

Computer Basics

About This Tutorial

About this tutorial

This tutorial will help you understand **how computers work** and **how to use them**. We'll talk about **how to set up a computer**, the difference between **hardware** and **software**, and the **types of computers** you can use. We'll also explore **operating systems**, **applications**, the **cloud**, and a whole lot more.



Whether you're getting started with your first computer or are just looking to learn more about how they work, you'll find all of the information you need in our **written lessons**, **videos**, and **interactives**. When you're done, you'll have a fundamental understanding of how to use a computer. You'll also be ready to learn even more about computers with some of our other tutorials.

So what are you waiting for? Let's get started!

Lesson 2: What is a Computer?

What is a computer?

A **computer** is an electronic device that manipulates information, or data. It has the ability to **store**, **retrieve**, and **process** data. You may already know that you can use a computer to **type documents**, **send email**, **play games**, and **browse the Web**. You can also use it to edit or create **spreadsheets**, **presentations**, and even **videos**.

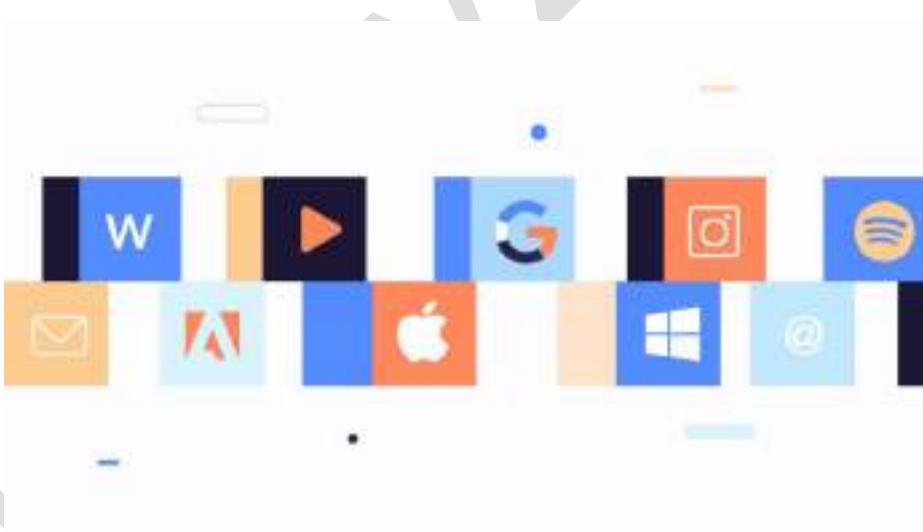
Hardware vs. software

Before we talk about different types of computers, let's talk about two things all computers have in common: **hardware** and **software**.

- ▶ **Hardware** is any part of your computer that has a **physical structure**, such as the keyboard or mouse. It also includes all of the computer's internal components.



- ▶ **Software** is any **set of instructions** that tells the hardware **what to do** and **how to do it**. Examples of software include web browsers, games, and word processors.



Everything you do on your computer will rely on both hardware and software. For example, right now you may be viewing this lesson in a **web browser** (software) and using your **mouse** (hardware) to click from page to page. As you learn about different types of computers, ask yourself about the differences in their hardware. As you progress through this tutorial, you'll see that different types of computers also often use different types of software.

What are the different types of

computers?

When most people hear the word **computer**, they think of a **personal computer** such as a **desktop** or **laptop**. However, computers come in many shapes and sizes, and they

perform many different functions in our daily lives. When you withdraw cash from an ATM, scan groceries at the store, or use a calculator, you're using a type of computer.



Desktop computers



Many people use **desktop computers** at work, home, and school. Desktop computers are designed to be placed on a desk, and they're typically made up of a few different parts, including the **computer case, monitor, keyboard, and mouse**.

Welcome 🙌 ! How
can we help you
today?

Laptop computers



The second type of computer you may be familiar with is a **laptop computer**, commonly called a laptop. Laptops are battery-powered computers that are **more portable** than desktops, allowing you to use them almost anywhere.

Tabletcomputers



Tablet computers—or **tablets**—are handheld computers that are even more portable than laptops. Instead of a keyboard and mouse, tablets use a **touch-sensitive screen** for typing and navigation. The **iPad** is an example of a tablet.

Servers

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A **server** is a computer that serves up information to other computers on a network. For example, whenever you use the Internet, you're looking at something that's stored on a server. Many businesses also use local **file servers** to store and share files internally.

Other types of computers

Many of today's electronics are basically **specialized computers**, though we don't always think of them that way. Here are a few common examples.

- ▶ **Smartphones:** Many cell phones can do a lot of things computers can do, including browsing the Internet and playing games. They are often called **smartphones**.
- ▶ **Wearables:** Wearable technology is a general term for a group of devices—including **fitness trackers** and **smartwatches**—that are designed to be worn throughout the day. These devices are often called **wearables** for short.
- ▶ **Game consoles:** A **game console** is a specialized type of computer that is used for playing **video games** on your TV.
- ▶ **TVs:** Many TVs now include **applications**—or **apps**—that let you access various types of online content. For example, you can stream video from the Internet directly onto your TV.

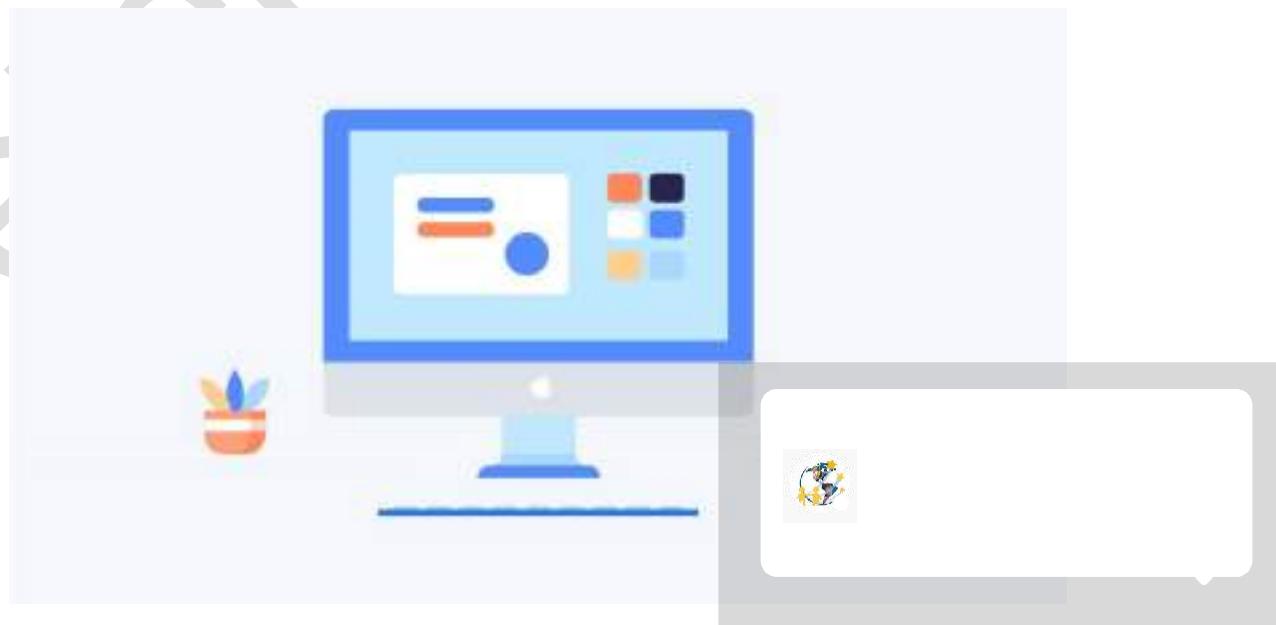
Personal computers come in two main styles: **PC** and **Mac**. Both are fully functional, but they have a different look and feel, and many people prefer one or the other.



PCs

This type of computer began with the original **IBM PC** that was introduced in 1981. Other companies began creating similar computers, which were called **IBM PC Compatible** (often shortened to **PC**). Today, this is the most common type of personal computer, and it typically includes the **Microsoft Windows** operating system.

Macs



The **Macintosh** computer was introduced in 1984, and it was the first widely sold personal computer with a graphical user interface, or **GUI** (pronounced **gooey**). All Macs are made by one company (**Apple**), and they almost always use the **Mac OS X** operating system.

Lesson 3: Basic Parts of a Computer

Introduction

The basic parts of a desktop computer are the **computer case**, **monitor**, **keyboard**, **mouse**, and **power cord**. Each part plays an **important role** whenever you use a computer.



Computer case

The **computer case** is the metal and plastic box that **contains the main components** of the computer, including the motherboard, central processing unit (CPU), and power supply. The front of the case usually has an **On/Off button** and one or more **optical drives**.

Computer cases come in different shapes and sizes. A **desktop case** lies flat on a desk, and the monitor usually sits on top of it. A **tower case** is tall and sits next to the monitor or on the floor. **All-in-one** computers come with the internal components built into the monitor, which eliminates the need for a separate case.

Monitor



The **monitor** works with a **video card**, located inside the computer case, to display images and text on the screen. Most monitors have **control buttons** that allow you to change your monitor's display settings, and some monitors also have built-in speakers.

Newer monitors usually have **LCD** (liquid crystal display) or **LED** (light-emitting diode) displays. These can be made very thin, and they are often called **flat-panel displays**. Older monitors use **CRT** (cathode ray tube) displays. CRT monitors are much larger and heavier, and they take up more desk space.

Mouse

The **keyboard** is one of the main ways to communicate with a computer. There are many different types of keyboards, but most are **very similar** and allow you to accomplish the same basic tasks.

Click the buttons in the interactive below to learn about the different parts of the keyboard.



If you want to learn how to type or improve your touch-typing skills, check out our free [Typing Tutorial](#).



The **mouse** is another important tool for communicating with computers. Commonly known as a **pointing device**, it lets you **point** to objects on the screen, **click** on them, and **move** them.

There are two main mouse types: optical and mechanical. The **optical** mouse uses an electronic eye to detect movement and is easier to clean. The **mechanical mouse** uses a rolling ball to detect movement and requires regular cleaning to work properly.

Mouse alternatives

There are other devices that can do the same thing as a mouse. Many people find them easier to use, and they also require less desk space than a traditional mouse. The most common mouse alternatives are below.

- ▶ **Trackball:** A trackball has a ball that can rotate freely. Instead of moving the device like a mouse, you can roll the ball with your thumb to move the pointer.
- ▶ **Touchpad:** A touchpad—also called a **trackpad**—is a touch-sensitive pad that lets you control the pointer by making a drawing motion with your finger. Touchpads are common on laptop computers.

Lesson 4: Buttons and Ports on a Computer



Introduction.

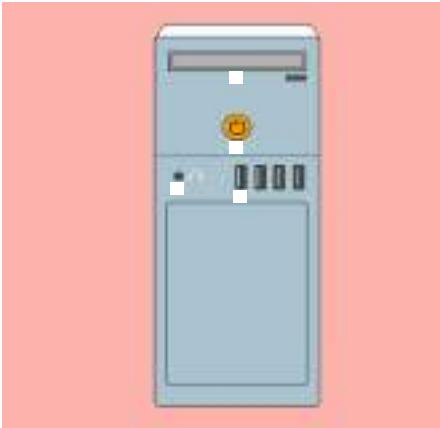
Take a look at the front and back of your computer case and count the number of **buttons**, **ports**, and **slots** you see. Now look at your monitor and count any you find there. You probably counted at least 10, and maybe a lot more.

Each computer is different, so the buttons, ports, and sockets will **vary from computer to computer**. However, there are certain ones you can expect to find on most desktop computers. Learning how these ports are used will help whenever you need to connect something to your computer, like a new printer, keyboard, or mouse.

Watch the video below to learn about the buttons, ports, and slots on a desktop computer.

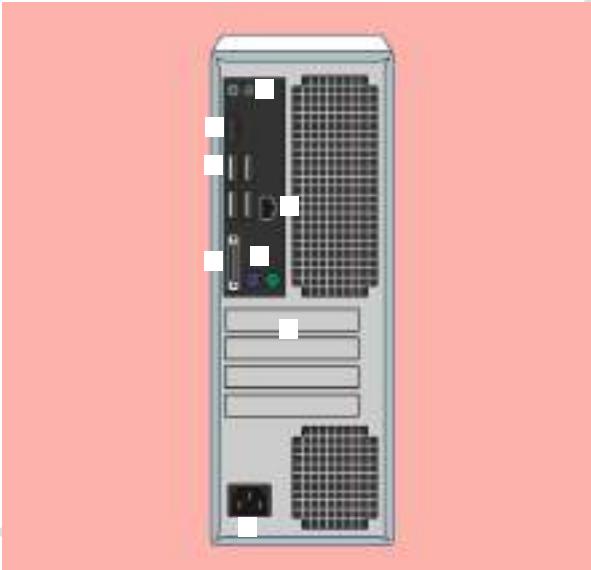
Front of a computer case

Click the buttons in the interactive below to become familiar with the front of a computer.



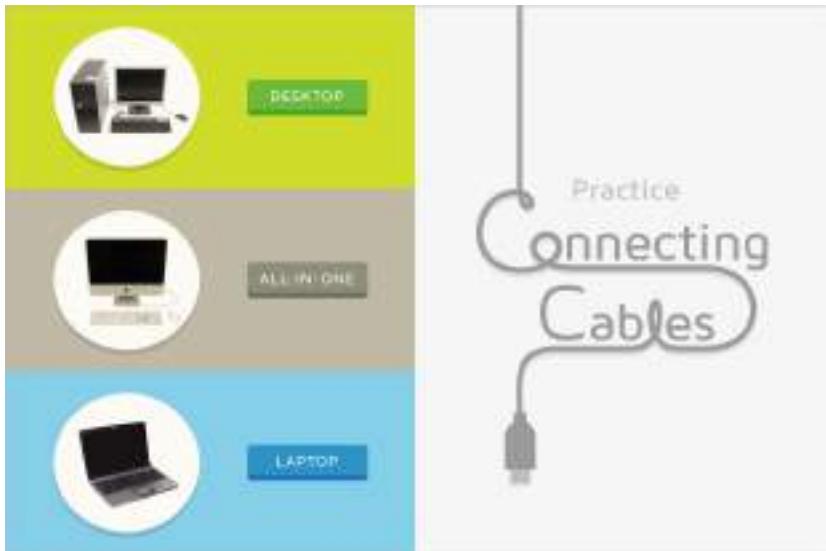
Back of a computer case

The back of a computer case has **connection ports** that are made to fit **specific devices**. The placement will vary from computer to computer, and many companies have their own special connectors for specific devices. Some of the ports may be **color coded** to help you determine which port is used with a particular device.



Other types of ports

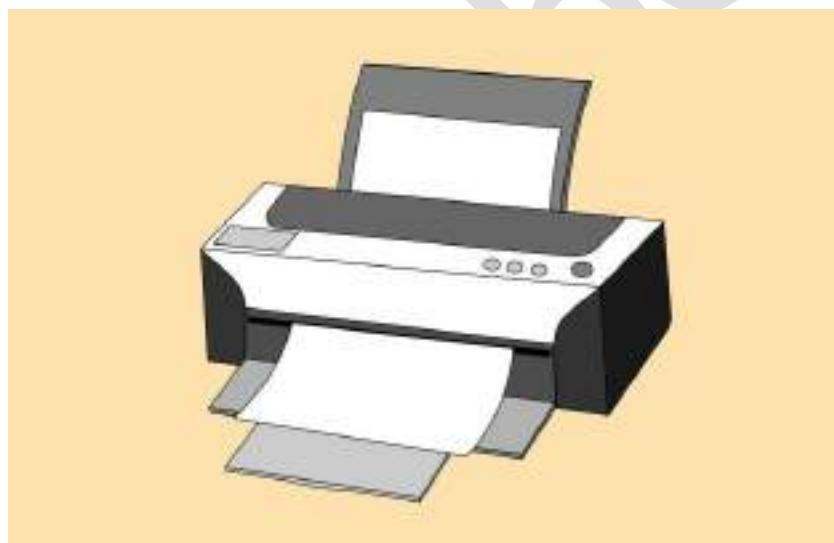
There are many other types of ports, such as FireWire, Thunderbolt, and HDMI. If your computer has ports you don't recognize, you should consult your manual for more information.



Peripherals you can use with your computer

The most basic computer setup usually includes the **computer case**, **monitor**, **keyboard**, and **mouse**, but you can plug many different types of devices into the extra ports on your computer. These devices are called **peripherals**. Let's take a look at some of the most common ones.

- ▶ **Printers:** A printer is used to **print** documents, photos, and anything else that appears on your screen. There are many types of printers, including **inkjet**, **laser**, and **photo** printers. There are even **all-in-one printers** that can also scan and copy documents.



- ▶ **Scanners:** A **scanner** allows you to **copy a physical image or document** and save it to your computer as a **digital (computer-readable)** image. Many scanners are included as part of an all-in-one printer, although you can also buy a separate **flatbed** or **handheld** scanner.
- ▶ **Speakers/headphones:** **Speakers** and **headphones** are output devices, which means they send information from the computer to the user—in this case, they allow you to **hear sound and music**. Depending on the model, they may connect to the **audio** port or the **USB** port. Some monitors also have built-in speakers.
- ▶ **Microphones:** A **microphone** is a type of input device, or a device that receives information from a user. You can connect a microphone to **record sound** or **talk with someone else** over the Internet. Many laptop computers come with built-in microphones.





- ▶ **Web cameras:** A **web camera**—or **webcam**—is a type of input device that can record **videos** and take **pictures**. It can also transmit video over the Internet in **real time**, which allows for **video chat** or **video conferencing** with someone else. Many webcams also include a microphone for this reason.
- ▶ **Game controllers and joysticks:** A game controller is used to control computer games. There are many other types of controllers you can use, including **joysticks**, although you can also use your **mouse** and **keyboard** to control most games.
- ▶ **Digital cameras:** A **digital camera** lets you capture pictures and videos in a digital format. By connecting the camera to your computer's USB port, you can transfer the images from the camera to the computer.
- ▶ **Mobile phones, MP3 players, tablet computers, and other devices:** Whenever you buy an electronic device, such as a mobile phone or MP3 player, check to see if it comes with a **USB cable**. If it does, this means you can most likely connect it to your computer.

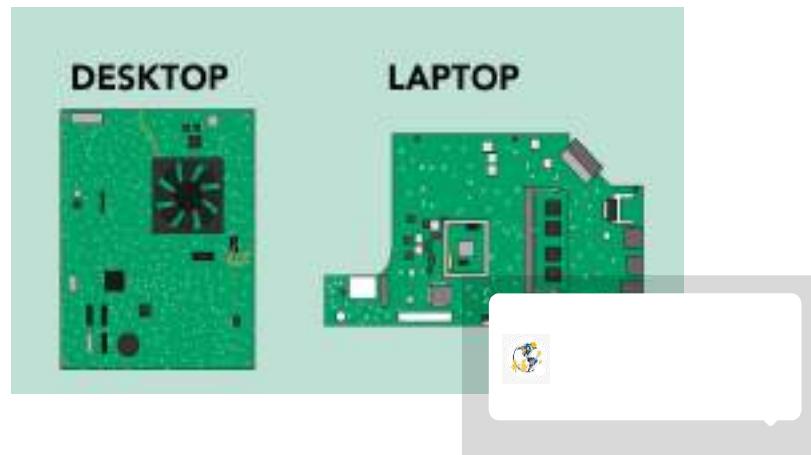
Lesson 5: Inside a Computer

Inside a computer

Have you ever looked **inside a computer case**, or seen pictures of the inside of one? The small parts may look complicated, but the inside of a computer case isn't really all that

mysterious. This lesson will help you master some of the basic **terminology** and understand a bit more about what goes on inside a computer.

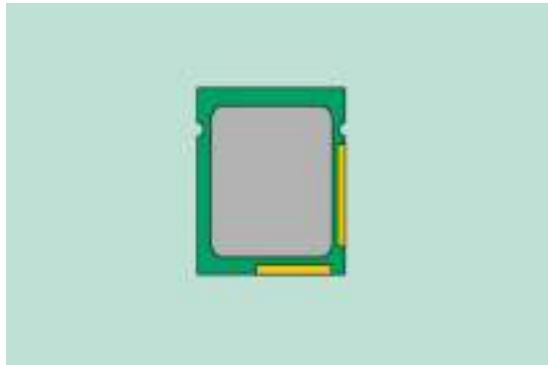
Motherboard



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control the video and audio, and connections to your computer's ports (such as USB ports). The motherboard connects directly or indirectly to every part of the computer.

CPU/processor

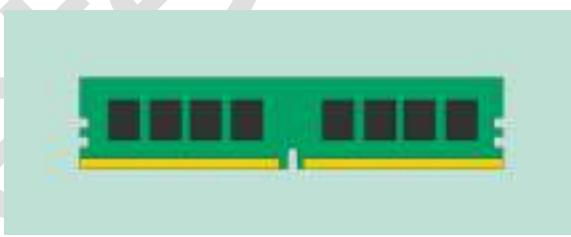


The central processing unit (CPU), also called a **processor**, is located inside the **computer case** on the motherboard. It is sometimes called the brain of the computer, and its job is to carry out commands. Whenever you press a key, click the mouse, or start an application, you're sending instructions to the CPU.

The CPU is usually a **two-inch ceramic square** with a **silicon chip** located inside. The chip is usually about the size of a thumbnail. The CPU fits into the motherboard's **CPU socket**, which is covered by the **heat sink**, an object that absorbs heat from the CPU.

A processor's **speed** is measured in **megahertz (MHz)**, or millions of instructions per second; and **gigahertz (GHz)**, or billions of instructions per second. A faster processor can execute instructions more quickly. However, the actual speed of the computer depends on the speed of many different components—not just the processor.

RAM (random access memory)

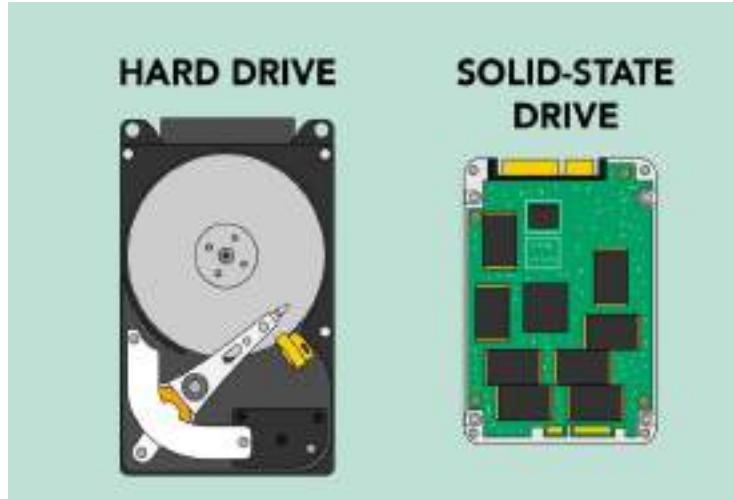


RAM is your system's **short-term memory**. Whenever your computer performs calculations, it temporarily stores the data in the RAM until it is needed.

This **short-term memory disappears** when the computer is turned off. If you're working on a document, spreadsheet, or other type of file, you'll need to **save** it to avoid losing it. When you save a file, the data is written to the **hard drive**, which acts as **long-term storage**.

RAM is measured in **megabytes (MB)** or **gigabytes (GB)**. The **more RAM** you have, the more things your computer can do at the same time. If you don't have enough RAM, you may notice that your computer is sluggish when you have several programs open. Because of this, many people add **extra RAM** to their computers to improve performance.

Hard drive



The **hard drive** is where your software, documents, and other files are stored. The hard drive is **long-term storage**, which means the data is still saved even if you turn the computer off or unplug it.

When you run a program or open a file, the computer copies some of the data from the **hard drive** onto the **RAM**. When you **save** a file, the data is copied back to the **hard drive**. The faster the hard drive, the faster your computer can **start up** and **load programs**.

Power supply unit



The power supply unit in a computer **converts the power** from the wall outlet to the type of power needed by the computer. It sends power through cables to the motherboard and other components.

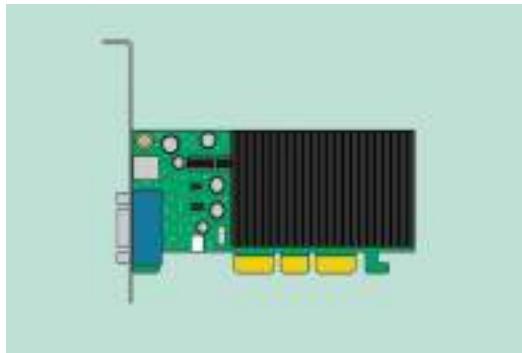
If you decide to open the computer case and take a look, make sure to **unplug** the computer first. Before touching the inside of the computer, you should touch a grounded metal object—or a metal part of the computer casing—to discharge any static buildup. Static electricity can be transmitted through the computer circuits, which can seriously damage your machine.

Expansion cards

Most computers have **expansion slots** on the motherboard that allow you to add various types of **expansion cards**. These are sometimes called **PCI (peripheral component interconnect) cards**. You may never need to add any PCI cards because most motherboards have built-in video, sound, network, and other capabilities.

However, if you want to boost the performance of your computer or update the capabilities of an older computer, you can always add one or more cards. Below are some of the most common types of expansion cards.

Video card

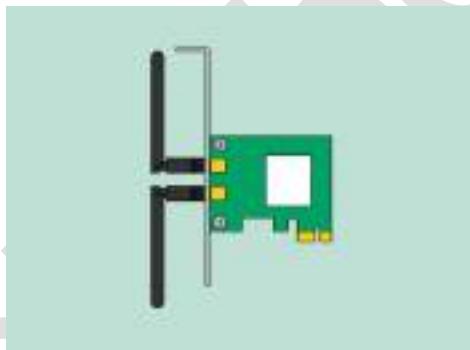


The **video card** is responsible for **what you see** on the monitor. Most computers have a **GPU (graphics processing unit)** built into the motherboard instead of having a separate video card. If you like playing graphics-intensive games, you can add a faster video card to one of the **expansion slots** to get better performance.

Sound card

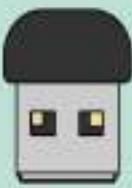
The **sound card**—also called an audio card—is responsible for **what you hear** in the speakers or headphones. Most motherboards have integrated sound, but you can upgrade to a dedicated sound card for higher-quality sound.

Network card



The **network card** allows your computer to communicate over a network and access the Internet. It can either connect with an **Ethernet** cable or through a **wireless** connection (often called **Wi-Fi**). Many motherboards have built-in network connections, and a network card can also be added to an expansion slot.

Bluetooth card (or adapter)



Bluetooth is a technology for wireless communication over short distances. It's often used in computers to communicate with wireless **keyboards**, **mice**, and **printers**. It's commonly built into the motherboard or included in a **wireless network card**. For computers that don't have Bluetooth, you can purchase a USB adapter, often called a **dongle**.

Lesson 6: Laptop Computers

What is a laptop computer?

A laptop is a personal computer that can be **easily moved** and used in a variety of locations. Most laptops are designed to have all of the functionality of a desktop computer, which means they can generally run the same **software** and open the same types of **files**. However, laptops also tend to be more expensive than comparable desktop computers.

How is a laptop different from a desktop?

Because laptops are designed for portability, there are some important differences between them and desktop computers. A laptop has an **all-in-one design**, with a built-in **monitor, keyboard, touchpad** (which replaces the mouse), and **speakers**. This means it is fully functional, even when no peripherals are connected. A laptop is also quicker to set up, and there are fewer cables to get in the way.

You'll also have the option to connect a regular mouse, larger monitor, and other peripherals. This basically **turns your laptop into a desktop computer**, with one main difference: You can easily disconnect the peripherals and take the laptop with you wherever you go.

Here are the main differences you can expect with a laptop.

- ▶ **Touchpad:** A touchpad—also called a **trackpad**—is a touch-sensitive pad that lets you control the pointer by making a drawing motion with your finger.



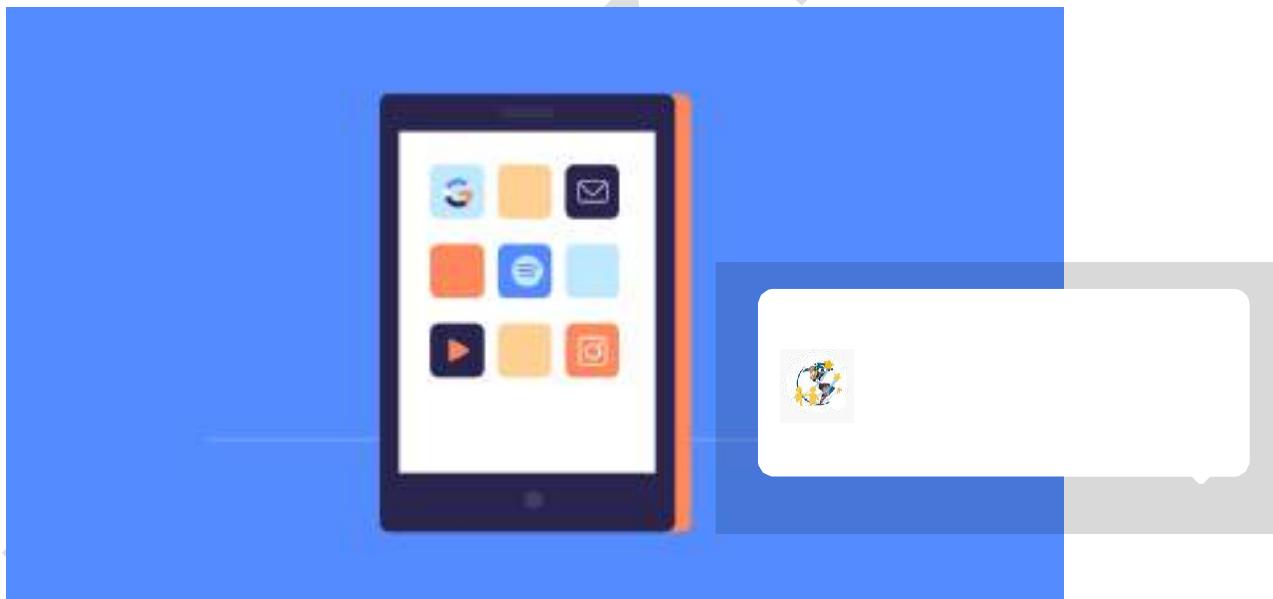
- ▶ **Battery:** Every laptop has a battery, which allows you to use the laptop when it's not plugged in. Whenever you plug in the laptop, the battery **recharges**. Another benefit of having a battery is that it can provide **backup power** to the laptop if the power goes out.
- ▶ **AC adapter:** A laptop usually has a specialized power cable called an **AC adapter**, which is designed to be used with that specific type of laptop.



- ▶ **Ports:** Most laptops have the same types of ports found on desktop computers (such as **USB**), although they usually have **fewer ports** to save space. However, some ports may be different, and you may need an adapter in order to use them.
- ▶ **Price:** Generally speaking, laptops tend to be **more expensive** than a desktop computer with the same internal components. While you may find that some basic laptops cost less than desktop computers, these are usually much less powerful machines.

Lesson 7: Mobile Devices

What is a mobile device?



A mobile device is a general term for any type of **handheld computer**. These devices are designed to be extremely portable, and they can often fit in your hand. Some mobile devices—like **tablets**, **e-readers**, and **smartphones**—are powerful enough to do many of the same things you can do with a desktop or laptop computer.

Tablet computers

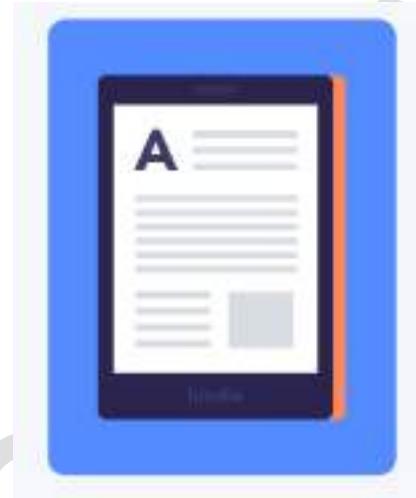
Like laptops, **tablet computers** are designed to be portable. However, they provide a different computing experience. The most obvious difference is that tablet computers don't have keyboards or touchpads. Instead, the entire screen is touch-sensitive, allowing you to type on a **virtual keyboard** and use your finger as a mouse pointer.

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Tablet computers can't necessarily do everything traditional computers can do. For many people, a traditional computer like a **desktop** or **laptop** is still needed in order to use some programs. However, the convenience of a tablet computer means it may be ideal as a **second computer**.

E-readers

E-book readers—also called **e-readers**—are similar to tablet computers, except they are mainly designed for reading **e-books** (digital, downloadable books). Notable examples include the **Amazon Kindle**, **Barnes & Noble Nook**, and **Kobo**. Most e-readers use an **e-ink** display, which is easier to read than a traditional computer display. You can even read in bright sunlight, just like if you were reading a regular book.



You don't need an e-reader to read e-books. They can also be read on **tablets**, **smartphones**, **laptops**, and **desktops**.

Smartphones

A smartphone is a more powerful version of a traditional cell phone. In addition to the same basic features—phone calls, voicemail, text messaging—smartphones can **connect to the Internet** over Wi-Fi or a cellular network (which requires purchasing a monthly **data plan**). This means you can use a smartphone for the same things you would normally do on a computer, such as checking your email, browsing the Web, or shopping online.



Most smartphones use a **touch-sensitive screen**, meaning there isn't a physical keyboard on the device. Instead, you'll type on a virtual keyboard and use your fingers to interact with the display. Other standard features include a high-quality digital camera and the ability to play digital music and video files. For many people, a smartphone can actually replace electronics like an old laptop, digital music player, and digital camera in the same device.

Lesson 8: Understanding Operating Systems

What is an operating system?

An **operating system** is the **most important software** that runs on a computer. It manages the computer's **memory** and **processes**, as well as all of its **software** and **hardware**. It also allows you to **communicate** with the computer without knowing how to speak the computer's language. **Without an operating system, a computer is useless.**

The operating system's job

Your computer's **operating system (OS)** manages all of the **software** and **hardware** on the computer. Most of the time, there are several different computer programs running at the same time, and they all need to access your computer's **central processing unit (CPU)**, **memory**, and **storage**. The operating system coordinates all of this to make sure each program gets what it needs.

Types of operating systems

Operating systems usually come **pre-loaded** on any computer you buy. Most people use the operating system that comes with their computer, but it's possible to upgrade or

even change operating systems. The three most common operating systems for personal computers are **Microsoft Windows**, **macOS**, and **Linux**.

Modern operating systems use a **graphical user interface**, or **GUI** (pronounced **gooey**).

A GUI lets you use your mouse to click **icons**, **buttons**, and **menus**, and even **sliders**! How clearly displayed on the screen using a combination of **graphics** and **text**.

an we help you today?



Each operating system's GUI has a different look and feel, so if you switch to a different operating system it may seem unfamiliar at first. However, modern operating systems are designed to be **easy to use**, and most of the basic principles are the same.

Microsoft Windows

Microsoft created the **Windows** operating system in the mid-1980s. There have been many different versions of Windows, but the most recent ones are **Windows 10** (released in 2015), **Windows 8** (2012), **Windows 7** (2009), and **Windows Vista** (2007). Windows comes **pre-loaded** on most new PCs, which helps to make it the **most popular operating system** in the world.



macOS

macOS (previously called **OS X**) is a line of operating systems created by Apple. It comes preloaded on all Macintosh computers, or Macs. Some of the specific versions include

Mojave (released in 2018), **High Sierra** (2017), and **Sierra** (2016).

According to [StatCounter Global Stats](#), macOS users account for less than **10%** of global operating systems—much lower than the percentage of Windows users (more than **80%**). One reason for this is that Apple computers tend to be more expensive. However, many people do prefer the look and feel of macOS over Windows.

Check out our [macOS Basics](#) tutorial for more information.



Linux

Linux (pronounced **LINN-ux**) is a family of **open-source** operating systems, which means they can be modified and distributed by anyone around the world. **Welcome** ! How can we help you different from **proprietary software** like Windows, which can only be managed by a company that owns it. The advantages of Linux are that it is **free** and there are many different **distributions**—or versions—you can choose from. According to [StatCounter Global Stats](#), Linux users account for less than **2%** of global operating systems. However, most **servers** run Linux because it's relatively easy to customize.

To learn more about different distributions of Linux, visit the [Ubuntu](#), [Linux Mint](#), and [Fedora](#) websites, or refer to our [Linux Resources](#). For a more comprehensive list, you can visit MakeUseOf's list of [The Best Linux Distributions](#).

Operating systems for mobile devices

The operating systems we've been talking about so far were designed to run on **desktop** and **laptop** computers. **Mobile devices** such as **phones**, **tablet computers**, and **MP3 players** are different from desktop and laptop computers, so they run operating systems that are designed specifically for mobile devices. Examples of mobile operating systems include **Apple iOS** and **Google Android**. In the screenshot below, you can see iOS running on an iPad.



Operating systems for mobile devices generally aren't as fully featured as those made for desktop and laptop computers, and they aren't able to run all of the same software.

However, you can still do a lot of things with them, like watch movies. To learn more about mobile operating systems, check out our [Mobile Devices](#) tutorials.

Lesson 9: Understanding Applications

What is an application?

You may have heard people talking about using a **program**, an **application**, or an **app**. But what exactly does that mean? Simply put, an **app** is a type of software that allows you to **perform specific tasks**. Applications for desktop or laptop computers are sometimes called **desktop applications**, while those for mobile devices are called **mobile apps**.

When you open an application, it runs inside the **operating system** until you close it. Most of the time, you will have more than one application open at the same time, which is known as **multi-tasking**.

App is a common term for an **application**, especially for **simple applications** that can be downloaded **inexpensively** or even **for free**. Many apps are also available for **mobile devices** and even some **TVs**.

Watch the video below to learn more about applications.

Desktop applications

There are countless desktop applications, and they fall into several categories. Some are more **full featured** (like **Microsoft Word**), while others may only do **one or two things** (like a **clock** or **calendar** app). Below are just a few types of applications you might use.

- ▶ **Word processors:** A word processor allows you to write a letter, design a flyer, and create many other types of documents. The most well-known word processor is **Microsoft Word**.



- ▶ **Web browsers:** A **web browser** is the tool you use to access the **Internet**. Most computers come with a web browser **pre-installed**, but you can also download a different one if you prefer. Examples of browsers include **Internet Explorer**, **Mozilla Firefox**, **Google Chrome**, and **Safari**.



- ▶ **Media players:** If you want to listen to **MP3s** or watch **movies** you've downloaded, you'll need to use a **media player**. **Windows Media Player** and **iTunes** are popular media players.



- ▶ **Games:** There are many types of games you can play on your computer. They range from card games like **Solitaire** to action games like **Halo**. Many action games require a lot of **computing power**, so they may not work unless you have a newer computer.

Mobile apps

Desktop and laptop computers aren't the only devices that can run applications. You can also download apps for mobile devices like **smartphones** and **tablets**. Here are a few examples of mobile apps.



- ▶ **Gmail:** You can use the Gmail app to easily view and send emails from your mobile device. It's available for **Android** and **iOS**.
- ▶ **Instagram:** You can use Instagram to quickly share photos with your friends and family. It's available for **Android** and **iOS**.
- ▶ **Duolingo:** With a combination of quizzes, games, and other activities, this

app can help you learn new languages. It's available for [Android](#) and [iOS](#).

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Installing new applications

Every computer and mobile device will come with some applications already built in, such as a web browser and media player. However, you can also purchase and install new apps to add more functionality. You can review our lessons on [Installing Software on Your Windows PC](#), [Installing Software on Your Mac](#), and [Free Software](#) to learn more.



Lesson 10: Setting Up a Computer

Setting up a computer

So you have a **new computer** and you're ready to set it up. This may seem like an overwhelming and complicated task, but it's actually a lot easier than you might think! Most computers are set up in a similar way, so it doesn't matter what brand of computer you have.

If you're setting up a new computer that's still in the box, you'll probably find a **how-to guide** that includes **step-by-step details**. Even if it didn't include instructions, you can still set up the computer in a **few easy steps**. We'll take you through the

needed to set up a typical computer.

Looking for the old version of this video? You can still view it [here](#).

Setting up a laptop computer

If you have a laptop, setup should be easy: Just open it and press the power button. If the battery isn't charged, you'll need to plug in the **AC adapter**. You can continue using the laptop while it charges.

Setting up a computer



Step 1

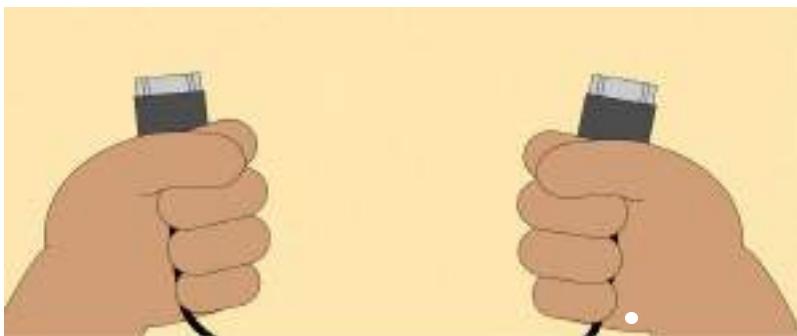
Unpack the **monitor** and **computer case** from the box. Remove any plastic covering or protective tape. Place the monitor and computer case on a desk or work area.



Be sure to place your computer case in an area that is **well ventilated** and has good air flow. This will help to prevent the computer from overheating.

Step 2

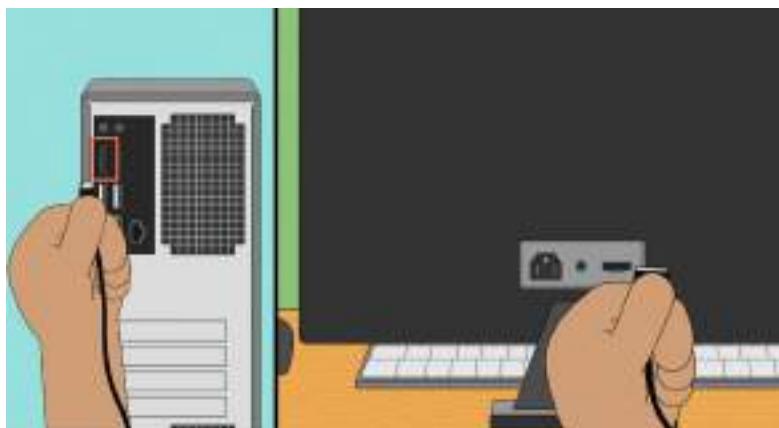
Locate the **monitor cable**. There are several types of monitor cables, so the one for your computer may not look like the one in the image below.



If you're having trouble finding your monitor cable, refer to the instruction manual for your computer. (If you have an **all-in-one** computer that's built into the monitor, you can skip to **Step 4**).

Step 3

Connect one end of the cable to the **monitor port** on the back of the **computer case** and the other end to the **monitor**.

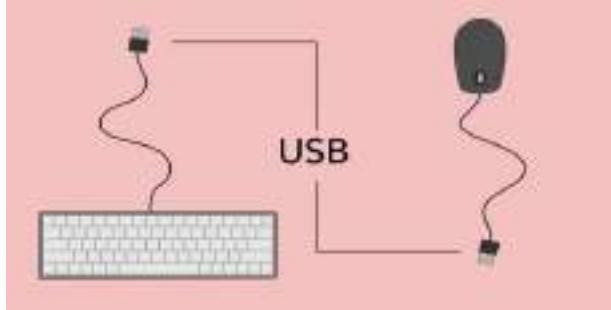


Many computer cables will only fit a specific way. If the cable doesn't fit, don't force it or you might damage the connectors. Make sure the plug aligns with the port, then connect it.

To figure out which cables belong in which ports, try our [Connecting Cables](#) interactive.

Step 4

Unpack the **keyboard** and determine whether it uses a **USB** (rectangular) connector or a **PS/2** (round) connector. If it uses a USB connector, plug it into any of the USB ports on the back of the computer. If it uses a PS/2 connector, plug it into the **purple** keyboard port on the back of the computer.



Step 5

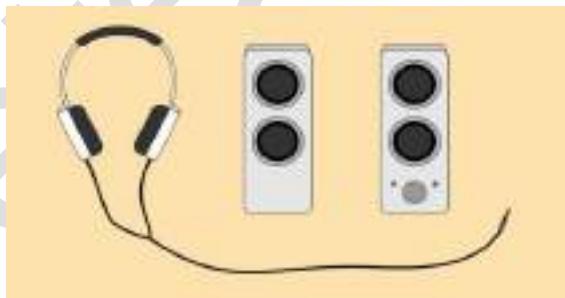
Unpack the **mouse** and determine whether it uses a **USB** or **PS/2** connector. If it uses a USB connector, plug it into any of the USB ports on the back of the computer. If it uses a PS/2 connector, plug it into the **green** mouse port on the back of the computer.

If your keyboard has a **USB port**, you can connect your mouse to the keyboard instead of connecting it directly to your computer.

If you have a **wireless** mouse or keyboard, you may need to connect a Bluetooth **dongle** (USB adapter) to your computer. However, many computers have built-in Bluetooth, so an adapter may not be necessary.

Step 6

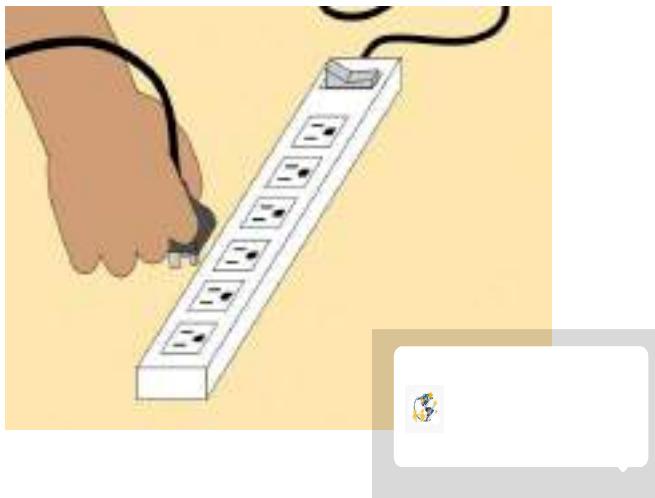
If you have **external speakers** or **headphones**, you can connect them to your computer's **audio port** (either on the front or back of the computer case). Many computers have color-coded ports. **Speakers** or **headphones** connect to the **green** port, and **microphones** connect to the **pink** port. The **blue** port is the **line in**, which can be used with other types of devices.



Some speakers, headphones, and microphones have **USB connectors** instead of the usual audio plug. These can be connected to any USB port. In addition, many computers have speakers or microphones built into the monitor.

Step 7

Locate the two **power supply cables** that came with your computer. Plug the first power supply cable into the back of the **computer case** and then into a **surge protector**. Then, using the other cable, connect the **monitor** to the **surge protector**.



Step 8

Finally, plug the **surge protector** into a wall outlet. You may also need to turn on the **surge protector** if it has a power switch.



If you don't have a surge protector, you can plug the computer directly into the wall. However, this is **not recommended** because electrical surges can damage your computer.

Step 9

If you have a **printer**, **scanner**, **webcam**, or other **peripherals**, you can connect them at this point. Many peripherals are **plug and play**, which means they will be recognized by your computer as soon as they are plugged in.



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Other peripherals may include **software** that needs to be installed before you can begin using them. Use the instructions included with the device to install it if necessary.

Generally, peripherals are **optional**, and you can add new ones at any time; you don't have to add all peripherals during the initial setup of your computer.

Setup complete!

That's it—you've finished setting up your computer, so it's time to start using it! We'll talk more about how to use your computer over the next several lessons.

Lesson 11: Getting Started with Your First Computer

Getting started with your first computer

A computer is more than just another household appliance. The vast amount of information and possibilities can be overwhelming. But you can accomplish a lot with a computer, and using one can be a good experience. Let's walk through getting started with your first computer.

Turning on a computer for the first time can be different from one computer to the next. Your experience could be different from this lesson. It's OK to ask someone for help.

If you're using a desktop computer, you'll need to make sure that the keyboard, mouse, and monitor are plugged into the computer case before you continue. Review our lesson on **Setting Up a Computer** to learn how.

Turning on a computer

The very first step is to **turn on** the computer. To do this, locate and press the **power** button. It's in a different place on every computer, but it will have the **universal power** button symbol (shown below).

can we help you
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Once turned on, your computer takes time before it's ready to use. You may see a few different displays flash on the screen. This process is called **booting up**, and it can take anywhere from 15 seconds to several minutes.

Once the computer has **booted up**, it may be ready to use, or it may require you to **log in**. This means identifying yourself by typing your user name or selecting your profile, then typing your password. If you've never logged in to your computer before, you may need to **create an account**.



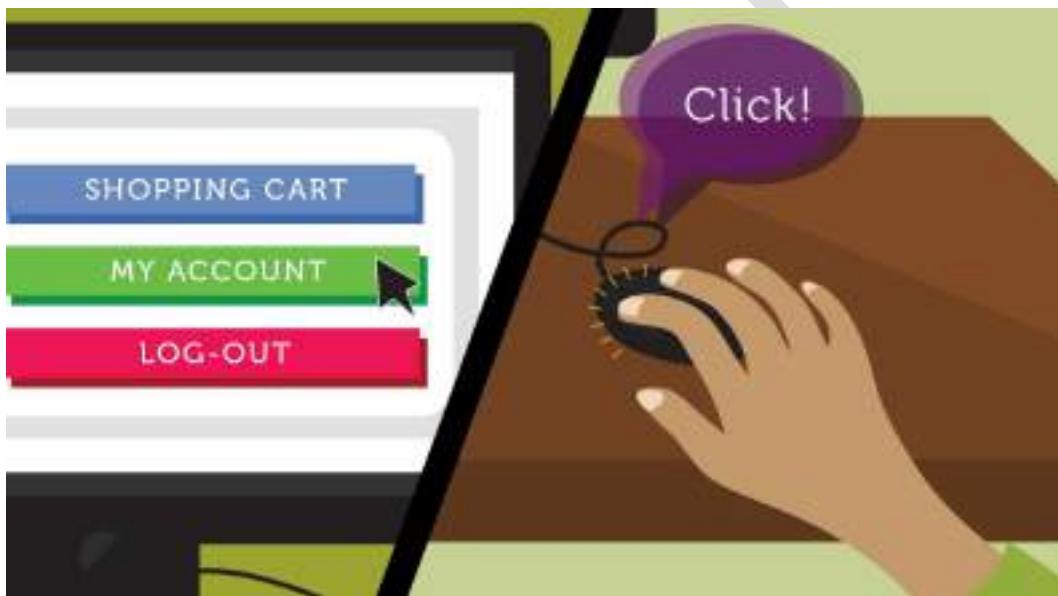
The keyboard and mouse

You interact with a computer mainly by using the **keyboard** and **mouse**, or a **trackpad** on laptops. Learning to use these devices is essential to learning to use a computer. Most people find it comfortable to place the keyboard on the desk directly in front of them and the mouse to one side of the keyboard.





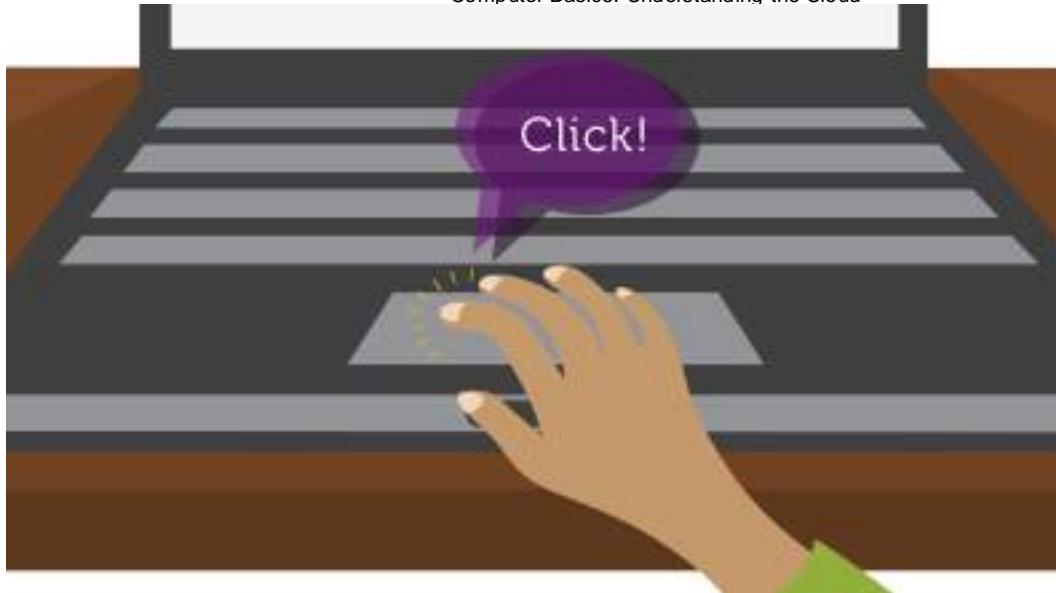
The mouse controls the **pointer** on the screen. Whenever you move the mouse across the desk, the pointer will move in a similar manner. A mouse usually has two buttons, which are referred to as the left button and the right button. You will often interact with the computer by moving the mouse pointer over something on the computer screen, then clicking one of the buttons.



On laptops, you can use the **trackpad**, located below the keyboard, instead of a mouse. Simply drag your finger across the trackpad to move the **pointer** on the screen. Some trackpads do not have buttons, so you'll either press or tap the trackpad to click.

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today?





The keyboard allows you to type letters, numbers, and words into the computer. Whenever you see a flashing vertical line—called the **cursor**—you can start typing.



Note that the **mouse pointer** is also called a **cursor**, but it is shaped differently. The **keyboard cursor** is also called the **insertion point**.

Using a computer

The main screen you'll start from is the **desktop**. This is sort of like a main menu or a table of contents. From here, you can access the programs and features you need to use your computer.

Icons are used to represent the different files, applications, and commands on your computer. An icon is a small image that's intended to give you an idea at a glance of what it represents, like a logo. Double-clicking an icon on the desktop will open that application or file.



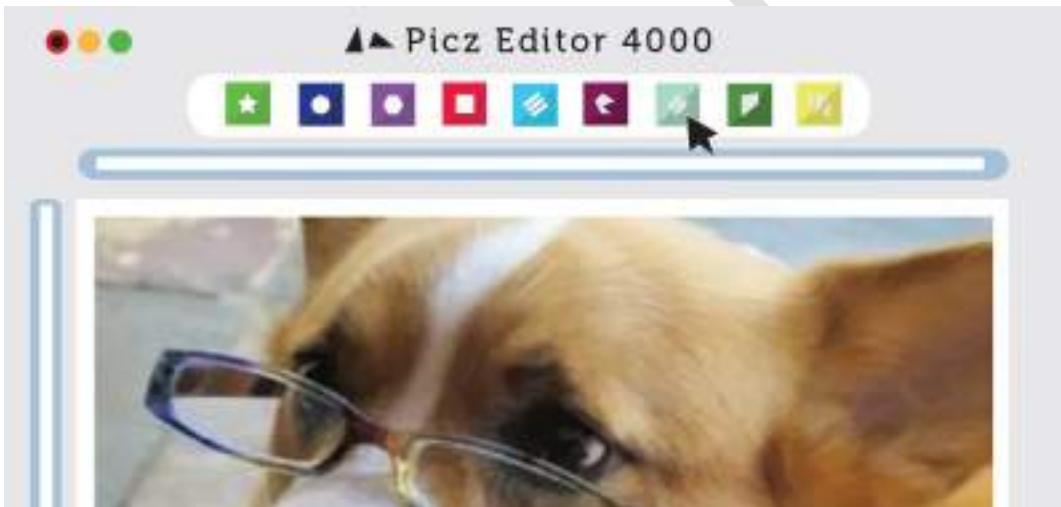
Welcome  ! How
can we help you

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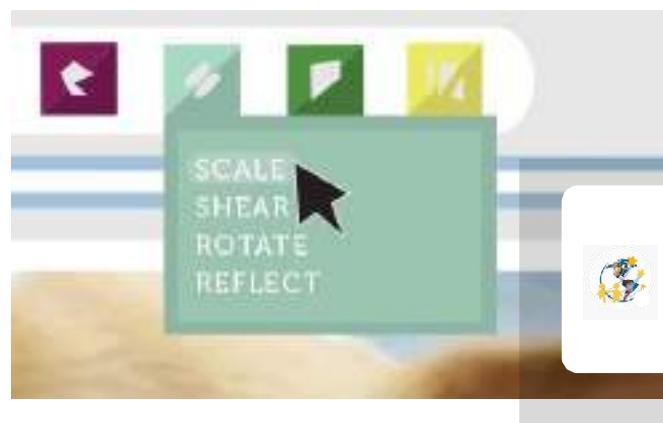




A **button** is a command that performs a specific function within an application. The most commonly used commands in a program will be represented by buttons.



Menus are organized collections of commands and shortcuts. Click a **menu** to open it and display the commands and shortcuts within. Then click an item in the **menu** to execute it.



When you open an application or folder, it is displayed in its own **window**. A **window** is a contained area—like a picture within a picture—with its own menus and buttons specific to that program. You can rearrange multiple **windows** on the desktop and switch between them.



What's next?

OK, so these are just the basics of using a computer. In the next lesson, we'll talk about how to use your computer's specific **operating system**.

Lesson 12: Getting to Know the OS

Getting to know your computer's OS

Now that you know the **absolute basics of using a computer**, it's time to learn more about your computer's **operating system**. We'll be talking about the two most common operating systems in this lesson: **Microsoft Windows** and **macOS**.

Watch the video below to learn the basics of using Windows.



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Windows Basics: Getting Started with the Desktop



Watch the video below to learn the basics of using macOS.

macOS Basics: Getting Started with the Desktop



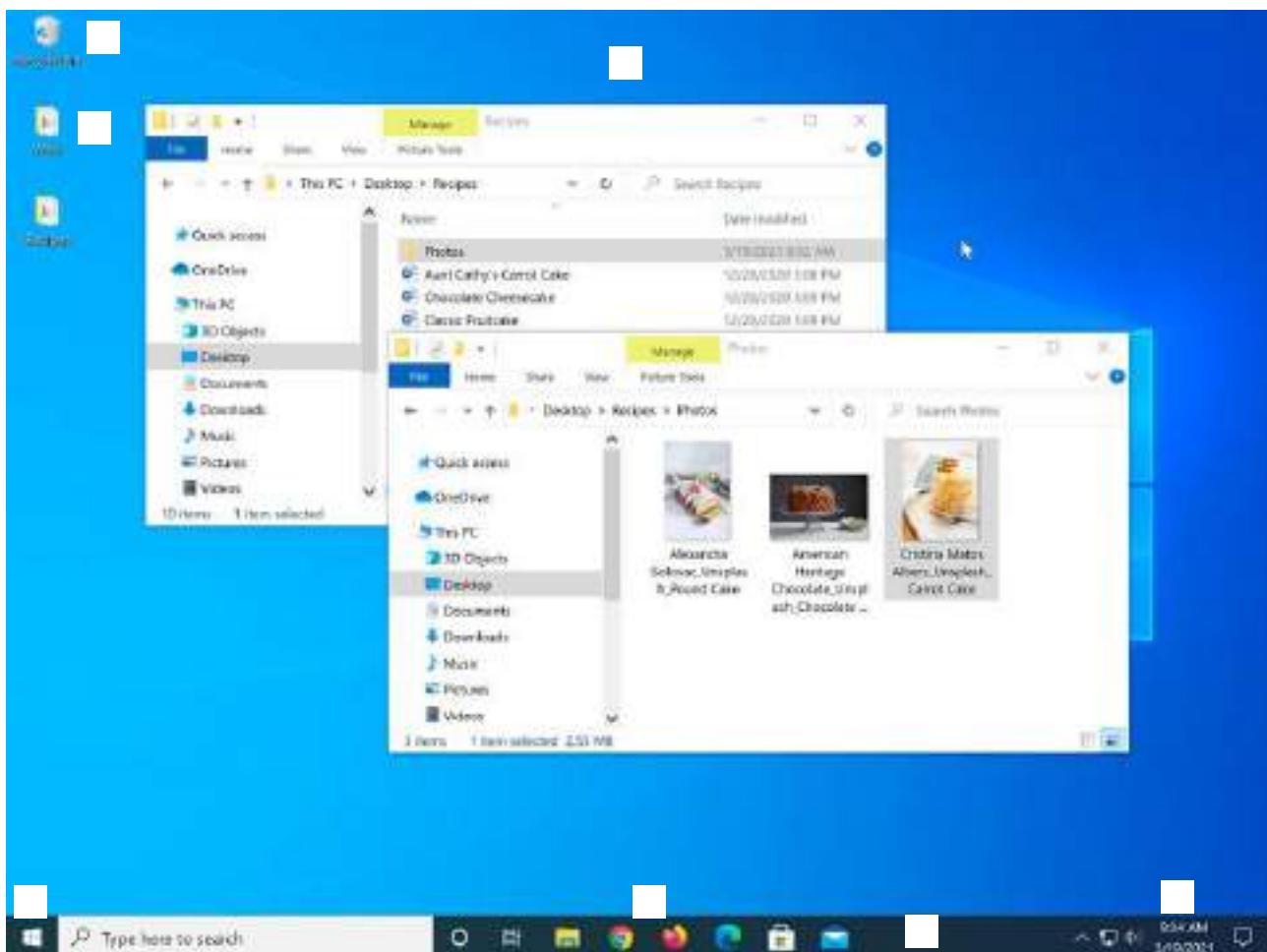
Getting to know the interface

Both PCs and Macs use a **graphical user interface (GUI)**, and they each have their own look and feel. The interactives below will introduce you to the Windows and Mac interfaces.

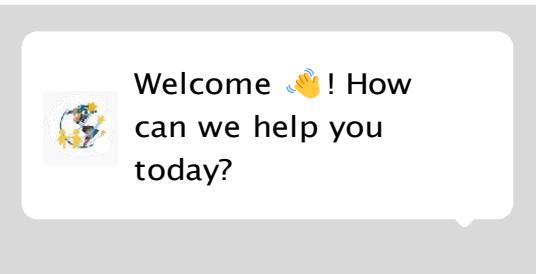


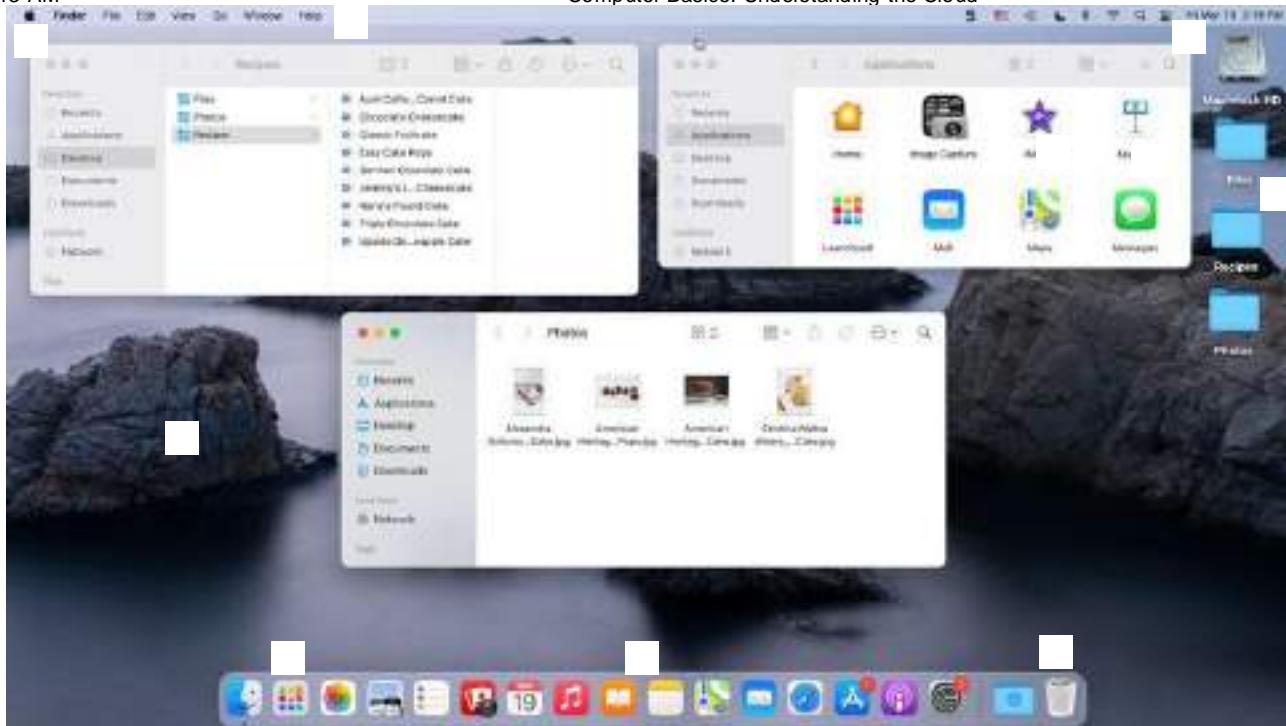
Welcome ! How
can we help you
today?

Click the buttons in the interactive below to learn more about the Windows interface.



Click the buttons in the interactive below to learn more about the macOS interface.

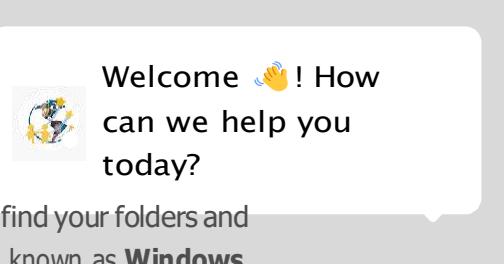
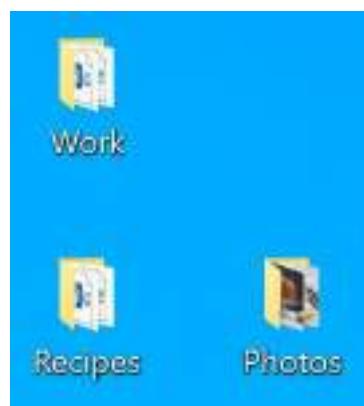




If you have difficulty seeing or hearing—or if you have trouble manipulating the mouse or keyboard—there are many settings that can help make your computer easier to use. To learn more, check out our lesson on [Using Accessibility Features](#).

All about your computer's filesystem

No matter which operating system you use, your computer uses **folders** to organize all of the different files and applications it contains. **Folder icons** on your computer are designed to look like file folders full of documents or pictures.



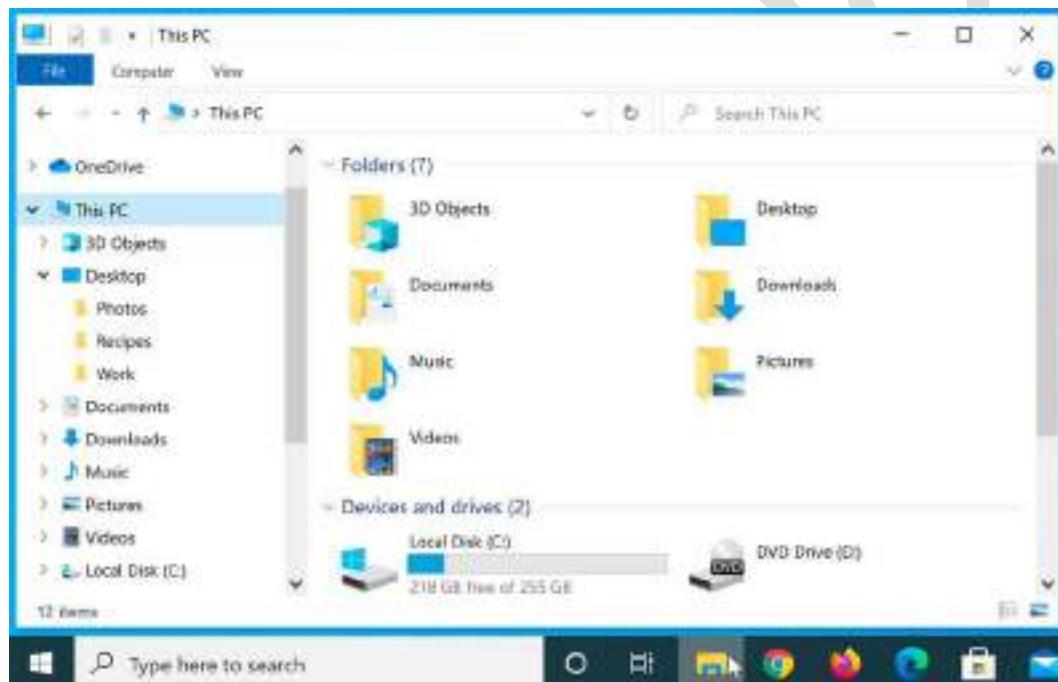
Each operating system has its own file system, which helps you find your folders and files. If you have a Windows PC, you'll use the **File Explorer** (also known as **Windows**

Explorer). If you have a Mac, you'll use **Finder**. Here, we'll talk about the basic functions that are common to all computer file systems.

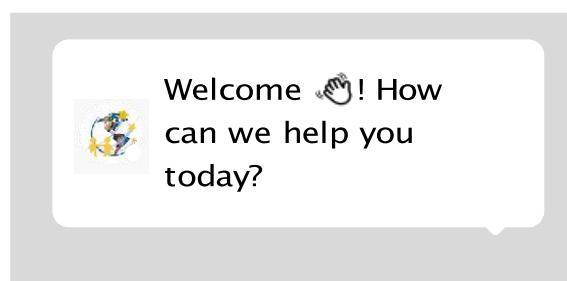
To find out more about file systems on Macs, check out the lesson on [Working with Files](#) in our [macOS Basics](#) tutorial. To learn more about PC file systems, take a look at the [Working with Files](#) lesson in our [Windows Basics](#) tutorial.

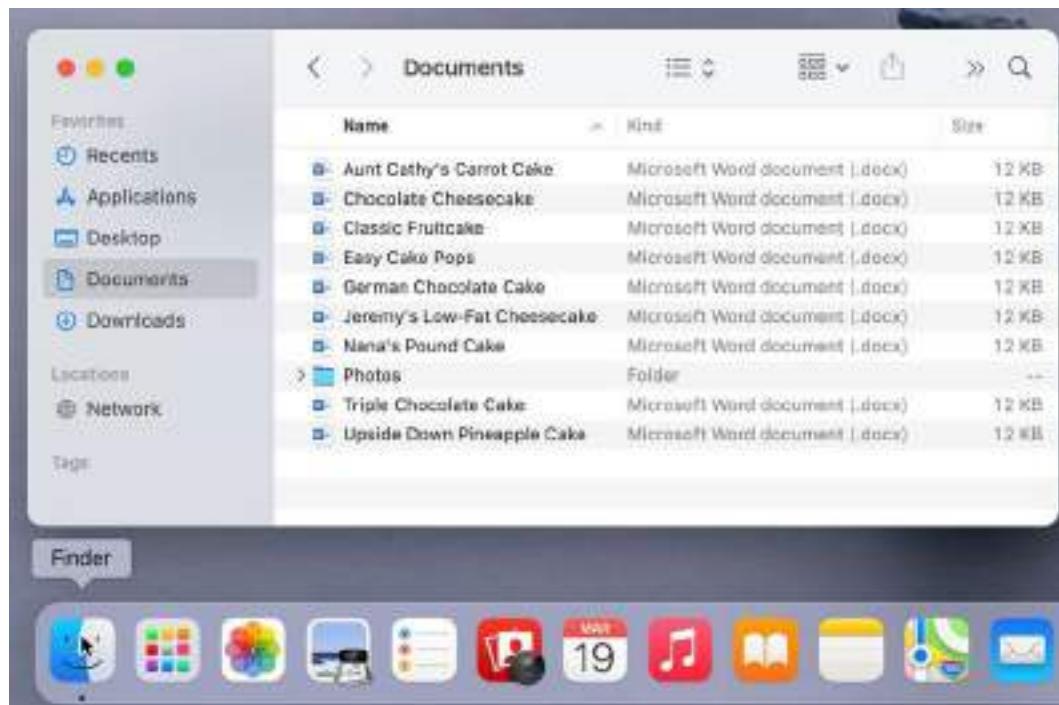
Opening your computer's file system

Whether you're using a PC or a Mac, the file system icon will be on the toolbar. On a PC, the **File Explorer icon** looks like a folder, as in the image below.



On a Mac, the **Finder icon** looks like a face on the Dock, as in the image below.





In both operating systems, you can also open the file system by **clicking a folder** from your **desktop**.

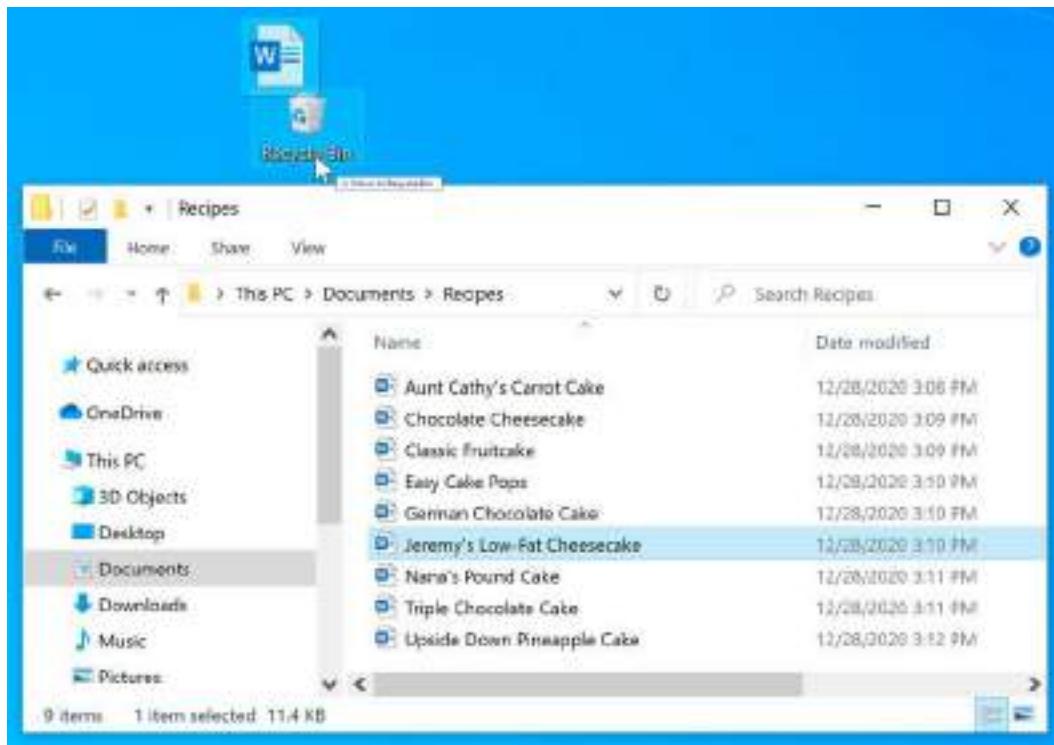
Basic navigation

Whether you're using File Explorer or Finder, basic navigation will work the same way. If you see the file you want, you can double-click it with your mouse. Otherwise, you can use the **Navigation pane** on the left side of the window to select a different location.

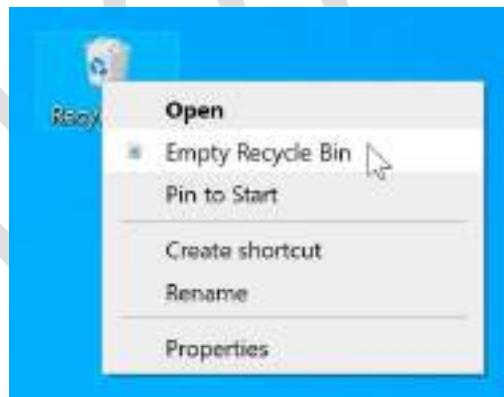
A screenshot of the Windows File Explorer interface. The left pane shows a navigation tree with "This PC" expanded, showing "OneDrive", "This PC", "3D Objects", "Desktop", and "Documents" (which is selected). The right pane displays a list of files in the "Documents" folder, including "Recipes" (a folder), "CV", "Resume", and "Cover Letter". A "Welcome" bubble icon with a hand icon and the text "Welcome! How can we help you today?" is overlaid on the bottom right.

Deleting files

macOS and Windows use a **Trash can**—or **Recycle Bin**—to prevent you from accidentally deleting files. When you delete a file, it is moved to the Trash can. If you change your mind, you can move the file back to its original location.



If you want to permanently delete the file, you will need to **empty the Trash or Recycle Bin**. To do this, right-click the icon and select **Empty**.



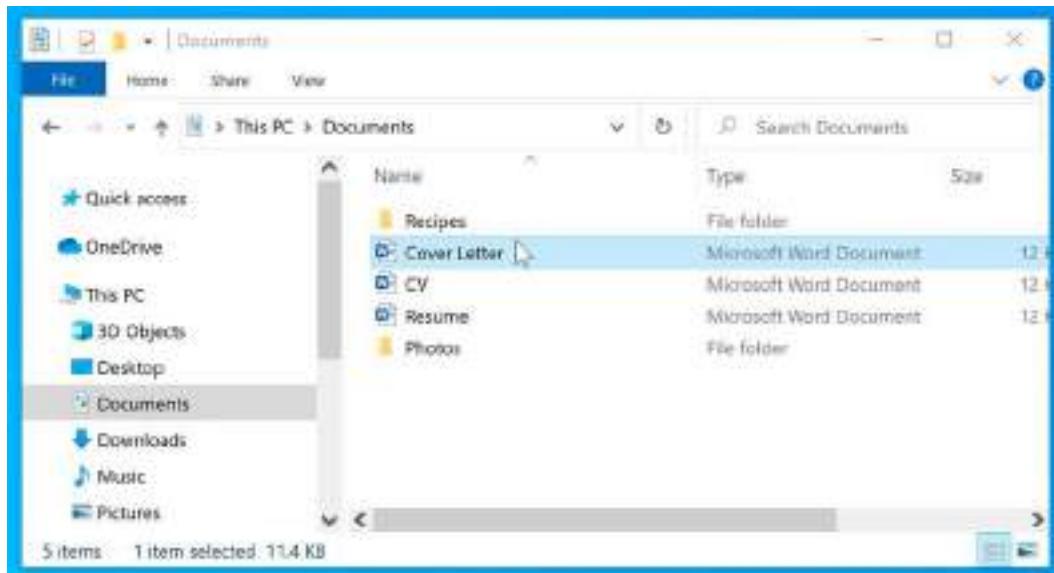
Opening files and applications

Each application on your computer has a group of **file types**—or **formats**—that it can open. When you **double-click** a file, your computer will automatically use the correct application to open it. In our example, we're opening a Microsoft Word document (**Cover Letter**), which will open in **Microsoft Word**.



Welcome ! How

can I help you?

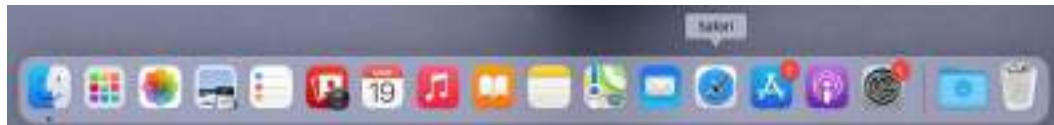


However, there may be times you may want to open an application directly, instead of just opening a file.

- To open an application in **Windows**, click the **Start** button, then select the desired application. If you don't see the one you want, you can click **All Programs/All Apps** to see a full list, scroll through the application list in Windows 10, or simply **type the name of the application** on your keyboard to search for it. In the example below, we're opening **Microsoft Edge** from the tiles.



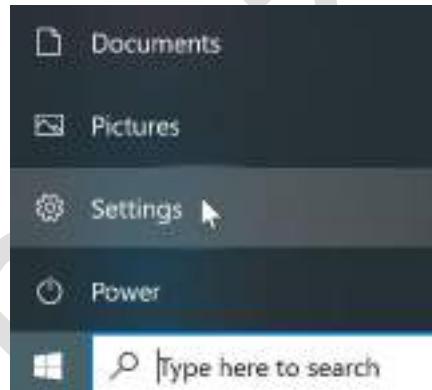
- To open an application on a **Mac**, click the application's icon on the **Dock**. If you don't see the one you want, click the **Spotlight** icon in the top-right corner of the screen, then **type the name of the application** on your keyboard to search for it. In the example below, we're opening **Safari**.



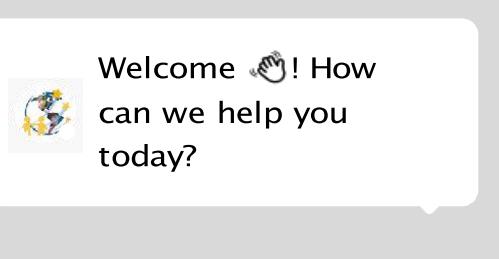
Adjusting your computer's settings

When you start using a new computer, you may want to begin by adjusting the computer's settings. Adjusting your settings can range from simple tasks such as changing your **desktop background** to more advanced tasks like adjusting your **security** or **keyboard settings**.

- In **Windows 10**, click the **Start** button, then select **Settings**.

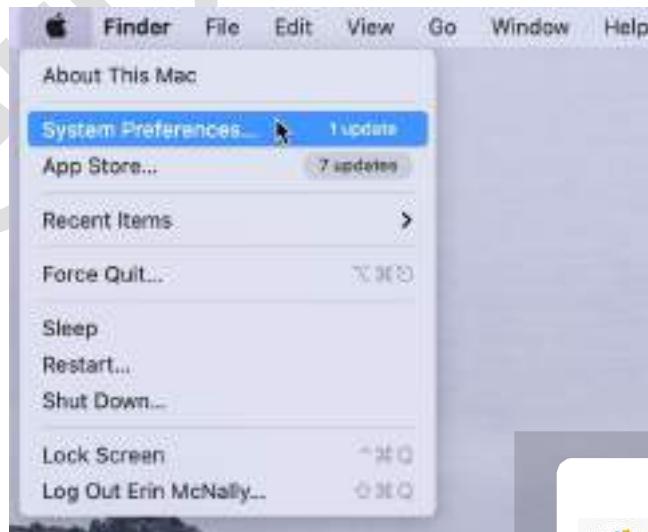


- In **Windows 8.1** and earlier, click the **Start** button, then locate and select the **Control Panel**. Check out the [Adjusting Your Settings](#) lesson in our [Windows Basics](#) tutorial to learn more about the Control Panel.





- ▶ On a **Mac**, click the **Apple icon**, then select **System Preferences**. Check out our **Adjusting Your Settings** lesson in our **macOS Basics** tutorial to learn more about System Preferences.

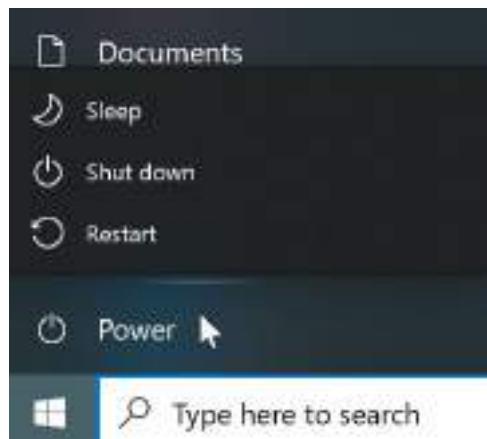


Welcome ! How
can we help you
today?

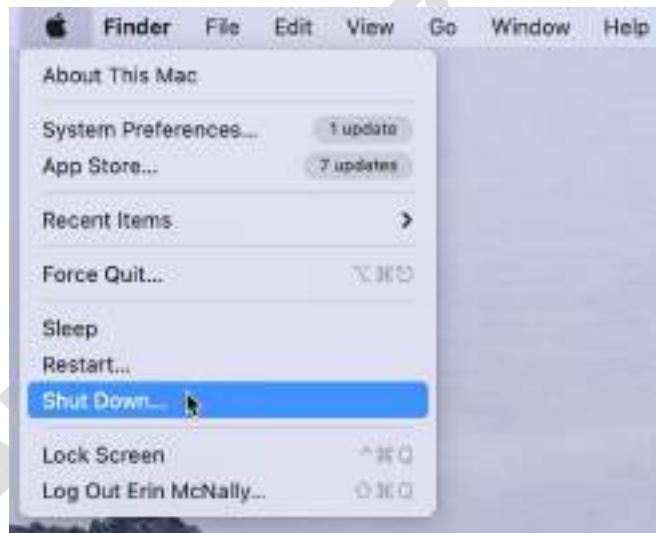
Shutting down your computer

When you're done using your computer, it's important to **shut it down properly**.

- ▶ To shutdown **Windows**, click the **Start** button, then select **Shutdown** from the menu (in some versions, this may say **Turn Off Computer** or look like the power symbol).



- ▶ To shut down a **Mac**, click the **Apple icon**, then select **Shutdown**.



Introduction

Microsoft Word 2016 is a word processing application that allows you to create a variety of documents, including letters, resumes, and more. In this lesson, you'll learn how to navigate the Word interface and become familiar with some of its most important features, such as the Ribbon, Quick Access Toolbar, and Backstage view.

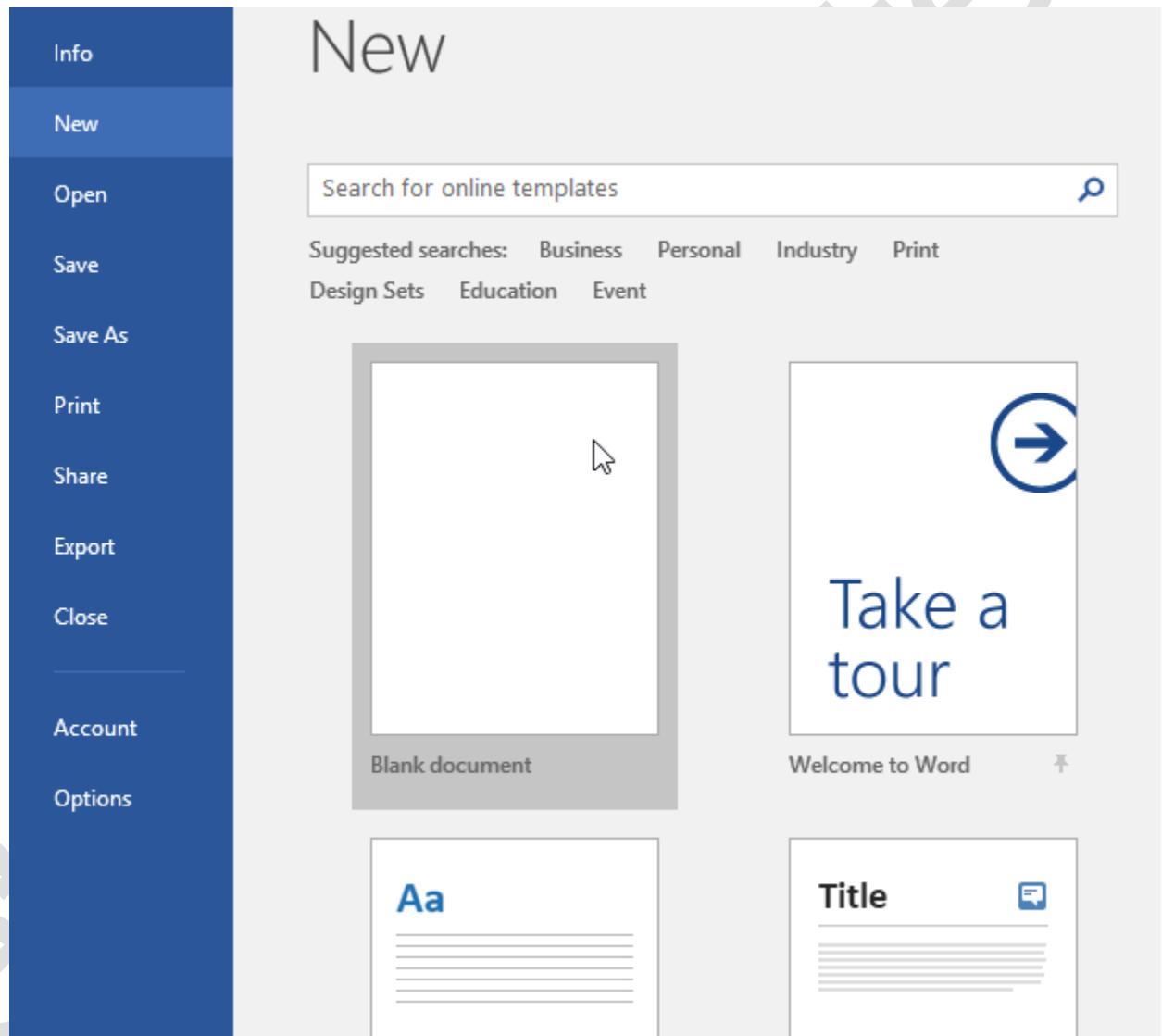
Watch the video below to become more familiar with Word 2016.

Getting to know Word 2016

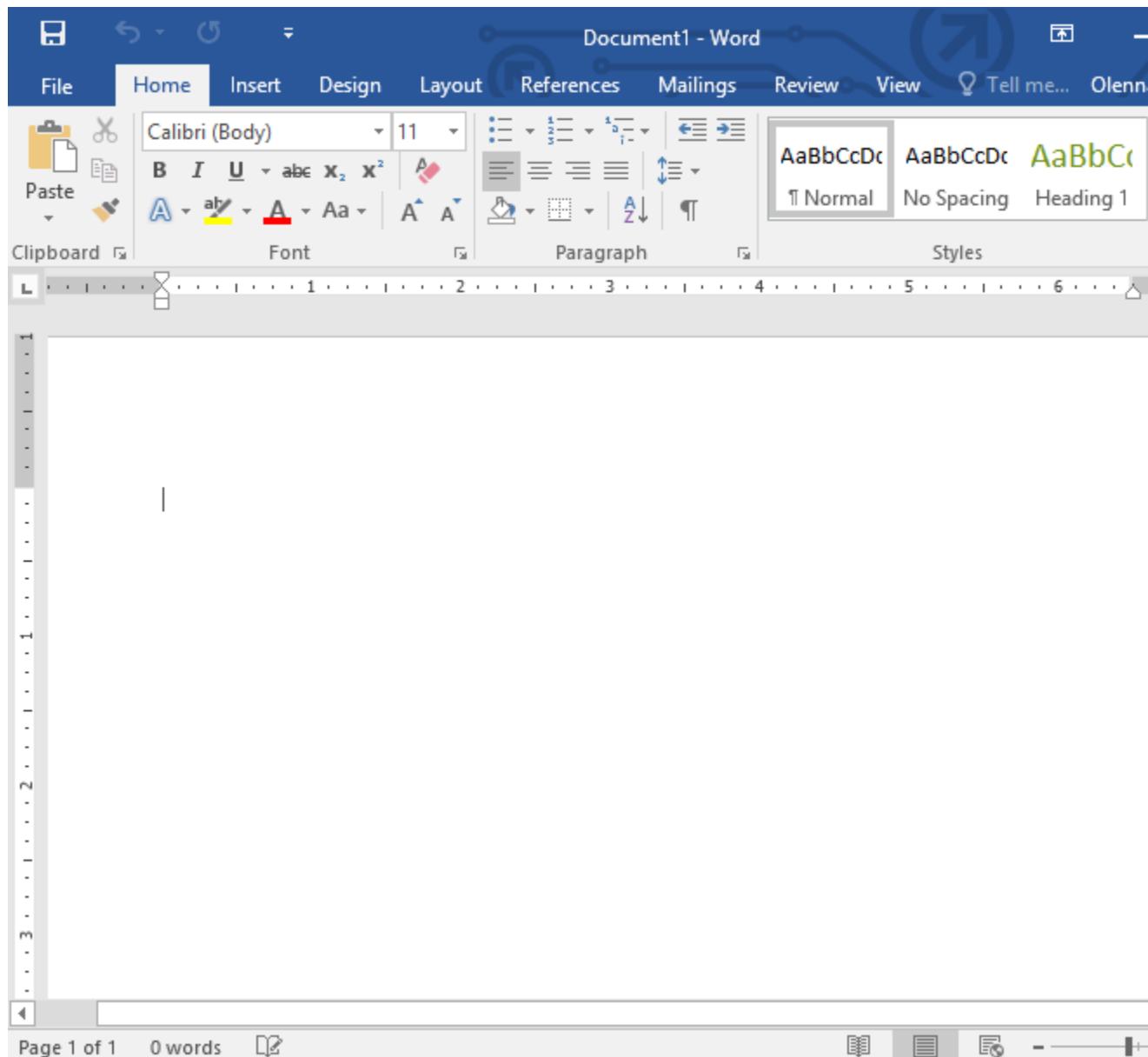
Word 2016 is similar to Word 2013 and Word 2010. If you've previously used either version, then Word 2016 should feel familiar. But if you are new to Word or have more experience with older versions, you should first take some time to become familiar with the Word 2016 interface.

The Word interface

When you open Word for the first time, the Start Screen will appear. From here, you'll be able to create a new document, choose a template, and access your recently edited documents. From the Start Screen, locate and select Blank document to access the Word interface.



Click the buttons in the interactive below to learn more about the Word interface:



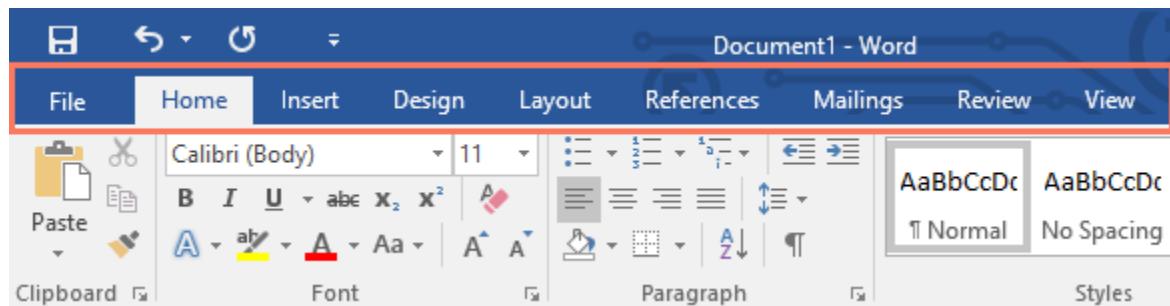
Working with the Word environment

Like other recent versions, Word 2016 continues to use features like the Ribbon and the Quick Access Toolbar—where you will find commands to perform common tasks in Word—as well as Backstage view.

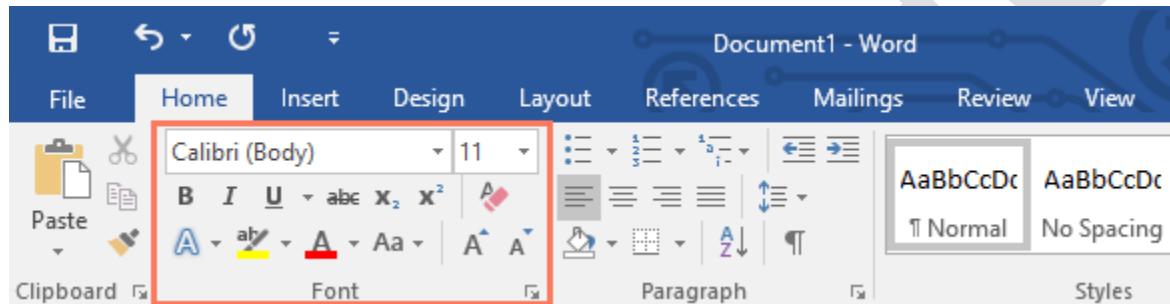
The Ribbon

Word uses a tabbed Ribbon system instead of traditional menus.

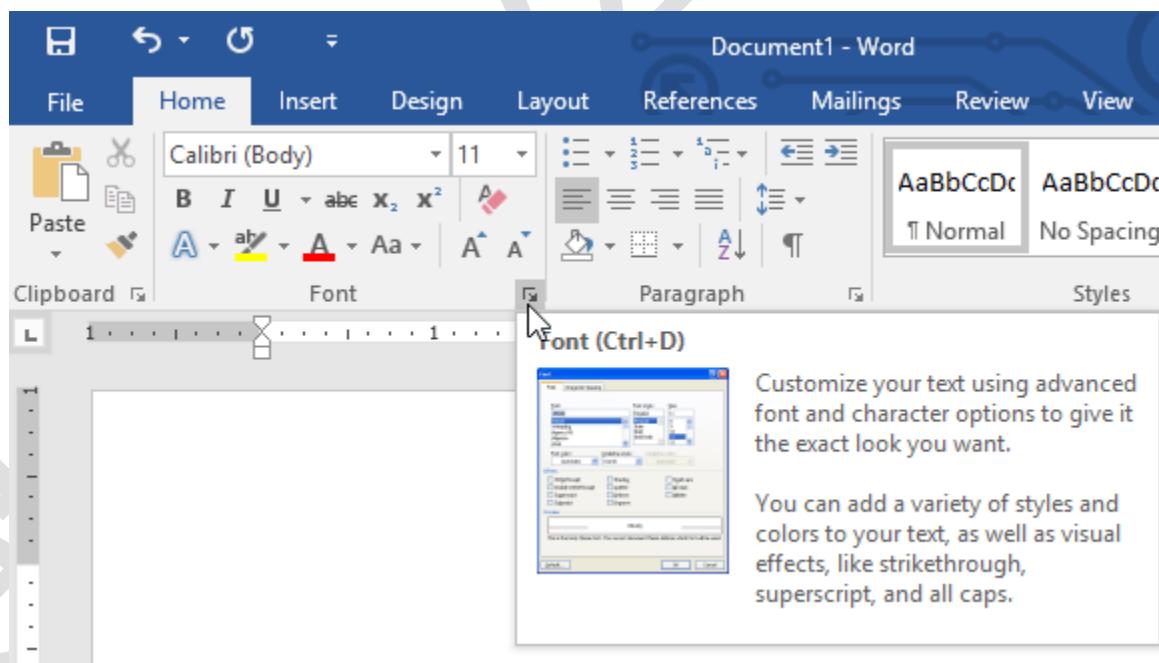
The Ribbon contains multiple tabs, which you can find near the top of the Word window.



Each tab contains several groups of related commands. For example, the Font group on the Home tab contains commands for formatting text in your document.

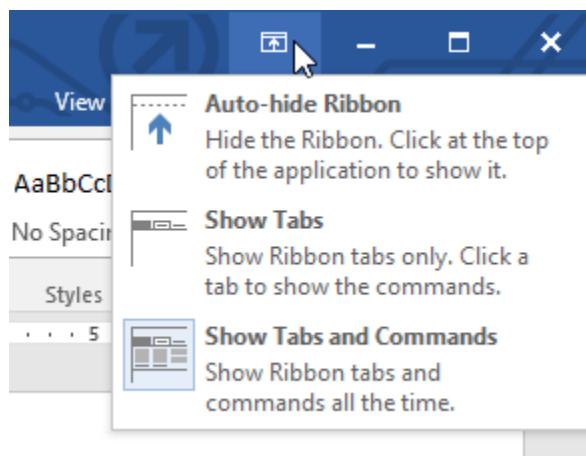


Some groups also have a small arrow in the bottom-right corner that you can click for even more options.



Showing and hiding the Ribbon

If you find that the Ribbon takes up too much screen space, you can hide it. To do this, click the Ribbon Display Options arrow in the upper-right corner of the Ribbon, then select the desired option from the drop-down menu:

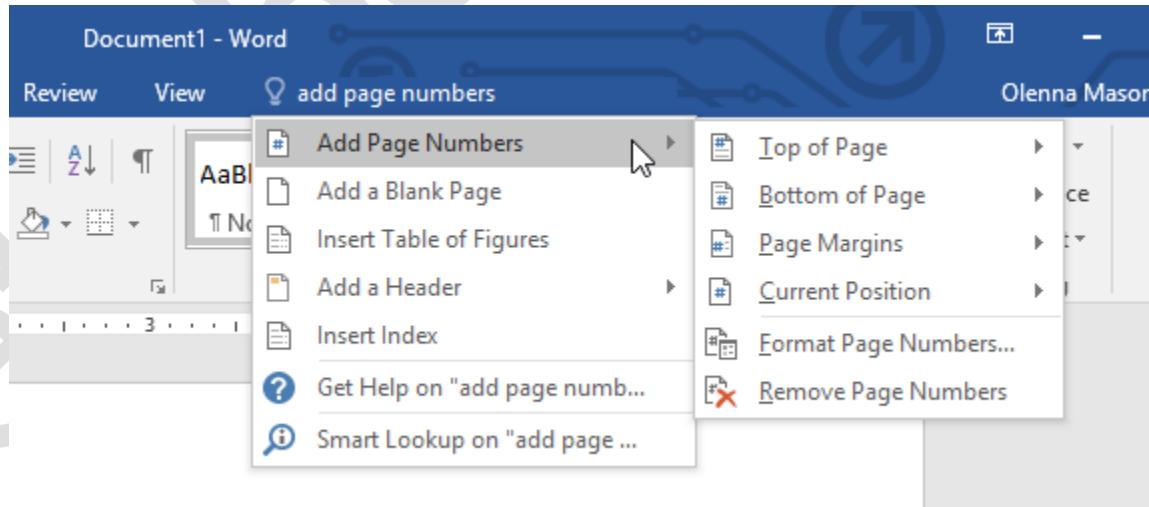


- **Auto-hide Ribbon:** Auto-hide displays your document in full-screen mode and completely hides the Ribbon from view. To show the Ribbon, click the Expand Ribbon command at the top of screen.
- **Show Tabs:** This option hides all command groups when they're not in use, but tabs will remain visible. To show the Ribbon, simply click a tab.
- **Show Tabs and Commands:** This option maximizes the Ribbon. All of the tabs and commands will be visible. This option is selected by default when you open Word for the first time.

To learn how to add custom tabs and commands to the Ribbon, review our Extra on [Customizing the Ribbon](#).

Using the Tell me feature

If you're having trouble finding command you want, the Tell Me feature can help. It works just like a regular search bar: Type what you're looking for, and a list of options will appear. You can then use the command directly from the menu without having to find it on the Ribbon.



The Quick Access Toolbar

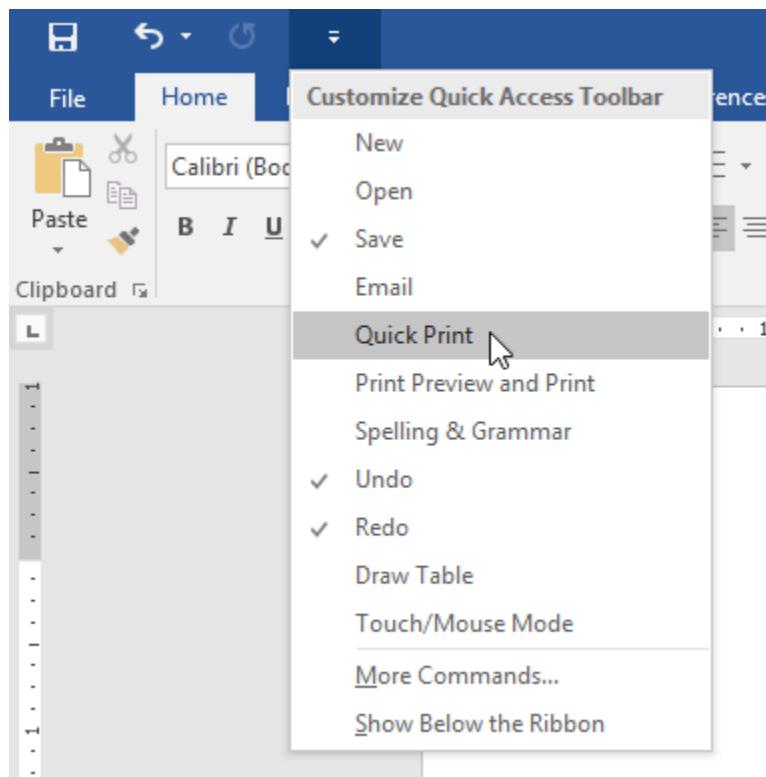
Located just above the Ribbon, the Quick Access Toolbar lets you access common commands no matter which tab is selected. By default, it shows the Save, Undo, and Redo commands, but you can add other commands depending on your needs.

To add commands to the Quick Access Toolbar:

1. Click the drop-down arrow to the right of the Quick Access Toolbar.



2. Select the command you want to add from the menu.



3. The command will be added to the Quick Access Toolbar.

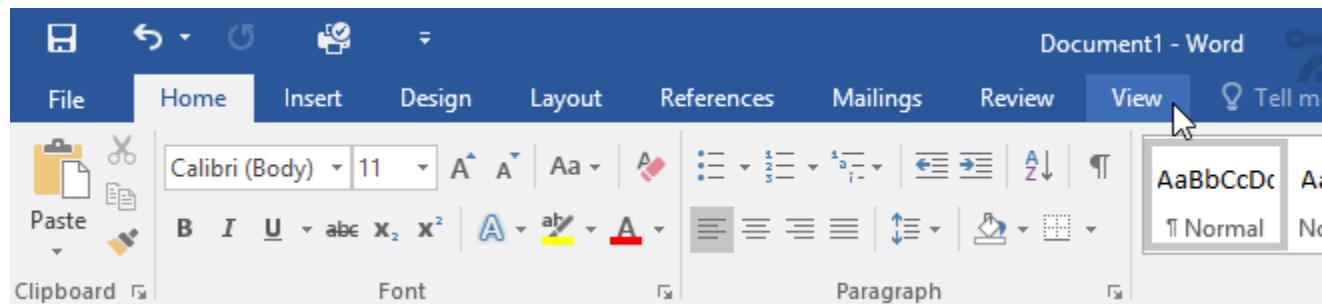


The Ruler

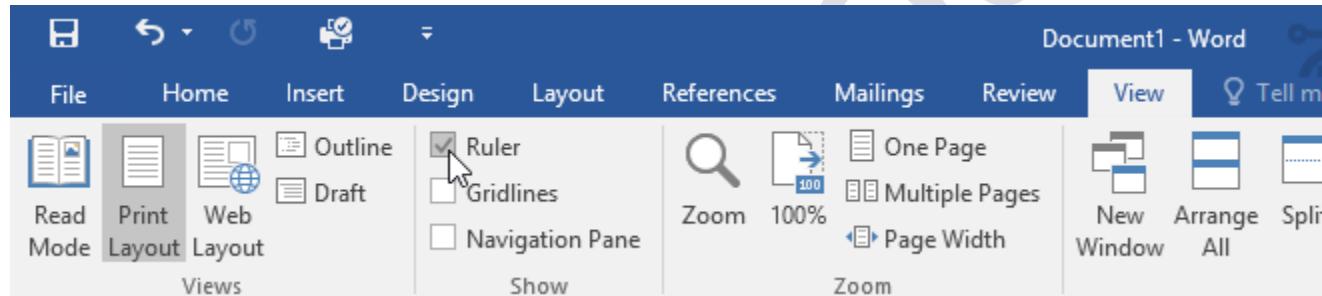
The Ruler is located at the top and to the left of your document. It makes it easier to adjust your document with precision. If you want, you can hide the Ruler to create more screen space.

To show or hide the Ruler:

1. Click the View tab.



2. Click the checkbox next to Ruler to show or hide the Ruler.



Backstage view

Backstage view gives you various options for saving, opening a file, printing, and sharing your document. To access Backstage view, click the File tab on the Ribbon.



Click the buttons in the interactive below to learn more about using Backstage view.

The screenshot shows the Microsoft Word ribbon with the 'Info' tab selected. On the left, a vertical menu lists options: Info, New, Open, Save, Save As, Print, Share, Export, Close, Account, and Options. To the right, there are three main sections: 'Protect Document' (with a lock icon), 'Inspect Document' (with a checkmark icon), and 'Manage Document' (with a magnifying glass icon). Each section has a brief description and a list of properties on the far right. The properties include: Size (Not specified), Pages (1), Words (0), Total Editing Time (18 M), Title (Add), Tags (Add), Comments (Add), Related Dates, Last Modified, Created (Today), Last Printed, Related People, Author (Add), Last Modified By, and Show All Properties.

Properties	Value
Size	Not specified
Pages	1
Words	0
Total Editing Time	18 M
Title	Add
Tags	Add
Comments	Add
Related Dates	
Last Modified	
Created	Today
Last Printed	
Related People	
Author	Add
Last Modified By	
Show All Properties	

Document views and zooming

Word has a variety of viewing options that change how your document is displayed. You can choose to view your document in Read Mode, Print Layout, or Web Layout. These views can be useful for various tasks, especially if you're planning to print the document. You can also zoom in and out to make your document easier to read.

Switching document views

Switching between different document views is easy. Just locate and select the desired document view command in the bottom-right corner of the Word window.

- **Read Mode:** This view opens the document to a full screen. This view is great for reading large amounts of text or simply reviewing your work.

without whom the *SR* would not have been able to solicit and select the excellent writers that have graced their pages during these past decades. For the last seventy-six years, the office of *SR* has housed only five, with the most recent editor, George Core, beginning his run in 1973. Andrew Nelson Lytle, one of the South's more distinguished (and underappreciated) men of letters, edited the *Sewanee Review* twice in his career, once in 1942 to 44 and then again from 1965 to 1973. During his tenure as editor, Lytle helped to resurrect the magazine from academic oblivion, financial straits and a dwindling readership while presenting some of the twentieth century's finest critics, writers and poets.



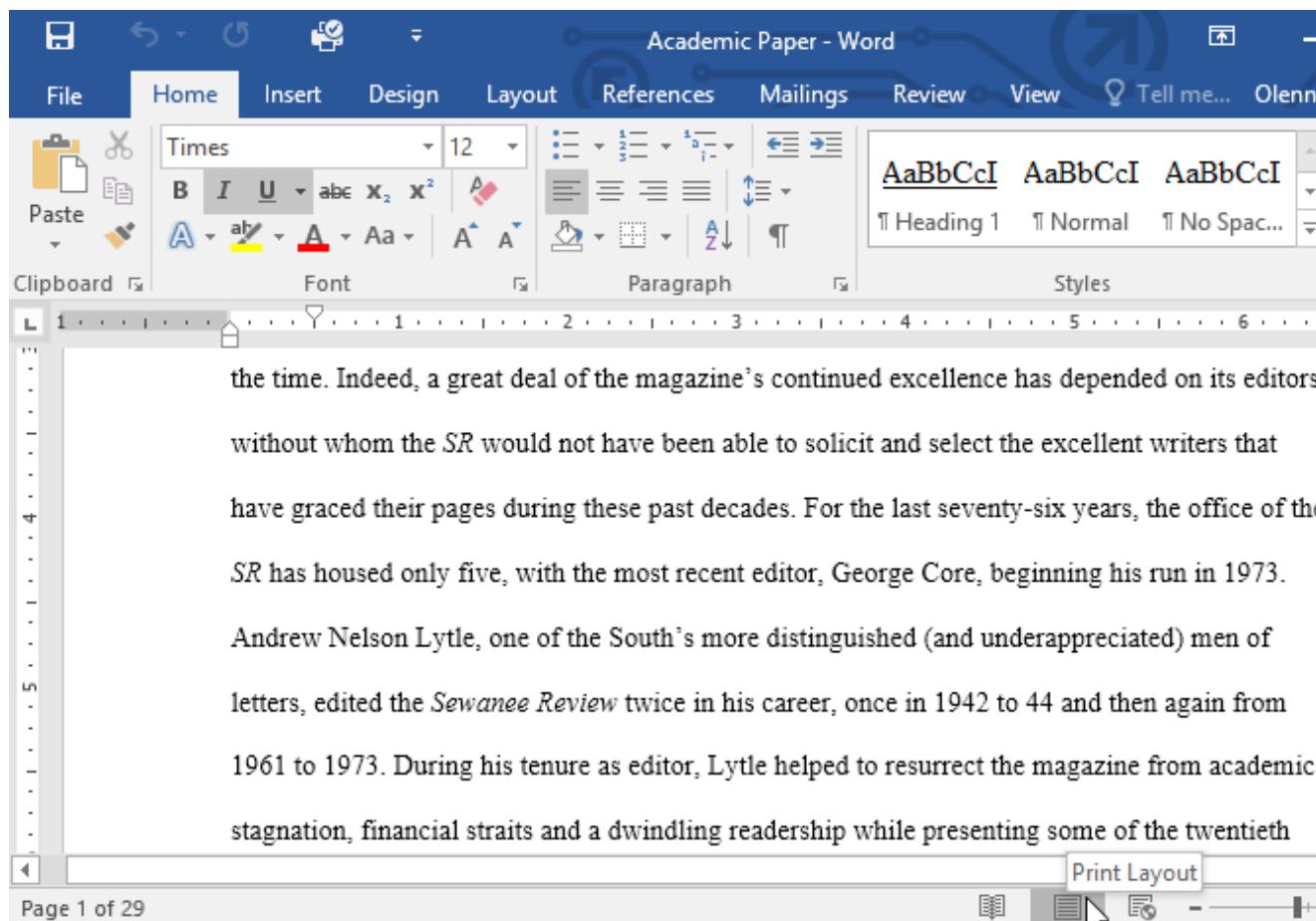
Screen 2 of 77

Read Mode

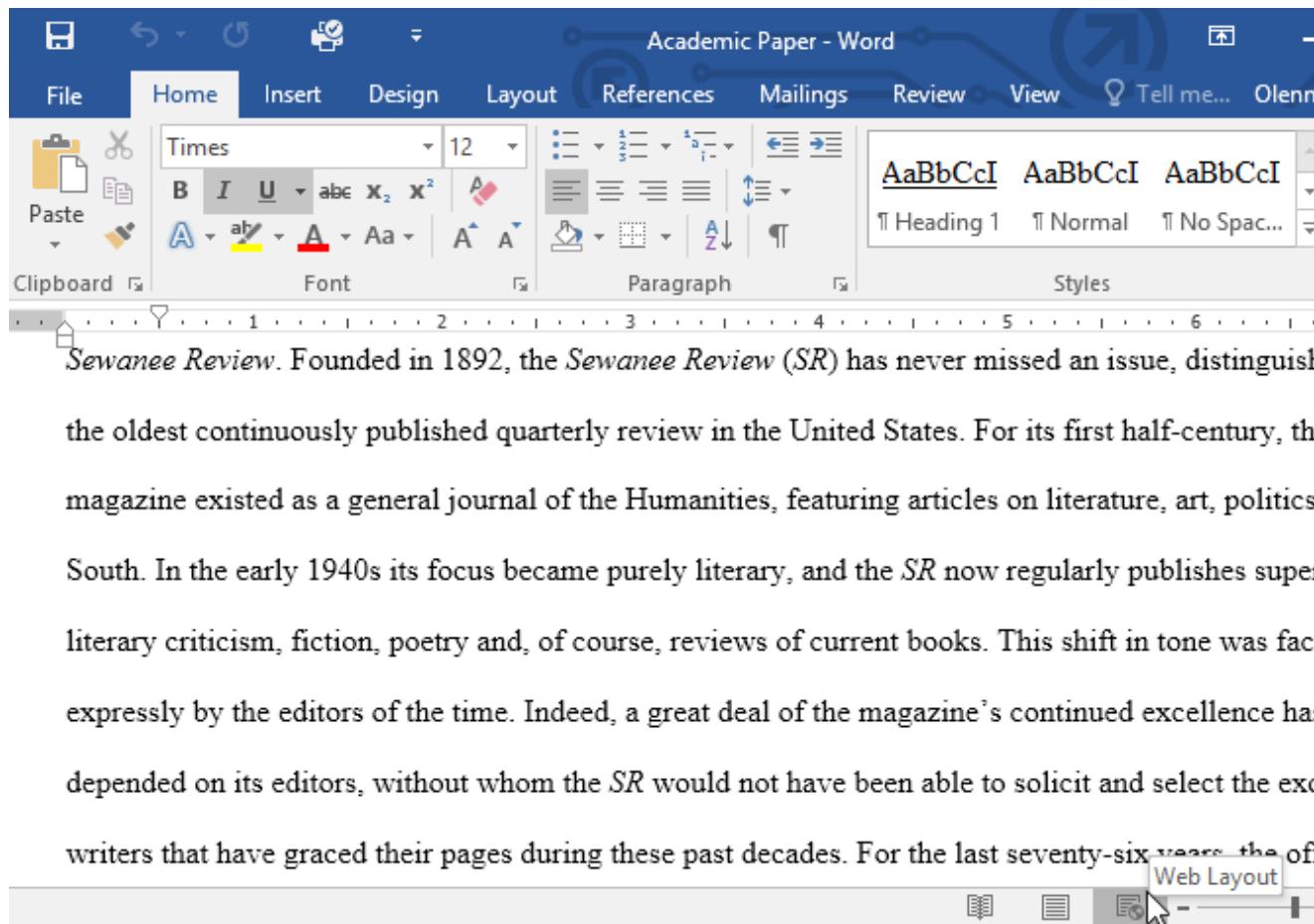


- **Print Layout:** This is the default document view in Word. It shows what the document will look like on the printed page.

Peterbo



- **Web Layout:** This view displays the document as a webpage, which can be helpful if you're using Word to publish content online.



Zooming in and out

To zoom in or out, click and drag the zoom control slider in the bottom-right corner of the Word window. You can also select the + or - commands to zoom in or out by smaller increments. The number next to the slider displays the current zoom percentage, also called the zoom level.

rs of the time. Indeed, a great deal of the magazine's

ed on its editors, without whom the *SR* would not have

: excellent writers that have graced their pages during

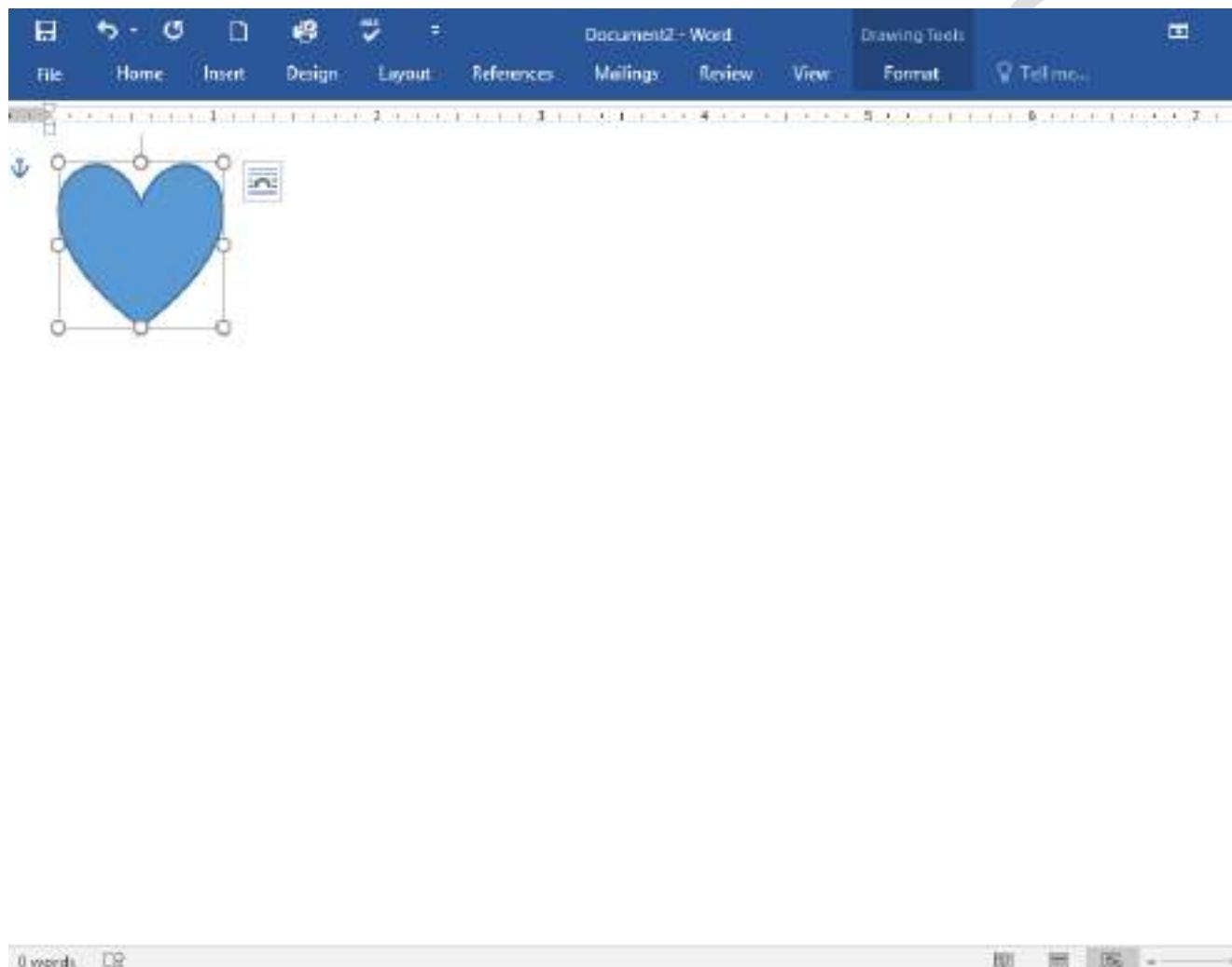
Zoom In

120%

Challenge!

1. Open Word 2016, and create a blank document.
2. Change the Ribbon Display Options to Show Tabs.
3. Using Customize Quick Access Toolbar, add New, Quick Print, and Spelling & Grammar.
4. In the Tell me bar, type Shape and press Enter.
5. Choose a shape from the menu, and double-click somewhere on your document.

- 6. Show the Ruler if it is not already visible.**
- 7. Zoom the document to 120%.**
- 8. Change the Document view to Web Layout.**
- 9. When you're finished, your document should look something like this:**



- 10. Change the Ribbon Display Options back to Show Tabs and Commands, and change the Document View back to Print Layout.**

Lesson 2: Understanding OneDrive

Introduction

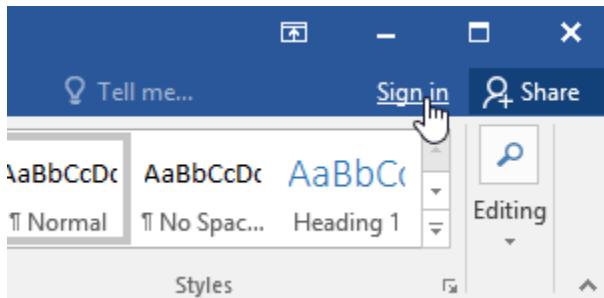
Many of the features in Office are geared toward saving and sharing files online. OneDrive is Microsoft's online storage space that you can use to save, edit, and share your documents and other files. You can access OneDrive from your computer, smartphone, or any of the devices you use.

To get started with OneDrive, all you need to do is set up a free Microsoft account, if you don't already have one.

If you don't already have a Microsoft account, you can go to the [Creating a Microsoft](#)

[Account](#) lesson in our Microsoft Account tutorial.

Once you have a Microsoft account, you'll be able to sign in to Office. Just click Sign in in the upper-right corner of the Word window.



Benefits of using OneDrive

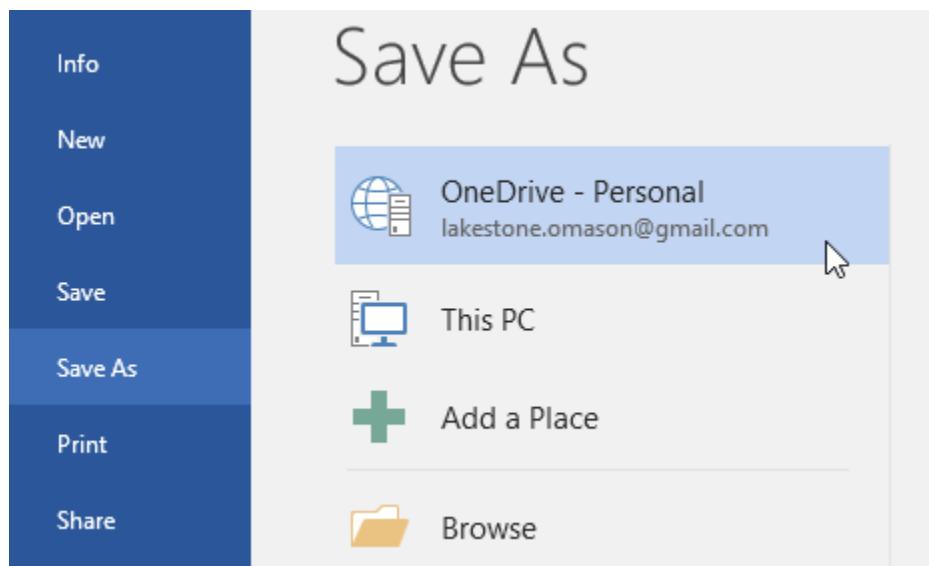
Once you're signed in to your Microsoft account, here are a few of the things you'll be able to do with OneDrive:

- **Access your files anywhere:** When you save your files to OneDrive, you'll be able to access them from any computer, tablet, or smartphone that has an Internet connection. You'll also be able to create new documents from OneDrive.
- **Back up your files:** Saving files to OneDrive gives them an extra layer of protection. Even if something happens to your computer, OneDrive will keep your files safe and accessible.
- **Share files:** It's easy to share your OneDrive files with friends and coworkers. You can choose whether they can edit or simply read files. This option is great for collaboration because multiple people can edit a document at the same time (also known as co-authoring).

Saving and opening files

When you're signed in to your Microsoft account, OneDrive will appear as an option whenever you save or open a file. You still have the option of saving files to your computer. However, saving files to your OneDrive allows you to access them from any other computer, and it also allows you to share files with friends and coworkers.

For example, when you click Save As, you can select either OneDrive or This PC as the save location.



Lesson 3: Creating and Opening Documents

Introduction

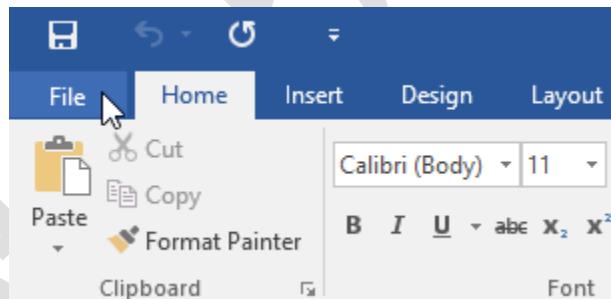
Word files are called documents. Whenever you start a new project in Word, you'll need to create a new document, which can either be blank or from a template. You'll also need to know how to open an existing document.

Watch the video below to learn more about creating and opening documents in Word.

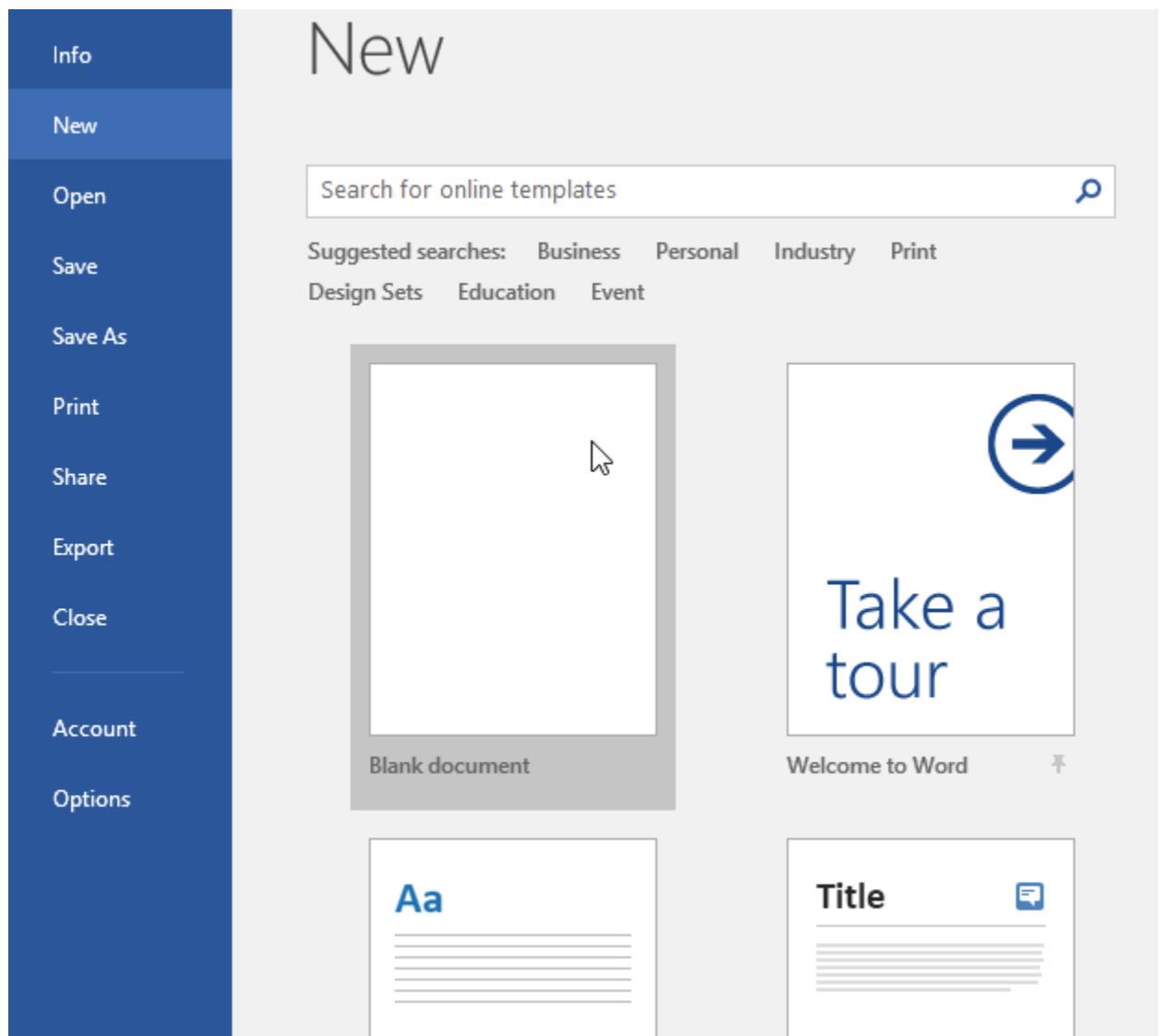
To create a new blank document:

When beginning a new project in Word, you'll often want to start with a new blank document.

1. Select the File tab to access Backstage view.



2. Select New, then click Blank document.

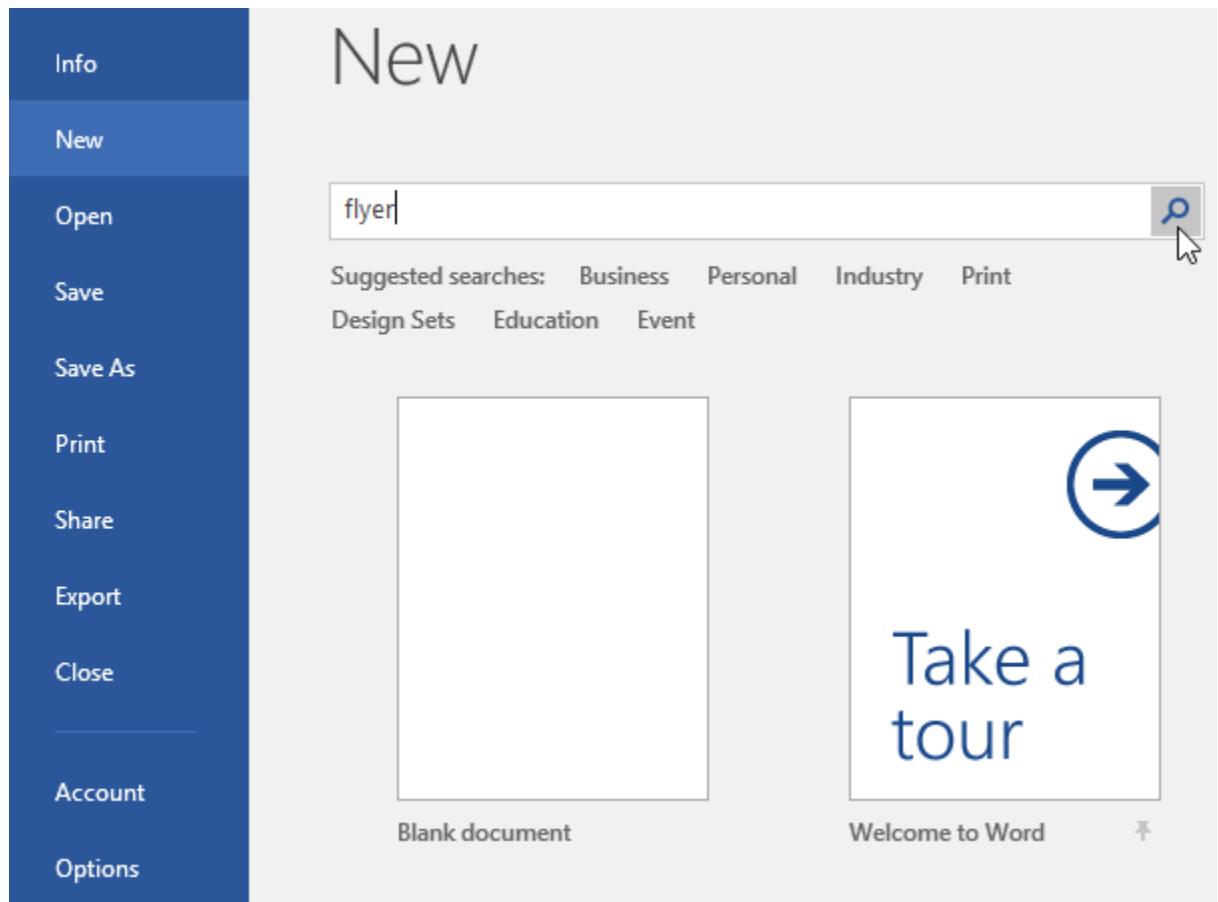


3. A new blank document will appear.

To create a new document from a template:

A template is a predesigned document you can use to create a new document quickly. Templates often include custom formatting and designs, so they can save you a lot of time and effort when starting a new project.

1. Click the File tab to access Backstage view, then select New.
2. Several templates will appear below the Blank document option. You can also use the search bar to find something more specific. In our example, we'll search for a flyer template.



3. When you find something you like, select a template to preview it.



Home flyer



Seasonal event flyer



Summer event flyer



Fall flyer



Seasonal event flyer (spr...)



Seasonal event flyer (wi...)



Seasonal event flyer (au...)

4. A preview of the template will appear. Click Create to use the selected template.

Pete

SUBTITLE

TITLE

Heading

To get started right away, just tap any placeholder text (such as this) and start typing to replace it with your own. Want to insert a picture from your files or add a shape, text box, or table? You got it! On the Insert tab of the ribbon, just tap the option you need.

replace with
LOGO

Add Key Event Info Here!

Don't Be Shy—Tell Them Why They Can't Miss It!

One More Point Here!

Add More Great Info Here!

You Have Room for Another One Here!

COMPANY NAME

Street Address
City, ST ZIP Code
Telephone
Website

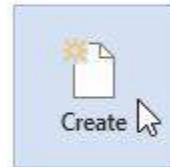
Dates and Times
Dates and Times

Seasonal event flyer (autumn)

Provided by: Microsoft Corporation

Announce your company event with this seasonal event flyer with a color block design. Customize the look by replacing the placeholder text with your own, or use this template as is by filling in your information. Find similar templates for other seasons by clicking the See Also link.

Download size: 803 KB



5. A new document will appear with the selected template.

You can also browse templates by category after performing a search.



Fall flyer



Seasonal event flyer (au...)

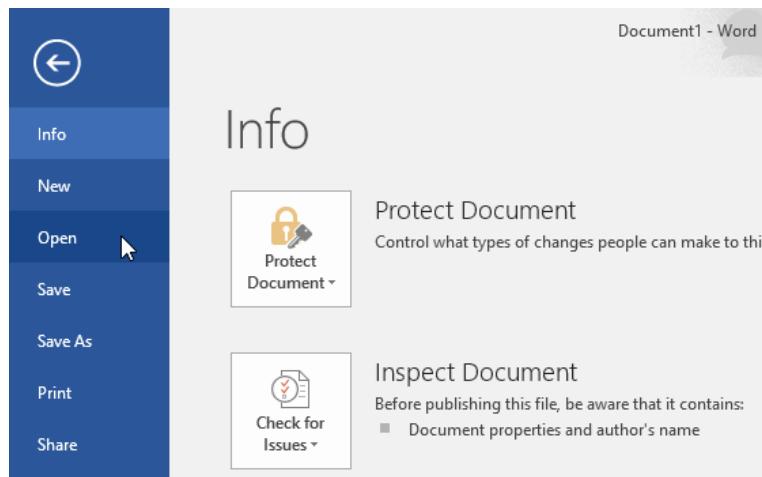
Category

Flyers	114
Event	94
Personal	72
Announcements	65
Blue	50
Business	46
Party	46
Education	43
Event Planning	42
Industry	42
Media	37
Print	34
Invitations	33
Illustration	32
Holiday	31
Posters	29
Advertisements	25
Portrait	25
Seasonal	25

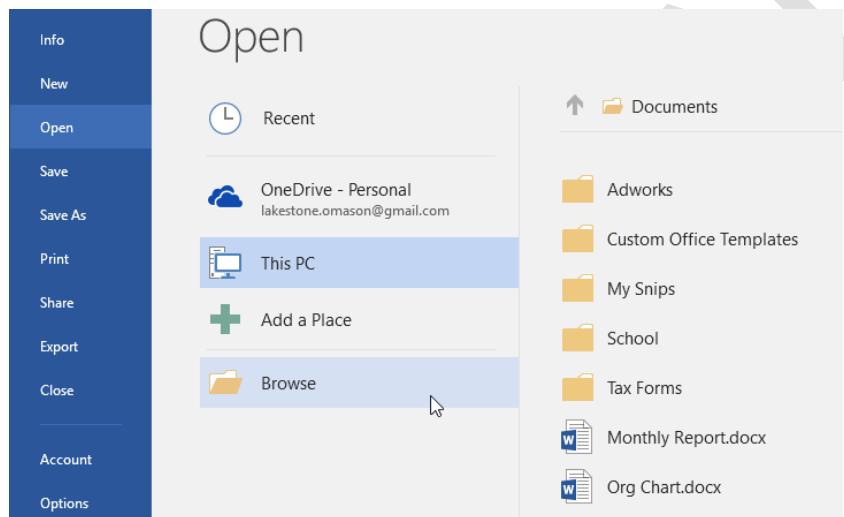
To open an existing document:

In addition to creating new documents, you'll often need to open a document that was previously saved. To learn more about saving documents, visit our lesson on [Saving and Sharing Documents](#).

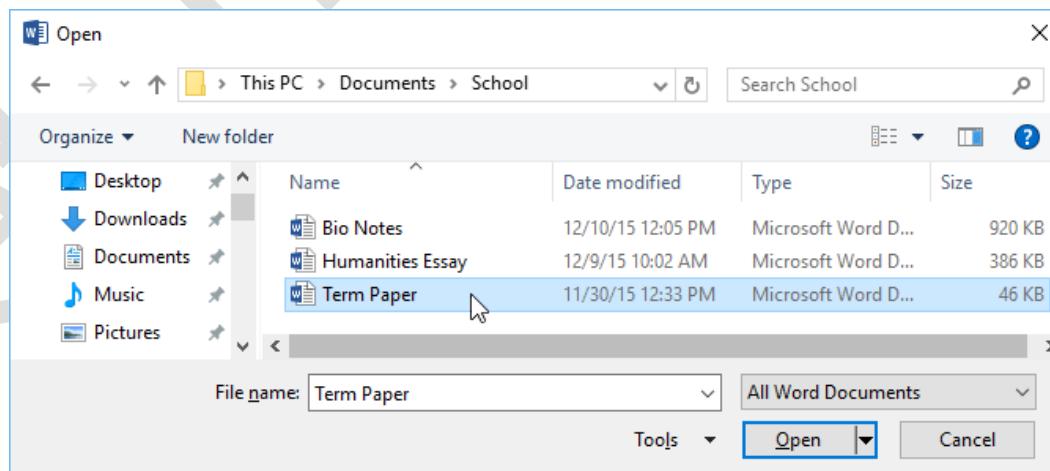
1. Navigate to Backstage view, then click Open.



2. Select This PC, then click Browse. Alternatively, you can choose OneDrive to open files stored on your OneDrive.



3. The Open dialog box will appear. Locate and select your document, then click Open.



4. The selected document will appear.

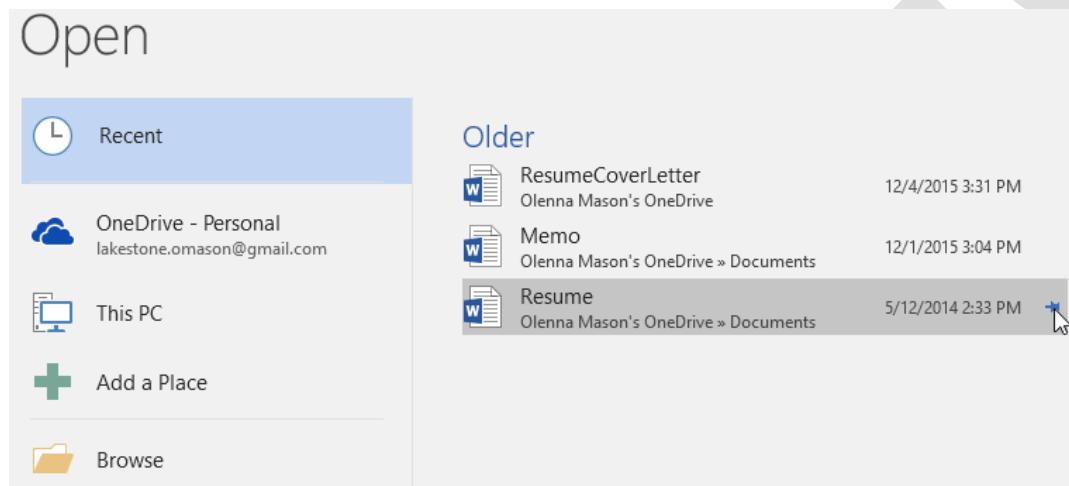
Most features in Microsoft Office, including Word, are geared toward saving and sharing documents online. This is done with OneDrive, which is an online storage space for your documents.

documents and files. If you want to use OneDrive, make sure you're signed in to Word with your Microsoft account. Review our lesson on [Understanding OneDrive](#) to learn more.

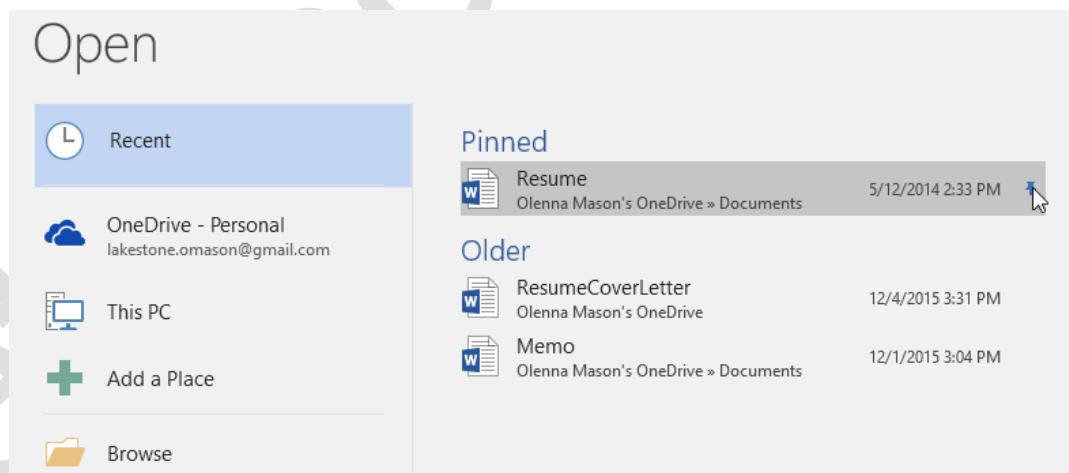
To pin a document:

If you frequently work with the same document, you can pin it to Backstage view for quick access.

- 1. Navigate to Backstage view, click Open, then select Recent.**
- 2. A list of recently edited documents will appear. Hover the mouse over the document you want to pin, then click the pushpin icon.**



- 3. The document will stay in Recent documents list until it is unpinned. To unpin a document, click the pushpin icon again.**



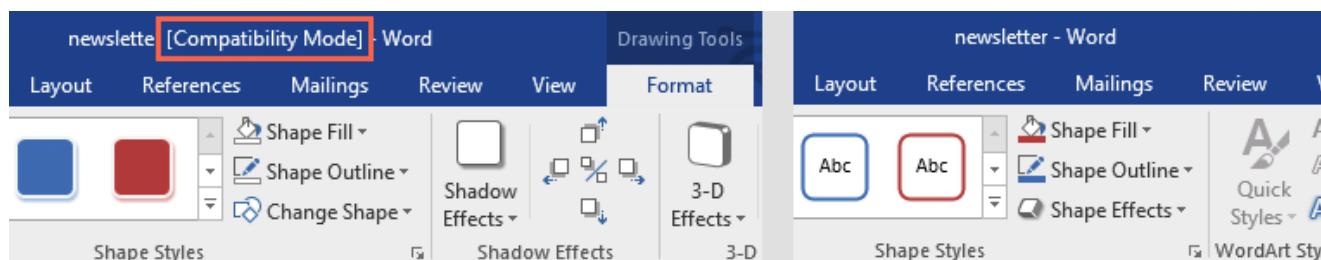
Compatibility Mode

Sometimes you may need to work with documents that were created in earlier versions of Microsoft Word, such as Word 2010 or Word 2007. When you open these types of documents, they will appear in Compatibility Mode.

Compatibility Mode disables certain features, so you'll only be able to access commands found in the program that was used to create the document. For example, if you open a document created in Word 2007 you can only use tabs and commands found in Word 2007.

2007.

In the image below, you can see how Compatibility Mode can affect which commands are available. Because the document on the left is in Compatibility Mode, it only shows commands that were available in Word 2007.



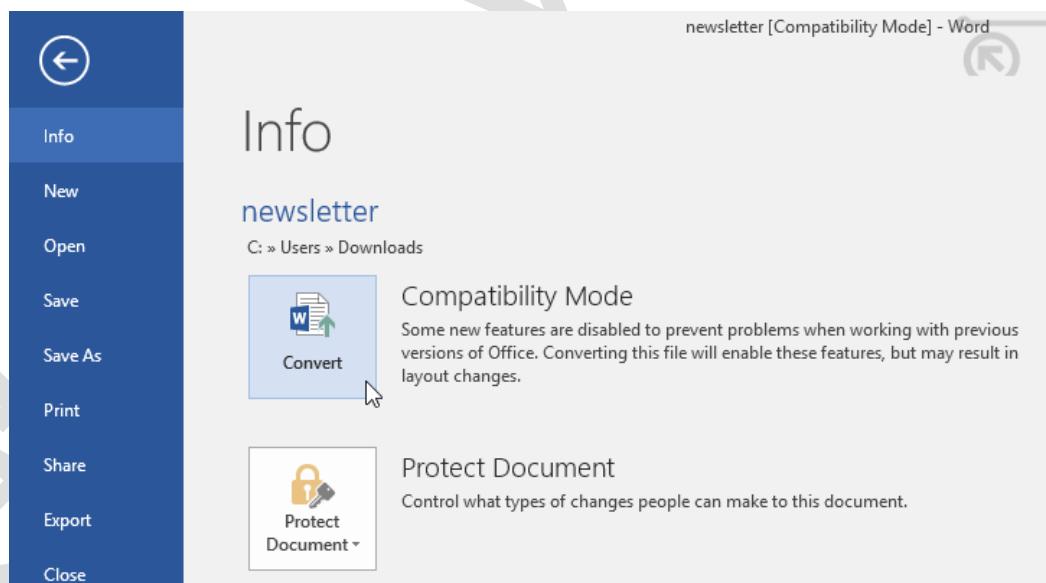
To exit Compatibility Mode, you'll need to convert the document to the current version type. However, if you're collaborating with others who only have access to an earlier version of Word, it's best to leave the document in Compatibility Mode so the format will not change.

You can review this [support page](#) from Microsoft to learn more about which features are disabled in Compatibility Mode.

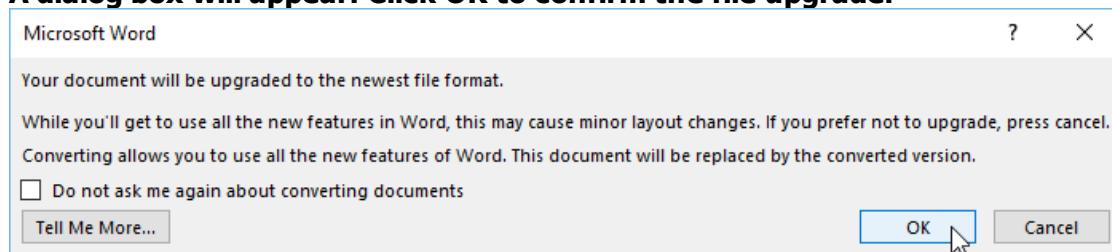
To convert a document:

If you want access to all Word 2016 features, you can convert the document to the 2016 file format.

1. Click the File tab to access Backstage view, then locate and select the Convert command.



2. A dialog box will appear. Click OK to confirm the file upgrade.



3. The document will be converted to the newest file type.

Converting a file may cause some changes to the original layout of the document.

Challenge!

1. Open our [practice document](#).

2. Notice that the document opens in Compatibility Mode. Convert it to the 2016 file format. If a dialog box appears asking if you would like to close and reopen the file in order to see the new features, choose Yes.

3. In Backstage view, pin a file or folder.

Lesson 4: Saving and Sharing Documents

Introduction

When you create a new document in Word, you'll need to know how to save it so you can access and edit it later. As with previous versions of Word, you can save files to your computer. If you prefer, you can also save files to the cloud using OneDrive. You can even export and share documents directly from Word.

Watch the video below to learn how to save and share Word documents.

Save and Save As

Word offers two ways to save a file: Save and Save As. These options work in similar ways, with a few important differences.

- **Save:** When you create or edit a document, you'll use the Save command to save your changes. You'll use this command most of the time. When you save a file, you'll only need to choose a file name and location the first time. After that, you can click the Save command to save it with the same name and location.
- **Save As:** You'll use this command to create a copy of a document while keeping the original. When you use Save As, you'll need to choose a different name and/or location for the copied version.

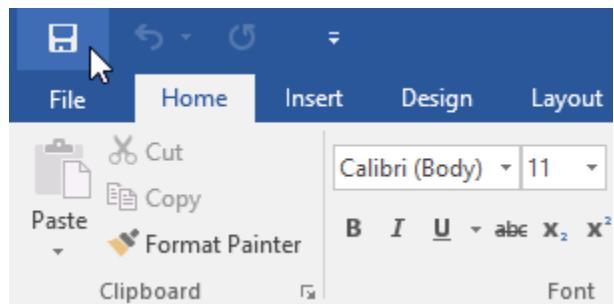
About OneDrive

Most features in Microsoft Office, including Word, are geared toward saving and sharing documents online. This is done with OneDrive, which is an online storage space for your documents and files. If you want to use OneDrive, make sure you're signed in to Word with your Microsoft account. Review our lesson on [Understanding OneDrive](#) to learn more.

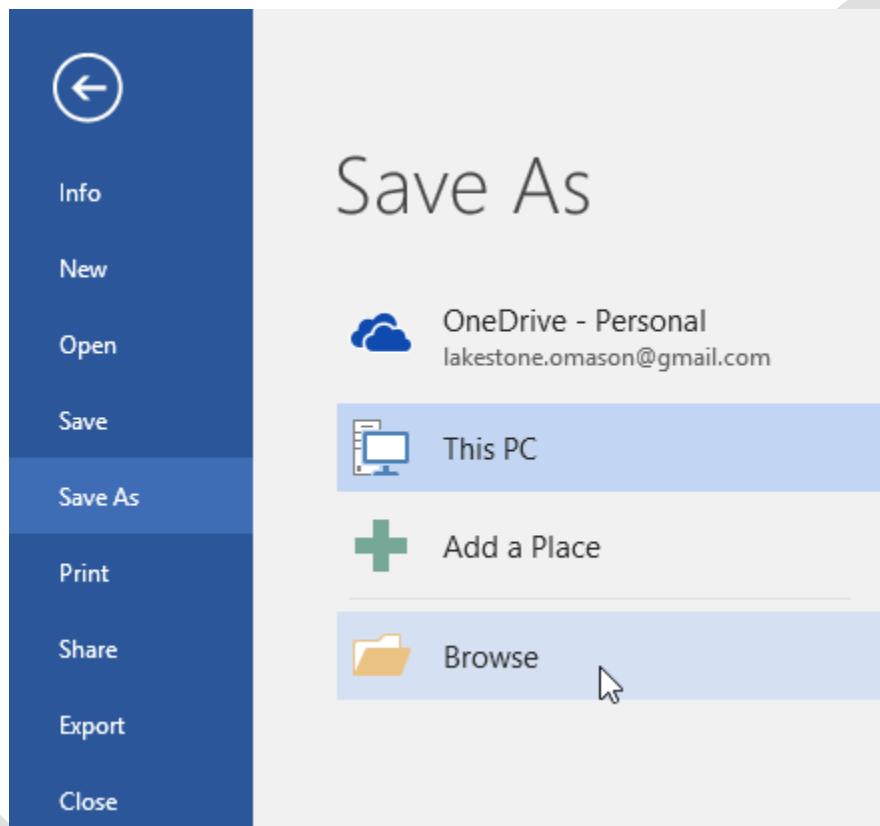
To save a document:

It's important to save your document whenever you start a new project or make changes to an existing one. Saving early and often can prevent your work from being lost. You'll also need to pay close attention to where you save the documents so it will be easy to find later.

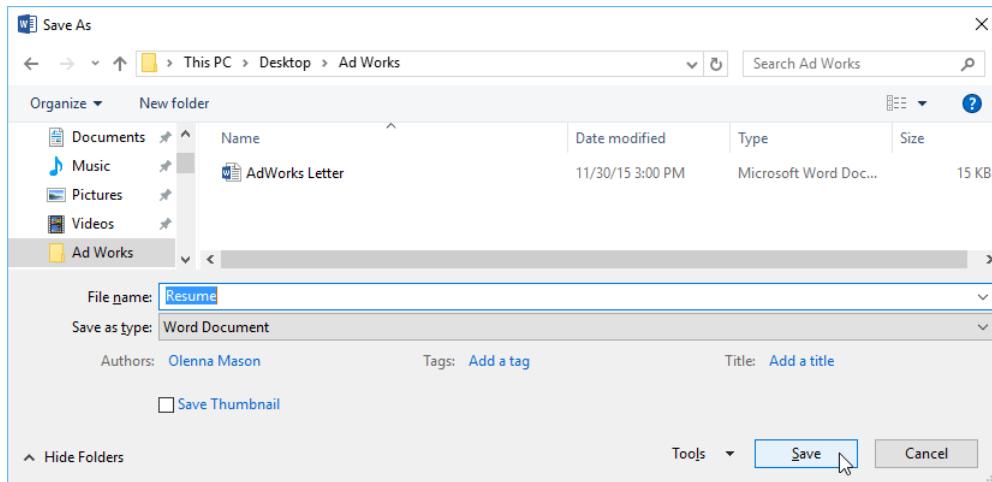
1. Locate and select the Save command on the Quick Access Toolbar.



2. If you're saving the file for the first time, the Save As pane will appear in Backstage view.
3. You'll then need to choose where to save the file and give it a file name. Click Browse to select a location on your computer. Alternatively, you can click OneDrive to save the file to your OneDrive.



4. The Save As dialog box will appear. Select the location where you want to save the document.
5. Enter a file name for the document, then click Save.



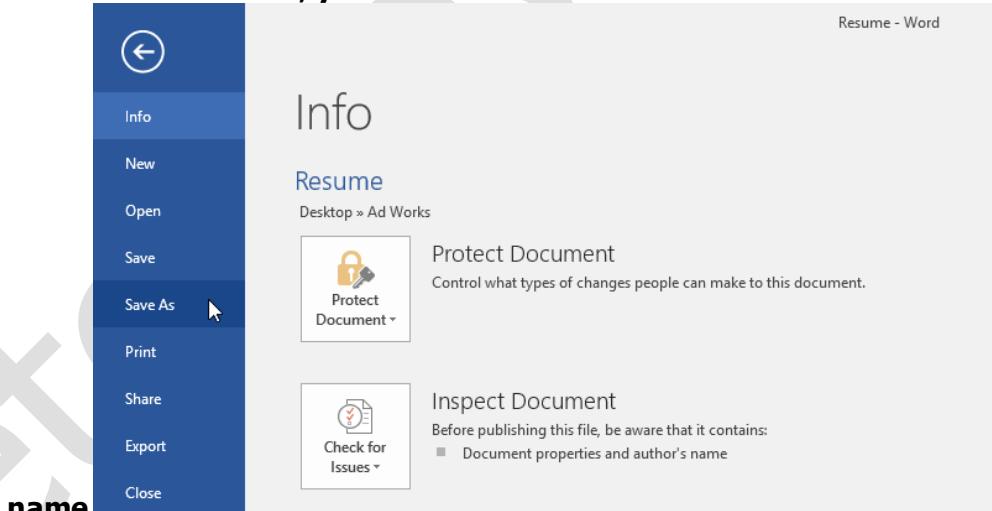
6. The document will be saved. You can click the Save command again to save your changes as you modify the document.

You can also access the Save command by pressing **Ctrl+S** on your keyboard.

Using Save As to make a copy

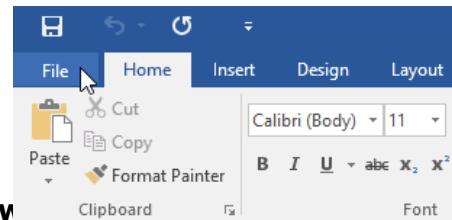
If you want to save a different version of a document while keeping the original, you can create a copy. For example, if you have a file named Sales Report, you could save it as Sales Report 2 so you'll be able to edit the new file and still refer back to the original version.

To do this, you'll click the Save As command in Backstage view. Just like when saving a file for the first time, you'll need to choose where to save the file and give it a new file



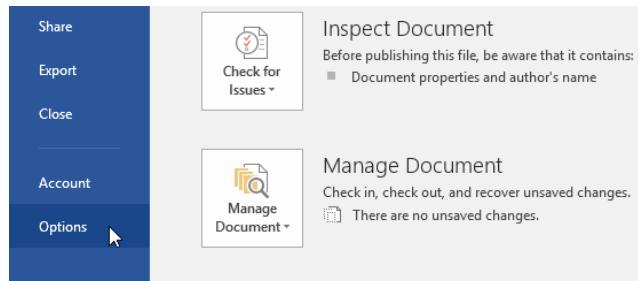
To change the default save location:

If you don't want to use OneDrive, you may be frustrated that OneDrive is selected as the default location when saving. If you find this inconvenient, you can change the default save location so This PC is selected by default.

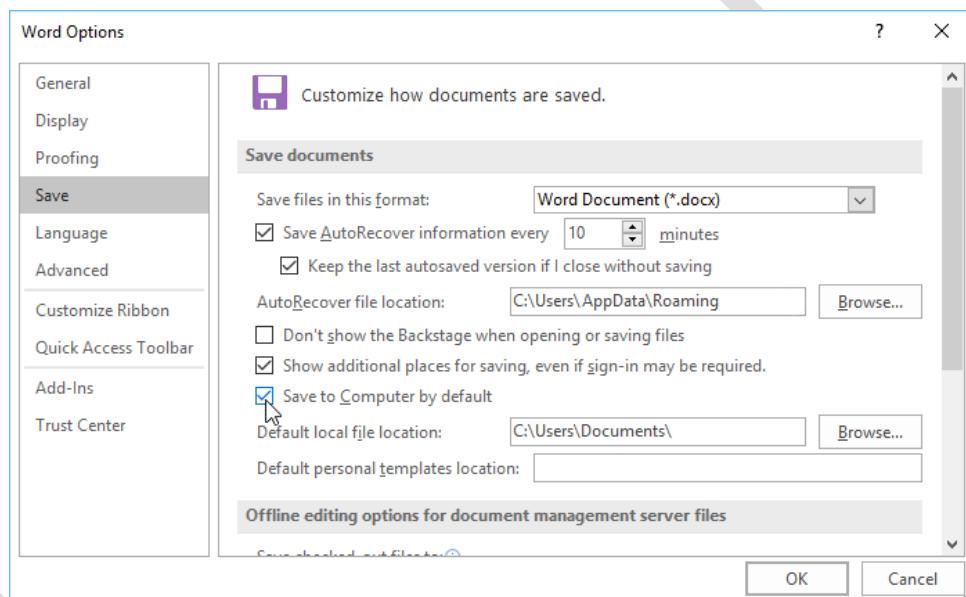


Click the File tab to access Backstage view

1. Click Options.



2. The Word Options dialog box will appear. Select Save on the left, check the box next to Save to Computer by default, then click OK. The default save location will be changed.

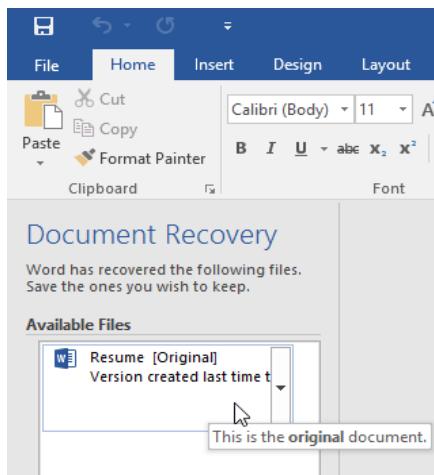


AutoRecover

Word automatically saves your documents to a temporary folder while you are working on them. If you forget to save your changes or if Word crashes, you can restore the file using AutoRecover.

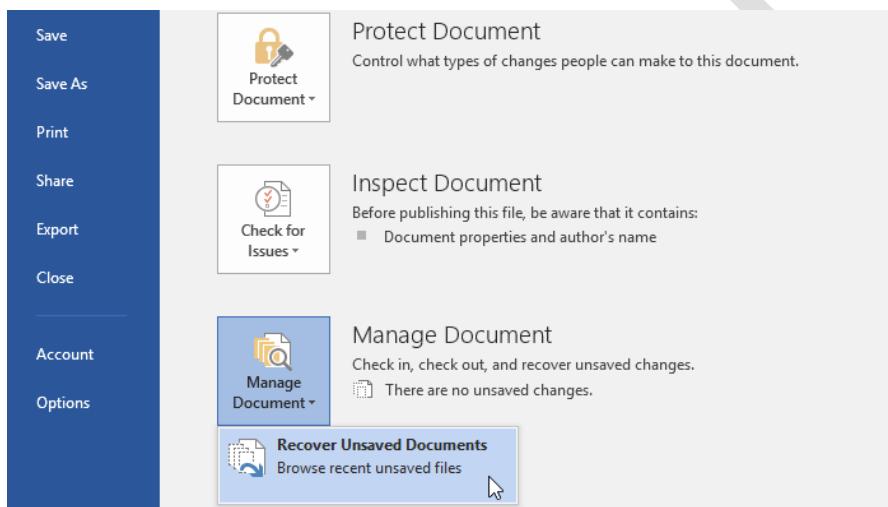
To use AutoRecover:

- 1. Open Word. If autosaved versions of a file are found, the Document Recovery pane will appear on the left.**
- 2. Click to open an available file. The document will be recovered.**



By default, Word autosaves every 10 minutes. If you are editing a document for less than 10 minutes, Word may not create an autosaved version.

If you don't see the file you need, you can browse all autosaved files from Backstage view. Select the File tab, click Manage Versions, then choose Recover Unsaved Documents.



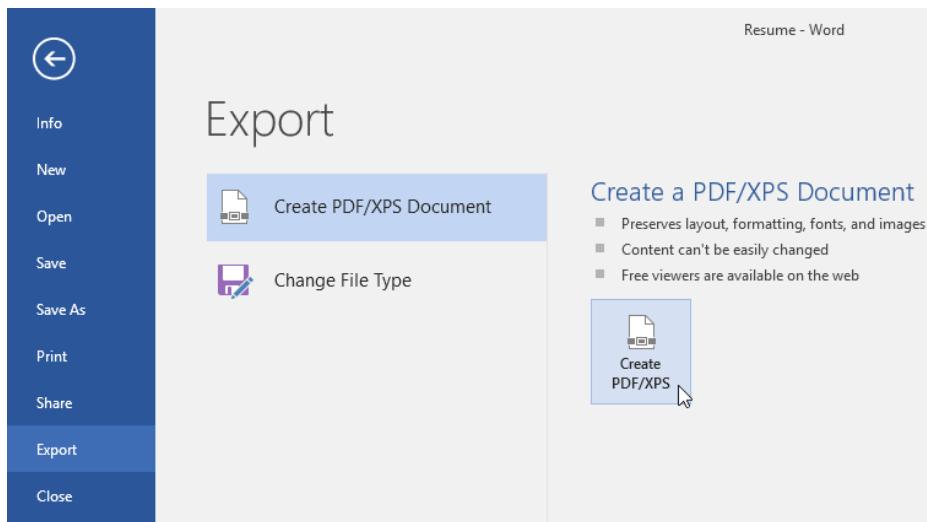
Exporting documents

By default, Word documents are saved in the .docx file type. However, there may be times when you need to use another file type, such as a PDF or Word 97-2003 document. It's easy to export your document from Word to a variety of file types.

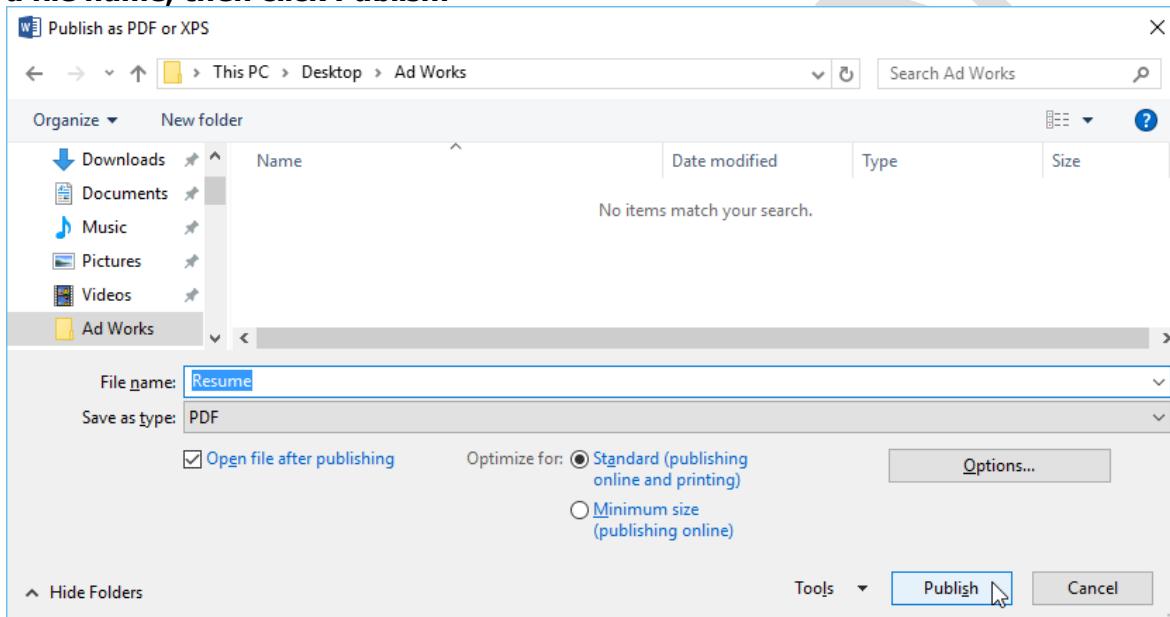
To export a document as a PDF file:

Exporting your document as an Adobe Acrobat document, commonly known as a PDF file, can be especially useful if you're sharing a document with someone who does not have Word. A PDF file will make it possible for recipients to view—but not edit—the content of your document.

- 1. Click the File tab to access Backstage view, choose Export, then select Create PDF/XPS.**



2. The Save As dialog box will appear. Select the location where you want to export the document, enter a file name, then click Publish.

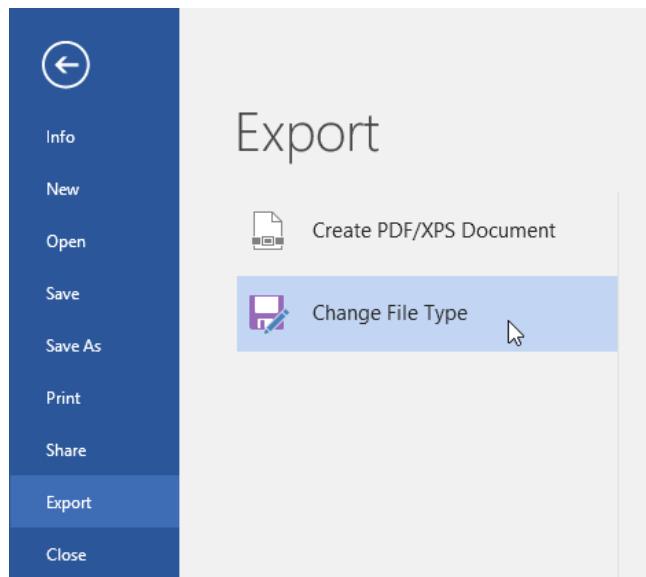


If you need to edit a PDF file, Word allows you to convert a PDF file into an editable document. Read our guide on [Editing PDF Files](#) for more information.

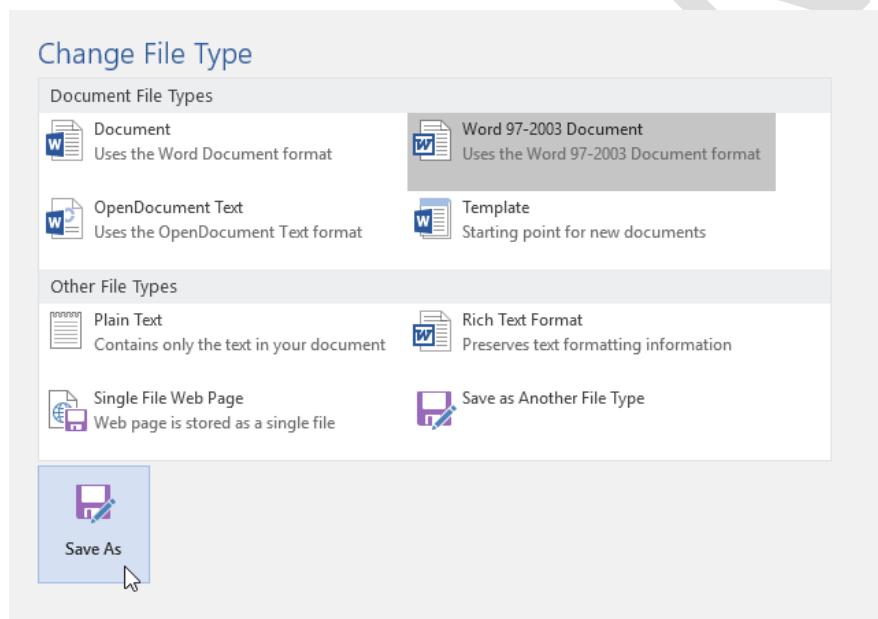
To export a document to other file types:

You may also find it helpful to export your document to other file types, such as a Word 97-2003 Document if you need to share with people using an older version of Word or as a .txt file if you need a plain-text version of your document.

1. Click the File tab to access Backstage view, choose Export, then select Change File Type.

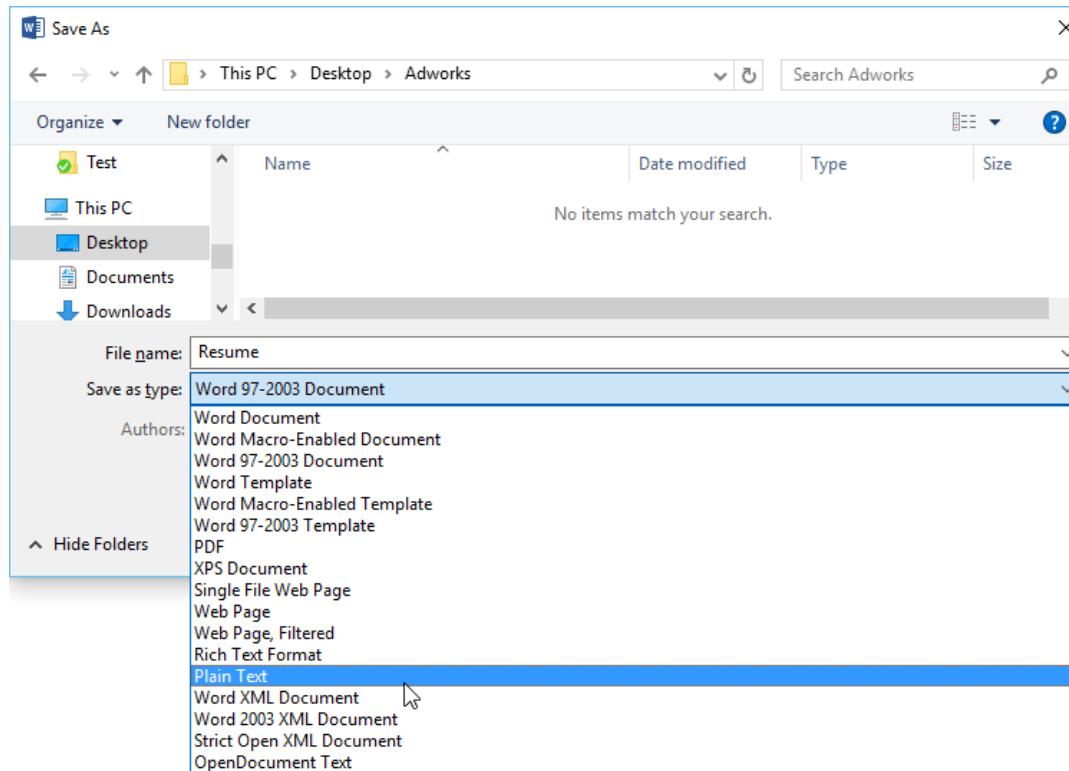


2. Select a file type, then click Save As.



3. The Save As dialog box will appear. Select the location where you want to export the document, enter a file name, then click Save.

You can also use the Save as type drop-down menu in the Save As dialog box to save documents to a variety of file types.



Sharing documents

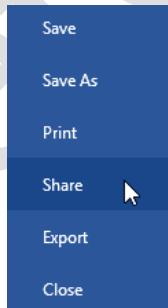
Word makes it easy to share and collaborate on documents using OneDrive. In the past, if you wanted to share a file with someone you could send it as an email attachment. While convenient, this system also creates multiple versions of the same file, which can be difficult to organize.

When you share a document from Word, you're actually giving others access to the exact same file. This lets you and the people you share with edit the same document without having to keep track of multiple versions.

In order to share a document, it must first be saved to your OneDrive.

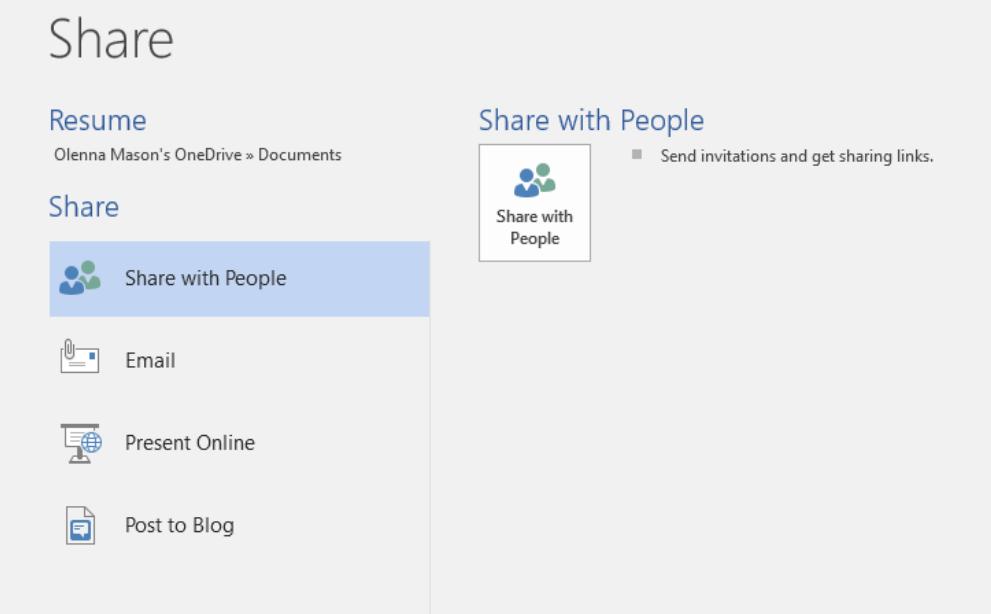
To share a document:

- 1. Click the File tab to access Backstage view, then click Share.**



- 2. The Share pane will appear.**

Click the buttons in the interactive below to learn more about different ways to share a document.



Post to Blog

From here, you can use Word to post entries directly to your blog if you use one of the supported blogging sites such as SharePoint Blog, WordPress, or Blogger.

Challenge!

1. Open our [practice document](#).
2. Use Save As to create a copy of the document. Name the new copy **Saving Challenge Practice**. You can save it to a folder on your computer or to your OneDrive.
3. Export your document as a PDF.

Lesson 5: Text Basics

Introduction

If you're new to Microsoft Word, you'll need to learn the basics of typing, editing, and organizing text. Basic tasks include the ability to add, delete, and move text in your document, as well as how to cut, copy, and paste.

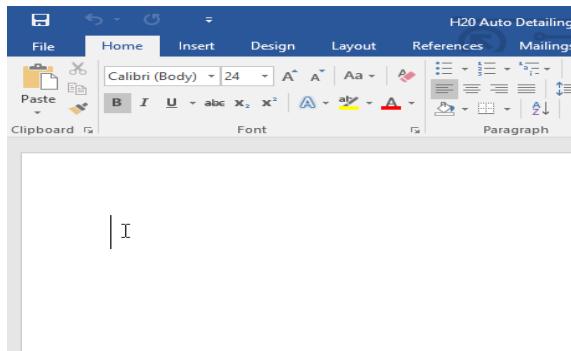
Optional: Download our [practice document](#).

Watch the video below to learn the basics of working with text in Word.

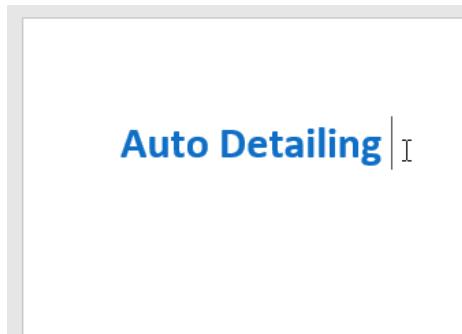
Using the insertion point to add text

The insertion point is the blinking vertical line in your document. It indicates where you can enter text on the page. You can use the insertion point in a variety of ways.

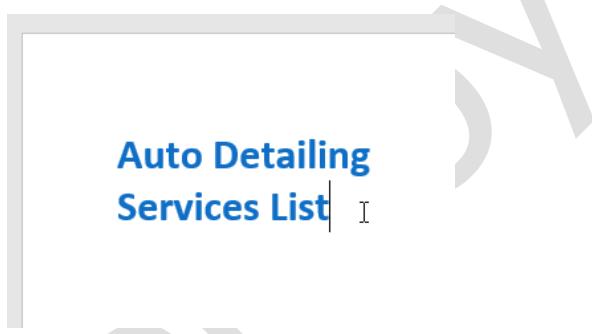
- **Blank document:** When a new blank document opens, the insertion point will appear in the top-left corner of the page. If you want, you can begin typing from this location.



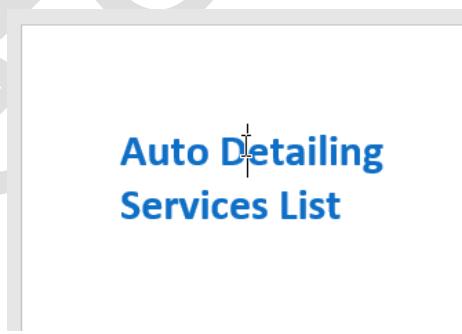
- **Adding spaces:** Press the spacebar to add spaces after a word or in between text.



- **New paragraph line:** Press Enter on your keyboard to move the insertion point to the next paragraph line.



- **Manual placement:** Once you begin typing, you can use the mouse to move the insertion point to a specific place in your document. Simply click the location in the text where you want to place it.



- **Arrow keys:** You can also use the arrow keys on your keyboard to move the insertion point. The left and right arrow keys will move between adjacent characters on the same line, while the up and down arrows will move between paragraph lines. You can also press Ctrl+Left or Ctrl+Right to quickly move between entire words.

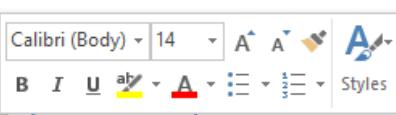
In a new blank document, you can double-click the mouse to move the insertion point elsewhere on the page.

Selecting text

Before you can move or format text, you'll need to select it. To do this, click and drag your mouse over the text, then release the mouse. A highlighted box will appear over the selected text.

■ H₂O Signature Wash
Cars \$20 · SUVs \$25 and up
Hand wash and dry vehicle, including tires, rims, wheel wells, and door jambs.
Interior vacuum, dust, and deodorize, plus windows inside & out.

When you select text or images in Word, a hover toolbar with command shortcuts will appear. If the toolbar does not appear at first, try hovering the mouse over the selection.



■ H₂O Signature Wash
Cars \$20 · SUVs \$25 and up
Hand wash and dry vehicle, including tires, rims, wheel wells, and door jambs.
Interior vacuum, dust, and deodorize, plus windows inside & out.

To select multiple lines of text:

- 1. Move the mouse pointer to the left of any line so it becomes a right slanted arrow.**

■ H₂O Signature Wash
Cars \$20 · SUVs \$25 and up
Hand wash and dry vehicle, including tires, rims, wheel wells, and door jambs.
Interior vacuum, dust, and deodorize, plus windows inside & out.

■ Signature Interior
Cars \$40 · SUVs \$60 and up · March special! \$5 off
Shampoo carpets, floor mats, seats, and door panels. Clean and protect console, dash, and cup holders.

- 2. Click the mouse. The line will be selected.**

■ H₂O Signature Wash
Cars \$20 · SUVs \$25 and up
Hand wash and dry vehicle, including tires, rims, wheel wells, and door jambs.
Interior vacuum, dust, and deodorize, plus windows inside & out.

■ Signature Interior
Cars \$40 · SUVs \$60 and up · March special! \$5 off
Shampoo carpets, floor mats, seats, and door panels. Clean and protect console, dash, and cup holders.

- 3. To select multiple lines, click and drag the mouse up or down.**

H₂O Signature Wash

Cars \$20 · SUVs \$25 and up

Hand wash and dry vehicle, including tires, rims, wheel wells, and door jambs.

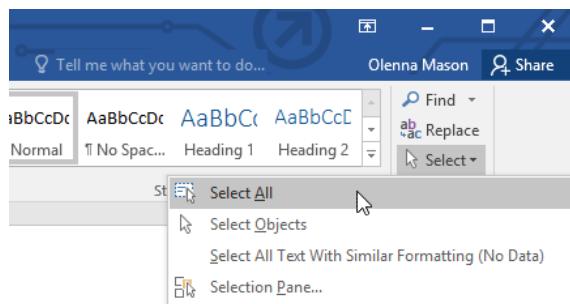
Interior vacuum, dust, and deodorize, plus windows inside & out.

Signature Interior

Cars \$40 · SUVs \$60 and up · March special! \$5 off

Shampoo carpets, floor mats, seats, and door panels. Clean and protect console, dash, and cup holders.

4. To select all of the text in your document, choose the Select command on the Home tab, then click Select All. Alternatively, you can press Ctrl+A on your keyboard.



Other shortcuts include double-clicking to select a word and triple-clicking to select an entire sentence or paragraph.

To delete text:

There are several ways to delete—or remove—text:

- To delete text to the left of the insertion point, press the Backspace key on your keyboard.
- To delete text to the right of the insertion point, press the Delete key on your keyboard.
- Select the text you want to remove, then press the Delete key.

If you select text and start typing, the selected text will automatically be deleted and replaced with the new text.

Copying and moving text

Word allows you to copy text that's already in your document and paste it in other places, which can save you a lot of time and effort. If you want to move text around in your document, you can cut and paste or drag and drop.

To copy and paste text:

- 1.
2. Select the text you want to copy.

H₂O Signature Wash

Cars \$20 · SUVs \$25 and up

Hand wash and dry vehicle, including tires, rims, wheel wells, and door jambs.

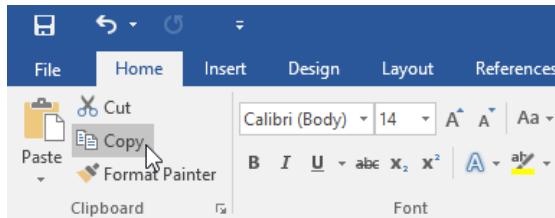
Interior vacuum, dust, and deodorize, plus windows inside & out.

Signature Interior

Cars \$40 · SUVs \$60 and up · March special! \$5 off

Shampoo carpets, floor mats, seats, and door panels. Clean and protect console, dash, and cup holders.

3. Click the Copy command on the Home tab. Alternatively, you can press Ctrl+C on your keyboard.



4. Place the insertion point where you want the text to appear.

H₂O Signature Wash

Cars \$20 · SUVs \$25 and up

Hand wash and dry vehicle, including tires, rims, wheel wells, and door jambs.

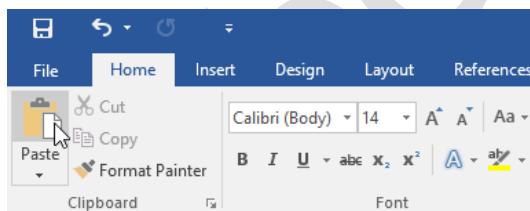
Interior vacuum, dust, and deodorize, plus windows inside & out.

Signature Interior

Cars \$40 · SUVs \$60 and up · March special! \$5 off

Shampoo carpets, floor mats, seats, and door panels. Clean and protect console, dash, and cup holders.

5. Click the Paste command on the Home tab. Alternatively, you can press Ctrl+V on your keyboard.



6. The text will appear.

H₂O Signature Wash

Cars \$20 · SUVs \$25 and up

Hand wash and dry vehicle, including tires, rims, wheel wells, and door jambs.

Interior vacuum, dust, and deodorize, plus windows inside & out.

H₂O Signature Interior

Cars \$40 · SUVs \$60 and up · March special! \$5 off

Shampoo carpets, floor mats, seats, and door panels. Clean and protect console, dash, and cup holders.

To cut and paste text:

1.

2. Select the text you want to cut.

• H₂O Signature Wash

Cars \$20 · SUVs \$25 and up

Hand wash and dry vehicle, including tires, rims, wheel wells, and door jambs.

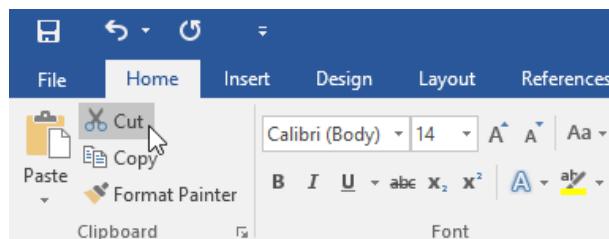
Interior vacuum, dust, and deodorize, plus windows inside & out.

• Signature Interior

Cars \$40 · SUVs \$60 and up · March special! \$5 off

Shampoo carpets, floor mats, seats, and door panels. Clean and protect console, dash, and cup holders.

3. Click the Cut command on the Home tab. Alternatively, you can press Ctrl+X on your keyboard.



4. Place your insertion point where you want the text to appear.

• H₂O Signature Wash

Cars \$20 · SUVs \$25 and up

Hand wash and dry vehicle, including tires, rims, wheel wells, and door jambs.

Interior vacuum, dust, and deodorize, plus windows inside & out.

• H₂O Signature Interior

Cars \$40 · SUVs \$60 and up · March special! \$5 off

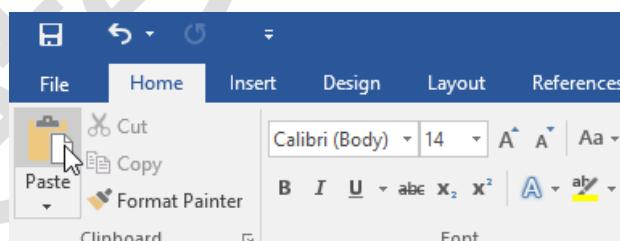
Shampoo carpets, floor mats, seats, and door panels. Clean and protect console, dash, and cup holders.

• Leather Cleaning & Conditioning

Cars \$20 · SUVs \$40 and up · March special! \$5 off

Includes seats and door panels.

5. Click the Paste command on the Home tab. Alternatively, you can press Ctrl+V on your keyboard.



6. The text will appear.

 **H₂O Signature Wash**

Cars \$20 · SUVs \$25 and up

Hand wash and dry vehicle, including tires, rims, wheel wells, and door jambs.

Interior vacuum, dust, and deodorize, plus windows inside & out.

 **H₂O Signature Detail**

Cars \$60 · SUVs \$75 and up · March special! \$10 off

Everything included in the Signature Wash, plus hand wax and buff. 

 **H₂O Signature Interior**

Cars \$40 · SUVs \$60 and up · March special! \$5 off

Shampoo carpets, floor mats, seats, and door panels. Clean and protect console, dash, and cup holders.

1.

You can also cut, copy, and paste by right-clicking your document and choosing the desired action from the drop-down menu. When you use this method to paste, you can choose from three options that determine how the text will be formatted: Keep Source Formatting, Merge Formatting, and Keep Text Only. You can hover the mouse over each icon to see what it will look like before you select it.

To drag and drop text:

1.

2. Select the text you want to move.

 **Paint Correction & Protection**

Call for pricing · March special! 10% off

Prices may vary depending on size of vehicle. Heavily soiled vehicles are subject to an additional charge. 

Schedule your appointment today!

Contact Hank Odum at 321-555-5400 or hank@H2Omobile.com

Special rates available for weekly/monthly customers

[**H₂O Mobile Wash & Valet | Just leave the details to us**](#)

3. Click and drag the text to the location where you want it to appear. A small rectangle will appear below the arrow to indicate that you are moving text.

 **Paint Correction & Protection**

Call for pricing · March special! 10% off

Prices may vary depending on size of vehicle. Heavily soiled vehicles are subject to an additional charge.

Schedule your appointment today!

Contact Hank Odum at 321-555-5400 or hank@H2Omobile.com

Special rates available for weekly/monthly customers

[**H₂O Mobile Wash & Valet | Just leave the details to us**](#)

4. Release the mouse, and the text will appear.

 Paint Correction & Protection
Call for pricing · March special! 10% off

Schedule your appointment today!
Contact Hank Odum at 321-555-5400 or hank@H2Omobile.com
Special rates available for weekly/monthly customers

H₂O Mobile Wash & Valet | Just leave the details to us

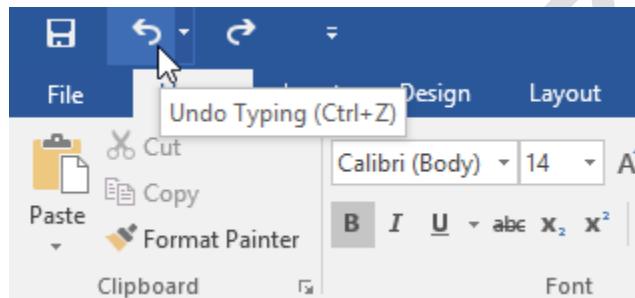
Prices may vary depending on size of vehicle. Heavily soiled vehicles are subject to an additional charge.

If text does not appear in the exact location you want, you can press the Enter key on your keyboard to move the text to a new line.

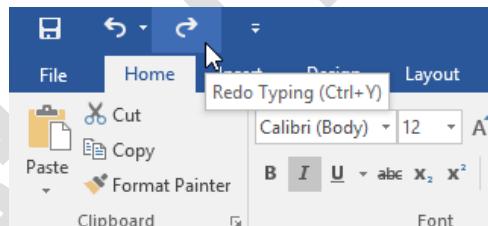
Undo and Redo

Let's say you're working on a document and accidentally delete some text. Fortunately, you won't have to retype everything you just deleted! Word allows you to undo your most recent action when you make a mistake like this.

To do this, locate and select the Undo command on the Quick Access Toolbar. Alternatively, you can press Ctrl+Z on your keyboard. You can continue using this command to undo multiple changes in a row.



By contrast, the Redo command allows you to reverse the last undo. You can also access this command by pressing Ctrl+Y on your keyboard.



Symbols

If you need to insert an unusual character that's not on your keyboard, such as a copyright (©) or trademark (™) symbol, you can usually find them with the Symbol command.

To insert a symbol:

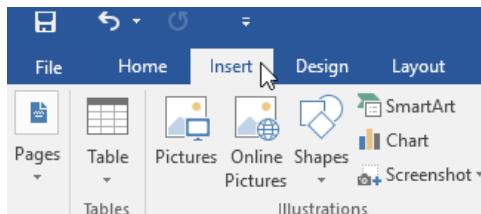
- 1. Place the insertion point where you want the symbol to appear.**

Schedule your appointment today!
Contact Hank Odum at 321-555-5400 or hank@H2Omobile.com
Special rates available for weekly/monthly customers

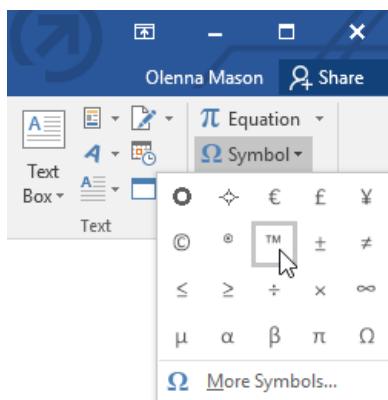
H₂O Mobile Wash & Valet | Just leave the details to us™

Prices may vary depending on size of vehicle. Heavily soiled vehicles are subject to an additional charge.

2. Click the Insert tab.



3. Locate and select the Symbol command, then choose the desired symbol from the drop-down menu. If you don't see the one you want, select More Symbols.



4. The symbol will appear in the document.

Schedule your appointment today!
Contact Hank Odum at 321-555-5400 or hank@H2Omobile.com
Special rates available for weekly/monthly customers

H₂O Mobile Wash & Valet | Just leave the details to us™

Prices may vary depending on size of vehicle. Heavily soiled vehicles are subject to an additional charge.

Challenge!

1. Open our [practice document](#).
2. Scroll to page 2.
3. Place the insertion point at the top of the document and type Now Introducing...
4. Use your arrow keys to move the insertion point to the Signature Detail Plan's price and change it to \$99.99/mo.

5. At the bottom of the document, use drag and drop to move Just leave the details to us to the end of the last line.
6. At the end of the line you just moved, insert the trademark symbol. If you cannot find the trademark symbol, insert a different symbol of your choice.

7. When you're finished, your document should look something like this:

Now introducing...



H2O Mobile's

UNLIMITED WASH CLUB

H2O Signature Detail Plan

\$99.99/mo

Includes:

Fragrance
Hand wax
Wax and buff
Hand wash and dry vehicle, including tires, rims, wheel wells, and door jambs
Interior vacuum
Dust
Deodorize
Windows Inside & Out

H2O Signature Wash Plan

\$79.99/mo

Hand wash and dry vehicle, including tires, rims, wheel wells, and door jambs.
Interior vacuum
Dust
Deodorize
Windows Inside & Out

For more details, contact Hank Odum at 321-555-5400 or hank@H2Omobile.com

Prices may vary depending on size of vehicle. Newly soiled vehicles are subject to an additional charge.

[H2O Mobile Wash & Valet | Just leave the details to us™](#)

Lesson 6: Formatting Text

Introduction

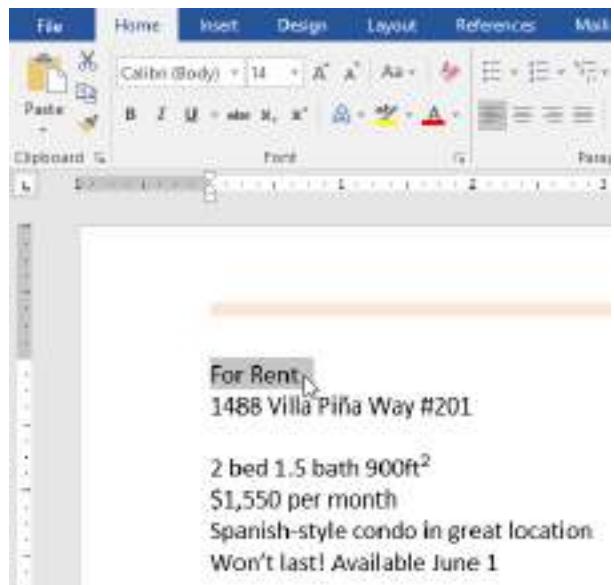
Formatted text can draw the reader's attention to specific parts of a document and emphasize important information. In Word, you have several options for adjusting text, including font, size, and color. You can also adjust the alignment of the text to change how it is displayed on the page.

Optional: Download our [practice document](#).

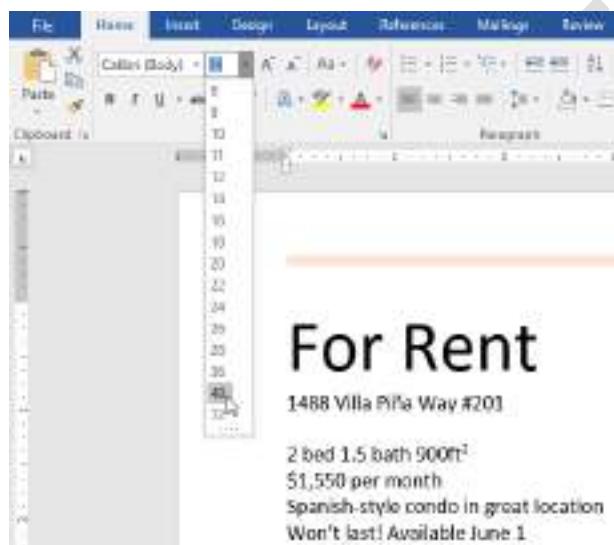
Watch the video below to learn more about formatting text in Word.

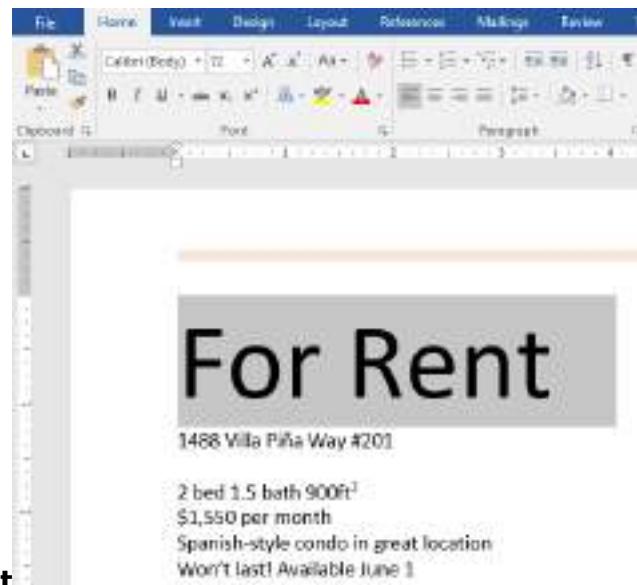
To change the font size:

1. Select the text you want to modify.



2. On the Home tab, click the Font size drop-down arrow. Select a font size from the menu. If the font size you need is not available in the menu, you can click the Font size box and type the desired font size, then press Enter.





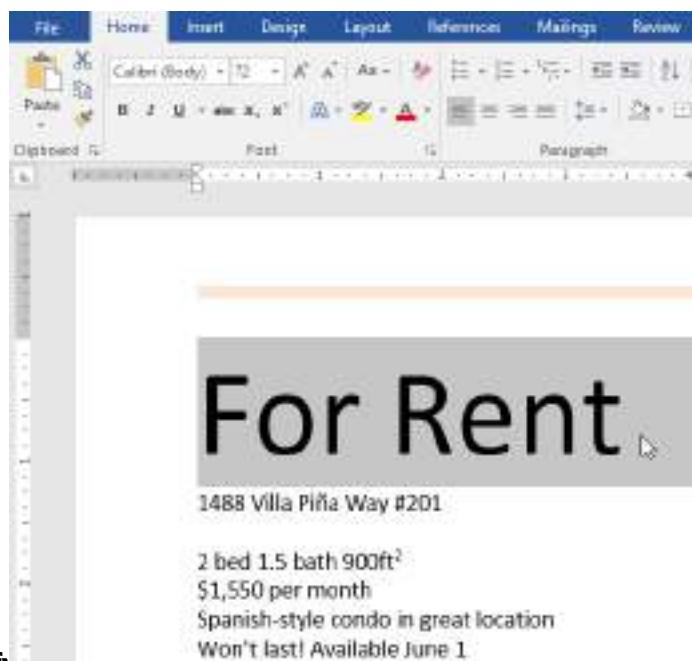
3. The font size will change in the document

You can also use the Grow Font and Shrink Font commands to change the font size.



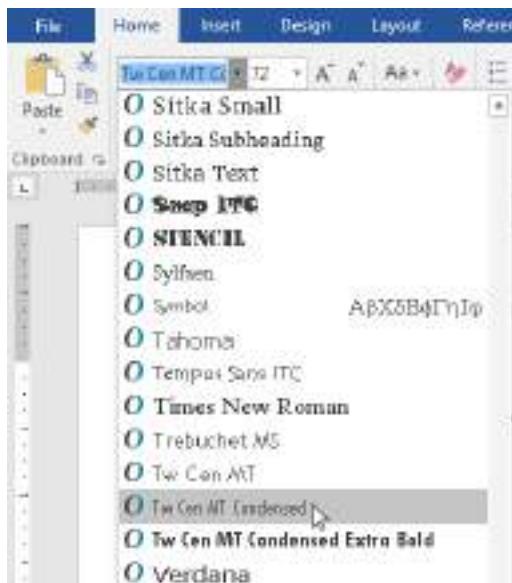
To change the font:

By default, the font of each new document is set to Calibri. However, Word provides many other fonts you can use to customize text.



1. Select the text you want to modify

1. Select the text you want to modify
2. On the Home tab, click the drop-down arrow next to the Font box. A menu of font styles will appear.
3. Select the font style you want to use.



4. The font will change in the document.

For Rent

1488 Villa Piña Way #201

2 bed 1.5 bath 900ft²

\$1,550 per month

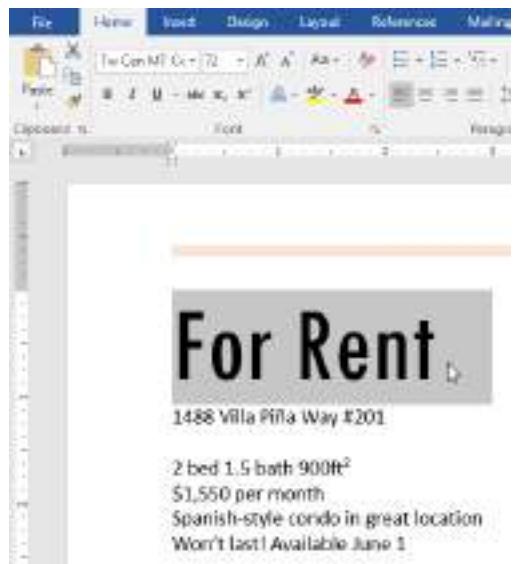
Spanish-style condo in great location

Won't last! Available June 1

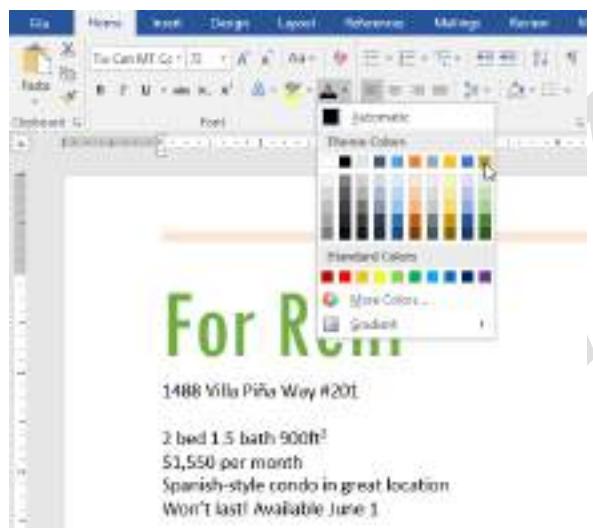
When creating a professional document or a document that contains multiple paragraphs, you'll want to select a font that's easy to read. Along with Calibri, standard reading fonts include Cambria, Times New Roman, and Arial.

To change the font color:

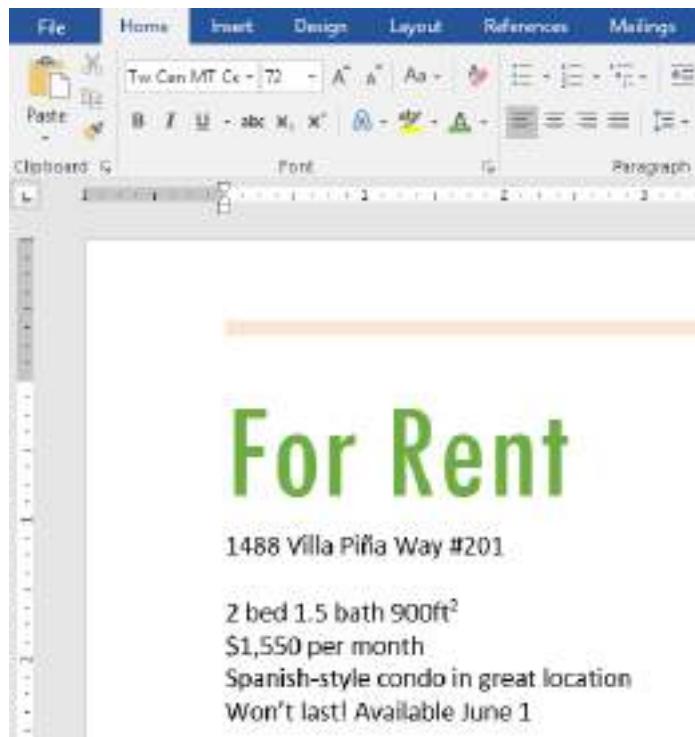
1. Select the text you want to modify.



2. On the Home tab, click the Font Color drop-down arrow. The Font Color menu appears.



3. Select the font color you want to use. The font color will change in the document.

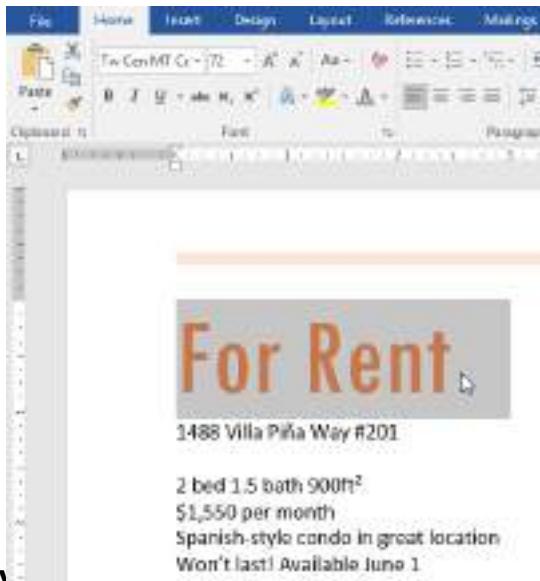


Your color choices aren't limited to the drop-down menu that appears. Select More Colors at the bottom of the menu to access the Colors dialog box. Choose the color you want, then click OK.



To use the Bold, Italic, and Underline commands:

The Bold, Italic, and Underline commands can be used to help draw attention to important words or phrases.

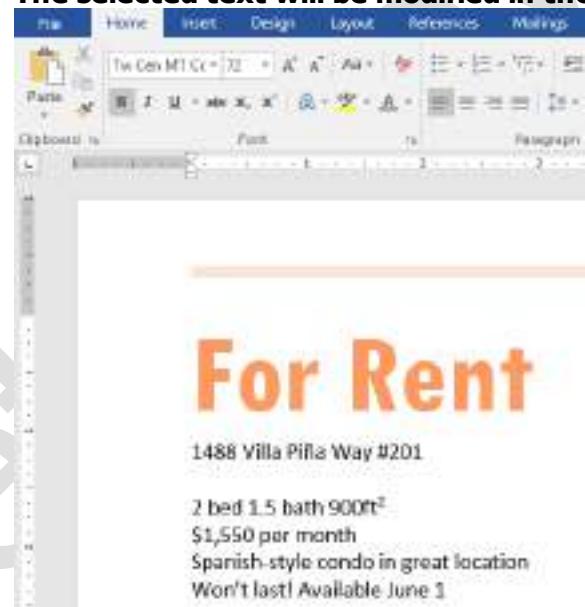


1. Select the text you want to modify

2. On the Home tab, click the Bold (B), Italic (I), or Underline (U) command in the Font group. In our example, we'll click Bold.



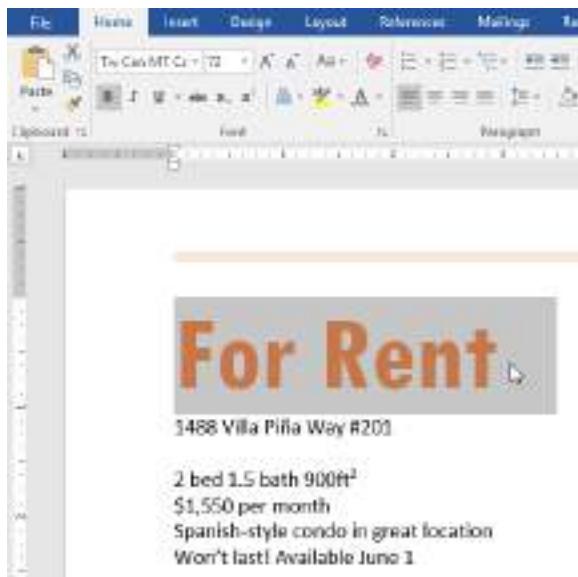
3. The selected text will be modified in the document.



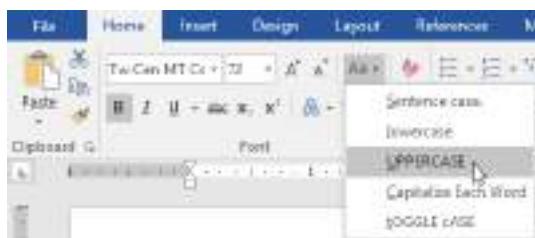
To change text case:

When you need to quickly change text case, you can use the Change Case command instead of deleting and retyping text.

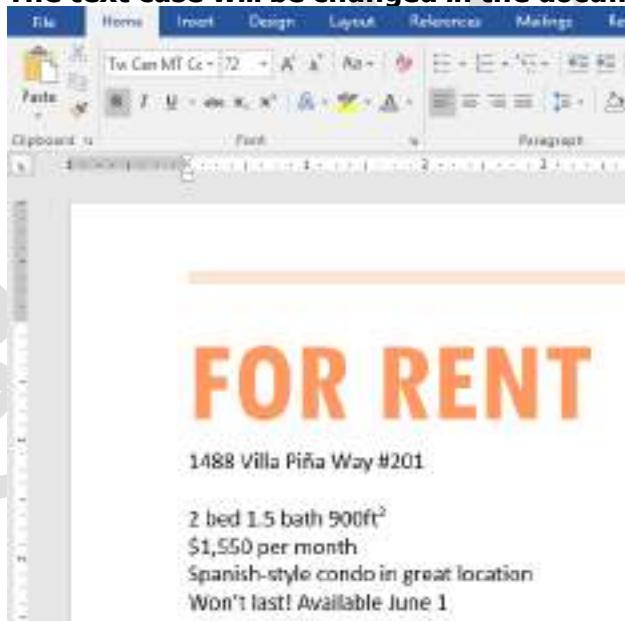
1. Select the text you want to modify.



2. On the Home tab, click the Change Case command in the Font group.
3. A drop-down menu will appear. Select the desired case option from the menu.



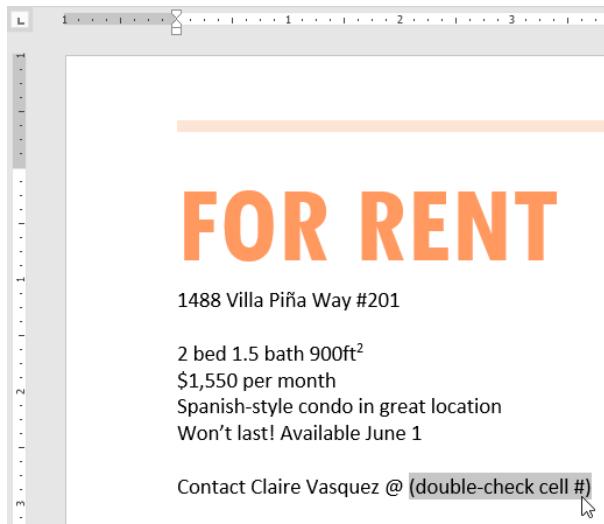
4. The text case will be changed in the document.



To highlight text:

Highlighting can be a useful tool for marking important text in your document.

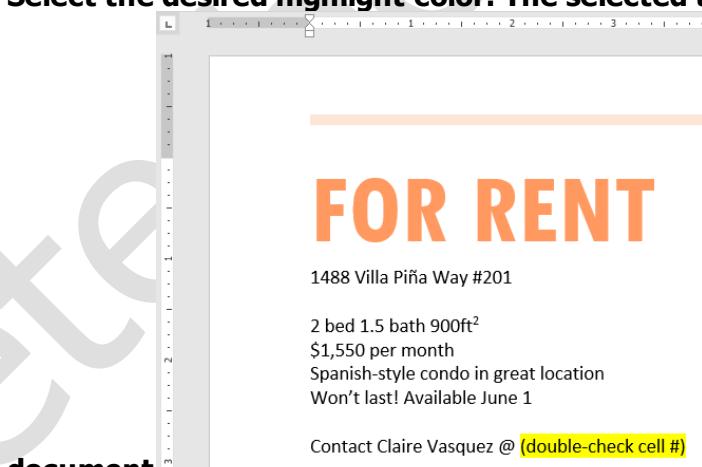
1. Select the text you want to highlight.



2. From the Home tab, click the Text Highlight Color drop-down arrow. The Highlight Color menu appears.

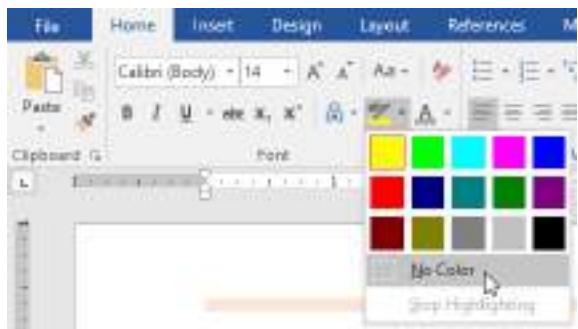


3. Select the desired highlight color. The selected text will then be highlighted in the



document

To remove highlighting, select the highlighted text, then click the Text Highlight Color drop-down arrow. Select No Color from the drop-down menu.



If you need to highlight several lines of text, changing the mouse into a highlighter may be a helpful alternative to selecting and highlighting individual lines. Click the Text Highlight Color command, and the cursor changes into a highlighter. You can then click and drag the highlighter over the lines you want to highlight.

To change text alignment:

By default, Word aligns text to the left margin in new documents. However, there may be times when you want to adjust text alignment to the center or right.

1. Select the text you want to modify.



2. On the Home tab, select one of the four alignment options from the Paragraph group. In our example, we've selected Center Alignment.



3. The text will be realigned in the document.



FOR RENT

1488 Villa Piña Way #201

2 bed 1.5 bath 900ft²
\$1,550 per month
Spanish-style condo in great location
Won't last! Available June 1

Contact Claire Vasquez @ [\(double-check cell #\)](#)

Click the arrows in the slideshow below to learn more about the four text alignment options.

arrow_back_ios

During the 4th quarter, Westbrook-Parker showed continued growth and exceeded profit expectations. The New Year is starting strong with January proving to be a profitable month.

Database software sales are up by 13%, subscriptions to our online database management applications are up by 21%, and capital expenditures in the marketing department have decreased since the 3rd quarter.

Align Text Left: This aligns all selected text to the left margin. The Align Text Left command is the most common alignment and is selected by default when a new document is created.

During the 4th quarter, Westbrook-Parker showed continued growth and exceeded profit expectations. The New Year is starting strong with January proving to be a profitable month.

Database software sales are up by 13%, subscriptions to our online database management applications are up by 21%, and capital expenditures in the marketing department have decreased since the 3rd quarter.

Center: This aligns text an equal distance from the left and right margins.

During the 4th quarter, Westbrook-Parker showed continued growth and exceeded profit expectations. The New Year is starting strong with January proving to be a profitable month.

Database software sales are up by 13%, subscriptions to our online database management applications are up by 21%, and capital expenditures in the marketing department have decreased since the 3rd quarter.

- **Align Text Right: This aligns all selected text to the right margin.**

During the 4th quarter, Westbrook-Parker showed continued growth and exceeded profit expectations. The New Year is starting strong with January proving to be a profitable month.

Database software sales are up by 13%, subscriptions to our online database management applications are up by 21%, and capital expenditures in the marketing department have decreased since the 3rd quarter.

- **Justify: Justified text is equal on both sides. It lines up equally to the right and left margins. Many newspapers and magazines use full justification.**

arrow_back_ios

You can use Word's convenient Set as Default feature to save all of the formatting changes you've made and automatically apply them to new documents. To learn how to do this, read our article on [Changing Your Default Settings in Word](#).

Challenge!

1. Open our [practice document](#).
2. Scroll to page 2.
3. Select the words For Rent and change the font size to 48 pt.
4. With the text still selected, change the font to Franklin Gothic Demi. Note: If you don't see this font in the menu, you can select a different one.
5. Use the Change Case command to change For Rent to UPPERCASE.
6. Change the color of the words For Rent to Gold, Accent 4.
7. Remove the highlight from the phone number (919-555-7237).
8. Select all of the text from For Rent to (919-555-7237) and Center Align.

9. Italicize the text in the paragraph below About Villa Piña.

10. When you're finished, your page should look like this:



A real estate listing for a condo at Villa Piña. The title 'FOR RENT' is in large yellow letters. Below it, the address '1502 Villa Piña Way #103' is listed. The listing includes details: '1 bed 1 bath 750ft²', '\$850 per month', 'Spanish-style condo in great location', and 'Won't last! Available August 1st'. Contact information 'Contact Juanita Vasquez @ (919-555-7237)' is provided. Below the text are three small images: 'Beautiful grounds.', 'One-bathroom.', and 'Spacious master.'

ABOUT VILLA PIÑA

Private but centrally located, historic Villa Piña is just moments from fine dining, shopping, and public transportation. Enjoy the best of both worlds at Villa Piña—the beauty of nature and the culture of a vibrant neighborhood.

For more information, visit us online:
www.villapiñaraleigh.com

Lesson 7: Using Find and Replace

Introduction

When you're working with longer documents, it can be difficult and time consuming to locate a specific word or phrase. Word can automatically search your document using the Find feature, and it allows you to quickly change words or phrases using Replace.

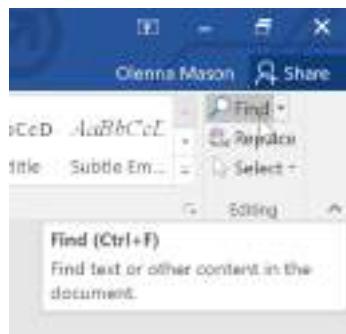
Optional: Download our [practice document](#).

Watch the video below to learn more about using Find and Replace.

To find text

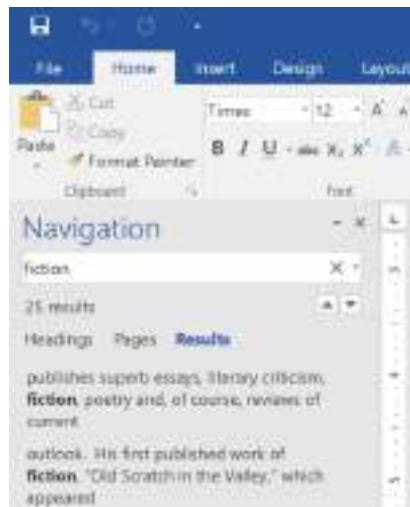
In our example, we've written an academic paper and will use the Find command to locate all instances of a particular word.

- 1. From the Home tab, click the Find command. Alternatively, you can press Ctrl+F on your keyboard.**



2. The navigation pane will appear on the left side of the screen.

3. Type the text you want to find in the field at the top of the navigation pane. In our example, we'll type the word we're looking for.



4. If the text is found in the document, it will be highlighted in yellow and a preview of the results will appear in the navigation pane. Alternatively, you can click one of the results below the arrows to jump to it.

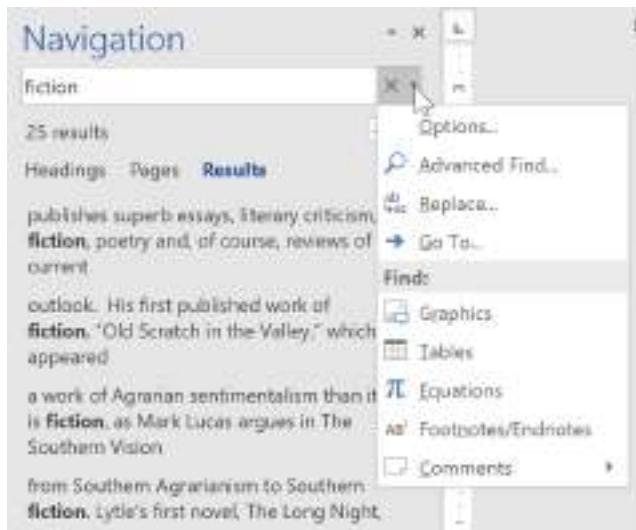


the late 1960s. After a short stint on the Broadway circuit, Lytle published *Foece and his Critter Company*, a biography of the Confederate general, Throughout the early thirties, as throughout his career, Lytle maintained Agrarian outlook. His first published work of fiction, "Old Scratch in the Outback," his first published work of fiction, "Old Scratch in the Valley," which appeared in the *Virginia Quarterly Review* in 1932, is more distinctly a work of sentimentalism than it is fiction, as Mark Lucas argues in *The Southern P... "No one would make great claims for the story as art.... Point of view is cl content is self-consciously provincial in the manner of local-color writing evision at the climax" (52). Such essays as "The Backwoods Progression Secures the State" follow the direction of Lytle's earlier Agrarian writing, recognized the weakness in this kind of writing when applied to literature, much later in career: "When a novel obviously makes an appeal other than*

5. When you are finished, click the X to close the navigation pane. The highlight will disappear.



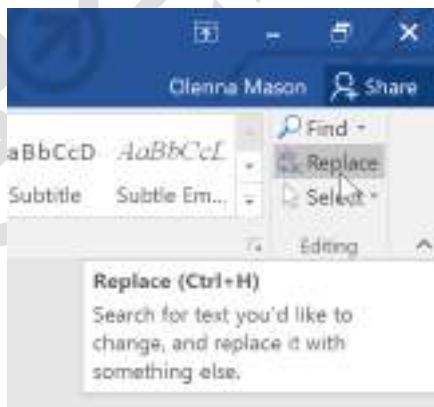
For more search options, click the drop-down arrow next to the search field.



To replace text

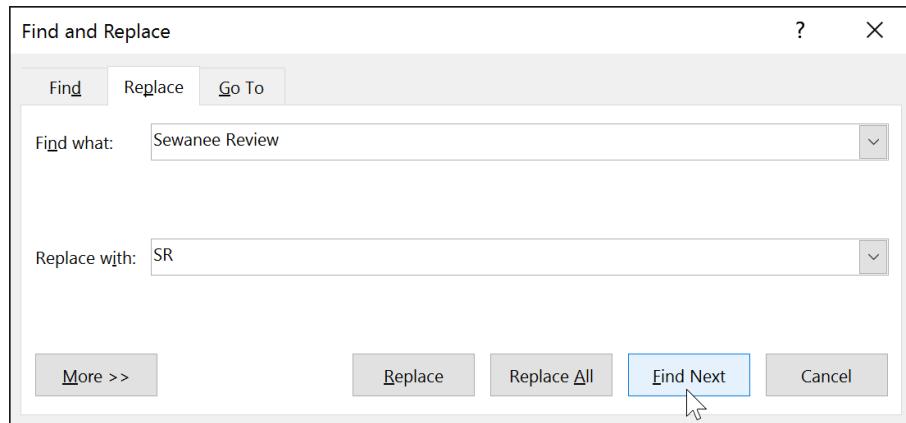
At times, you may discover that you've made a mistake repeatedly throughout your document—such as misspelling a person's name—or that you need to exchange a particular word or phrase for another. You can use Word's Find and Replace feature to quickly make revisions. In our example, we'll use Find and Replace to change the title of a magazine so it is abbreviated.

1. From the Home tab, click the Replace command. Alternatively, you can press **Ctrl+H** on your keyboard.



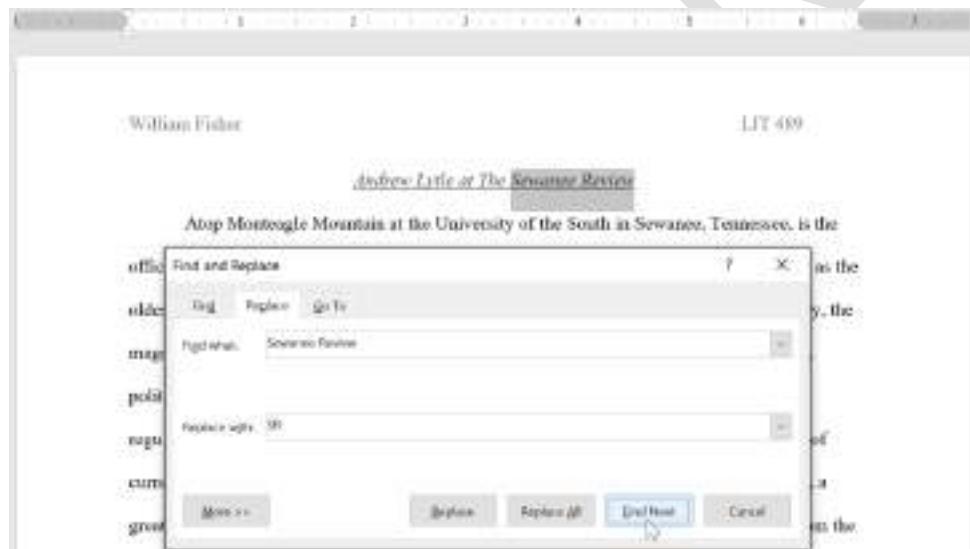
2. The Find and Replace dialog box will appear.
3. Type the text you want to find in the Find what: field.

4. Type the text you want to replace it with in the Replace with: field. Then click Find Next.



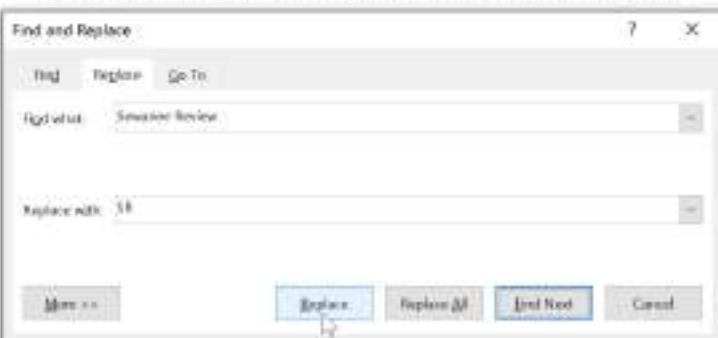
5. Word will find the first instance of the text and highlight it in gray.

6. Review the text to make sure you want to replace it. In our example, the text is part of the title of the paper and does not need to be replaced. We'll click Find Next again to jump to the next instance.



7. If you want to replace it, you can click Replace to change individual instances of text. Alternatively, you can click Replace All to replace every instance of the text throughout

Atop Monteagle Mountain at the University of the South in Sewanee, Tennessee, is the office of **The Sewanee Review**. Founded in 1892, the **Sewanee Review** (SR) has never missed an issue, distinguishing it as the oldest continuously published quarterly review in the United States. For its first half-century, the magazine existed as a general journal of the Humanities, featuring



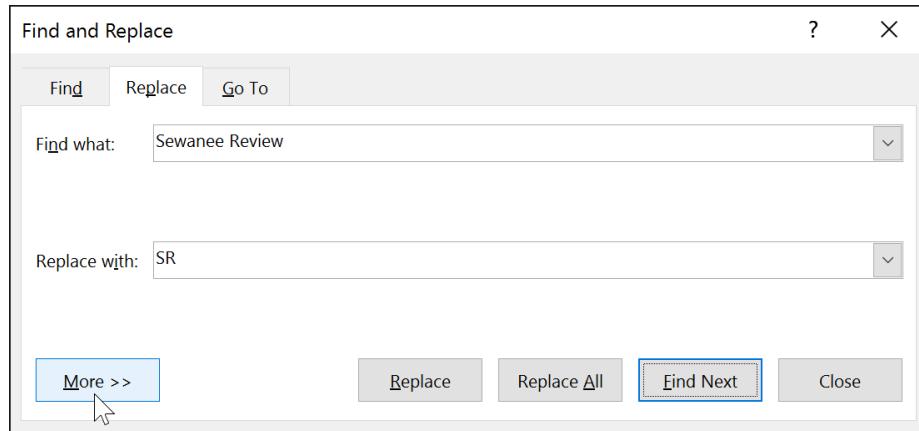
the document

8. The text will be replaced.

current books. This shift in tone was facilitated expressly by the editors of the t
great deal of the magazine's continued excellence has depended on its editors, ✓
SR would not have been able to solicit and select the excellent writers that have
pages during these past decades. For the last seventy-six years, the office of the

9. When you're done, click Close or Cancel to close the dialog box.

For more search options, click More in the Find and Replace dialog box. From here, you can select additional search options, such as matching case and ignoring punctuation.



When it comes to using Replace All, it's important to remember that it could find matches you didn't anticipate and that you might not actually want to change. You should only use this option if you're absolutely sure it won't replace anything you didn't intend it to.

Challenge!

1. Open our [practice document](#).
2. Using the Find feature, determine which pages mention Caroline Gordon.
3. The name T.S. Eliot is misspelled. Replace all instances of Elliot with Eliot. When you're finished, you should have made three replacements.
4. Allen Tate's name is also misspelled. Find and Replace Alan with Allen. Hint: Do not use Replace All. Otherwise, you might accidentally replace the word balance.

Lesson 8: Indents and Tabs

Introduction

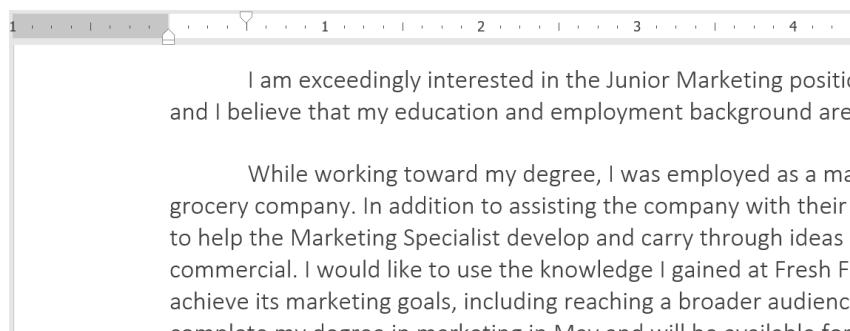
Indenting text adds structure to your document by allowing you to separate information. Whether you'd like to move a single line or an entire paragraph, you can use the tab selector and the horizontal ruler to set tabs and indents.

Optional: Download our [practice document](#).

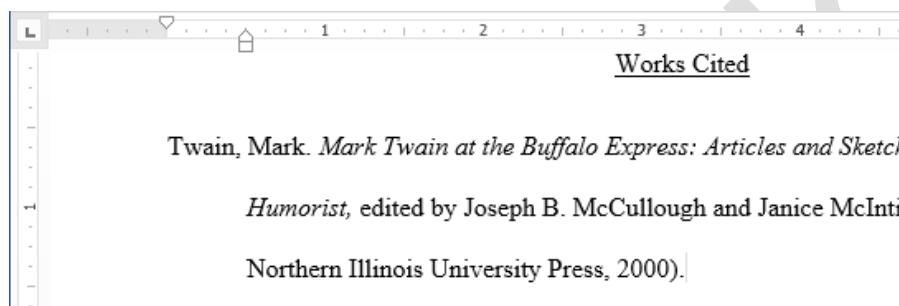
Watch the video below to learn more about how to use indents and tabs in Word.

Indenting text

In many types of documents, you may want to indent only the first line of each paragraph. This helps to visually separate paragraphs from one another.



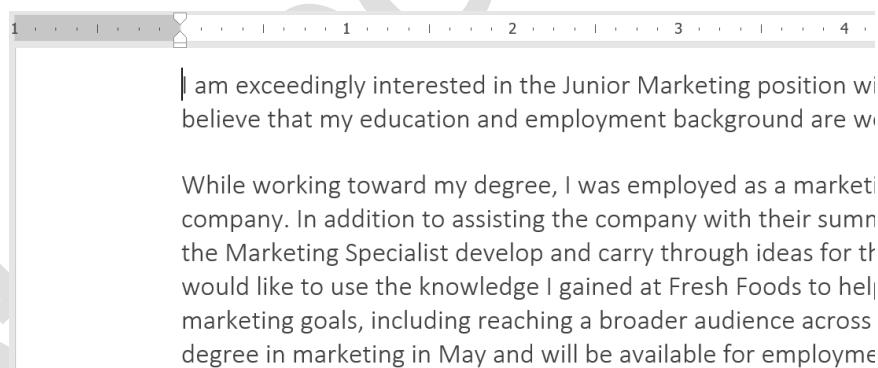
It's also possible to indent every line except for the first line, which is known as a hanging indent.



To indent using the Tab key

A quick way to indent is to use the Tab key. This will create a first-line indent of 1/2 inch.

- 1. Place the insertion point at the very beginning of the paragraph you want to indent.**



- 2. Press the Tab key. On the Ruler, you should see the first-line indent marker move to the right by 1/2 inch.**

- 3. The first line of the paragraph will be indented.**



While working toward my degree, I was employed as a marketing company. In addition to assisting the company with their summer the Marketing Specialist develop and carry through ideas for the c would like to use the knowledge I gained at Fresh Foods to help yc marketing goals, including reaching a broader audience across cou degree in marketing in May and will be available for employment i

If you can't see the Ruler, select the View tab, then click the check box next to the Ruler.



Indent markers

In some cases, you may want to have more control over indents. Word provides indent markers that allow you to indent paragraphs to the location you want.

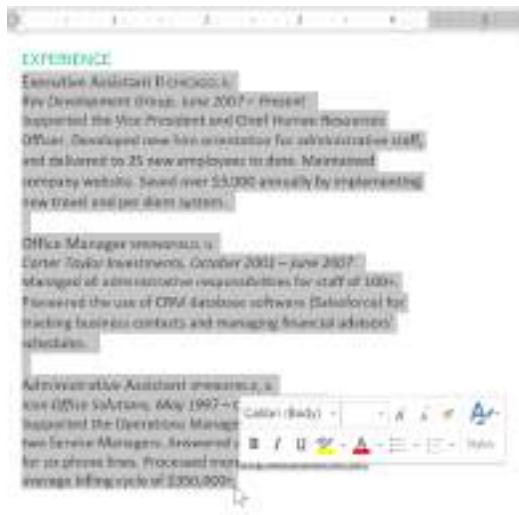


The indent markers are located to the left of the horizontal ruler, and they provide several indenting options:

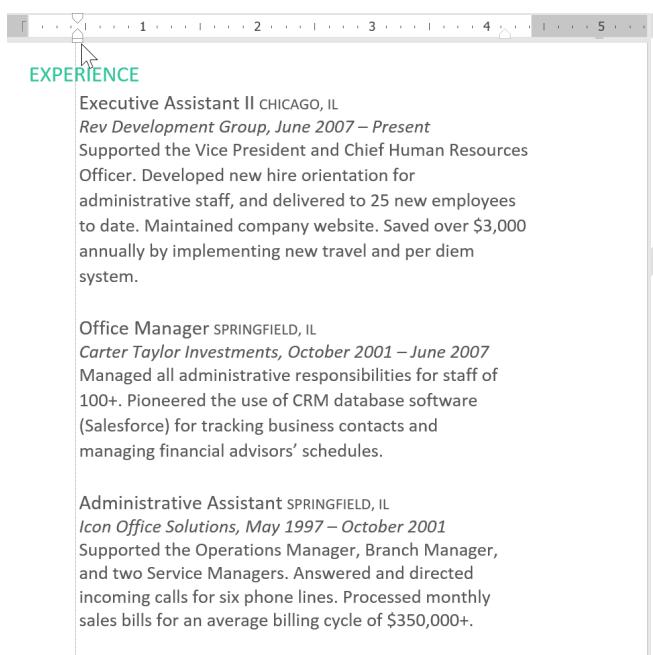
- **First-line indent marker** ▽ adjusts the first-line indent
- **Hanging indent marker** △ adjusts the hanging indent
- **Left indent marker** □ moves both the first-line indent and hanging indent markers at the same time (this will indent all lines in a paragraph)

To indent using the indent markers

1. **Place the insertion point anywhere in the paragraph you want to indent, or select one or more paragraphs.**



2. Click and drag the desired indent marker. In our example, we'll click and drag the left indent marker.



3. Release the mouse. The paragraphs will be indented.



EXPERIENCE

Executive Assistant II CHICAGO, IL

Rev Development Group, June 2007 – Present

Supported the Vice President and Chief Human Resources Officer. Developed new hire orientation for administrative staff, and delivered to 25 new employees to date. Maintained company website. Saved over \$3,000 annually by implementing new travel and per diem system.

Office Manager SPRINGFIELD, IL

Carter Taylor Investments, October 2001 – June 2007

Managed all administrative responsibilities for staff of 100+. Pioneered the use of CRM database software (Salesforce) for tracking business contacts and managing financial advisors' schedules.

Administrative Assistant SPRINGFIELD, IL

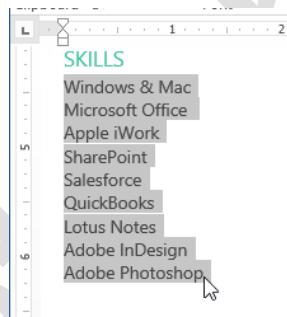
Icon Office Solutions, May 1997 – October 2001

Supported the Operations Manager, Branch Manager, and two Service Managers. Answered and directed incoming calls for six phone lines. Processed monthly sales bills for an average billing cycle of \$350,000+.

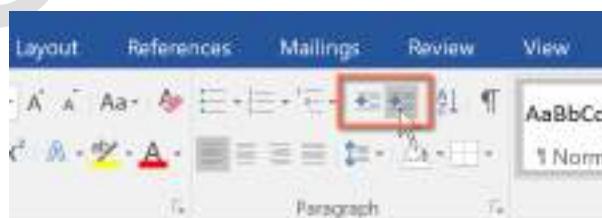
To indent using the Indent commands

If you want to indent multiple lines of text or all lines of a paragraph, you can use the Indent commands. The Indent commands will adjust the indent by 1/2-inch increments.

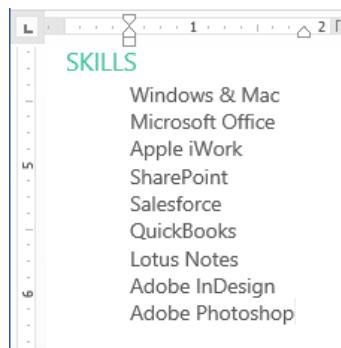
1. Select the text you want to indent.



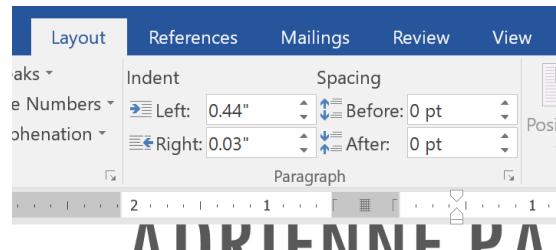
2. On the Home tab, click the Increase Indent or Decrease Indent command.



3. The text will indent.



To customize the indent amounts, select the Layout tab near the desired values in the boxes under Indent.



Tabs

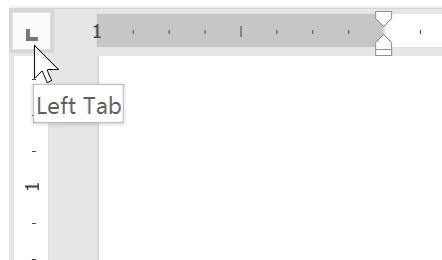
Using tabs gives you more control over the placement of text. By default, every time you press the Tab key, the insertion point will move 1/2 inch to the right. Adding tab stops to the Ruler allows you to change the size of the tabs, and Word even allows you to apply more than one tab stop to a single line. For example, on a resume you could left-align the beginning of a line and right-align the end of the line by adding a Right Tab, as shown in the image below.



Pressing the Tab key can either add a tab or create a first-line indent, depending on where the insertion point is. Generally, if the insertion point is at the beginning of an existing paragraph, it will create a first-line indent; otherwise, it will create a tab.

The tab selector

The tab selector is located above the vertical ruler on the left. Hover the mouse over the tab selector to see the name of the active tab stop.



Types of tab stops:

- **Left Tab** left-aligns the text at the tab stop.
- **Center Tab** centers the text around the tab stop.
- **Right Tab** right-aligns the text at the tab stop.
- **Decimal Tab** aligns decimal numbers using the decimal point.
- **Bar Tab** draws a vertical line on the document.
- **First Line Indent** inserts the indent marker on the Ruler and indents the first line of text in a paragraph.
- **Hanging Indent** inserts the hanging indent marker and indents all lines other than the first line.

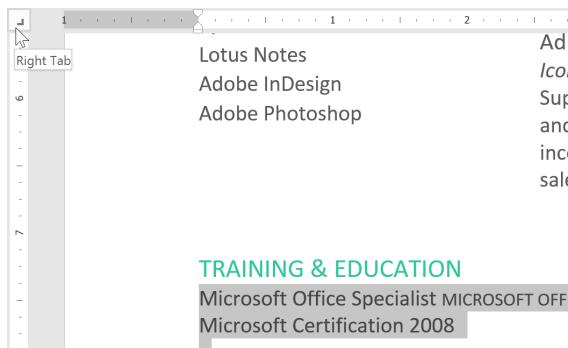
Although Bar Tab, First Line Indent, and Hanging Indent appear on the tab selector, they're not technically tabs.

To add tab stops

1. Select the paragraph or paragraphs you want to add tab stops to. If you don't select any paragraphs, the tab stops will apply to the current paragraph and any new paragraphs you type below it.



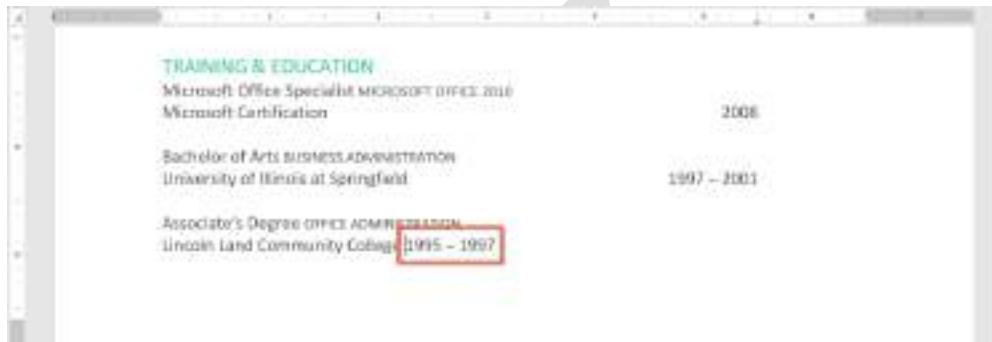
2. Click the tab selector until the tab stop you want to use appears. In our example, we'll select Right Tab.



3. Click the location on the horizontal ruler where you want your text to appear (it helps to click on the bottom edge of the Ruler). You can add as many tab stops as you want.

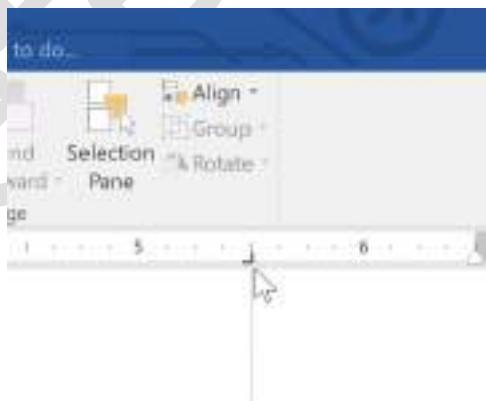


4. Place the insertion point in front of the text you want to tab, then press the Tab key. The text will jump to the next tab stop. In our example, we will move each date range to the tab stop we created.



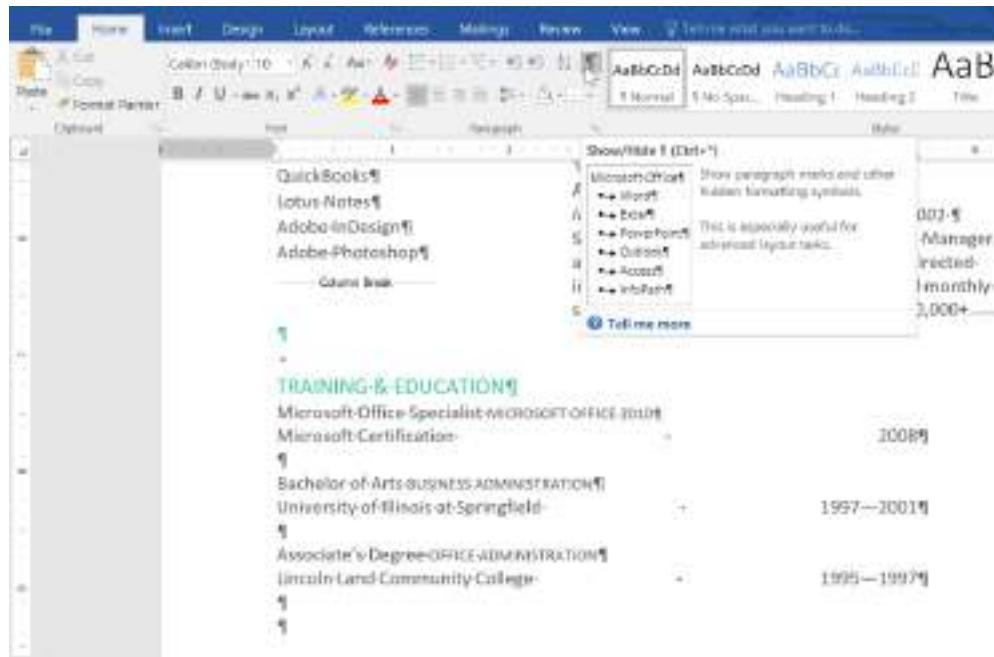
Removing tab stops

It's a good idea to remove any tab stops you aren't using so they don't get in the way. To remove a tab stop, first select all of the text that uses the tab stop. Then click and drag it off of the Ruler.



Word can also display hidden formatting symbols such as spaces (..), paragraph marks (¶), and tabs (→) to help you see the formatting in your document. To show hidden

formatting symbols, select the Home tab, then click the Show/Hide command.



Lesson 9: Line and Paragraph Spacing

Introduction

As you design your document and make formatting decisions, you will need to consider line and paragraph spacing. You can increase spacing to improve readability and reduce it to fit more text on the page.

About line spacing

Line spacing is the space between each line in a paragraph. Word allows you to customize the line spacing to be single spaced (one line high), double spaced (two lines high), or any other amount you want. The default spacing in Word is 1.08 lines, which is slightly larger than single spaced.

In the images below, you can compare different types of line spacing. From left to right, these images show default line spacing, single spacing, and double spacing.

SUMMARY Tech-savvy, solutions-oriented professional with experience in all aspects of office management, administration, and support.	SUMMARY Tech-savvy, solutions-oriented professional with experience in all aspects of office management, administration, and support.	SUMMARY Tech-savvy, solutions-oriented professional with experience in all aspects of office
-------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------

Line spacing is also known as leading (pronounced to rhyme with wedding).

To format line spacing

1. Select the text you want to format.

Dear Ms. Jackson:

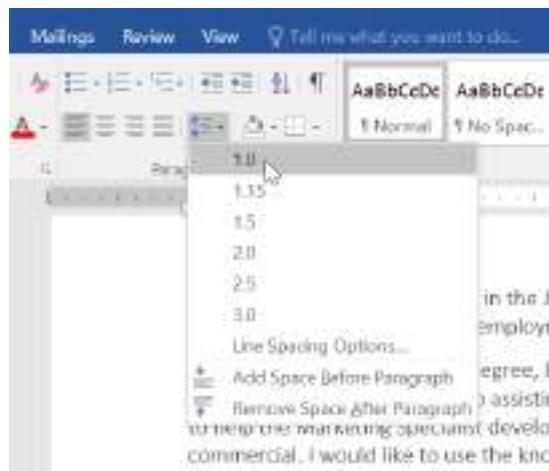
I am exceedingly interested in the Junior Marketing position with Top Tier Telephones, and I believe that my education and employment background are well suited for the position.

While working toward my degree, I was employed as a marketing assistant with a local grocery company. In addition to assisting the company with their summer promotions, I was able to help the Marketing Specialist develop and carry through ideas for the company's next commercial. I would like to use the knowledge I gained at Fresh Foods to help your company achieve its marketing goals, including reaching a broader audience across country. I will complete my degree in marketing in May and will be available for employment in early June.

Enclosed is a copy of my resume, which more fully details my qualifications for the position. Within the next week, I will contact you to confirm that you received my email and resume and I'll be happy to answer any questions that you may have. Thank you for your consideration.

Sincerely,

2. On the Home tab, click the Line and Paragraph Spacing command, then select the desired line spacing.



3. The line spacing will change in the document.

Dear Ms. Jackson:

I am exceedingly interested in the Junior Marketing position with Top Tier Telephones, and I believe that my education and employment background are well suited for the position.

While working toward my degree, I was employed as a marketing assistant with a local grocery company. In addition to assisting the company with their summer promotions, I was able to help the Marketing Specialist develop and carry through ideas for the company's next commercial. I would like to use the knowledge I gained at Fresh Foods to help your company achieve its marketing goals, including reaching a broader audience across country. I will complete my degree in marketing in May and will be available for employment in early June.

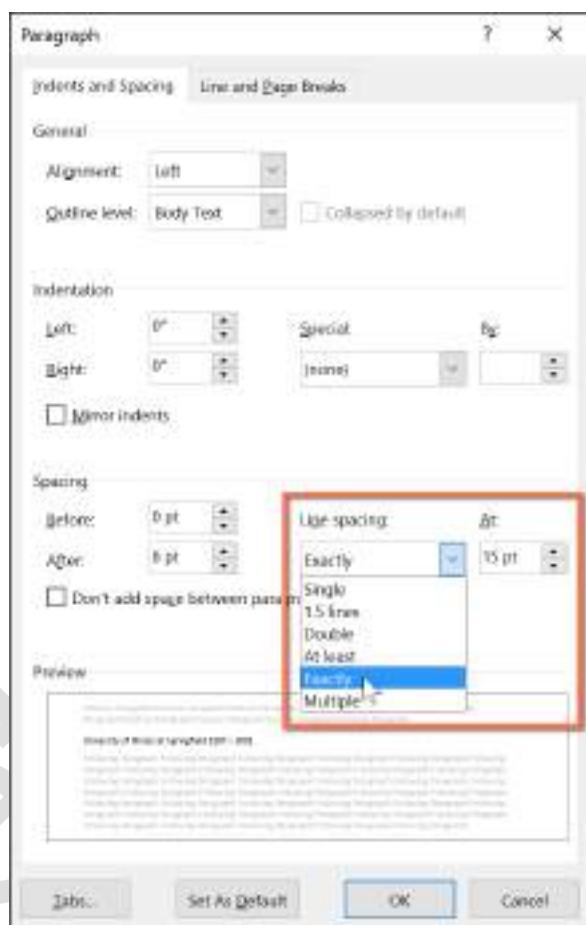
Enclosed is a copy of my resume, which more fully details my qualifications for the position. Within the next week, I will contact you to confirm that you received my email and resume and I'll be happy to answer any questions that you may have. Thank you for your consideration.

Sincerely,

Fine tuning line spacing

Your line spacing options aren't limited to the ones in the Line and Paragraph Spacing menu. To adjust spacing with more precision, select Line Spacing Options from the menu to access the Paragraph dialog box. You'll then have a few additional options you can use to customize spacing.

- **Exactly:** When you choose this option, the line spacing is measured in points, just like font size. For example, if you're using 12-point text, you could use 15-point spacing.
- **At least:** Like the Exactly option, this lets you choose how many points of spacing you want. However, if you have different sizes of text on the same line, the spacing will expand to fit the larger text.
- **Multiple:** This option lets you type the number of lines of spacing you want. For example, choosing Multiple and changing the spacing to 1.2 will make the text slightly more spread out than single-spaced text. If you want the lines to be closer together, you can choose a smaller value, like 0.9.



Paragraph spacing

Just as you can format spacing between lines in your document, you can adjust spacing before and after paragraphs. This is useful for separating paragraphs, headings, and subheadings.

To format paragraph spacing:

In our example, we'll increase the space before each paragraph to separate them a bit more. This will make it a little easier to read.

1. Select the paragraph or paragraphs you want to format.

Dear Ms. Jackson:

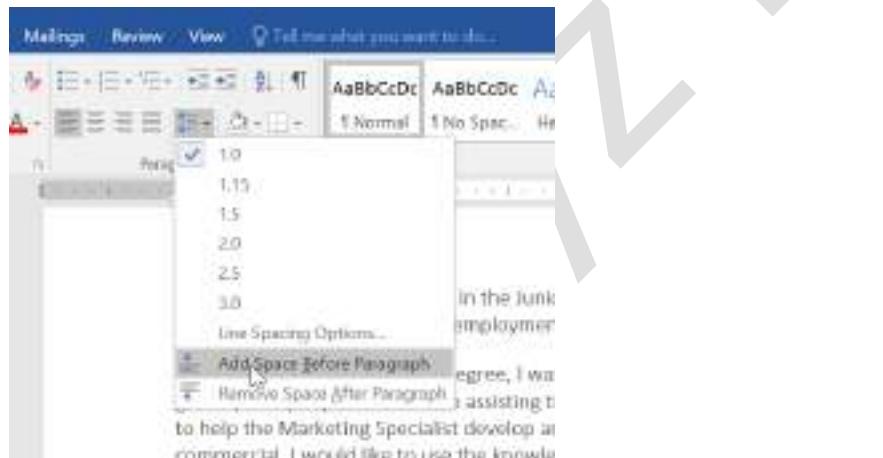
I am exceedingly interested in the Junior Marketing position with Top Tier Telephones, and I believe that my education and employment background are well suited for the position.

While working toward my degree, I was employed as a marketing assistant with a local grocery company. In addition to assisting the company with their summer promotions, I was able to help the Marketing Specialist develop and carry through ideas for the company's next commercial. I would like to use the knowledge I gained at Fresh Foods to help your company achieve its marketing goals, including reaching a broader audience across country. I will complete my degree in marketing in May and will be available for employment in early June.

Enclosed is a copy of my resume, which more fully details my qualifications for the position. Within the next week, I will contact you to confirm that you received my email and resume and I'll be happy to answer any questions that you may have. Thank you for your consideration.

Sincerely,

2. On the Home tab, click the Line and Paragraph Spacing command. Click Add Space Before Paragraph or Remove Space After Paragraph from the drop-down menu. In our example, we'll select Add Space Before Paragraph.



3. The paragraph spacing will change in the document.

Dear Ms. Jackson:

I am exceedingly interested in the Junior Marketing position with Top Tier Telephones, and I believe that my education and employment background are well suited for the position.

While working toward my degree, I was employed as a marketing assistant with a local grocery company. In addition to assisting the company with their summer promotions, I was able to help the Marketing Specialist develop and carry through ideas for the company's next commercial. I would like to use the knowledge I gained at Fresh Foods to help your company achieve its marketing goals, including reaching a broader audience across country. I will complete my degree in marketing in May and will be available for employment in early June.

Enclosed is a copy of my resume, which more fully details my qualifications for the position. Within the next week, I will contact you to confirm that you received my email and resume and I'll be happy to answer any questions that you may have. Thank you for your consideration.

Sincerely,

Adrienne Patel

From the drop-down menu, you can also select Line Spacing Options to open the Paragraph dialog box. From here, you can control how much space there is before and after the paragraph.



You can use Word's convenient Set as Default feature to save all of the formatting changes you've made and automatically apply them to new documents.

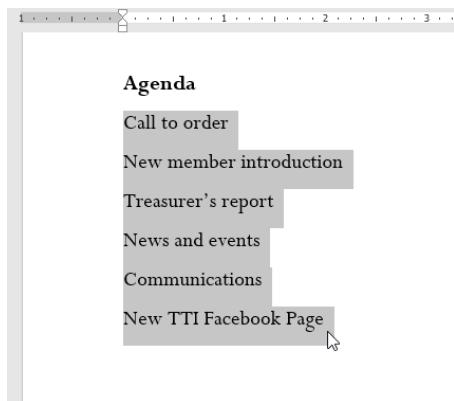
Lesson 10: Lists

Introduction

Bulleted and numbered lists can be used in your documents to outline, arrange, and emphasize text. In this lesson, you will learn how to modify existing bullets, insert new bulleted and numbered lists, select symbols as bullets, and format multilevel lists.

To create a bulleted list:

- ### **1. Select the text you want to format as a list.**



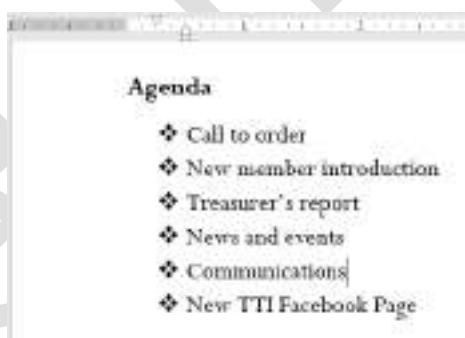
2. On the Home tab, click the drop-down arrow next to the Bullets command. A menu of bullet styles will appear.



3. Move the mouse over the various bullet styles. A live preview of the bullet style will appear in the document. Select the bullet style you want to use.



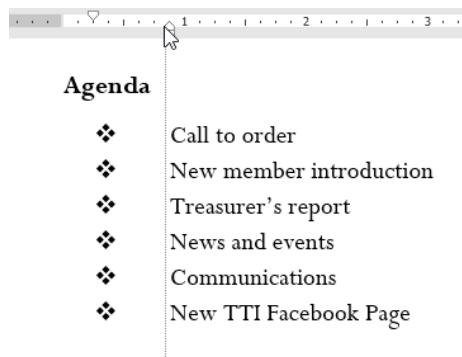
4. The text will be formatted as a bulleted list.



Options for working with lists

- To remove numbers or bullets from a list, select the list and click the Bulleted or Numbered list command.
- When you're editing a list you can press Enter to start a new line, and the new line will automatically have a bullet or number. When you've reached the end of your list, press Enter twice to return to normal formatting.

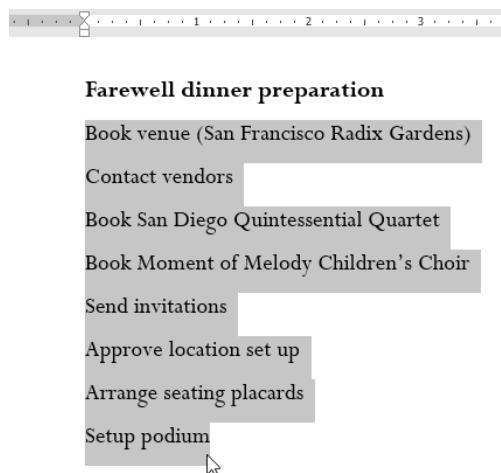
- By dragging the indent markers on the Ruler, you can customize the indenting of your list and the distance between the text and the bullet or number.



To create a numbered list:

When you need to organize text into a numbered list, Word offers several numbering options. You can format your list with numbers, letters, or Roman numerals.

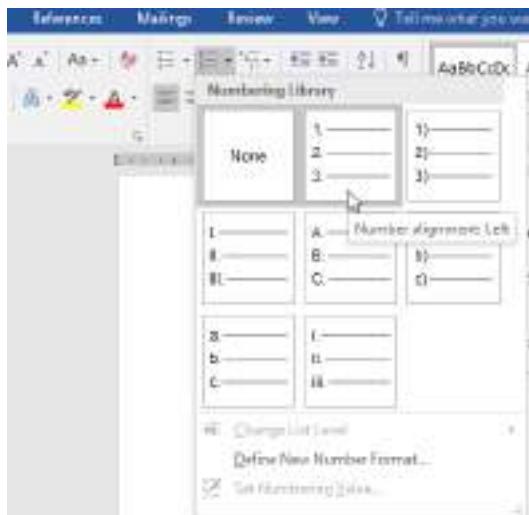
1. Select the text you want to format as a list.



2. On the Home tab, click the drop-down arrow next to the Numbering command. A menu of numbering styles will appear.



3. Move the mouse over the various numbering styles. A live preview of the numbering style will appear in the document. Select the numbering style you want to use.



4. The text will format as a numbered list.



Farewell dinner preparation

1. Book venue (San Francisco Radix Gardens)
2. Contact vendors
3. Book San Diego Quintessential Quartet
4. Book Moment of Melody Children's Choir
5. Send invitations
6. Approve location set up
7. Arrange seating placards
8. Setup podium

To restart a numbered list:

If you want to restart the numbering of a list, Word has a **Restart at 1** option. It can be applied to numeric and alphabetical lists.

1. Right-click the list item you want to restart the numbering for, then select **Restart at 1** from the menu that appears.

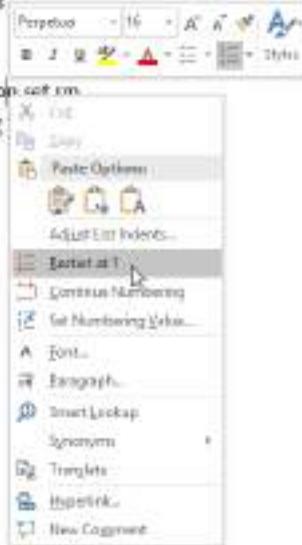


Farewell dinner preparation

1. Book venue (San Francisco Radix Gardens)
2. Contact vendors
3. Book San Diego Quintessential Quartet
4. Book Moment of Melody Children's Choir
5. Send invitations

Day of the dinner

6. Approve location set up
7. Arrange seating placards
8. Setup podium



Notes

2. The list numbering will restart.



Farewell dinner preparation

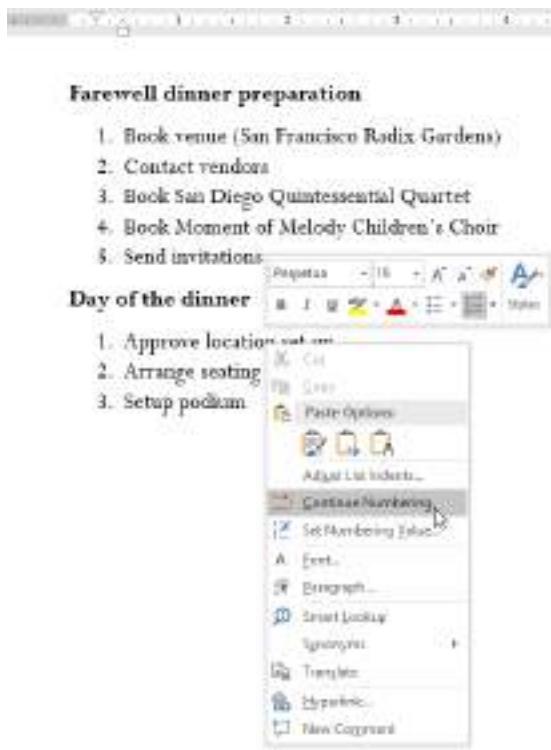
1. Book venue (San Francisco Radix Gardens)
2. Contact vendors
3. Book San Diego Quintessential Quartet
4. Book Moment of Melody Children's Choir
5. Send invitations

Day of the dinner

1. Approve location set up
2. Arrange seating placards
3. Setup podium

You can also set a list to continue numbering from the previous list. To do this, right-click and select Continue Numbering.

PE



Customizing bullets

Customizing the look of the bullets in your list can help you emphasize certain list items and personalize the design of your list. Word allows you to format bullets in a variety of ways. You can use symbols and different colors, or even upload a picture as a bullet.

To use a symbol as a bullet:

1. Select an existing list you want to format.



Agenda

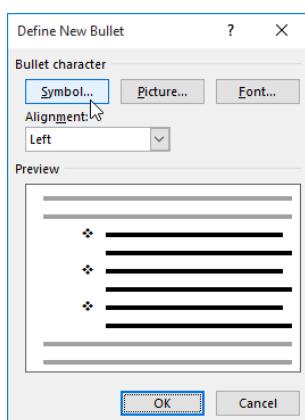
- ❖ Call to order
- ❖ New member introduction
- ❖ Treasurer's report
- ❖ News and events
- ❖ Communications
- ❖ New TTI Facebook Page
- ❖ Community Service
- ❖ Fundraising
- ❖ Chair's Report
- ❖ Adjournment

Additional Notes:

2. On the Home tab, click the drop-down arrow next to the Bullets command. Select Define New Bullet from the drop-down menu.



3. The Define New Bullet dialog box will appear. Click the Symbol button.



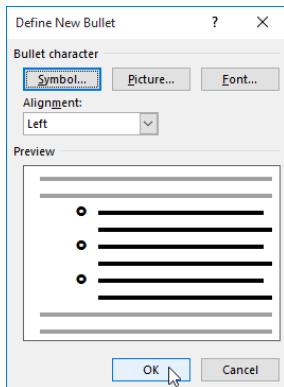
4. The Symbol dialog box will appear.

5. Click the Font drop-down box and select a font. The Wingdings and Symbol fonts are good choices because they have many useful symbols.

6. Select the desired symbol, then click OK.



7. The symbol will appear in the Preview section of the Define New Bullet dialog box. Click OK.



8. The symbol will appear in the list.



Agenda

- Call to order
- New member introduction
- Treasurer's report
- News and events
- Communications
- New TTI Facebook Page
- Community Service
- Fundraising
- Chair's Report
- Adjournment

Additional Notes:

To change the bullet color:

1. Select an existing list you want to format.

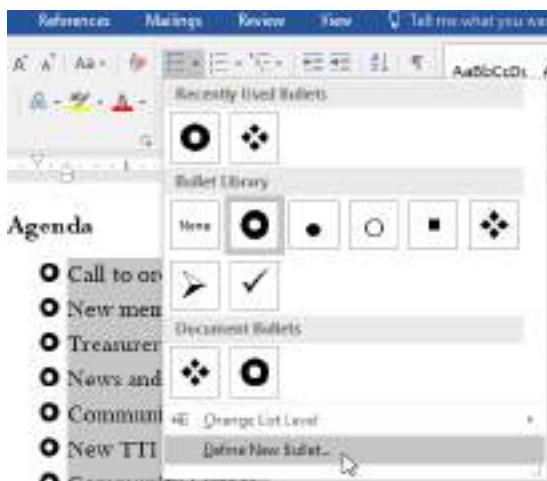


Agenda

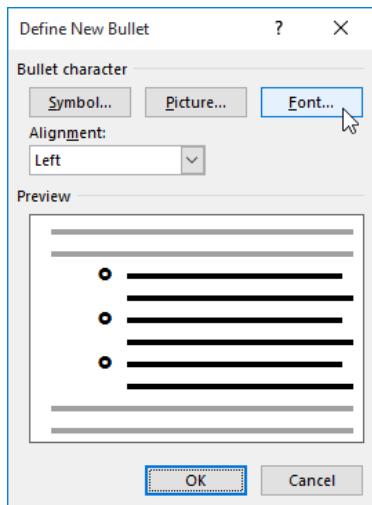
- Call to order
- New member introduction
- Treasurer's report
- News and events
- Communications
- New TTI Facebook Page
- Community Service
- Fundraising
- Chair's Report
- Adjournment

Additional Notes:

2. On the Home tab, click the drop-down arrow next to the Bullets command. Select Define New Bullet from the drop-down menu.



3. The Define New Bullet dialog box will appear. Click the Font button.

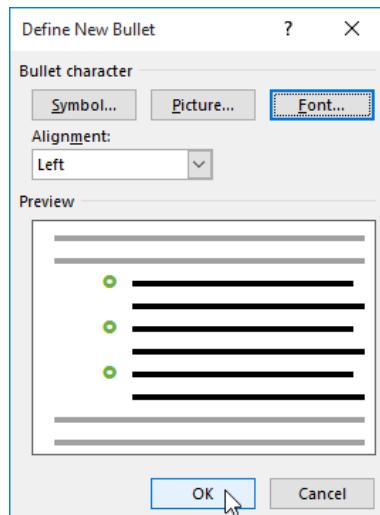


4. The Font dialog box will appear. Click the Font Color drop-down box. A menu of font colors will appear.

5. Select the desired color, then click OK.



6. The bullet color will appear in the Preview section of the Define New Bullet dialog box. Click OK.



7. The bullet color will change in the list.



Agenda

- Call to order
- New member introduction
- Treasurer's report
- News and events
- Communications
- New TTI Facebook Page
- Community Service
- Fundraising
- Chair's Report
- Adjournment

Additional Notes:

Multilevel lists

Multilevel lists allow you to create an outline with multiple levels. Any bulleted or numbered list can be turned into a multilevel list by using the Tab key.



Agenda

- Call to order
- New member introduction
- Treasurer's report
- News and events
 - Announcement of Chair's retirement
 - Farewell dinner
 - Oak Park Dedication
 - International Arborists Association
- Communications
- New TTI Facebook Page
- Community Service
 - J Pelham Urban Garden
 - Volunteer service day – Grove Memorial
 - Montrose Arboretum education project

To create a multilevel list:

1. Place the insertion point at the beginning of the line you want to move.



Agenda

- Call to order
- New member introduction
- Treasurer's report
- News and events
- |Announcement of Chair's retirement
- Farewell dinner
- Oak Park Dedication
- International Arborists Association
- Communications
- New TTI Facebook Page
- Community Service

2. Press the Tab key to increase the indent level of the line. The line will move to the right.



Agenda

- Call to order
- New member introduction
- Treasurer's report
- News and events
 - Announcement of Chair's retirement
- Farewell dinner
- Oak Park Dedication
- International Arborists Association
- Communications
- New TTI Facebook Page
- Community Service

To increase or decrease an indent level:

You can make adjustments to the organization of a multilevel list by increasing or decreasing the indent levels. There are several ways to change the indent level.

- To increase the indent by more than one level, place the insertion point at the beginning of the line, then press the Tab key until the desired level is reached.



Agenda

- Call to order
- New member introduction
- Treasurer's report
- News and events
 - Announcement of Chair's retirement
 - □ Farewell dinner
 - Oak Park Dedication
 - International Arborists Association
- Communications
- New TTI Facebook Page
- Community Service

- To decrease the indent level, place the insertion point at the beginning of the line, then hold the Shift key and press the Tab key.



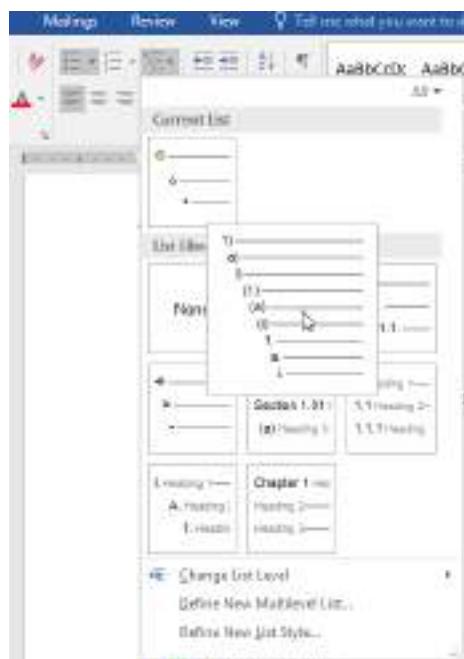
Agenda

- Call to order
- New member introduction
- Treasurer's report
- News and events
 - Announcement of Chair's retirement
 - ← ○ □ Farewell dinner
 - Oak Park Dedication
 - International Arborists Association
- Communications
- New TTI Facebook Page
- Community Service

- You can also increase or decrease the levels of text by placing the insertion point anywhere in the line and clicking the Increase Indent or Decrease Indent commands.



When formatting a multilevel list, Word will use the default bullet style. To change the style of a multilevel list, select the list, then click the Multilevel list command on the Home tab.



Lesson 11: Hyperlinks

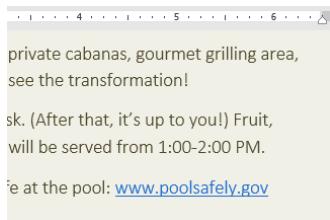
Introduction

Adding hyperlinks to text can provide access to websites and email addresses directly from your document. There are a few ways to insert a hyperlink into your document. Depending on how you want the link to appear, you can use Word's automatic link formatting or convert text into a link.

Understanding hyperlinks in Word

Hyperlinks have two basic parts: the address (URL) of the webpage and the display text. For example, the address could be <http://www.popsci.com>, and the display text could be Popular Science Magazine. When you create a hyperlink in Word, you'll be able to choose both the address and the display text.

Word often recognizes email and web addresses as you type and will automatically format them as hyperlinks after you press Enter or the spacebar. In the image below, you can see a hyperlinked web address.



To follow a hyperlink in Word, hold the Ctrl key and click the hyperlink.

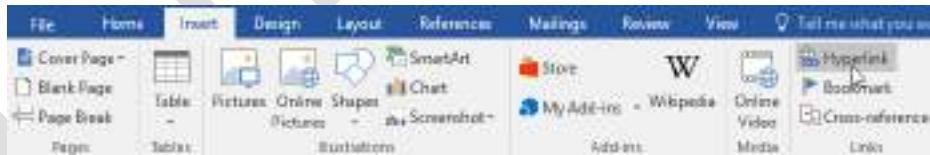


To format text with a hyperlink:

1. Select the text you want to format as a hyperlink.

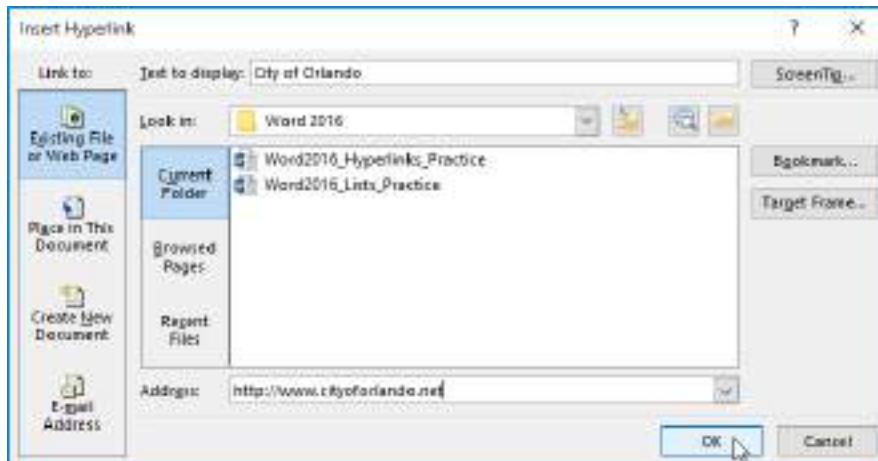


2. Select the Insert tab, then click the Hyperlink command.



Alternatively, you can open the Insert Hyperlink dialog box by right-clicking the selected text and selecting Hyperlink... from the menu that appears.

- 3. The Insert Hyperlink dialog box will appear. Using the options on the left side, you can choose to link to a file, webpage, email address, document, or a place in the current document.**
- 4. The selected text will appear in the Text to display: field at the top. You can change this text if you want.**
- 5. In the Address: field, type the address you want to link to, then click OK.**



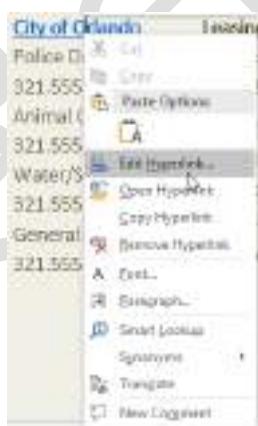
6. The text will then be formatted as a hyperlink.



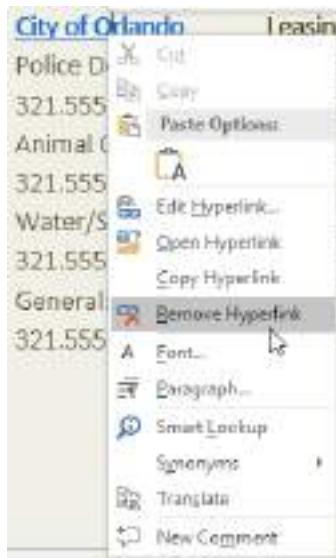
After you create a hyperlink, you should test it. If you've linked to a website, your web browser should automatically open and display the site. If it doesn't work, check the hyperlink address for misspellings.

Editing and removing hyperlinks

Once you've inserted a hyperlink, you can right-click the hyperlink to edit, open, copy, or remove it.

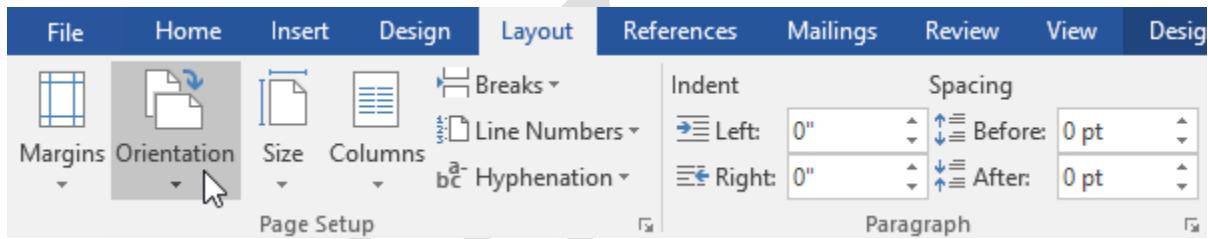


To remove a hyperlink, right-click the hyperlink and select Remove Hyperlink from the menu that appears.

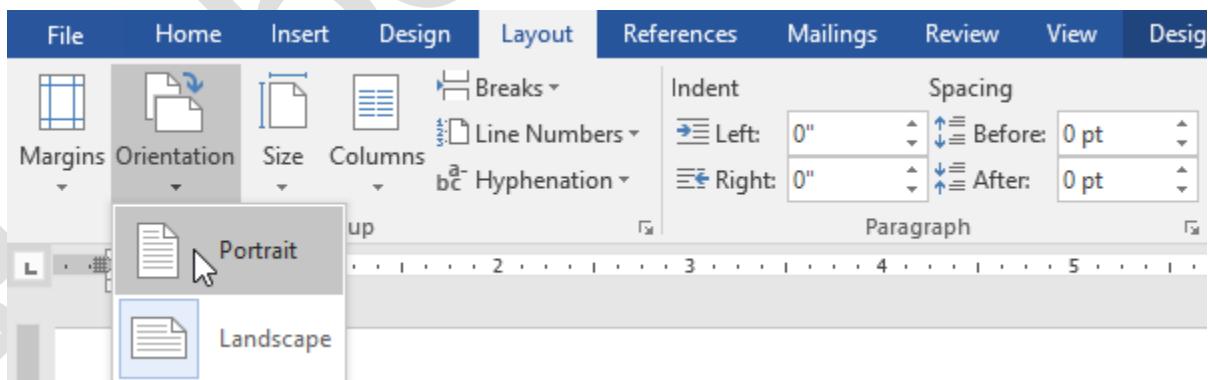


To change page orientation:

1. Select the Layout tab.
2. Click the Orientation command in the Page Setup group.



3. A drop-down menu will appear. Click either Portrait or Landscape to change the page orientation.



4. The page orientation of the document will be changed.

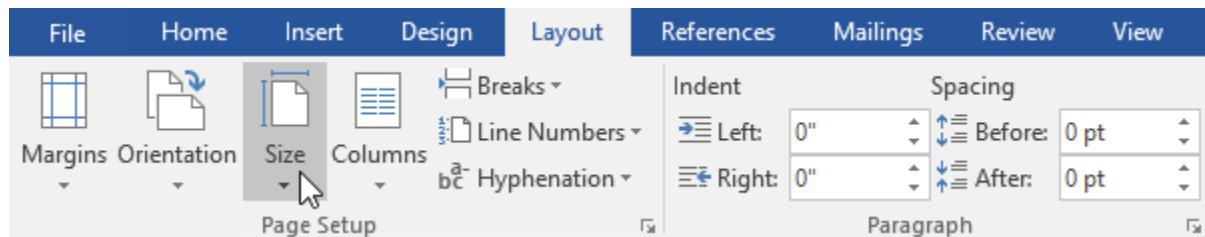
Page size

By default, the page size of a new document is 8.5 inches by 11 inches. Depending on your project, you may need to adjust your document's page size. It's important to note that before modifying the default page size, you should check to see which page sizes your printer can accommodate.

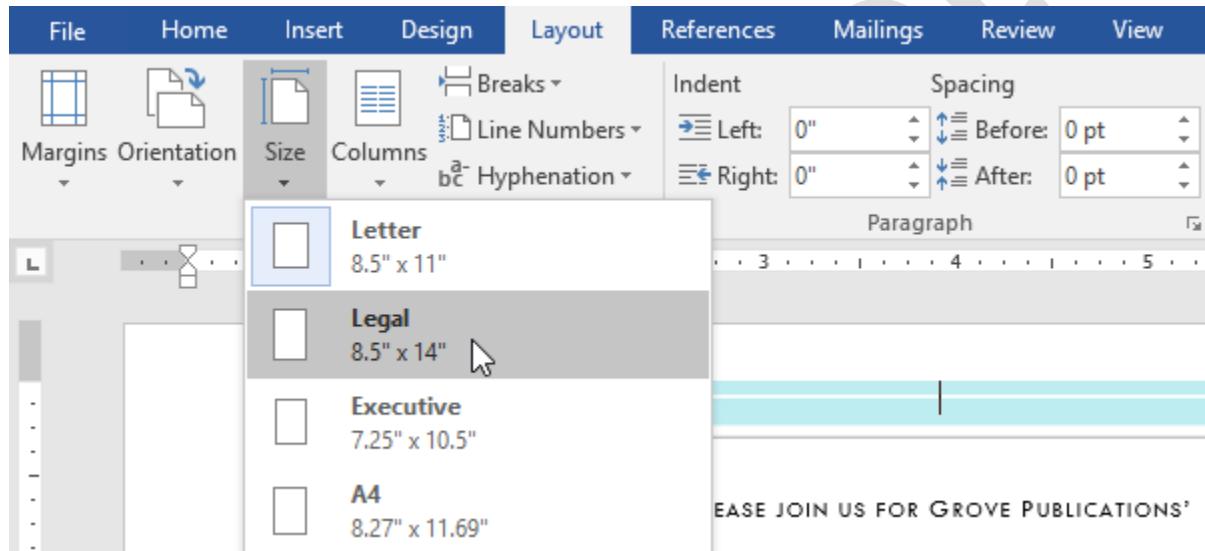
To change the page size:

Word has a variety of predefined page sizes to choose from.

1. Select the Layout tab, then click the Size command.



2. A drop-down menu will appear. The current page size is highlighted. Click the desired predefined page size.

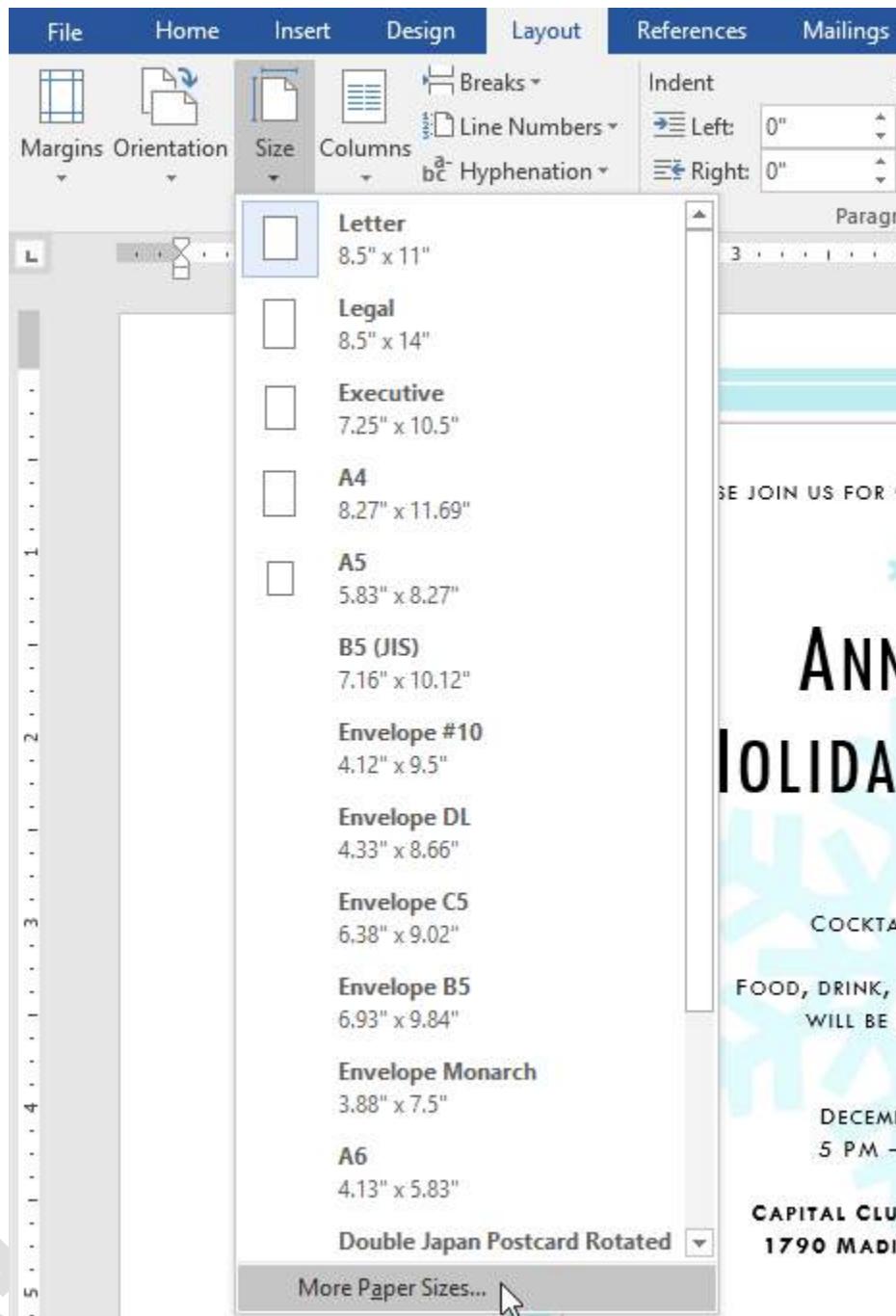


3. The page size of the document will be changed.

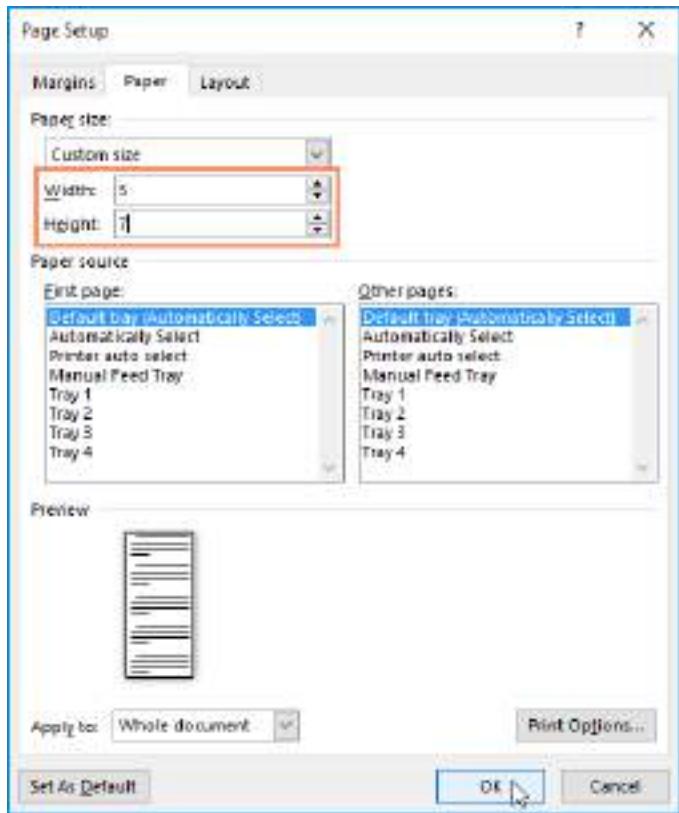
To use a custom page size:

Word also allows you to customize the page size in the Page Setup dialog box.

1. From the Layout tab, click Size. Select More Paper Sizes from the drop-down menu.



2. The Page Setup dialog box will appear.
3. Adjust the values for Width and Height, then click OK.



4. The page size of the document will be changed.

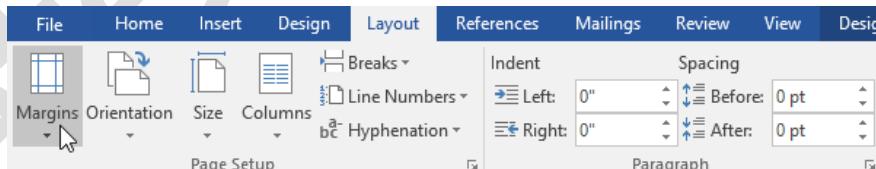
Page margins

A margin is the space between the text and the edge of your document. By default, a new document's margins are set to Normal, which means it has a one-inch space between the text and each edge. Depending on your needs, Word allows you to change your document's margin size.

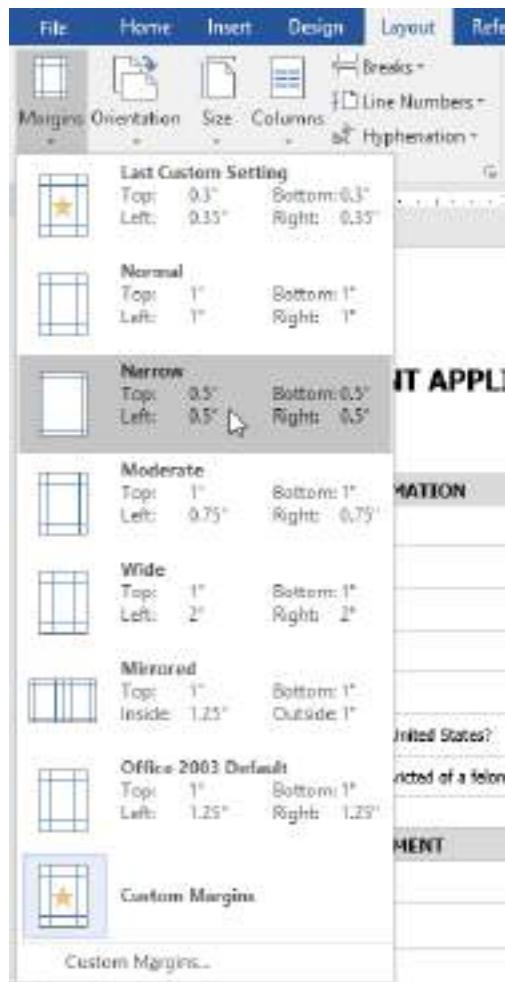
To format page margins:

Word has a variety of predefined margin sizes to choose from.

1. Select the Layout tab, then click the Margins command.



2. A drop-down menu will appear. Click the predefined margin size you want.

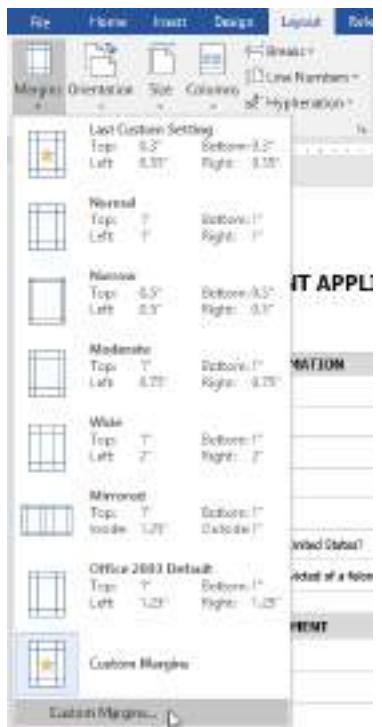


3. The margins of the document will be changed.

To use custom margins:

Word also allows you to customize the size of your margins in the Page Setup dialog box.

1. From the Layout tab, click Margins. Select Custom Margins from the drop-down menu.

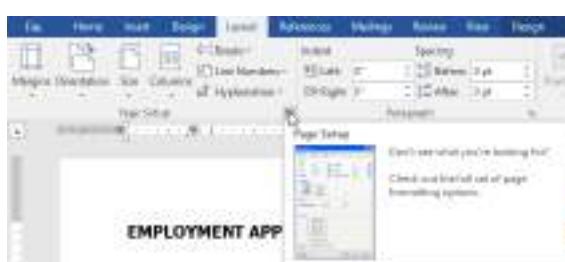


2. The Page Setup dialog box will appear.
3. Adjust the values for each margin, then click OK.



4. The margins of the document will be changed.

Alternatively, you can open the Page Setup dialog box by navigating to the Layout tab and clicking the small arrow in the bottom-right corner of the Page Setup group.



You can use Word's convenient Set as Default feature to save all of the formatting changes you've made and automatically apply them to new documents.

Lesson 13: Printing Documents

Introduction

Once you've created your document, you may want to print it to view and share your work offline. It's easy to preview and print a document in Word using the Print pane.

To access the Print pane:

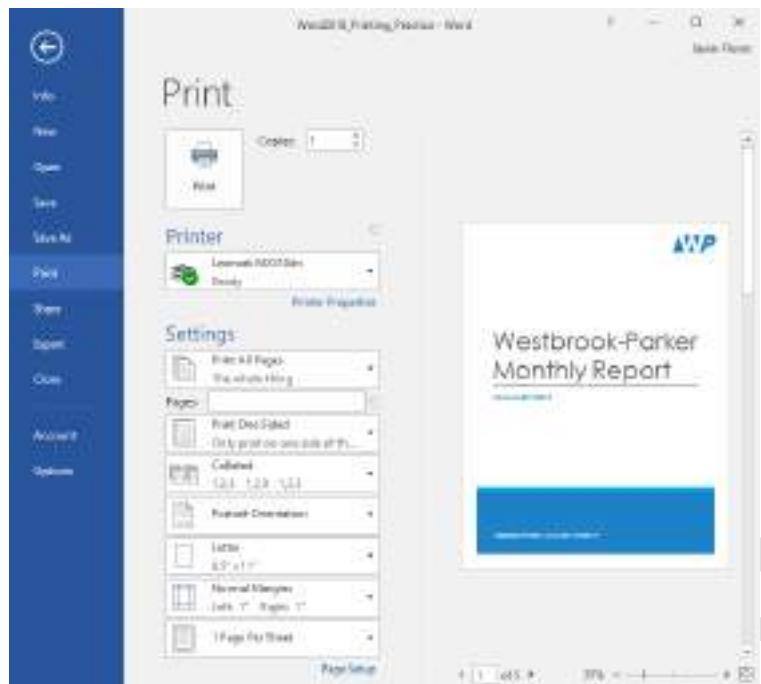
- 1. Select the File tab. Backstage view will appear.**



- 2. Select Print. The Print pane will appear.**



Click the buttons in the interactive below to learn more about using the Print pane.



Preview Pane

Here, you can see a preview of how your document will look when printed.

You can also access the Print pane by pressing **Ctrl+P** on your keyboard.

To print a document:

1. Navigate to the Print pane, then select the desired printer.



2. Enter the number of copies you want to print.



3. Select any additional settings if needed.



4. Click Print.



Custom printing

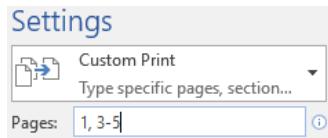
Sometimes you may find it unnecessary to print your entire document, in which case custom printing may be more suited for your needs. Whether you're printing several

individual pages or a range of pages, Word allows you to specify exactly which pages you'd like to print.

To custom print a document:

If you'd like to print individual pages or page ranges, you'll need to separate each entry with a comma (1, 3, 5-7, or 10-14 for example).

1. Navigate to the Print pane.
2. In the Pages: field, enter the pages you want to print.



3. Click Print.



If your document isn't printing the way you want, you may need to adjust some of the page layout settings.

Lesson 14: Breaks

Introduction

When you're working on a multi-page document, there may be times when you want to have more control over how exactly the text flows. Breaks can be helpful in these cases. There are many types of breaks to choose from depending on what you need, including page breaks, section breaks, and column breaks.

Optional: Download our [practice document](#).

Watch the video below to learn more about using breaks in Word.

To insert a page break:

In our example, the section headers on page three (Monthly Revenue and By Client) are separated from the table on the page below. And while we could just press Enter until that text reaches the top of page four, it could easily be shifted around if we added or deleted something in another part of the document. Instead, we'll insert a page break.

1. Place the insertion point where you want to create the page break. In our example, we'll place it at the beginning of our headings.

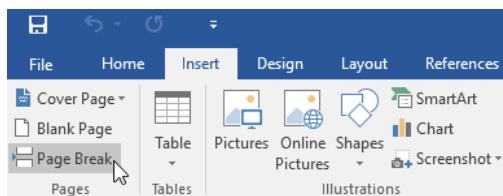
MONTHLY REVENUE

BY CLIENT

Page | 4

Clients	Quarter 4	Quarter 1
Union Grove Public Schools	\$42,600	\$53,600
Jarvis Unified School District	\$31,200	\$42,400
Mellon Foundation	\$16,000	\$19,000
Right Hand International	\$5,200	\$6,400
DigiPaws.com	\$3,600	\$4,400

2. On the Insert tab, click the Page Break command. Alternatively, you can press Ctrl+Enter on your keyboard.



3. The page break will be inserted into the document, and the text will move to the next page.

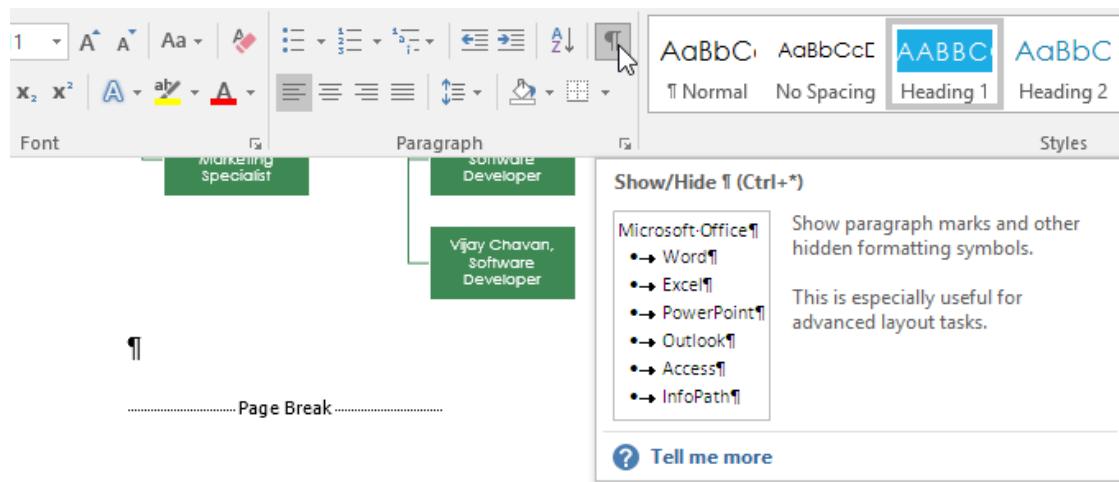
MONTHLY REVENUE

BY CLIENT

Page | 4

Clients	Quarter 4	Quarter 1
Union Grove Public Schools	\$42,600	\$53,600
Jarvis Unified School District	\$31,200	\$42,400
Mellon Foundation	\$16,000	\$19,000

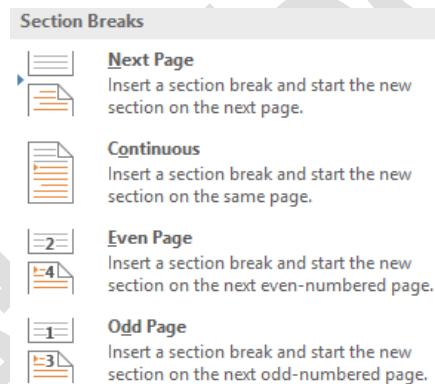
By default, breaks are invisible. If you want to see the breaks in your document, click the Show/Hide command on the Home tab.



Section breaks

Section breaks create a barrier between different parts of a document, allowing you to format each section independently. For example, you may want one section to have two columns without adding columns to the entire document. Word offers several types of section breaks.

- **Next Page:** This option inserts a section break and moves text after the break to the next page of the document.
- **Continuous:** This option inserts a section break and allows you to continue working on the same page.
- **Even Page and Odd Page:** These options add a section break and move the text after the break to the next even or odd page. These options may be useful when you need to begin a new section on an even or odd page (for example, a new chapter of a book).



To insert a section break:

In our example, we'll add a section break to separate a paragraph from a two-column list.

1. Place the insertion point where you want to create the break. In our example, we'll place it at the beginning of the paragraph we want to separate from two-column formatting.

CLIENTS OVERVIEW

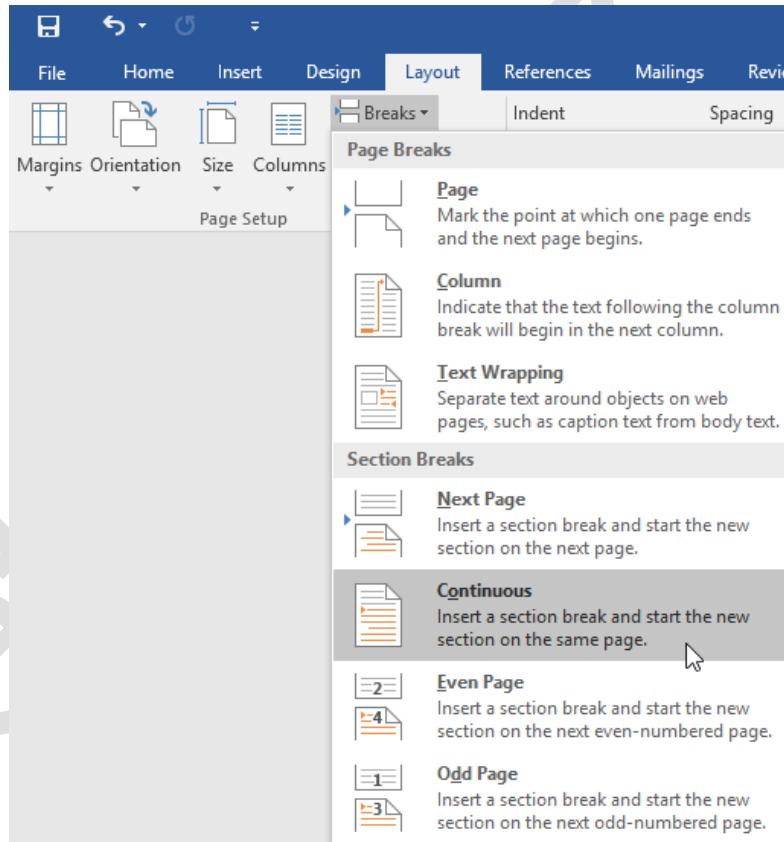
The company added 13 new clients to its roster between December 2015 and January 2016.

NEW CLIENTS

- Bancroft Preparatory Academy
- Candy Coaters and Shakes Ice Cream Parlor
- Firehouse Dalmatian Rescue
- Fly by Day Events
- General T. Sanders High School
- Homes and Hope Charity
- Julia A. Clark Middle School
- Little Jumpers Equestrian Squad
- Mason-Bowers Editing and Proofreading
- Peterson's Precision Landscaping
- Shepard, Smith, & Wolfe
- Tillie's Breakfast and Grill
- Wakanda Middle School

[Of the list above, four of the clients are schools, three are nonprofits, and six are small to medium-sized businesses. New categories of business clients we serve include landscaping, event planning, law firms, and editing houses.]

- 2. On the Page Layout tab, click the Breaks command, then select the desired section break from the drop-down menu. In our example, we'll select Continuous so our paragraph remains on the same page as the columns.**



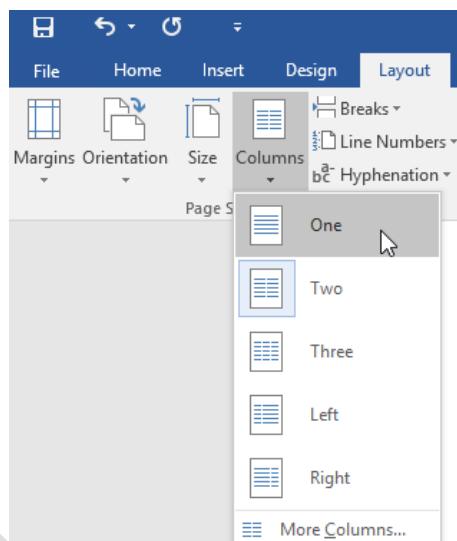
- 3. A section break will appear in the document.**

NEW CLIENTS

- Bancroft Preparatory Academy
- Candy Coaters and Shakes Ice Cream Parlor
- Firehouse Dalmatian Rescue
- Fly by Day Events
- General T. Sanders High School
- Homes and Hope Charity
- Julia A. Clark Middle School
- Little Jumpers Equestrian Squad
- Mason-Bowers Editing and Proofreading
- Peterson's Precision Landscaping
- Shepard, Smith, & Wolfe
- Tillie's Breakfast and Grill
- Wakanda Middle School

Of the list above, four of the clients are schools, three are nonprofits, and six are small to medium-sized businesses. New categories of business clients we serve include landscaping, event planning, law firms, and editing houses.

4. The text before and after the section break can now be formatted separately. In our example, we'll apply one-column formatting to the paragraph.



5. The formatting will be applied to the current section of the document. In our example, the text above the section break uses two-column formatting, while the paragraph below the break uses one-column formatting.

NEW CLIENTS

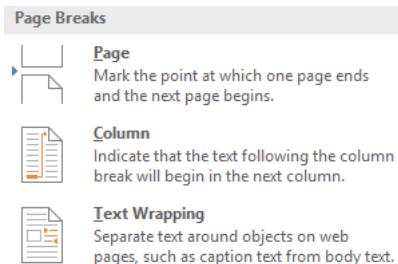
- Bancroft Preparatory Academy
- Candy Coaters and Shakes Ice Cream Parlor
- Firehouse Dalmatian Rescue
- Fly by Day Events
- General T. Sanders High School
- Homes and Hope Charity
- Julia A. Clark Middle School
- Little Jumpers Equestrian Squad
- Mason-Bowers Editing and Proofreading
- Peterson's Precision Landscaping
- Shepard, Smith, & Wolfe
- Tillie's Breakfast and Grill
- Wakanda Middle School

Of the list above, four of the clients are schools, three are nonprofits, and six are small to medium-sized businesses. New categories of business clients we serve include landscaping, event planning, law firms, and editing houses.

Other types of breaks

When you want to format the appearance of columns or modify text wrapping around an image, Word offers additional break options that can help:

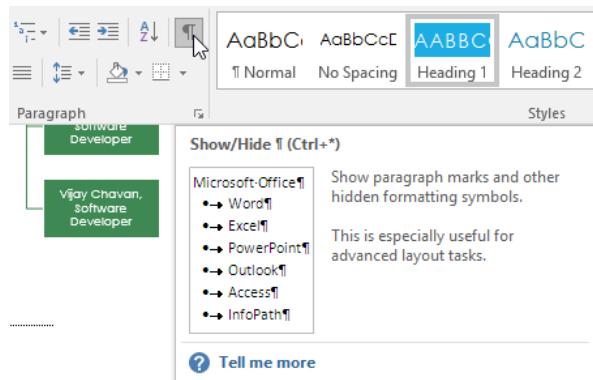
- **Column:** When creating multiple columns, you can apply a column break to balance the appearance of the columns. Any text following the column break will begin in the next column.
- **Text wrapping:** When text has been wrapped around an image or object, you can use a text-wrapping break to end the wrapping and begin typing on the line below the image.



To delete a break:

By default, breaks are hidden. If you want to delete a break, you'll first need to show the breaks in your document.

1. **On the Home tab, click the Show/Hide command.**



2. Locate the break you want to delete, then place the insertion point at the beginning of the break.

Page | 11

EXECUTIVE SUMMARY → ¶

¶ During the 4th quarter, Westbrook-Parker showed continued growth and exceeded profit expectations. The new year is starting strong, with January 2016 proving to be a profitable month. ¶

Database software sales are up by 13%, subscriptions to our online database management applications are up by 21%, and capital expenditures in the marketing department have decreased since the 3rd quarter. ¶

At the beginning of the month, Brent Summerfield (formerly Business Systems Manager) was promoted to the role of Vice President. Patrick Jarvis assumed the role of Web Developer in order to grow and troubleshoot our online database applications. This has effectively freed up the software development team to focus on database solutions that will continue to meet our clients' demands. The sales team also hired an additional salesperson and acquired 13 new clients, including four schools, three nonprofits, and six businesses. ¶

I |Page Break..... ¶

3. Press the Delete key. The break will be deleted from the document.



During the 4th quarter, Westbrook-Parker showed continued growth and exceeded profit expectations. The new year is starting strong, with January 2016 proving to be a profitable month. ¶

Database software sales are up by 13%, subscriptions to our online database management applications are up by 21%, and capital expenditures in the marketing department have decreased since the 3rd quarter. ¶

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Clients report their satisfaction with the flexibility that our online database applications continue to afford them. The marketing department plans to study usage trends throughout the 1st and 2nd quarters so that the software development team can tailor our offerings to best meet demands. Marketing and sales trends indicate that our overall growth will continue. ¶

Lesson 15: Columns

Introduction

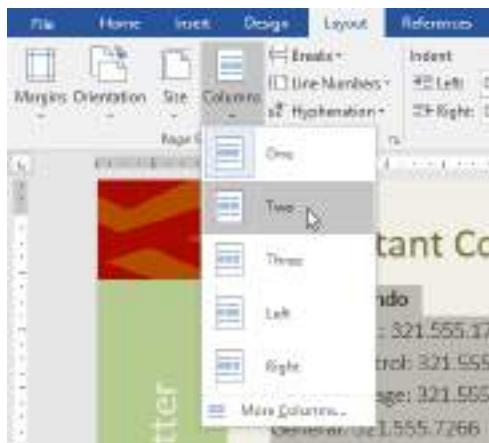
Sometimes the information you include in your document is best displayed in columns. Not only can columns help improve readability, but some types of documents—like newspaper articles, newsletters, and flyers—are often written in column format. Word also allows you to adjust your columns by adding column breaks.

To add columns to a document:

- 1. Select the text you want to format.**



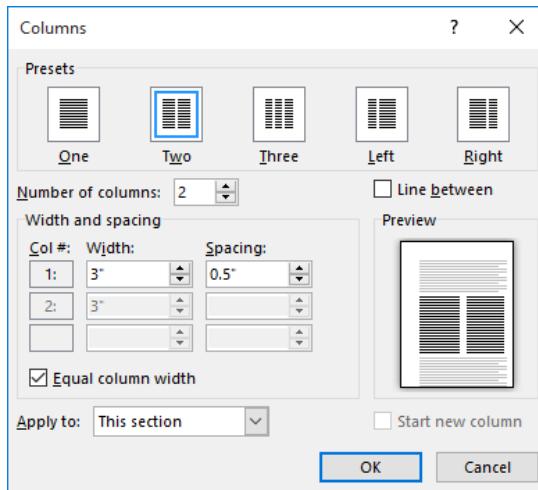
2. Select the Layout tab, then click the Columns command. A drop-down menu will appear.
3. Select the number of columns you want to create.



4. The text will format into columns.



Your column choices aren't limited to the drop-down menu that appears. Select More Columns at the bottom of the menu to access the Columns dialog box. Click the arrows next to Number of columns: to adjust the number of columns.

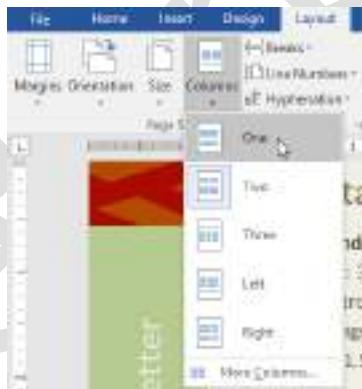


If you want to adjust the spacing and alignment of columns, click and drag the indent markers on the Ruler until the columns appear the way you want.



To remove columns:

To remove column formatting, place the insertion point anywhere in the columns, then click the Columns command on the Layout tab. Select One from the drop-down menu that appears.



Adding column breaks

Once you've created columns, the text will automatically flow from one column to the next. Sometimes, though, you may want to control exactly where each column begins. You can do this by creating a column break.

To add a column break:

In our example below, we'll add a column break that will move text to the beginning of the next column.

- 1. Place the insertion point at the beginning of the text you want to move.**

Important Contact Info

City of Orlando

Police Dept.: 321.555.1728

Animal Control: 321.555.8915

Water/Sewage: 321.555.6142

General: 321.555.7266

Leasing Office

Phone: 321.555.5463

Fax: 321.555.5464

Email: info@limegroveapts.com

Office Hours

Monday-Friday 9:00-6:00

Saturday 10:00-5:00

Sunday 1:00-5:00

- 2. Select the Layout tab, then click the Breaks command. A drop-down menu will appear.**

- 3. Select Column from the menu.**

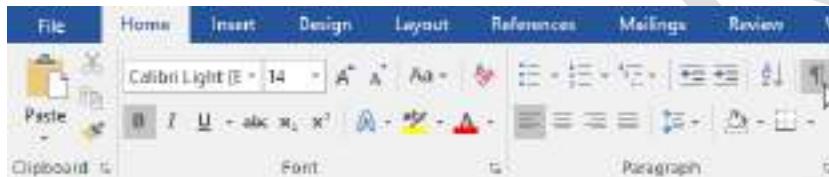
The screenshot shows the Microsoft Word ribbon with the 'Layout' tab selected. In the 'Breaks' section of the ribbon, a dropdown menu is open, showing various options under 'Page Breaks'. The 'Column' option is highlighted with a mouse cursor. The main document area shows a green sidebar with the text 'ting Newsletter' and a red graphic.

- 4. The text will move to the beginning of the column. In our example, it moved to the beginning of the next column.**

The screenshot shows a Microsoft Word document titled "Important Contact Info". It contains two columns of text. The left column is titled "City of Orlando" and lists: Police Dept.: 321.555.1728, Animal Control: 321.555.8915, Water/Sewage: 321.555.6142, and General: 321.555.7266. The right column is titled "Leasing Office" and lists: Phone: 321.555.5463, Fax: 321.555.5464, Email: info@limegroveapts.com. Below these, there is a section titled "Office Hours" with the text: Monday-Friday 9:00-6:00, Saturday 10:00-5:00, Sunday 1:00-5:00.

To remove column breaks:

1. By default, breaks are hidden. If you want to show the breaks in your document, click the Show/Hide command on the Home tab.



2. Place the insertion point to the left of the break you want to delete.

A screenshot of a Microsoft Word document titled "Important Contact Info". The document contains two columns of text. A vertical red line highlights a "Column Break" in the left column between the "Water/Sewage" and "General" entries. Another red line highlights a "Section Break (Continuous)" at the end of the right column. The text includes: City-of-Orlando, Police-Dept.:321.555.1728, Animal-Control:321.555.8915, Water/Sewage:321.555.6142, General:321.555.7266, Leasing-Office, Phone:321.555.5463, Fax:321.555.5464, Email:info@limegroveapts.com, Office-Hours, Monday-Friday:9:00-6:00, Saturday:10:00-5:00, Sunday:1:00-5:00.

3. Press the delete key to remove the break.

City-of-Orlando
Police-Dept.:321.555.1728
Animal-Control:321.555.8915
Water/Sewage:321.555.6142
General:321.555.7266

Leasing-Office
Phone:321.555.5463

Fax:321.555.5464
Email:info@limegroveapts.com

Office-Hours
Monday-Friday:9:00-6:00
Saturday:10:00-5:00
Sunday:1:00-5:00

Lesson 16: Headers and Footers

Introduction

The header is a section of the document that appears in the top margin, while the footer is a section of the document that appears in the bottom margin. Headers and footers generally contain additional information such as page numbers, dates, an author's name, and footnotes, which can help keep longer documents organized and make them easier to read. Text entered in the header or footer will appear on each page of the document.

To create a header or footer:

In our example, we want to display the author's name at the top of each page, so we'll place it in the header.

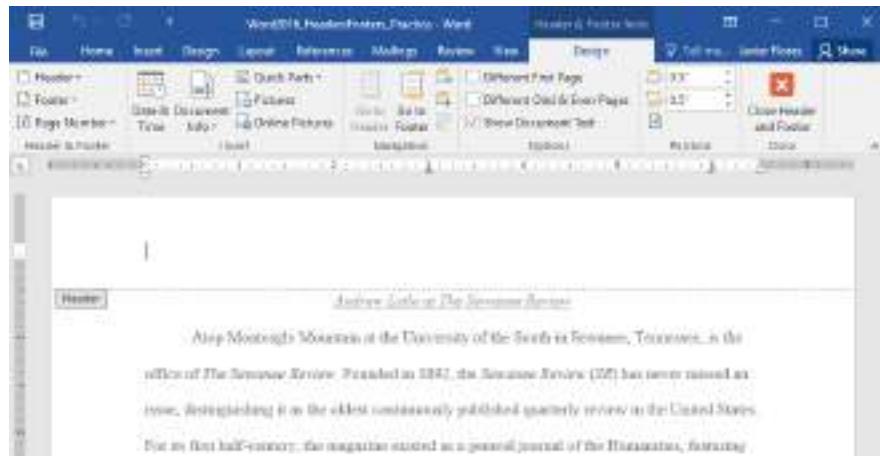
1. Double-click anywhere on the top or bottom margin of your document. In our example, we'll double-click the top margin.

Word2010_HeadersFooters_Practice - Word

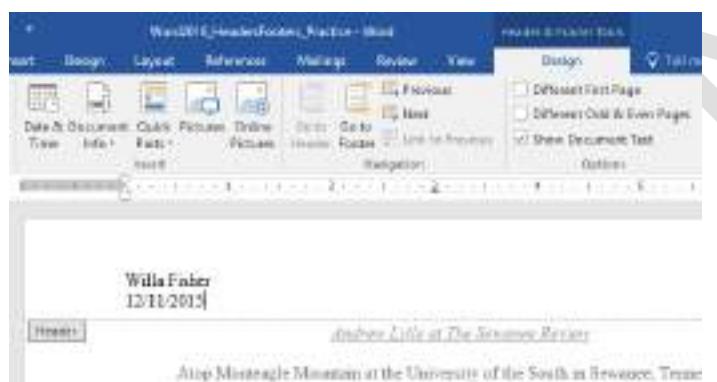
Andrew Justice at The Sewanee Review

A atop Mountagle Mountain at the University of the South in Sewanee, Tennessee, is the office of *The Sewanee Review*. Founded in 1891, the *Sewanee Review* (SR) has never missed an issue, distinguishing it as the oldest continuously published quarterly review in the United States. For its first half-century, the magazine existed as a general journal of the Humanities, featuring

2. The header or footer will open, and a Design tab will appear on the right side of the Ribbon. The insertion point will appear in the header or footer.



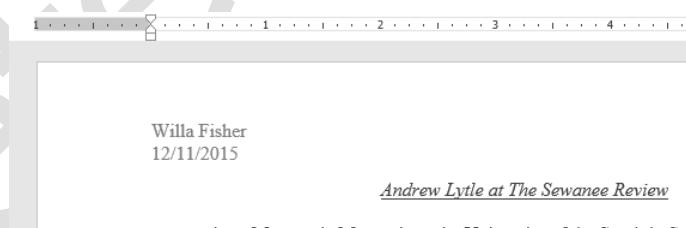
- 3. Type the desired information into the header or footer. In our example, we'll type the author's name and the date.**



- 4. When you're finished, click Close Header and Footer. Alternatively, you can press the Esc key.**



- 5. The header or footer text will appear.**



To insert a preset header or footer:

Word has a variety of preset headers and footers you can use to enhance your document's design and layout. In our example, we'll add a preset header to our document.

- 1. Select the Insert tab, then click the Header or Footer command. In our example, we'll click**

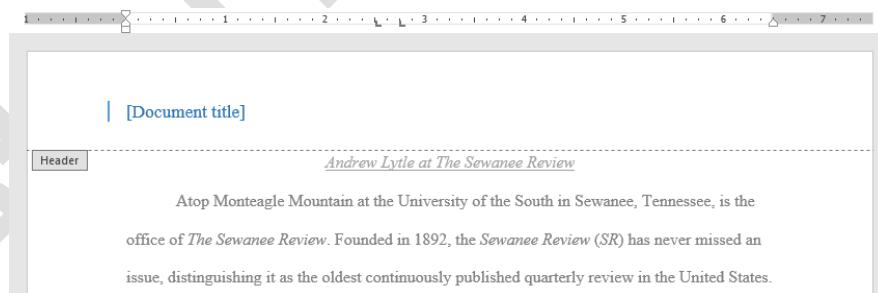
the Header command.



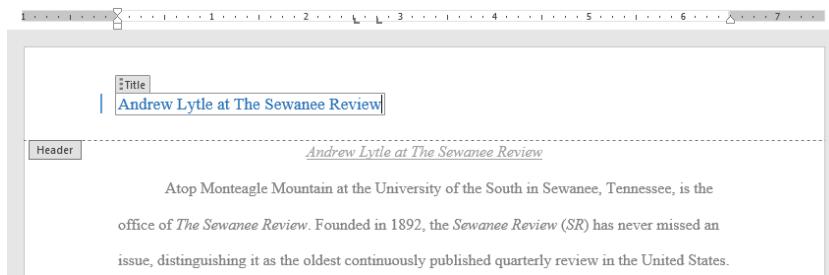
2. In the menu that appears, select the desired preset header or footer.



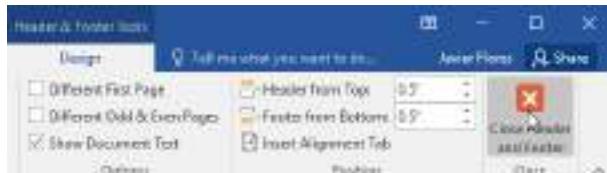
3. The header or footer will appear. Many preset headers and footers contain text placeholders called Content Control fields. These fields are good for adding information like the document title, author's name, date, and page number.



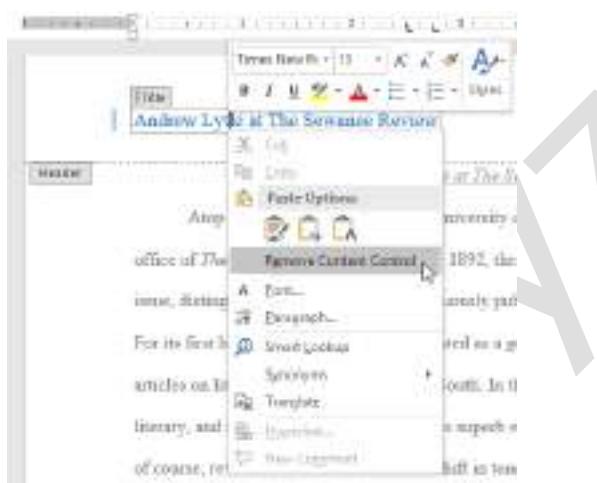
4. To edit a Content Control field, click it and type the desired information.



5. When you're finished, click Close Header and Footer. Alternatively, you can press the Esc key.

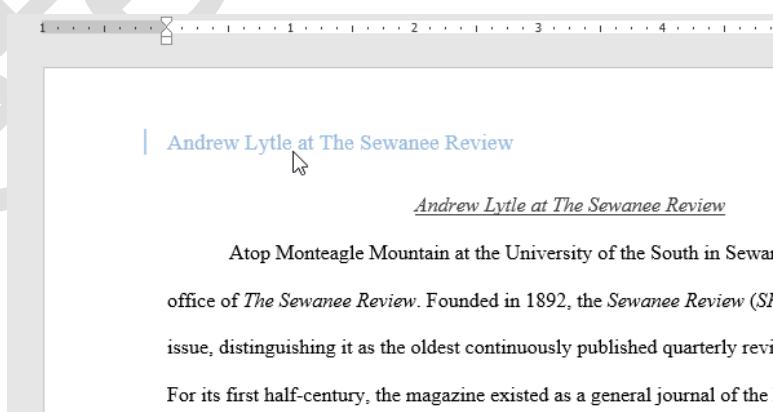


If you want to delete a Content Control field, right-click it and select Remove Content Control from the menu that appears.



Editing headers and footers

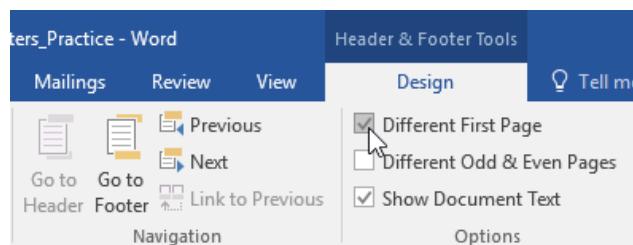
After you close the header or footer, it will still be visible, but it will be locked. Simply double-click a header or footer to unlock it, which will allow you to edit it.



Design tab options

When your document's header and footer are unlocked, the Design tab will appear on the right side of the Ribbon, giving you various editing options:

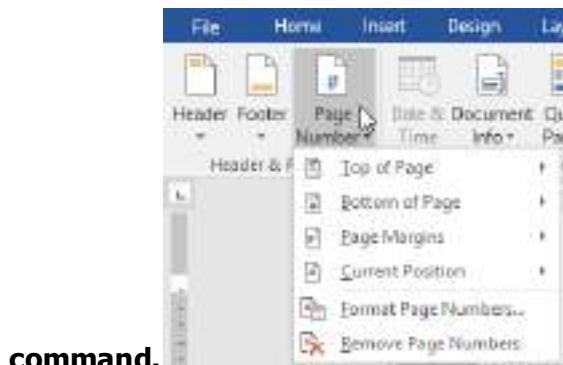
- **Hide the first-page header and footer:** For some documents, you may not want the first page to show the header and footer, like if you have a cover page and want to start the page numbering on the second page. If you want to hide the first-page header and footer, check the box next to Different First Page.



- **Remove the header or footer:** If you want to remove all information contained in the header, click the Header command and select Remove Header from the menu that appears. Similarly, you can remove a footer using the Footer command.

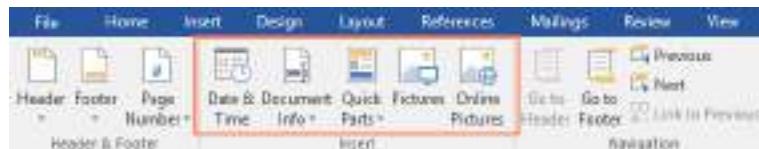


- **Page Number:** You can automatically number each page with the Page Number



command.

- Additional options: With the commands available in the Insert group, you can add the date and time, document info, pictures, and more to your header or footer.

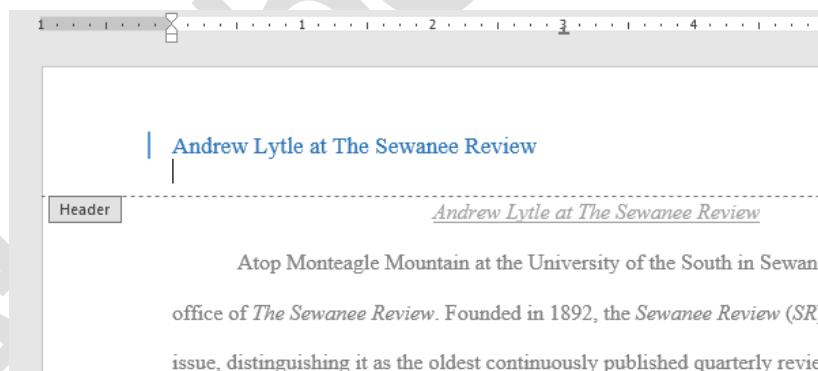


To insert the date or time into a header or footer:

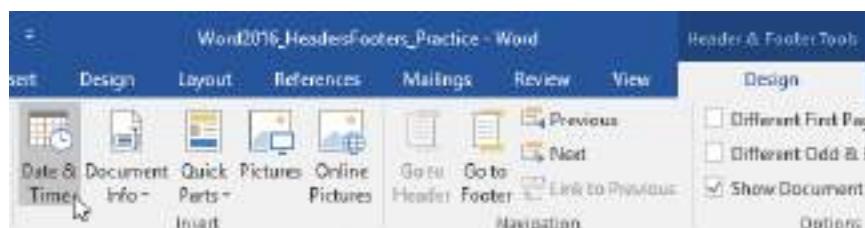
Sometimes it's helpful to include the date or time in the header or footer. For example, you may want your document to show the date when it was created.

On the other hand, you may want to show the date when it was printed, which you can do by setting it to update automatically. This is useful if you frequently update and print a document because you'll always be able to tell which version is the most recent.

- Double-click anywhere on the header or footer to unlock it. Place the insertion point where you want the date or time to appear. In our example, we'll place the insertion point on the line below the author's name.



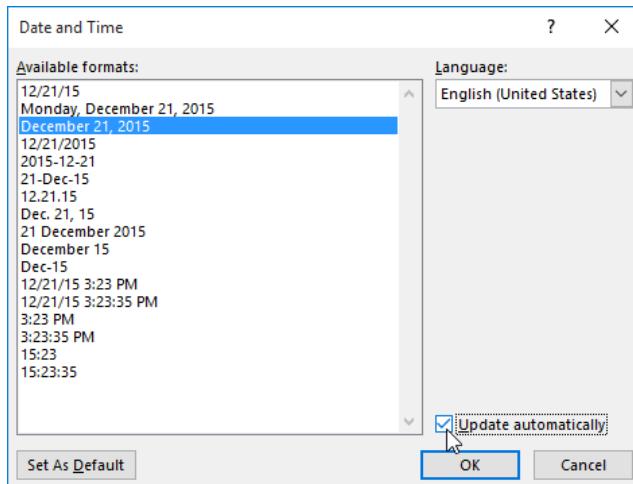
- The Design tab will appear. Click the Date & Time command.



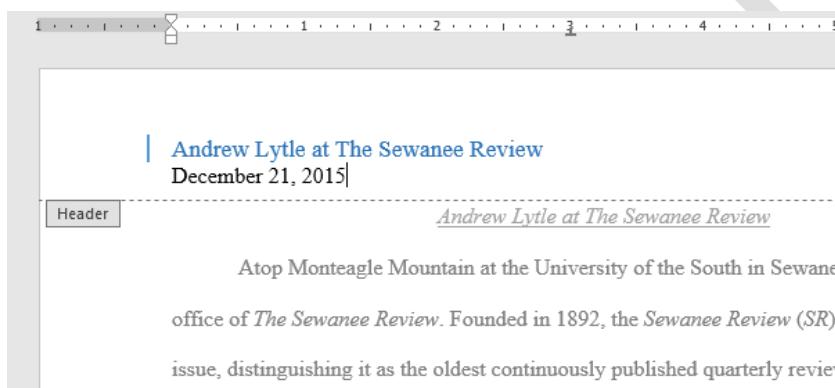
- The Date and Time dialog box will appear. Select the desired date or time format.

4. Check the box next to Update Automatically if you want the date to change every time you open the document. If you don't want the date to change, leave this option unchecked.

5. Click OK.



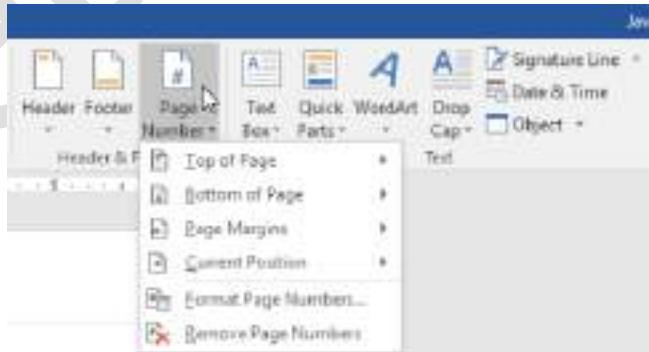
6. The date will appear in the header.



To add page numbers:

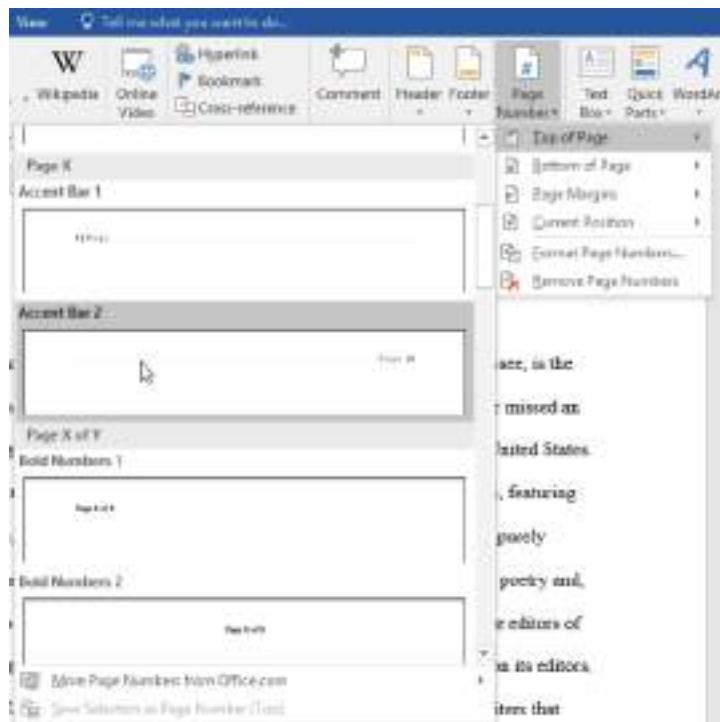
Word can automatically label each page with a page number and place it in a header, footer, or side margin. If you have an existing header or footer, it will be removed and replaced with the page number.

1. On the Insert tab, click the Page Number command.

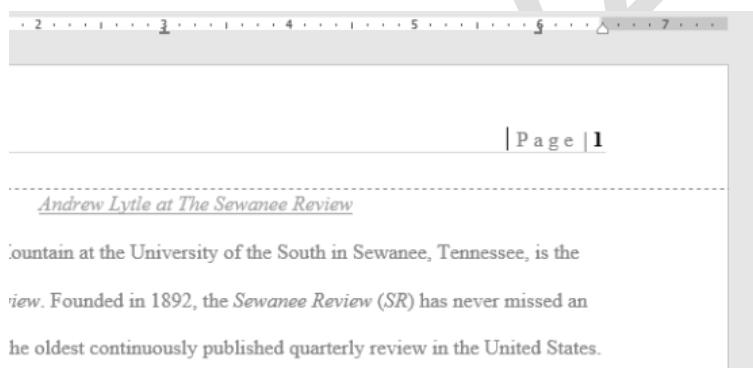


2. Open the Top of Page, Bottom of Page, or Page Margin menu, depending on where you want the page

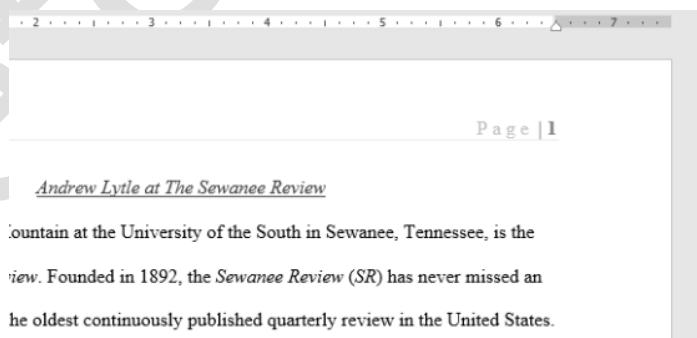
number to be positioned. Then select the desired style of header.



3. Page numbering will appear.



4. Press the Esc key to lock the header and footer.



5. If you need to make any changes to your page numbers, simply double-click the header or footer to unlock it.

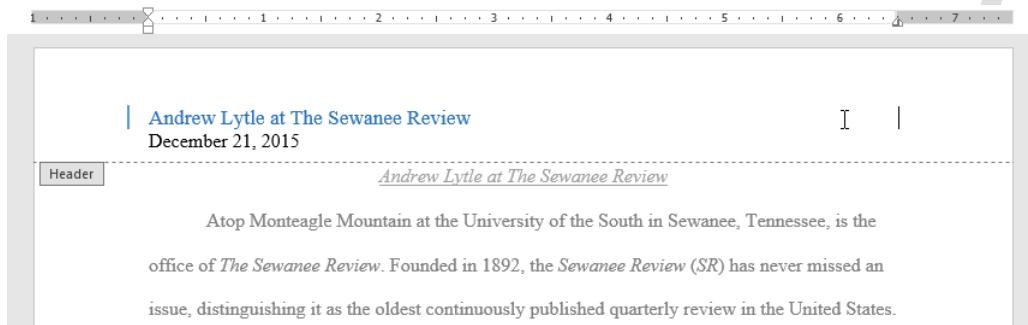
If you've created a page number in the side margin, it's still considered part of

the header or footer. You won't be able to select the page number unless the header or footer is selected.

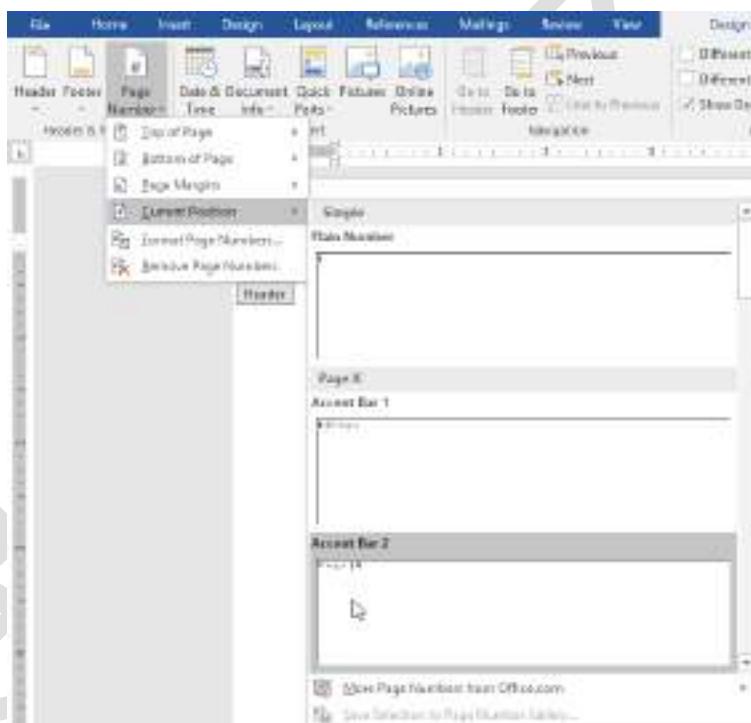
To add page numbers to an existing header or footer:

If you already have a header or footer and you want to add a page number to it, Word has an option to automatically insert the page number into the existing header or footer. In our example, we'll add page numbering to our document's header.

- 1. Double-click anywhere on the header or footer to unlock it.**



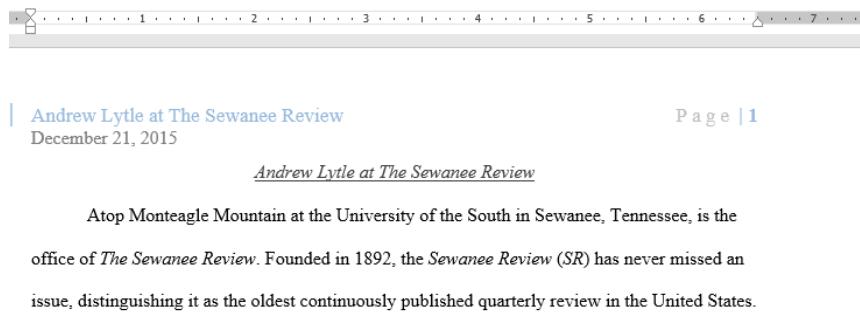
- 2. On the Design tab, click the Page Number command. In the menu that appears, hover the mouse over Current Position and select the desired page numbering style.**



- 3. Page numbering will appear.**



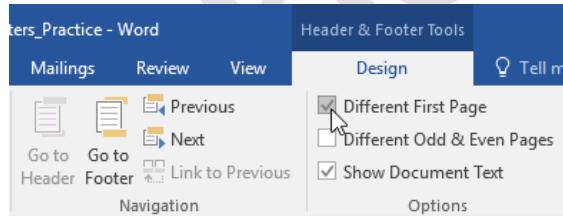
4. When you're finished, press the Esc key.



To hide the page number on the first page:

In some documents, you may not want the first page to show the page number. You can hide the first page number without affecting the rest of the pages.

1. Double-click the header or footer to unlock it.
2. From the Design tab, place a check mark next to Different First Page. The header and footer will disappear from the first page. If you want, you can type something new in the header or footer, and it will only affect the first page.



If you're unable to select Different First Page, it may be because an object within the header or footer is selected. Click in an empty area within the header or footer to make sure nothing is selected.

To restart page numbering:

Word allows you to restart page numbering on any page of your document. You can do this by inserting a section break and selecting the number you want to restart the numbering with. In our example, we'll restart the page numbering for our document's Works Cited section.

1. Place the insertion point at the top of the page you want to restart page numbering for. If there is text on the page, place the insertion point at the beginning of the text.

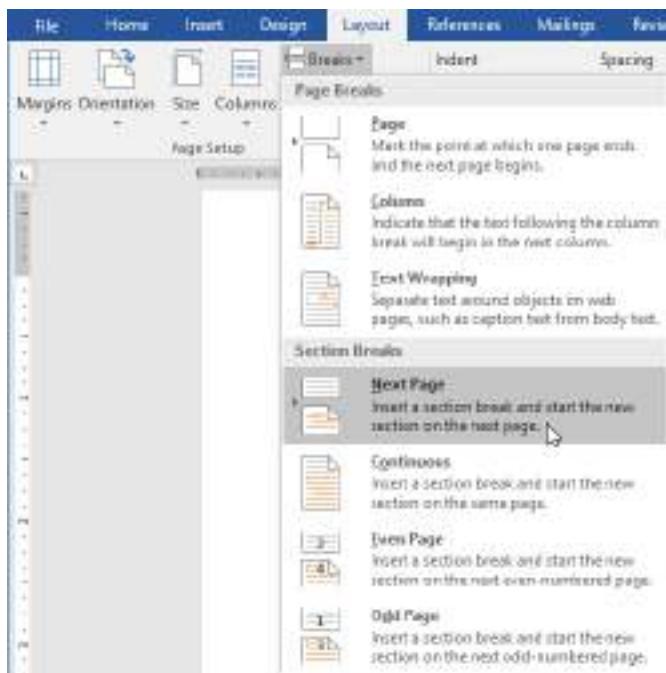
I Works Cited

otte. The Fugitive Legacy: A Critical History. Baton Rouge: LSU Press, 2001.

je. "Remaking *The Sewanee Review*." Chattahoochee Review 8 (1988): 71-7.

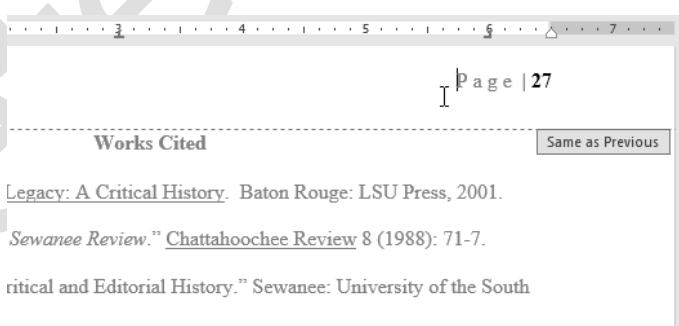
Sewanee Review: A Critical and Editorial History." *Sewanee*: University of the South

2. Select the Layout tab, then click the Breaks command. Select Next Page from the drop-down menu that appears.



3. A section break will be added to the document.

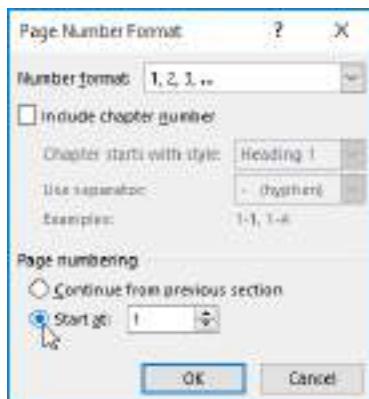
4. Double-click the header or footer containing the page number you want to restart.



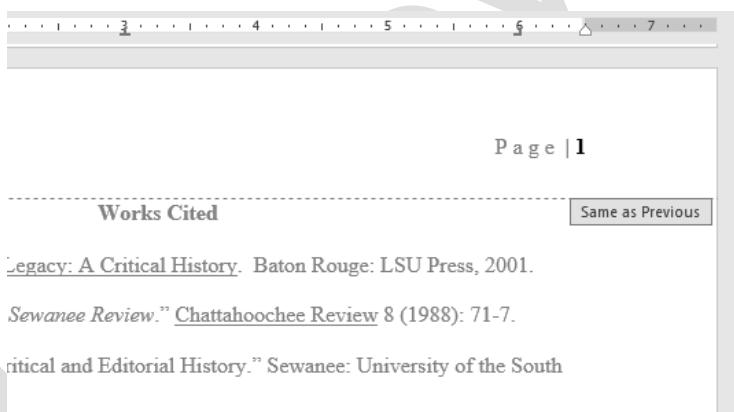
5. Click the Page Number command. In the menu that appears, select Format Page Numbers.



6. A dialog box will appear. Click the Start at: button. By default, it will start at 1. If you want, you can change the number. When you're done, click OK.



7. The page numbering will restart.



Lesson 18: Pictures and Text Wrapping

Introduction

Adding pictures to your document can be a great way to illustrate important

information and add decorative accents to existing text. Used in moderation, pictures can improve the overall appearance of your document.

To insert a picture from a file:

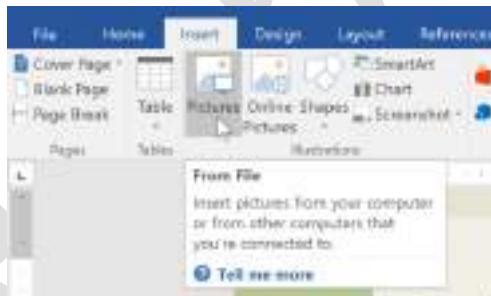
If you have a specific image in mind, you can insert a picture from a file. In our example, we'll insert a picture saved locally on our computer. If you'd like to work along with our example, right-click the image below and save it to your computer.



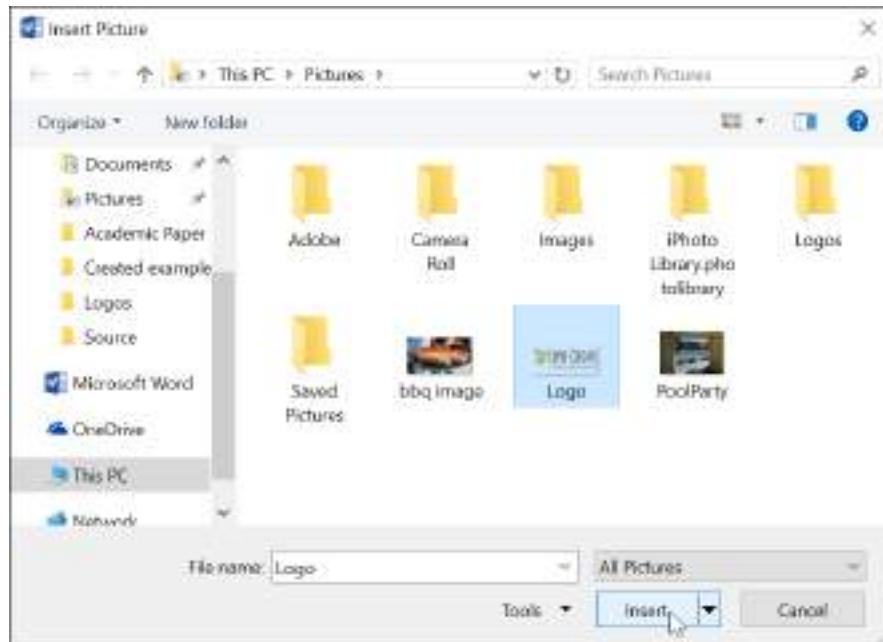
- 1. Place the insertion point where you want the image to appear.**



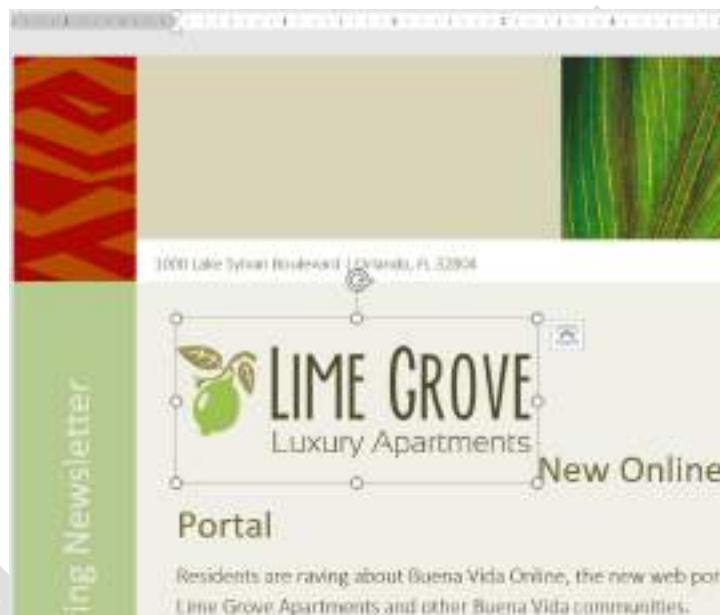
- 2. Select the Insert tab on the Ribbon, then click the Pictures command.**



- 3. The Insert Picture dialog box will appear. Navigate to the folder where your image is located, then select the image and click Insert.**



4. The image will appear in the document.



To resize an image, click and drag one of the corner sizing handles. The image will change size while keeping the same proportions. If you want to stretch it horizontally or vertically, you can use the side sizing handles.



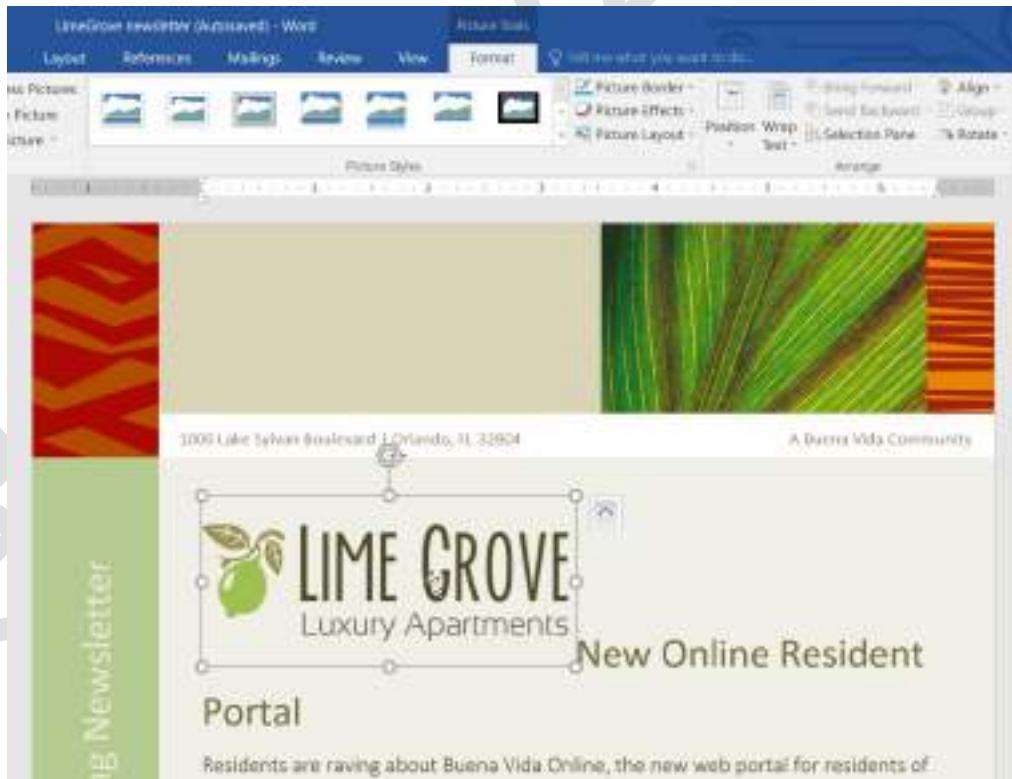
Page Break

Changing text wrapping settings

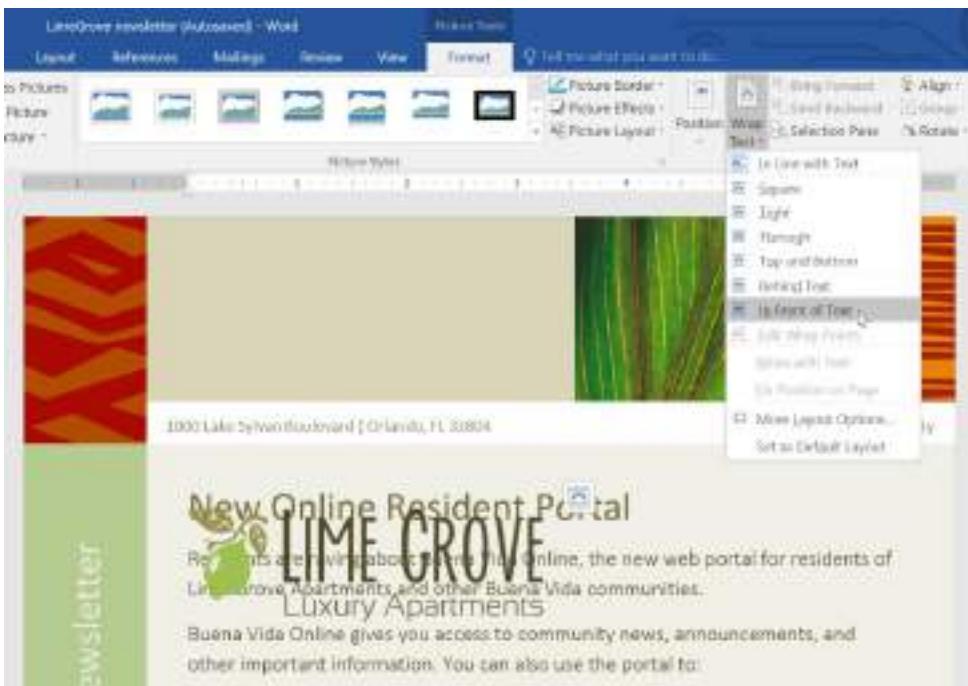
When you insert a picture from a file, you may notice that it's difficult to move it exactly where you want. This is because the text wrapping for the image is set to In Line with Text. You'll need to change the text wrapping setting if you want to move the image freely, or if you just want the text to wrap around the image in a more natural way.

To wrap text around an image:

1. Select the image you want to wrap text around. The Format tab will appear on the right side of the Ribbon.



2. On the Format tab, click the Wrap Text command in the Arrange group. Then select the desired text wrapping option. In our example, we'll select In Front of Text so we can freely move it without affecting the text. Alternatively, you can select More Layout Options to fine tune the layout.



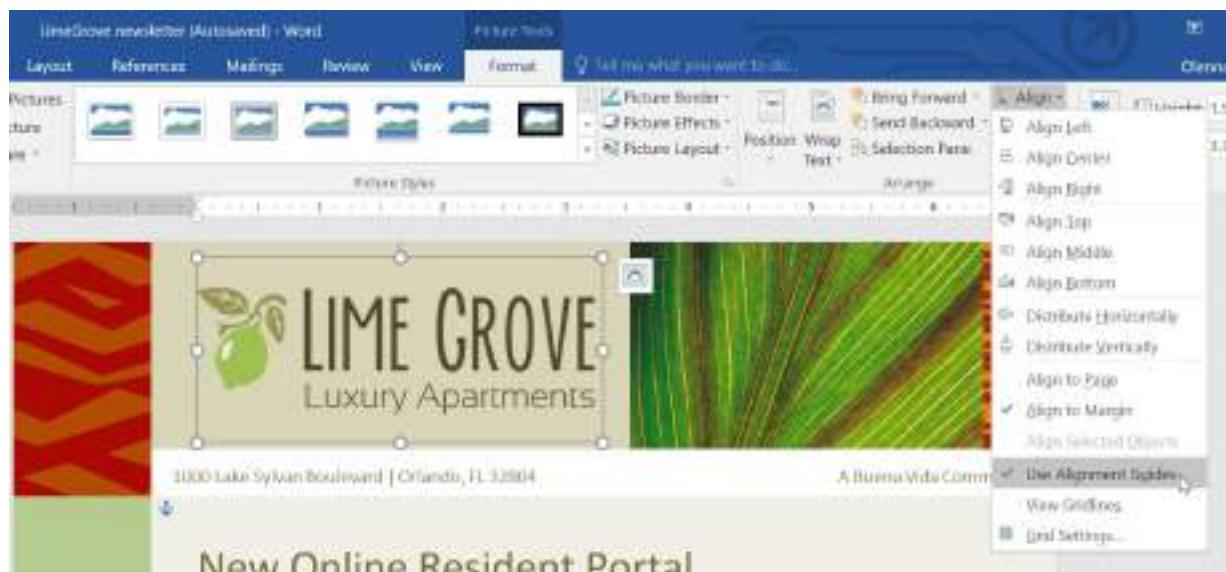
3. The text will wrap around the image. You can now move the image if you want. Just click and drag it to the desired location. As you move it, alignment guides will appear to help you align the image on the page.



Alternatively, you can access text wrapping options by selecting the image and clicking the Layout Options button that appears.

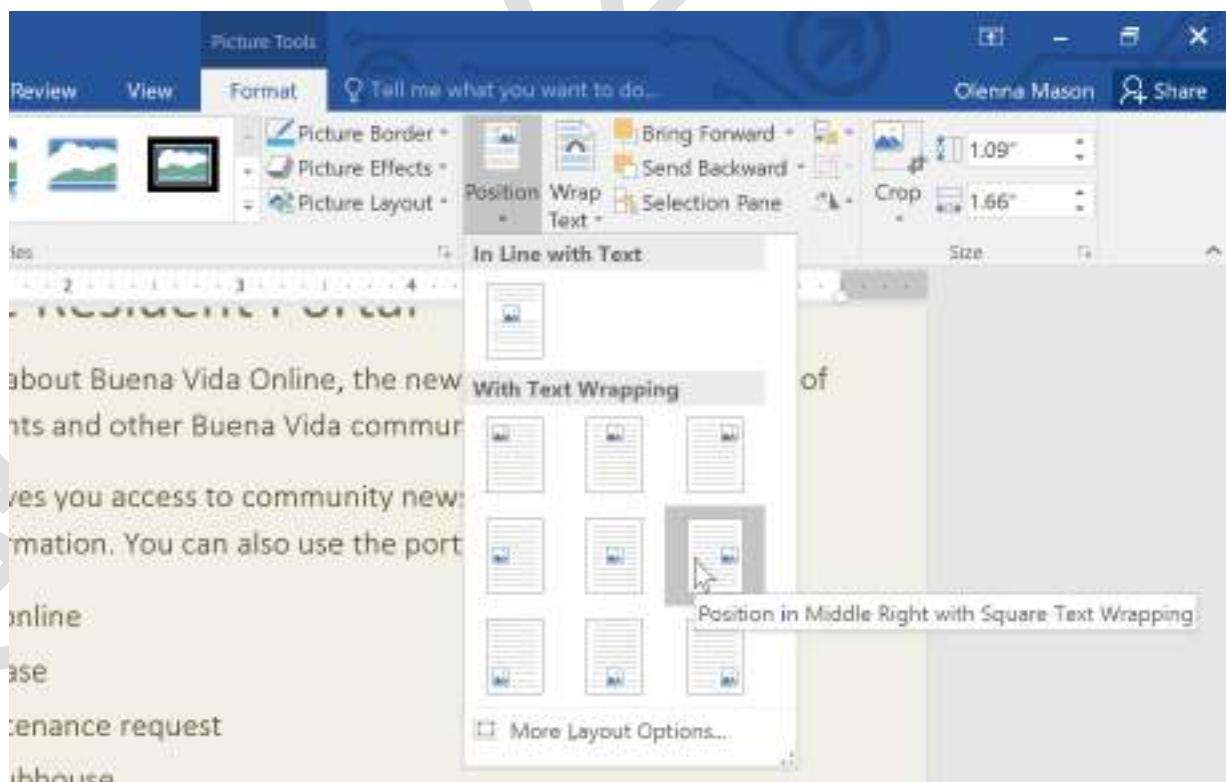


If the alignment guides do not appear, select the Page Layout tab, then click the Align command. Select Use Alignment Guides from the drop-down menu that appears.



Using a predefined text wrapping setting

Predefined text wrapping allows you to quickly move the image to a specific location on the page. The text will automatically wrap around the object so it's still easy to read.



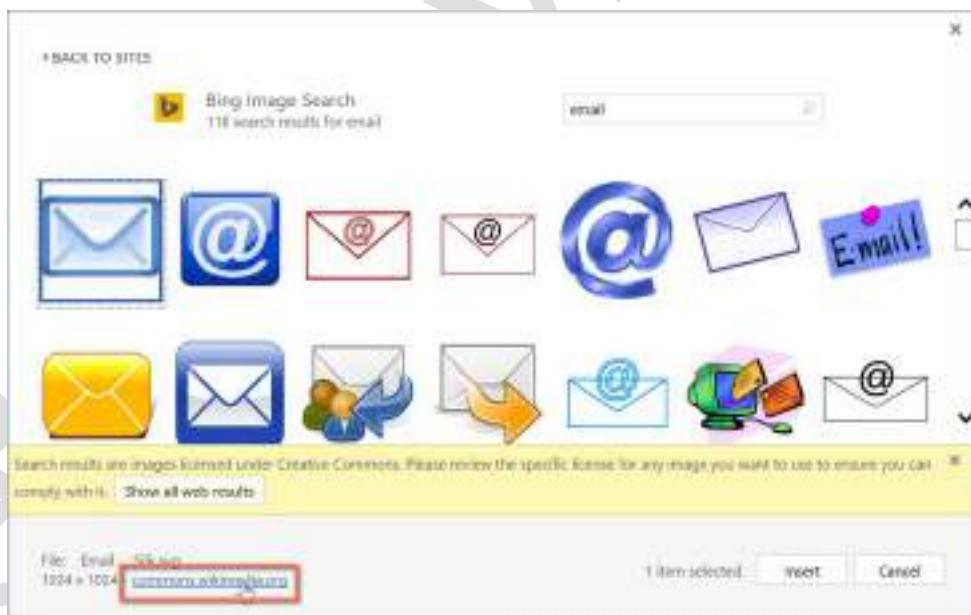
Inserting online pictures

If you don't have the picture you want on your computer, you can find a picture online to add to your document. Word offers two options for finding online pictures.

- OneDrive:** You can insert an image stored on your OneDrive. You can also link other online accounts with your Microsoft account, such as Facebook and Flickr.



- Bing Image Search:** You can use this option to search the Internet for images. By default, Bing only shows images that are licensed under Creative Commons, which means you can use them for your own projects. However, you should click the link to the image's website to see if there are any restrictions on how it can be used.



To insert an online picture:

1. Place the insertion point where you want the image to appear.

1 1 2 3 4 5

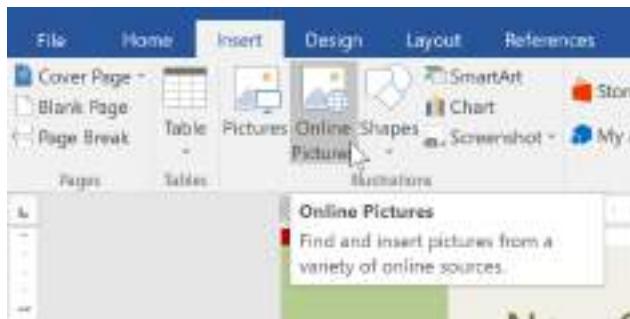
New Online Resident Portal

Residents are raving about Buena Vida Online, the new web portal Lime Grove Apartments and other Buena Vida communities.

Buena Vida Online gives you access to community news, announce other important information. You can also use the portal to:

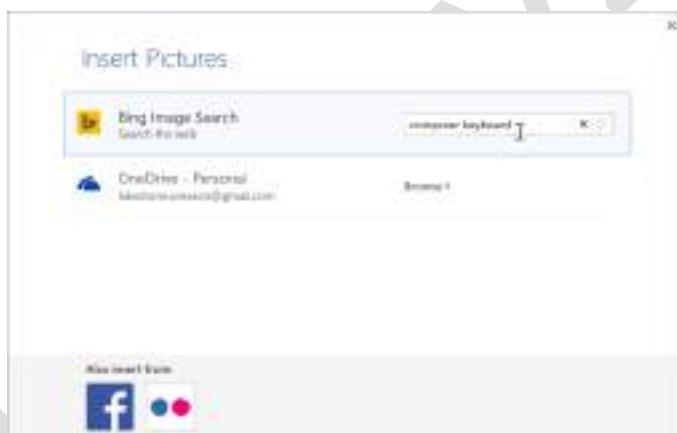
- Pay your rent online

2. Select the Insert tab, then click the Online Pictures command.



3. The Insert Pictures dialog box will appear.

4. Choose Bing Image Search or your OneDrive. In our example, we'll use Bing Image Search.



5. Press the Enter key. Your search results will appear in the box.

6. Select the desired image, then click Insert.



7. The image will appear in the document.



When adding images, videos, or music to your own projects, it's important to make sure you have the legal rights to use them. Most things you buy or download online are protected by copyright, which means you may not be allowed to use them. For more information, visit our [Copyright and Fair Use lesson](#).

Lesson 19: Formatting Pictures

Introduction

There are many ways to format pictures in Word. For instance, you can change the size or shape of an image to better suit your document. You can also enhance its appearance using Word's image adjustment tools.

To crop an image:

When you crop an image, part of the picture is removed. Cropping can be useful if you're working with an image that's too big and you want to focus on only part of it.

1. Select the image you want to crop. The Format tab will appear.
2. From the Format tab, click the Crop command.



3. Cropping handles will appear on the sides and corners of the image. Click and drag any handle to crop the image. Because the cropping handles are near the resizing handles, be careful not to drag a resizing handle by mistake.



4. To confirm, click the Crop command again. The image will be cropped.



The corner handles are useful for simultaneously cropping the image horizontally and vertically.

To crop an image to a shape:

1. Select the image you want to crop, then click the Format tab.
2. Click the Crop drop-down arrow. Hover over Crop to Shape, then select the desired shape from the drop-down menu.



3. The image will be cropped to the chosen shape.



To add a border to a picture:

1. Select the picture you want to add a border to, then click the Format tab.
2. Click the Picture Border command. A drop-down menu will appear.
3. From here, you can select a color, weight (thickness), and whether the line is dashed.



4. The border will appear around the image.

Making image adjustments

With Word's image adjustment tools, you can easily fine tune properties like color, contrast, saturation, and tone. Word also offers built-in picture styles, which can be used to add a frame, drop shadow, and other predefined effects.

When you're ready to adjust an image, simply select it. Then use the options below, which can be found on the Format tab.



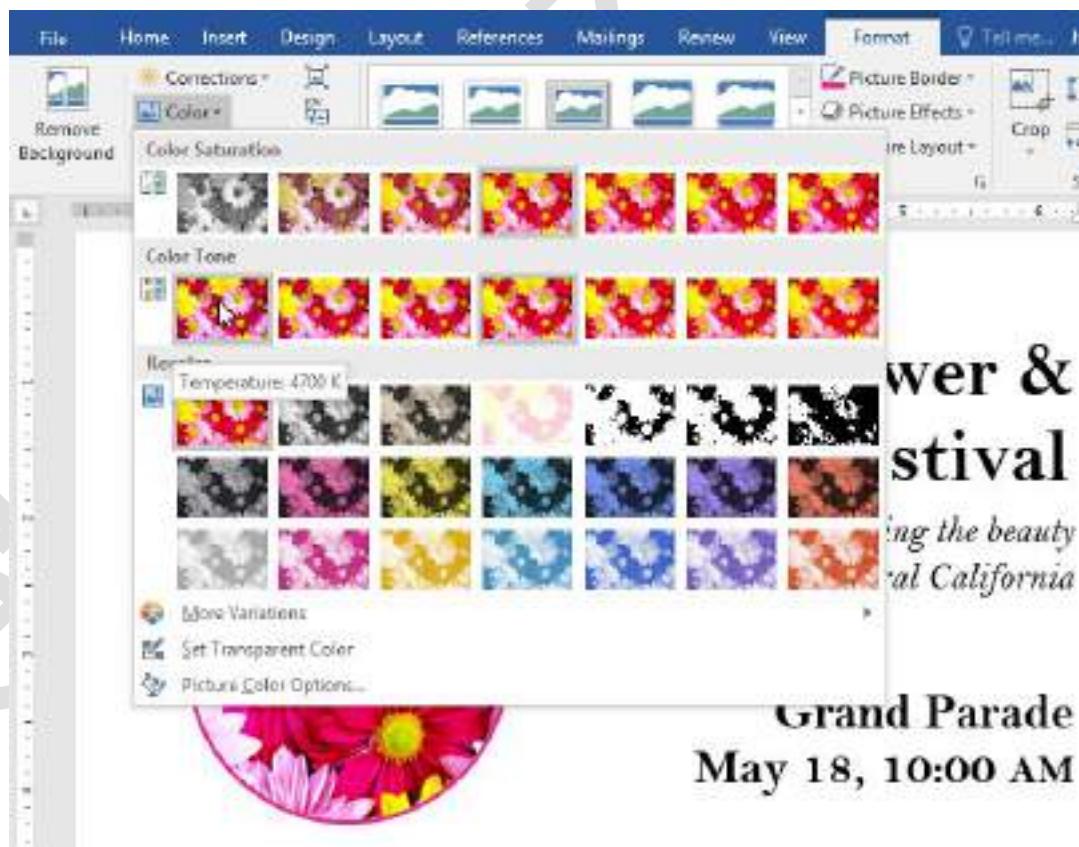
Corrections

From here, you can sharpen or soften the image to adjust how clear or blurry it appears. You can also adjust brightness and contrast, which affect the image's lightness and general intensity.



Color

Using this command, you can adjust the image's saturation (how vibrant the colors appear), tone (the color temperature of the image, from cool to warm), and coloring (the overall tint of the image).



Artistic Effects

Here, you can apply special effects to your image, such as pastel, watercolor, or glowing edges. Because the results are so bold, you may want to use these effects sparingly.

(especially in professional documents).



Picture Styles group

This group contains many different predefined styles that make image formatting even easier. Picture styles are designed to frame your image without changing its basic settings or effects.



Compressing pictures

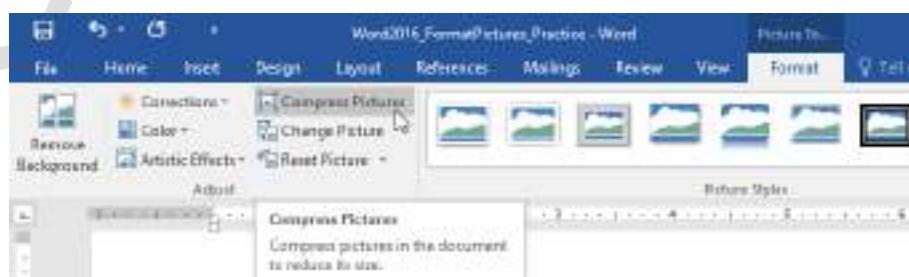
If you plan to email a document that contains pictures, you'll need to monitor its file size. Large, high-resolution images can cause your document to become very large, which may make it difficult to attach to an email. Additionally, cropped areas of pictures are saved within the document by default, which can add to the file size.

Thankfully, you can reduce your document's file size by compressing your pictures. This will lower their resolution and delete cropped areas.

Compressing a picture may noticeably affect its quality (for instance, the image may become blurry or pixelated). Therefore, we recommend saving an extra copy of your document before you compress pictures. Alternatively, be prepared to use the Undo command if you're dissatisfied with the results.

To compress a picture:

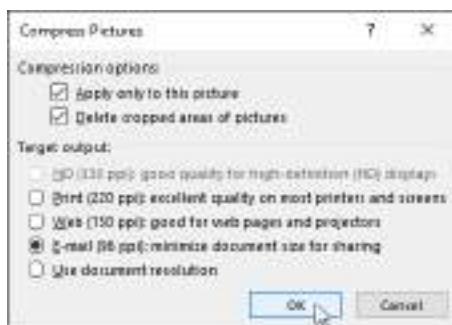
1. Select the picture you want to compress, then navigate to the Format tab.
2. Click the Compress Pictures command.



3. A dialog box will appear. Check the box next to Delete cropped areas of pictures. You can also choose whether to apply the settings to this picture only or to all pictures in the document.

4. Choose a Target output. If you are emailing your document, you may want to select Email, which produces the smallest file size.

5. Click OK.



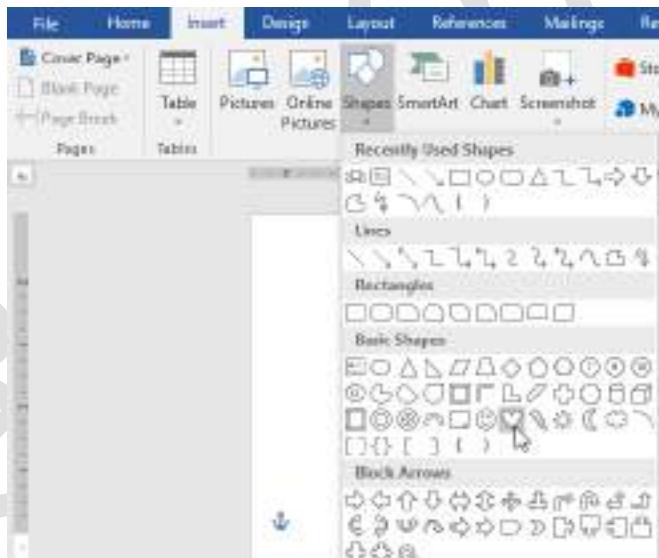
Lesson 20: Shapes

Introduction

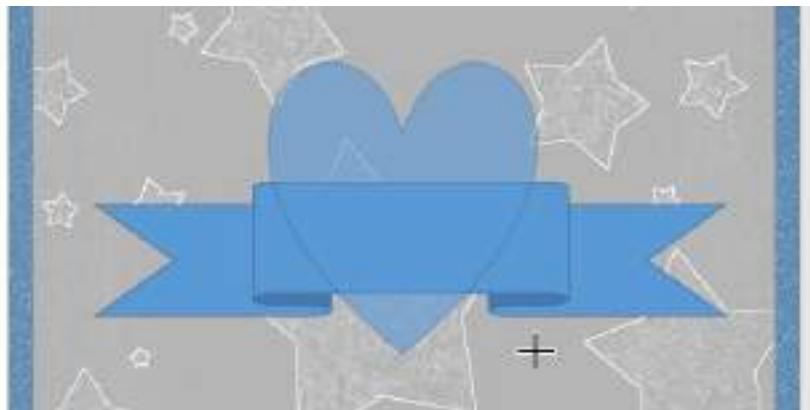
You can add a variety of shapes to your document, including arrows, callouts, squares, stars, and flowchart shapes. Want to set your name and address apart from the rest of your resume? Use a line. Need to create a diagram showing a timeline or process? Use flowchart shapes. While you may not need shapes in every document you create, they can add visual appeal and clarity.

1. Select the Insert tab, then click the Shapes command. A drop-down menu of shapes will appear.

2. Select the desired shape.



3. Click and drag in the desired location to add the shape to your document.



If you want, you can enter text in a shape. When the shape appears in your document, you can begin typing. You can then use the formatting options on the Home tab to change the font, font size, or color of the text.



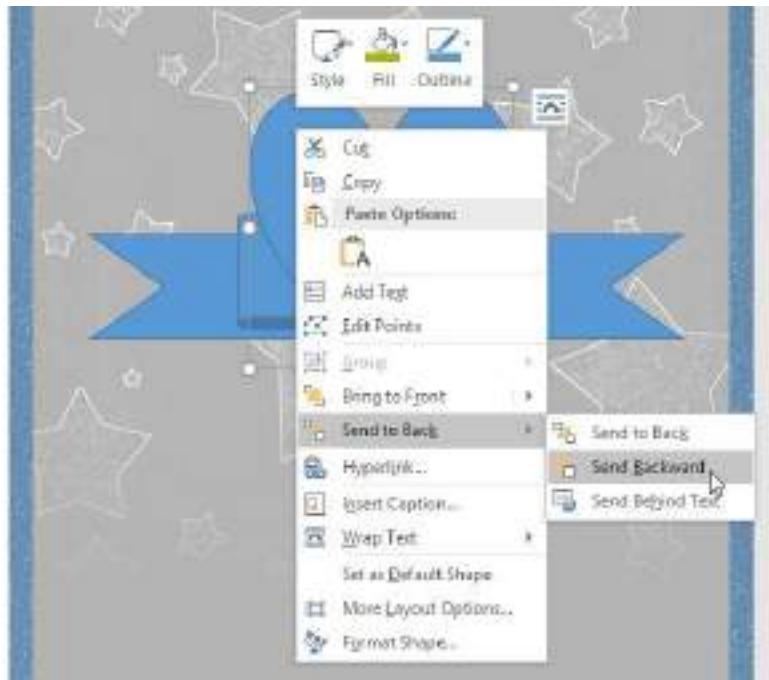
To change the order of shapes:

If one shape overlaps another, you may need to change the ordering so the correct shape appears in front. You can bring a shape to the front or send it to the back. If you have multiple images, you can use Bring to Front or Send to Back to fine tune the ordering. You can also move a shape in front of or behind text.

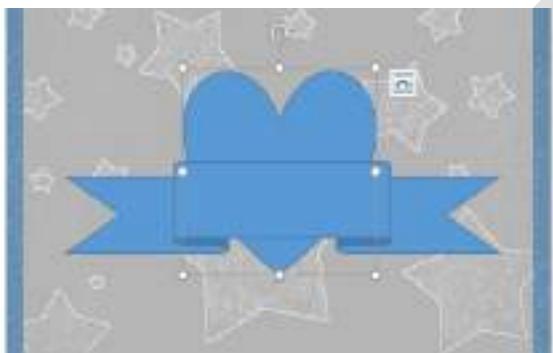
1. Right-click the shape you want to move. In our example, we want the heart to appear behind the ribbon, so we'll right-click the heart.



2. In the menu that appears, hover over Bring to Front or Send to Back. Several ordering options will appear. Select the desired ordering option. In this example, we'll choose Send to Back.

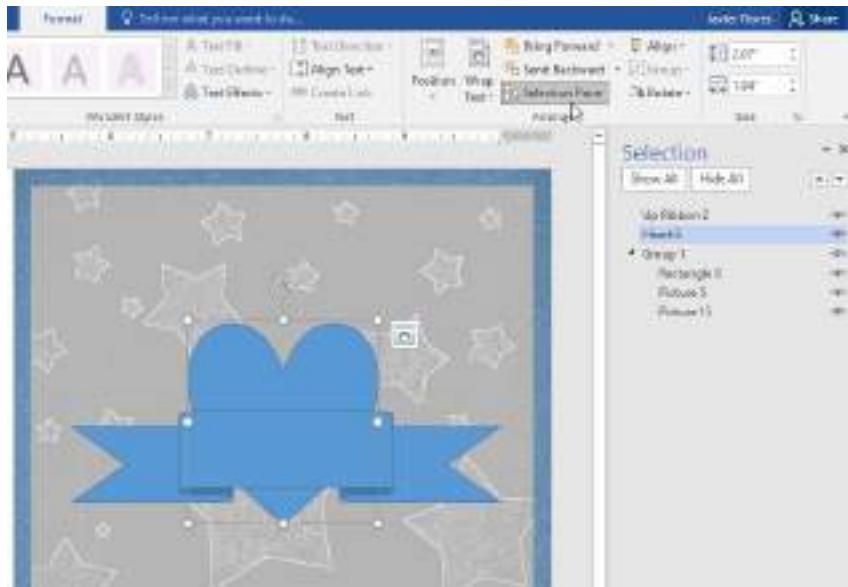


3. The order of the shapes will change.



In some cases, the ordering option you select will not affect the ordering of the shapes. If this happens, try selecting the same option again or try a different option.

If you have several shapes placed on top of each other, it may be difficult to select an individual shape. The Selection pane allows you to select a shape and drag it to a new location. To access the Selection pane, click Selection Pane on the Format tab.

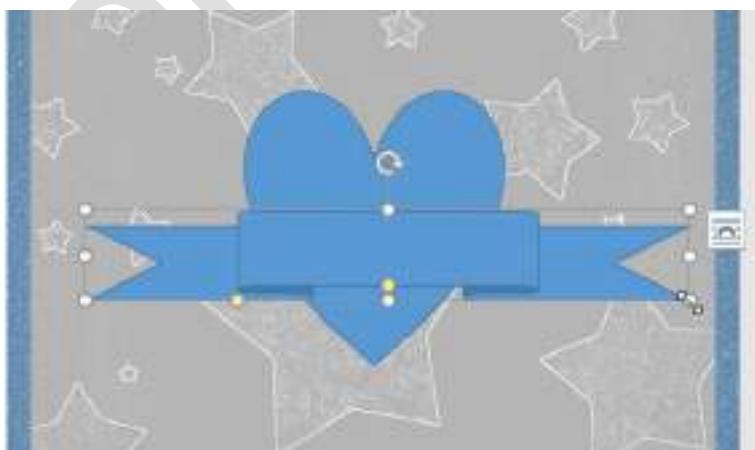


To resize a shape:

1. Select the shape you want to resize. Sizing handles will appear on the corners and sides of the shape.



2. Click and drag the sizing handles until the shape is the desired size. You can use the corner sizing handles to change the shape's height and width at the same time.



3. To rotate the shape, click and drag the rotation handle.



Some shapes also have one or more yellow handles that can be used to modify the shape. For example, with banner shapes you can adjust the position of the folds.



Modifying shapes

Word allows you to modify your shapes in a variety of ways so you can tailor them to your projects. You can change a shape into a different shape, format a shape's style and color, and add various effects.

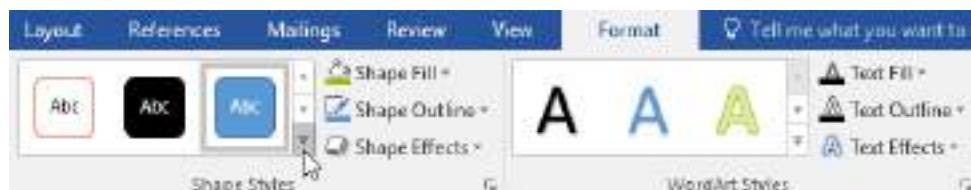
To change the shape style:

Choosing a shape style allows you to apply preset colors and effects to quickly change the appearance of your shape.

- 1. Select the shape you want to change.**



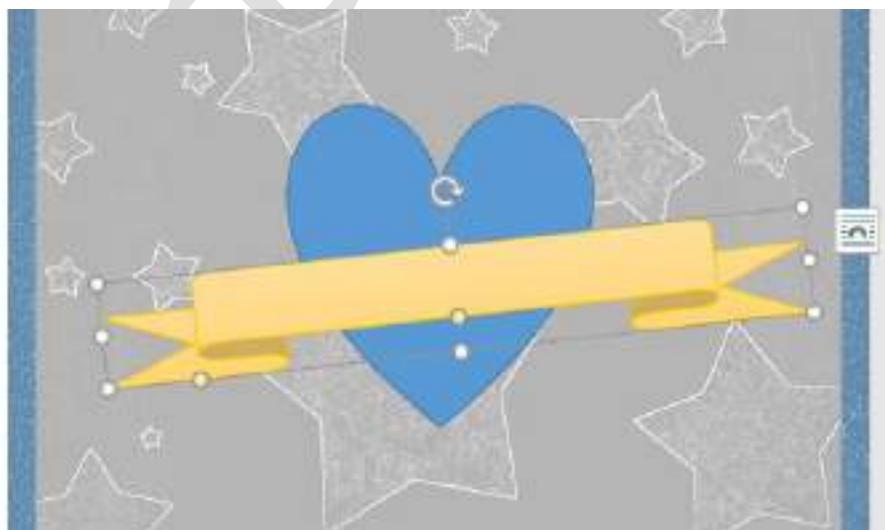
- 2. On the Format tab, click the More drop-down arrow in the Shape Styles group.**



3. A drop-down menu of styles will appear. Select the style you want to use.



4. The shape will appear in the selected style.



To change the shape fill color:

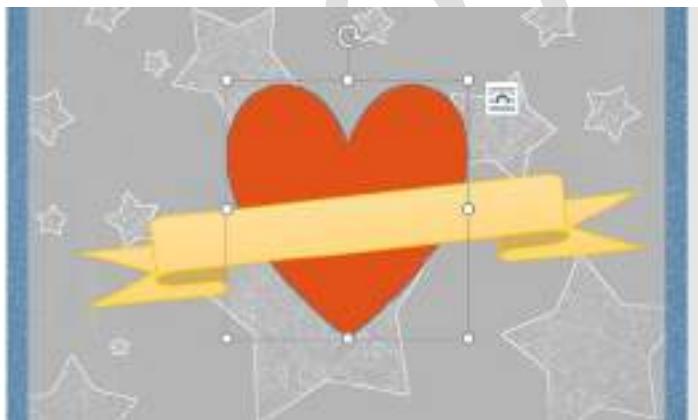
1. Select the shape you want to change.



2. On the Format tab, click the Shape Fill drop-down arrow. Select the color you want to use. To view more color options, select More Fill Colors.



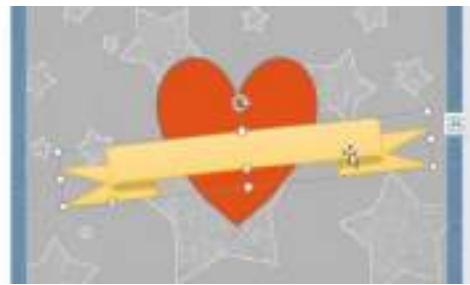
3. The shape will appear in the selected fill color.



If you want to use a different type of fill, select Gradient or Texture from the drop-down menu. You can also select No Fill to make it transparent.

To change the shape outline:

1. Select the shape you want to change.



2. On the Format tab, click the Shape Outline drop-down arrow. The Shape Outline menu will appear.
3. Select the color you want to use. If you want to make the outline transparent, select No Outline.



4. The shape will appear in the selected outline color.



From the drop-down menu, you can change the outline color, weight (thickness), and whether it is a dashed line.

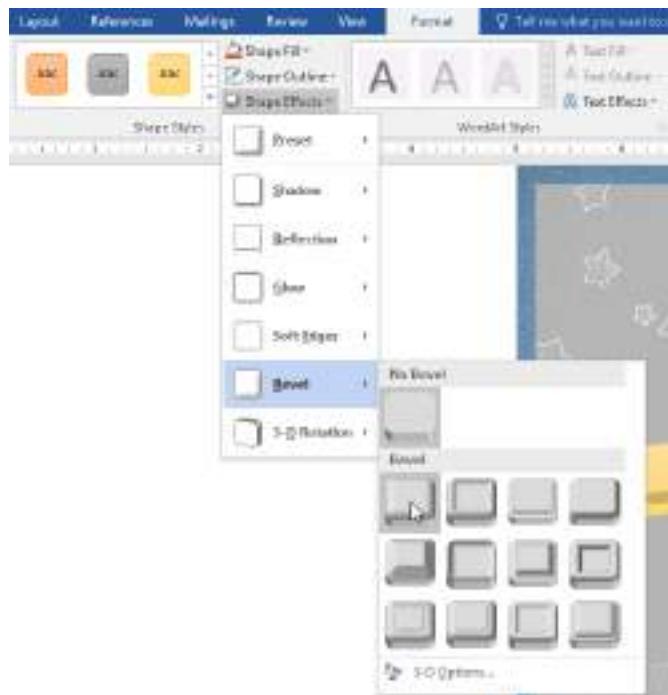


To add shape effects:

1. Select the shape you want to change.



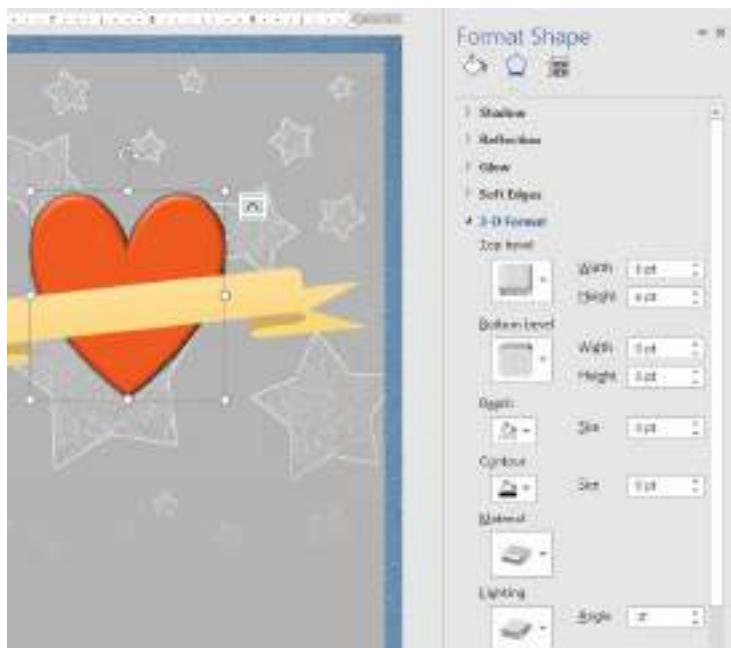
2. On the Format tab, click the Shape Effects drop-down arrow. In the menu that appears, hover the mouse over the style of effect you want to add, then select the desired preset effect.



3. The shape will appear with the selected effect.



To further adjust your shape effects, select Options at the end of each menu. The Format Shape pane will appear, allowing you to customize the effects.



To change to a different shape:

1. Select the shape you want to change. The Format tab will appear.



2. On the Format tab, click the Edit Shape command. In the menu that appears, hover the mouse over Change Shape, then select the desired shape.



3. The new shape will appear.



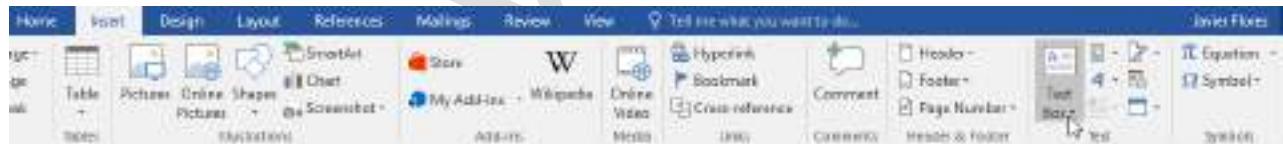
Lesson 21: Text Boxes

Introduction

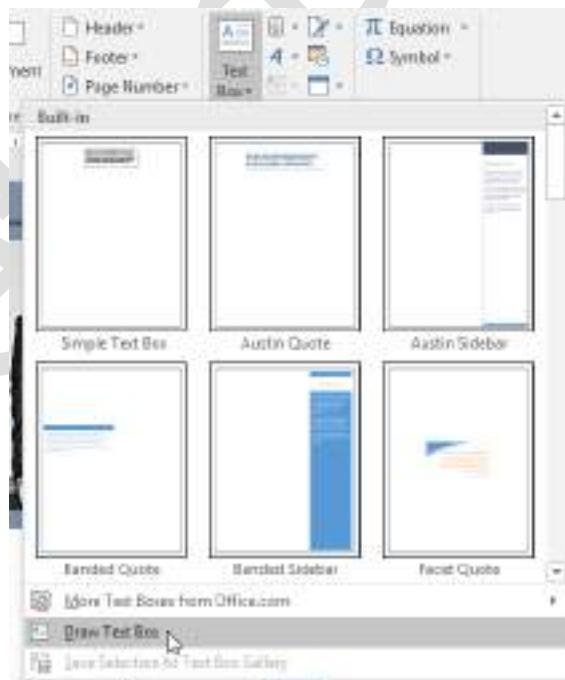
Text boxes can be useful for drawing attention to specific text. They can also be helpful when you need to move text around in your document. Word allows you to format text boxes and the text within them with a variety of styles and effects.

To insert a text box:

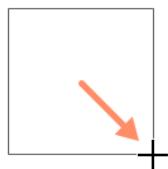
1. Select the Insert tab, then click the Text Box command in the Text group.



2. A drop-down menu will appear. Select Draw Text Box.



3. Click and drag anywhere on the document to create the text box.



4. The insertion point will appear inside the text box. You can now type to create text inside the text box.

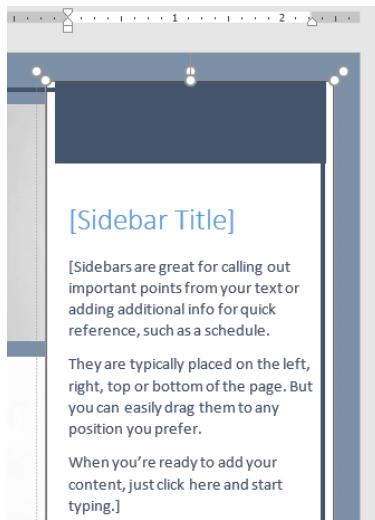


5. If you want, you can select the text and then change the font, color, and size by using the commands on the Format and Home tabs. To learn more about using these formatting



6. Click anywhere outside the text box to return to your document.

You can also select one of the built-in text boxes that have predefined colors, fonts, positions, and sizes. If you choose this option, the text box will appear automatically, so you will not need to draw it.



To move a text box:

1. Click the text box you want to move.
2. Hover the mouse over one of the edges of the text box. The mouse will change into a cross with arrows.
3. Click and drag the text box to the desired location.



To resize a text box:

1. Click the text box you want to resize.
2. Click and drag any of the sizing handles on the corners or sides of the text box until it is the desired size.



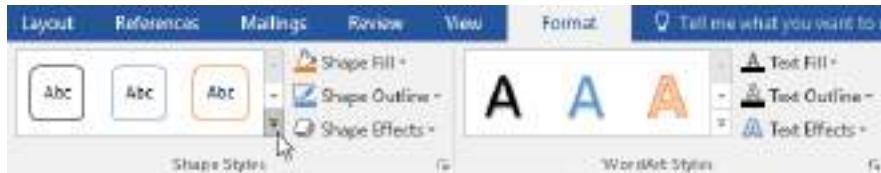
Modifying text boxes

Word offers several options for changing the way text boxes appear in your document. You can change the shape, style, and color of text boxes or add various effects.

To change the shape style:

Choosing a shape style allows you to apply preset colors and effects to quickly change the appearance of your text box.

1. Select the text box you want to change.
2. On the Format tab, click the More drop-down arrow in the Shape Styles group.



3. A drop-down menu of styles will appear. Select the style you want to use.



4. The text box will appear in the selected style.



If you want to have more control over text box formatting, you can use any of the shape formatting options such as Shape Fill and Shape Outline.

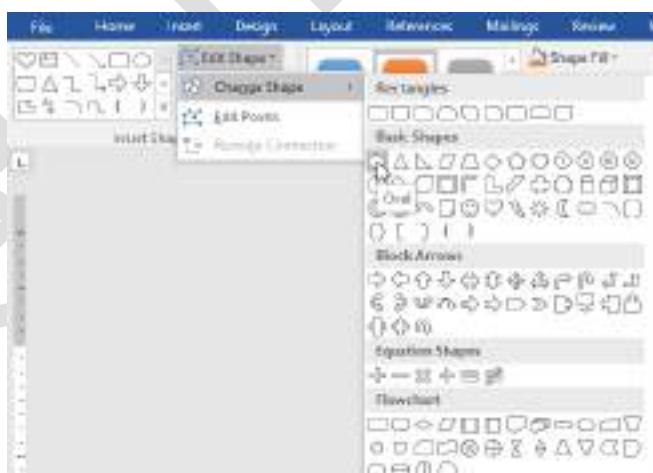
To change the text box shape:

Changing the shape of a text box can be a useful option for creating an interesting look in your document.

1. Select the text box you want to change. The Format tab will appear.
2. From the Format tab, click the Edit Shape command.



3. Hover the mouse over Change Shape, then select the desired shape from the menu that appears.



4. The text box will appear formatted as the shape.



1.

Lesson 22: Aligning, Ordering, and Grouping Objects

Introduction

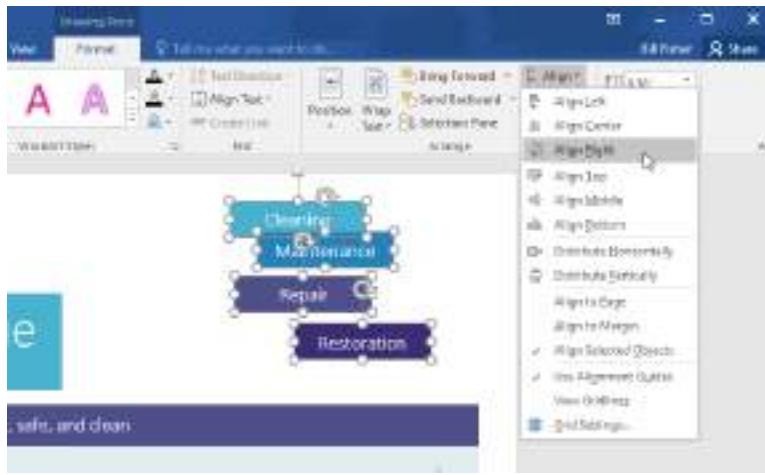
There may be times when your documents have multiple objects, such as pictures, shapes, and text boxes. You can arrange the objects any way you want by aligning, grouping, ordering, and rotating them in various ways.

To align two or more objects:

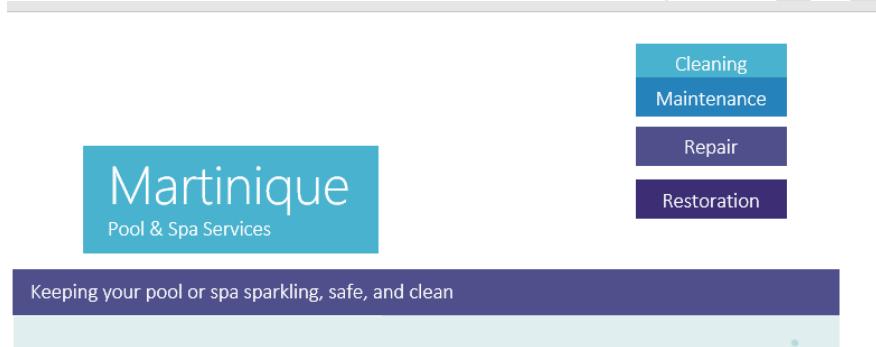
- 1. Hold the Shift (or Ctrl) key and click the objects you want to align. In our example, we'll select the four shapes on the right.**



- 2. From the Format tab, click the Align command, then select one of the alignment options. In our example, we'll choose Align Right.**



3. The objects will be aligned based on the selected option. In our example, the shapes are now aligned with each other.

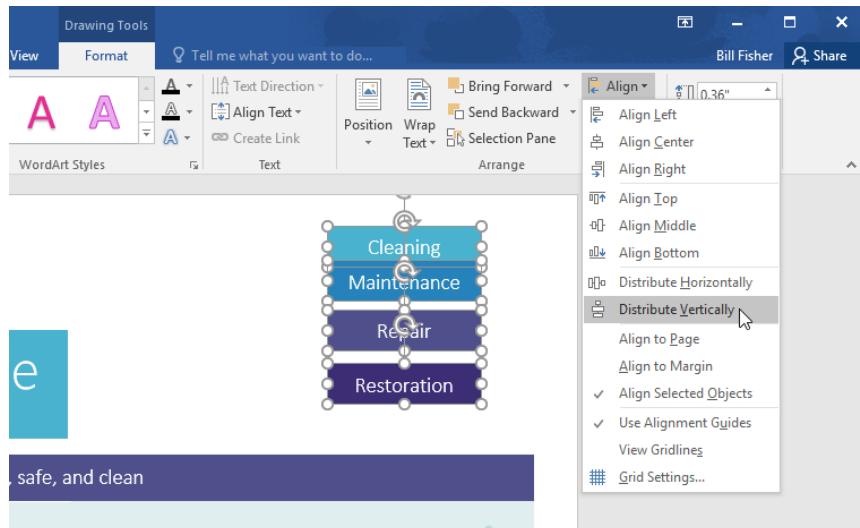


Note that the Align Selected Objects option is selected by default, which allows you to align objects without moving them to a different part of the page. However, if you want to move the objects the top or bottom of the page, select Align to Page or Align to Margin before choosing an alignment option.

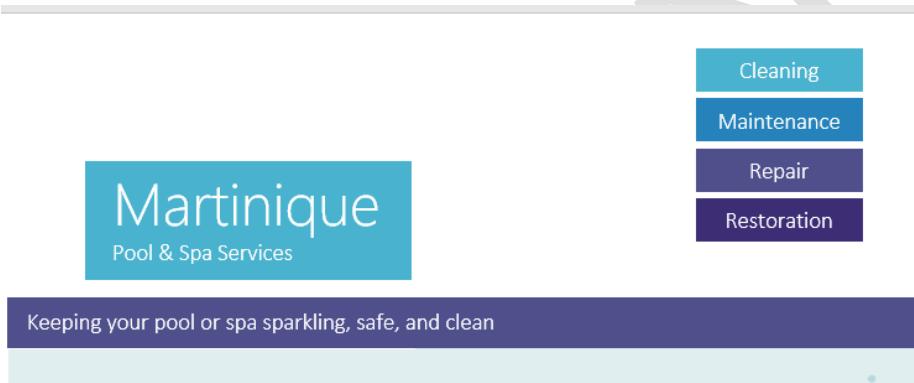
To distribute objects evenly:

If you have arranged your objects in a row or column, you may want them to be an equal distance from one another for a neater appearance. You can do this by distributing the objects horizontally or vertically.

1. Hold the Shift (or Ctrl) key and click the objects you want to distribute.
2. On the Format tab, click the Align command, then select Distribute Horizontally or Distribute Vertically.



3. The objects will be evenly spaced from one another.

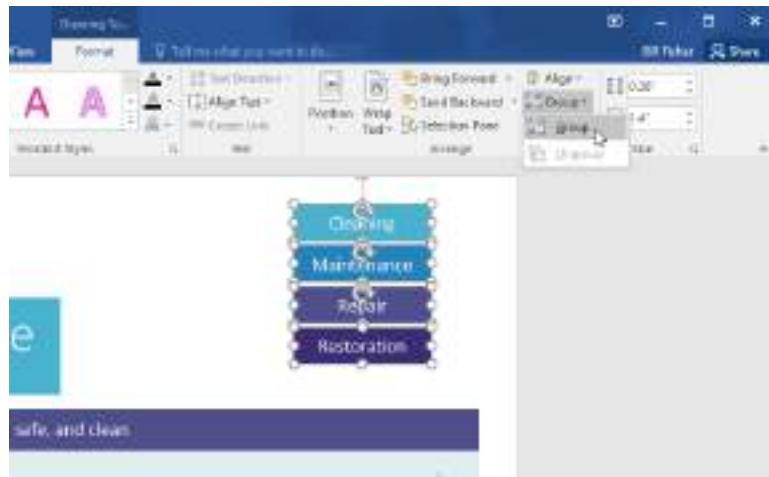


Grouping objects

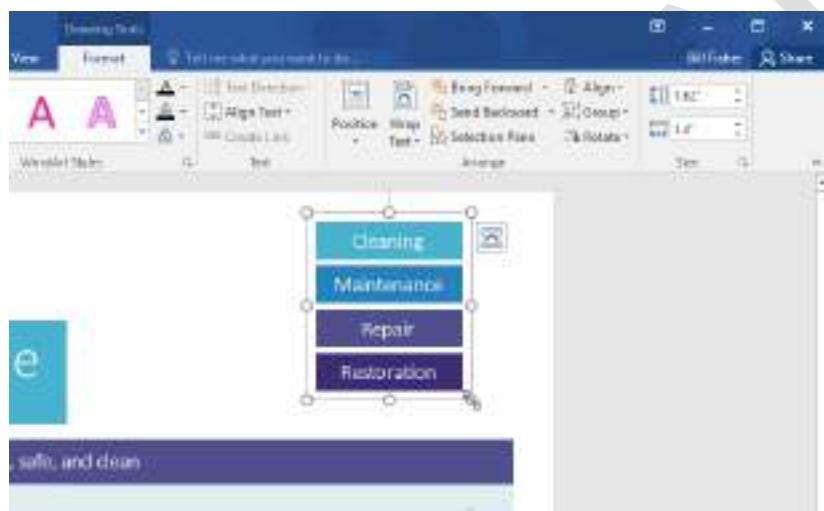
At times, you may want to group multiple objects into one object so they will stay together. This is usually easier than selecting them individually, and it also allows you to resize and move all of the objects at the same time.

To group objects:

1. Hold the Shift (or Ctrl) key and click the objects you want to group.
2. Click the Group command on the Format tab, then select Group.

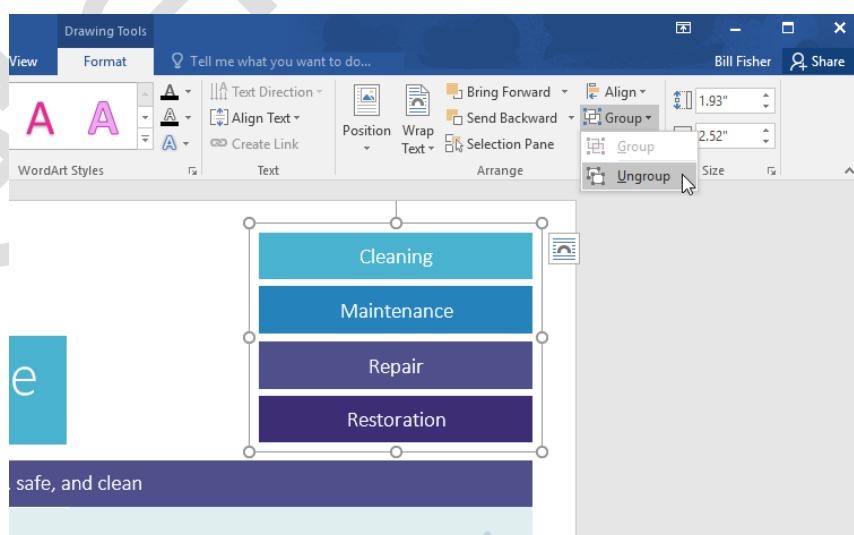


3. The selected objects will now be grouped. There will be a single box with sizing handles around the entire group so you can move or resize all of the objects at the same time.



To ungroup objects:

1. Select the grouped object. From the Format tab, click the Group command and select Ungroup.



2. The objects will be ungrouped.



Ordering objects

In addition to aligning objects, Word gives you the ability to arrange objects in a specific order. The ordering is important when two or more objects overlap because it determines which objects are in the front or the back.

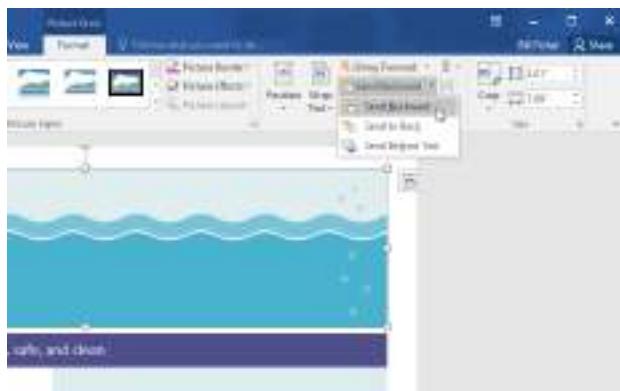
Understanding levels

Objects are placed on different levels according to the order in which they were inserted into a document. In the example below, if we move the waves image to the beginning of the document, it covers up several of the text boxes. That's because the image is currently on the highest—or top—level. However, we can change its level to put it behind the other objects.

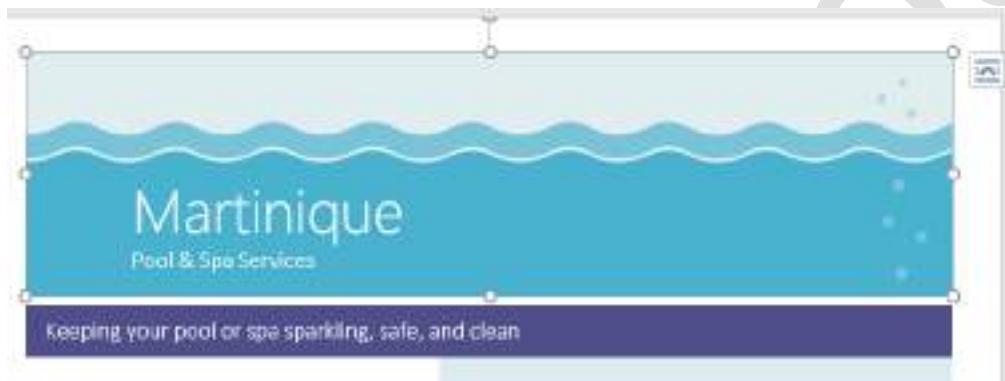


To change an object's level:

1. Select the object you want to move. In our example, we'll select the image of the waves.
2. From the Format tab, click the Bring Forward or Send Backward command to change the object's ordering by one level. In our example, we'll select Send Backward.



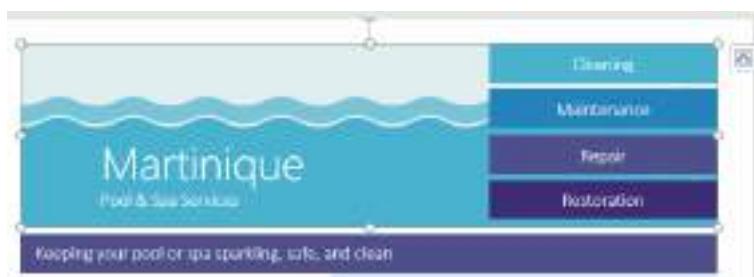
3. The objects will be reordered. In our example, the image is now behind the text on the left, but it's still covering the shapes on the right.



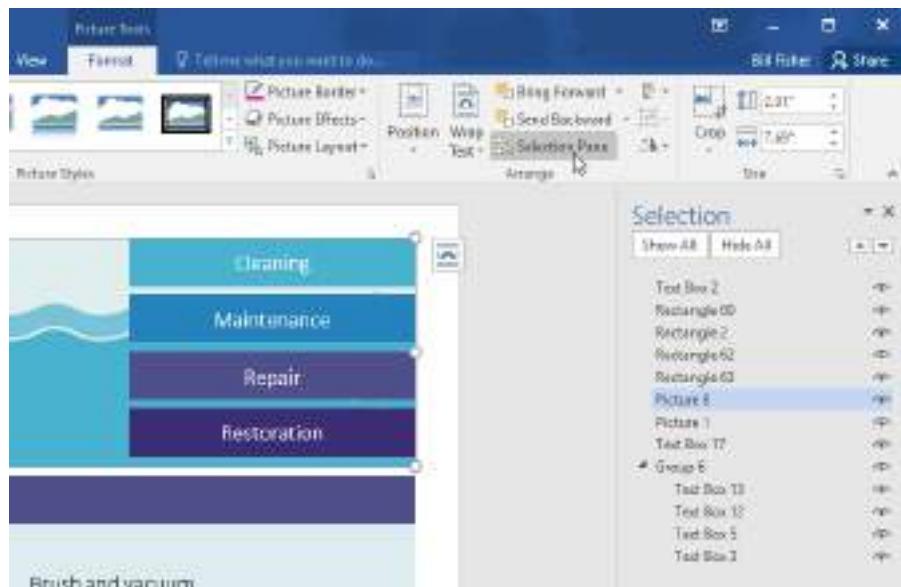
4. If you want to move an object behind or in front of several objects, it's usually faster to use Bring Forward or Send Backward instead of clicking the other ordering command multiple times.



5. In our example, the image has been moved behind everything else on the page, so all of the other text and shapes are visible.



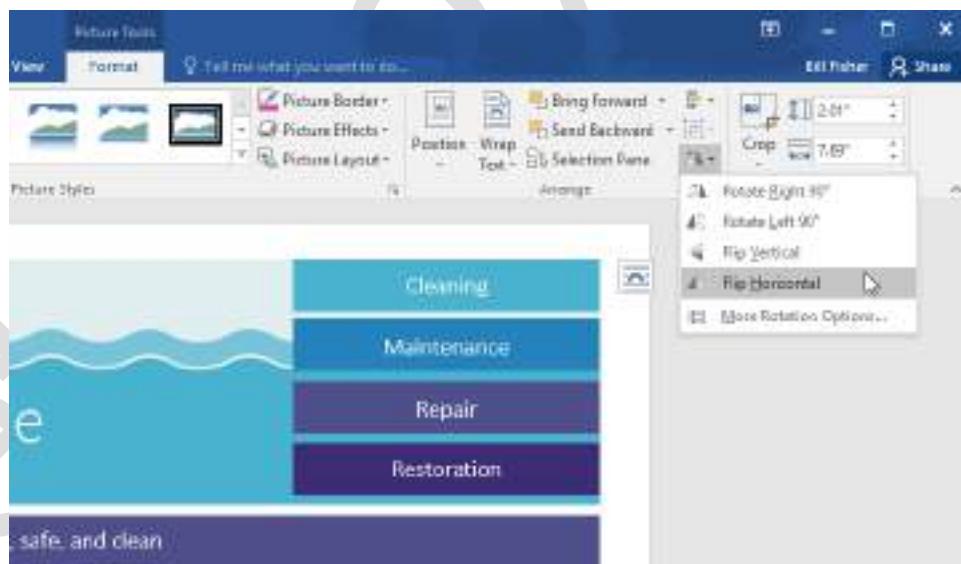
If you have several objects placed on top of each other, it may be difficult to select an individual object. The Selection Pane allows you to easily drag an object to a different level. To view the Selection Pane, click Selection Pane on the Format tab.



To rotate or flip an object:

If you need to turn an object so it faces a different direction, you can rotate it to the left or right, or you can flip it horizontally or vertically.

- With the desired object selected, click the Rotate command on the Format tab, then choose the desired rotation option. In our example, we'll choose Flip Horizontal.



- The object will be rotated. In our example, we can now see the bubbles on the left that were previously hidden behind the text boxes.



1.

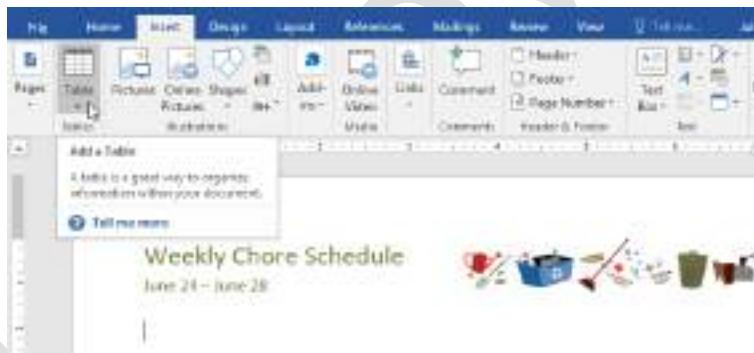
Lesson 23: Tables

Introduction

A table is a grid of cells arranged in rows and columns. Tables can be used to organize any type of content, whether you're working with text or numerical data. In Word, you can quickly insert a blank table or convert existing text to a table. You can also customize your table using different styles and layouts.

To insert a blank table:

1. Place the insertion point where you want the table to appear.
2. Navigate to the Insert tab, then click the Table command.



3. This will open a drop-down menu that contains a grid. Hover over the grid to select the number of columns and rows you want.



4. Click the grid to confirm your selection, and a table will appear.
5. To enter text, place the insertion point in any cell, then begin typing.

Weekly Chore Schedule				
July 24–July 31				
Monday	Tuesday	Wednesday	Thursday	Friday

To navigate between cells, use the Tab key or arrow keys on your keyboard. If the insertion point is in the last cell, pressing the Tab key will automatically create a new row.

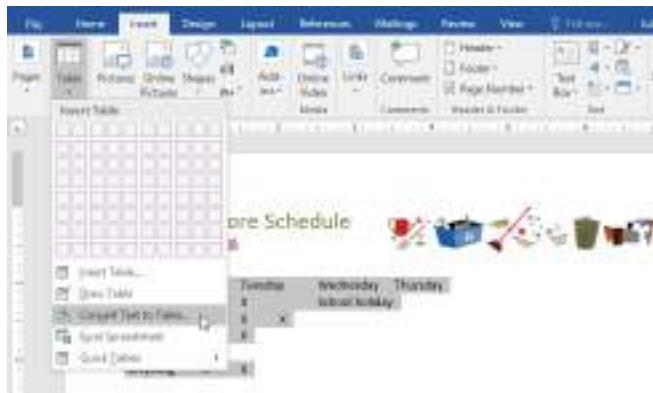
To convert existing text to a table:

In the example below, each line of text contains part of a checklist, including chores and days of the week. The items are separated by tabs. Word can convert this information into a table, using the tabs to separate the data into columns.

1. Select the text you want to convert to a table. If you're using our practice file, you can find this text on page 2 of the document.

Weekly Chore Schedule			
July 1–July 5			
Monday	Tuesday	Wednesday	Thursday
Homework	X		School
Feed fish	X	X	
Dishes	X	X	
Washing			
Recycling	X	X	

2. Go to the Insert tab, then click the Table command.
3. Select Convert Text to Table from the drop-down menu.



4. A dialog box will appear. Choose one of the options under Separate text at. This is how Word knows what to put into each column.



5. Click OK. The text will appear in a table.

	Monday	Tuesday	Wednesday	Thursday
Homework	X			School holiday
Feed fish	X	X		
Dishes	X	X	X	
Laundry				
Recycling	X	X		

Modifying tables

You can easily change the appearance of your table once you've added one to your document. There are several options for customization, including adding rows or columns and changing the table style.

To add a row or column:

1. Hover outside the table where you want to add a row or column. Click the plus sign that appears.

Weekly Chore Schedule

July 1 – July 5



	Monday	Tuesday	Wednesday	Thursday
Homework	X			School holiday
Feed fish	X	X		
Dishes	X	X	X	
Sweeping				
Recycling	X	X		

2. A new row or column will be added to the table.

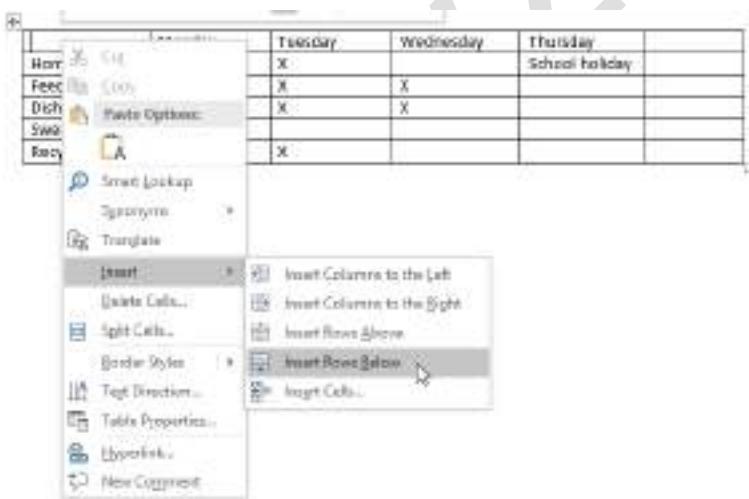
Weekly Chore Schedule

July 1 – July 5



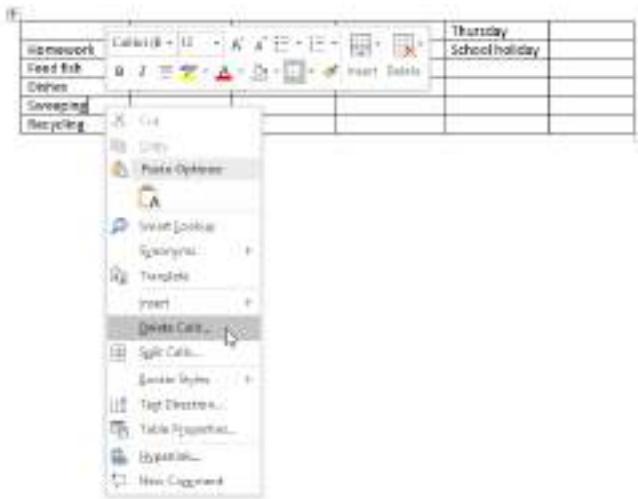
	Monday	Tuesday	Wednesday	Thursday	
Homework	X	X		School holiday	
Feed fish	X	X	X		
Dishes	X	X	X		
Sweeping					
Recycling	X	X			

Alternatively, you can right-click the table, then hover over Insert to see various row and column options.

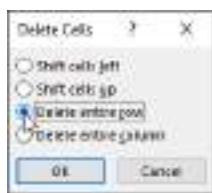


To delete a row or column:

1. Place the insertion point in the row or column you want to delete.
2. Right-click, then select Delete Cells from the menu.



3. A dialog box will appear. Choose Delete entire row or Delete entire column, then click OK.



4. The row or column will be deleted.

To apply a table style:

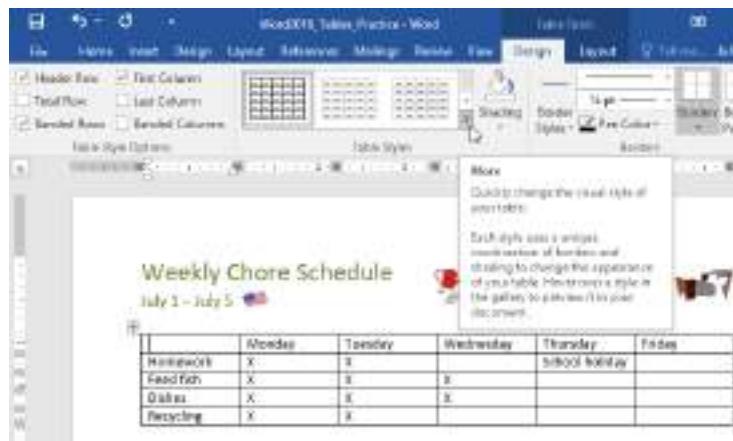
Table styles let you change the look and feel of your table instantly. They control several design elements, including color, borders, and fonts.

1. Click anywhere in your table to select it, then click the Design tab on the far right of the Ribbon.

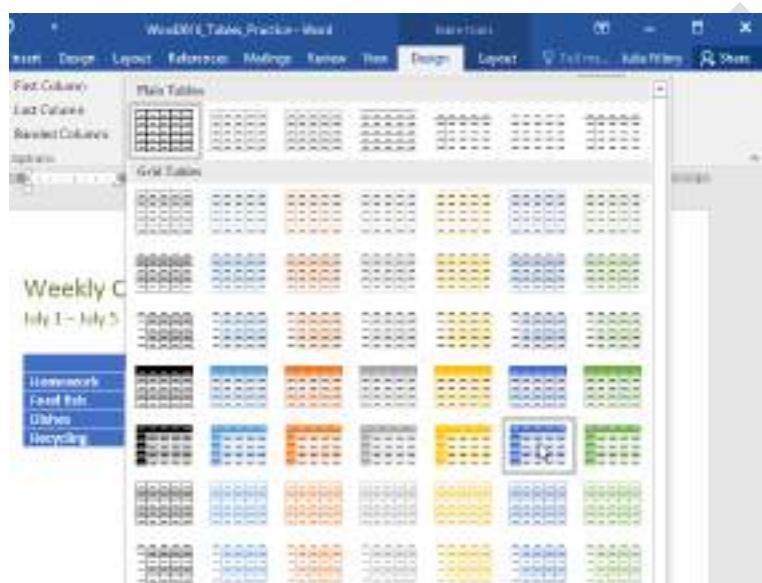
Weekly Chore Schedule
July 1–July 5

	Monday	Tuesday	Wednesday	Thursday	Friday
Homework	X	X		School holiday	
Feed fish	X	X	X		
Dishes	X	X	X		
Recycling	X	X			

2. Locate the Table Styles group, then click the More drop-down arrow to see the full list of styles.



3. Select the table style you want.



4. The table style will appear.

Weekly Chore Schedule
July 1 – July 5

	Monday	Tuesday	Wednesday	Thursday	Friday
Homework	X				School holiday
Feed fish	X	X			
Dishes	X	X	X		
Recycling	X	X			

To modify table style options:

Once you've chosen a table style, you can turn various options on or off to change its appearance. There are six options: Header Row, Total Row, Banded Rows, First Column, Last Column, and Banded Columns.

1. Click anywhere in your table, then navigate to the Design tab.
2. Locate the Table Style Options group, then check or uncheck the desired options.



3. The table style will be modified.

Weekly Chore Schedule
July 1 – July 5

	Monday	Tuesday	Wednesday	Thursday	Friday
Homework	X	X		School holiday	
Feed fish	X	X	X		
Dishes	X	X	X		
Recycling	X	X			

Depending on the Table Style you've chosen, certain Table Style Options may have a different effect. You might need to experiment to get the look you want.

To apply borders to a table:

1. Select the cells you want to apply a border to.

Weekly Chore Schedule
July 1 – July 5

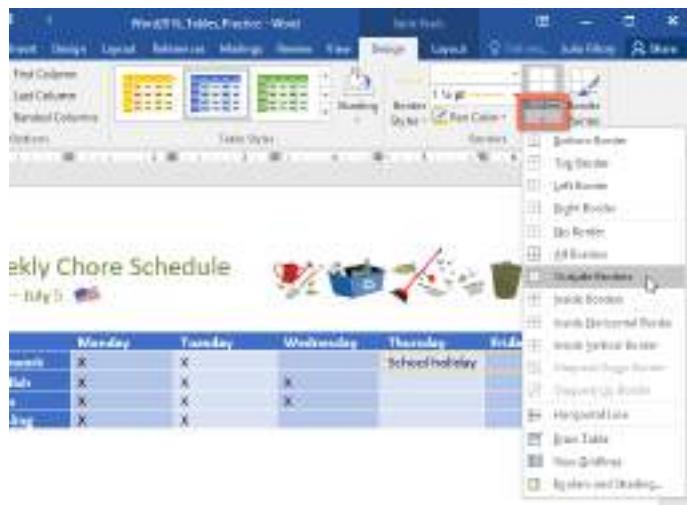
	Monday	Tuesday	Wednesday	Thursday	Friday
Homework	X	X		School holiday	
Feed fish	X	X	X		
Dishes	X	X	X		
Recycling	X	X			

2. Use the commands on the Design tab to choose the desired Line Style, Line Weight, and Pen Color.

Word2016_Table_Practice - Word

3. Click the drop-down arrow below the Borders command.

4. Choose a border type from the menu.



5. The border will be applied to the selected cells.

Weekly Chore Schedule				
July 1 – July 5				
	Monday	Tuesday	Wednesday	Thursday
Homework	X			
Feed fish	X	X		
Dishes	X	X	X	
Recycling	X	X		

Modifying a table using the Layout tab

In Word, the Layout tab appears whenever you select your table. You can use the options on this tab to make a variety of modifications.

Click the buttons in the interactive below to learn more about Word's table layout controls.

Align Cell Text

By changing the alignment of your cells, you can control exactly where the text is located. In the example below, the text has been aligned to the center.

Lesson 24: Charts

Introduction

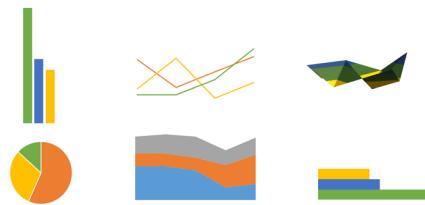
A chart is a tool you can use to communicate information graphically. Including a chart in your document can help you illustrate numerical data—such as comparisons and trends—so it's easier for the reader to understand.

Types of charts

There are several types of charts to choose from. To use charts effectively, you'll need to understand what makes each one unique.

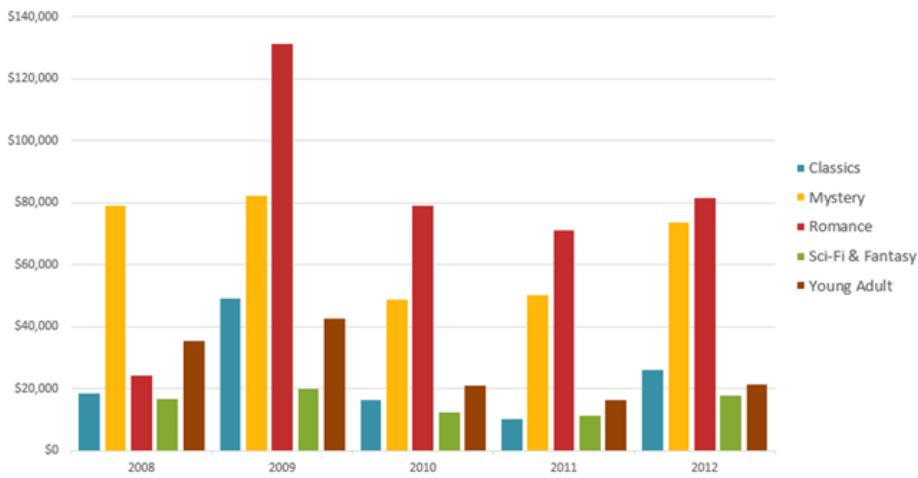
Click the arrows in the slideshow below to learn more about the types of charts in Word.

Types of Charts



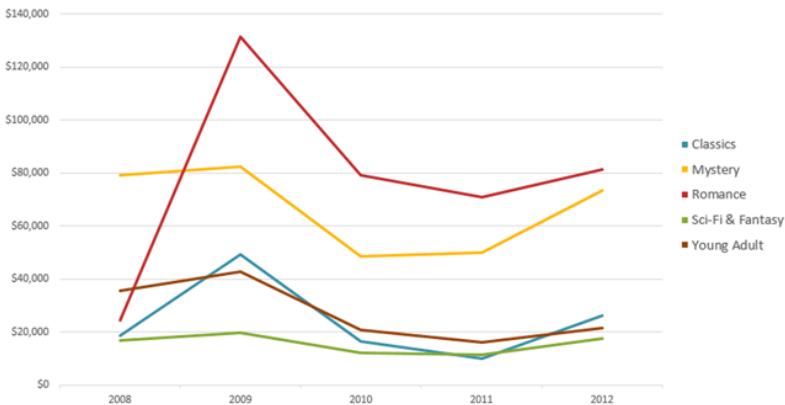
Word has a variety of chart types, each with its own advantages. Click the arrows to see some of the different types of charts available in Word.

Column



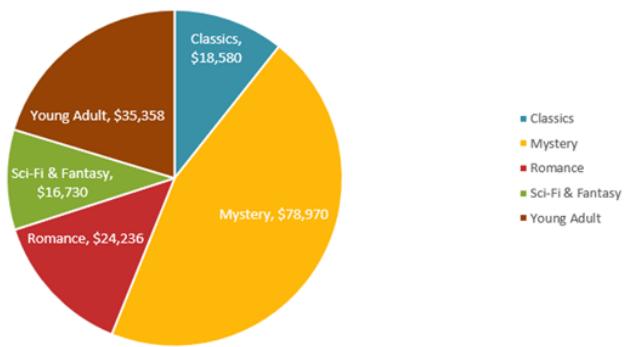
Column charts use vertical bars to represent data. They can work with many different types of data, but they're most frequently used for comparing information.

Line



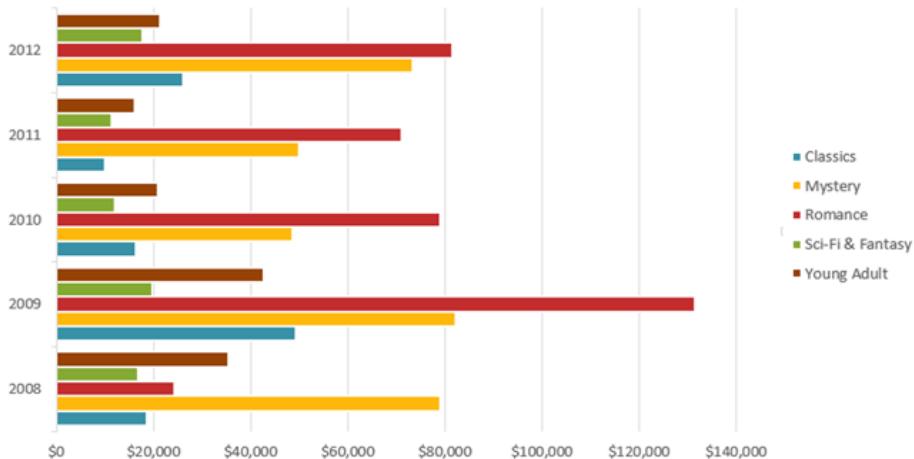
• Line charts are ideal for showing trends. The data points are connected with lines, making it easy to see whether values are increasing or decreasing over time.

Pie



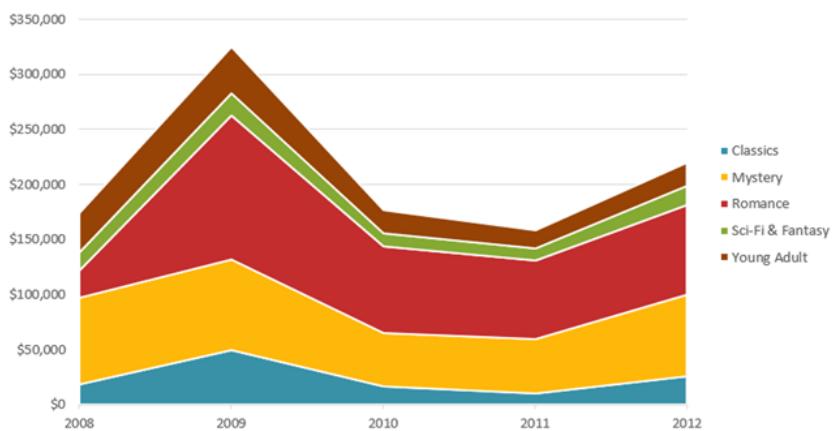
• Pie charts make it easy to compare proportions. Each value is shown as a slice of the pie, so it's easy to see which values make up the percentage of a whole.

Bar



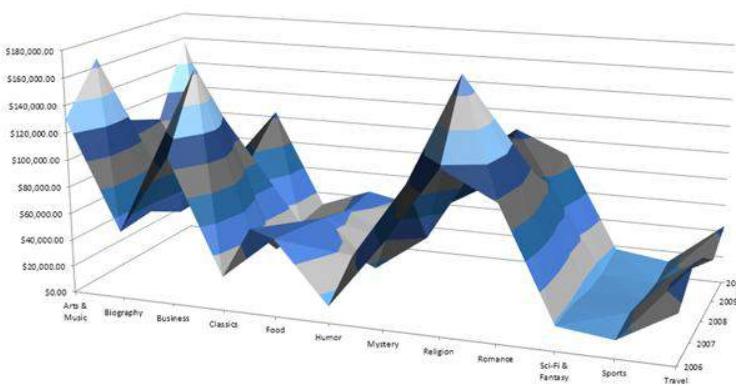
• Bar charts work just like column charts, but they use horizontal rather than vertical bars.

Area



• Area charts are similar to line charts, except the areas under the lines are filled in.

Surface



- Surface charts allow you to display data across a 3D landscape. They work best with large data sets, allowing you to see a variety of information at the same time.

arrow_back_ios

Identifying the parts of a chart

In addition to chart types, you'll need to understand how to read a chart. Charts contain several different elements—or parts—that can help you interpret data.

Click the buttons in the interactive below to learn about the different parts of a chart.

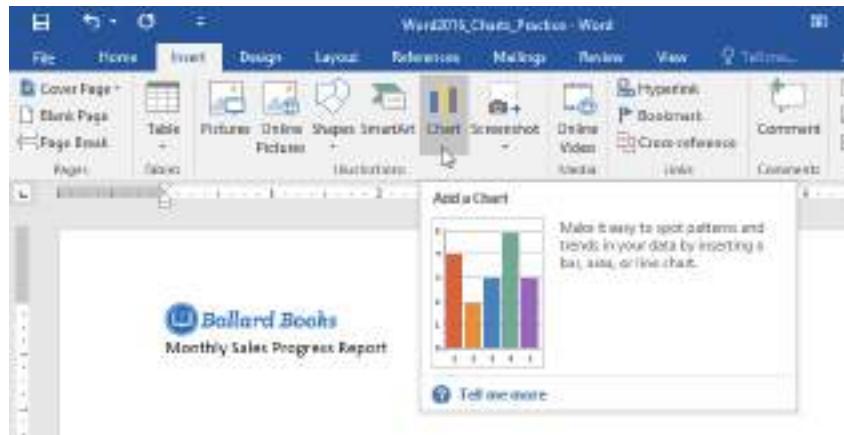


Inserting charts

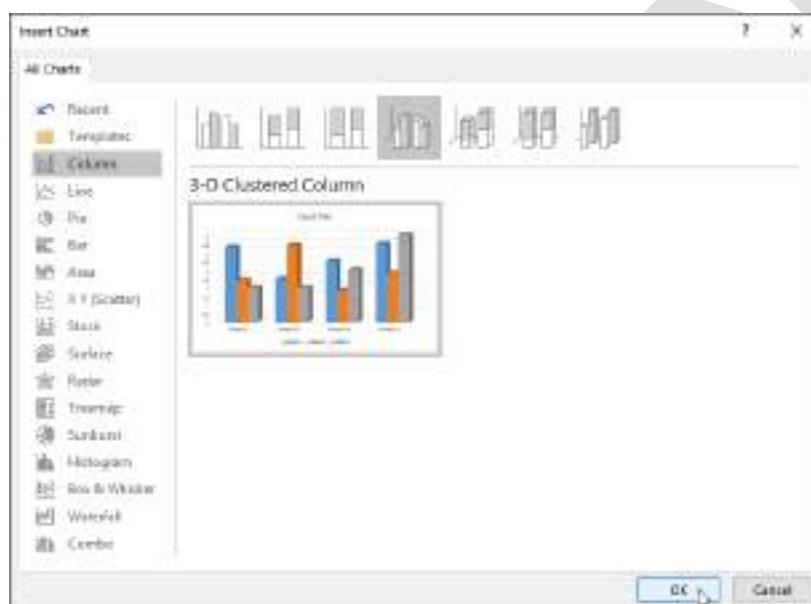
Word utilizes a separate spreadsheet window for entering and editing chart data, much like a spreadsheet in Excel. The process of entering data is fairly simple,

To insert a chart:

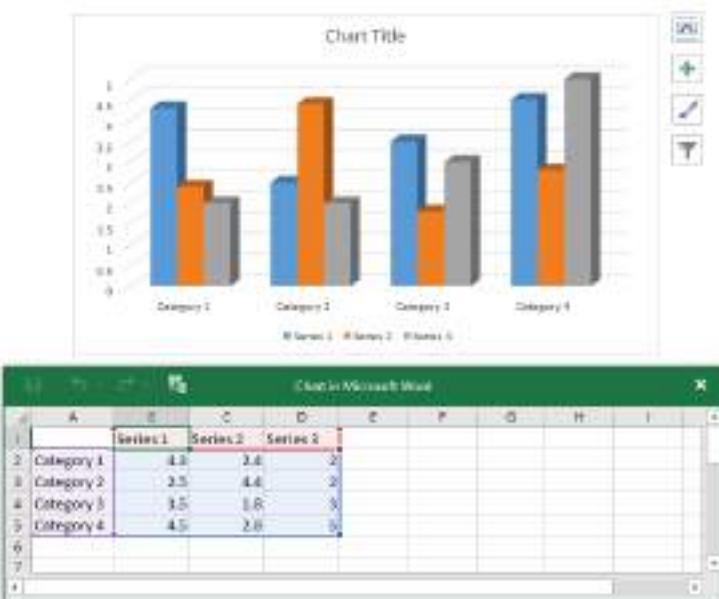
1. Place the insertion point where you want the chart to appear.
2. Navigate to the Insert tab, then click the Chart command in the Illustrations group.



3. A dialog box will appear. To view your options, choose a chart type from the left pane, then browse the charts on the right.
4. Select the desired chart, then click OK.



5. A chart and spreadsheet window will appear. The text in the spreadsheet is merely a placeholder that you'll need to replace with your own source data. The source data is what Word will use to create the chart.



6. Enter your source data into the spreadsheet.

The figure shows a Microsoft Word document titled "Chart in Microsoft Word". It contains a table with columns labeled "Jan", "Feb", "March", "April", "May", and "June". The rows represent book genres: Classics, Romance, Sci-Fi Fanta, Mystery, and Young Adult. A blue rectangular selection box highlights the data from January through May for all genres.

	Jan	Feb	March	April	May	June
Classics	4.3	2.4	2			
Romance	2.5	4.4	2			
Sci-Fi Fanta	3.5	1.8	3			
Mystery	4.5	2.8	3			
Young Adult						4

7. Only the data enclosed in the blue box will appear in the chart. If necessary, click and drag the lower-right corner of the blue box to manually increase or decrease the data range.

The figure shows the same Microsoft Word document and table as the previous screenshot. The blue selection box has been expanded to include the "June" column for all genres. A red circle is drawn around the bottom-right corner of the selection box, indicating where it can be resized.

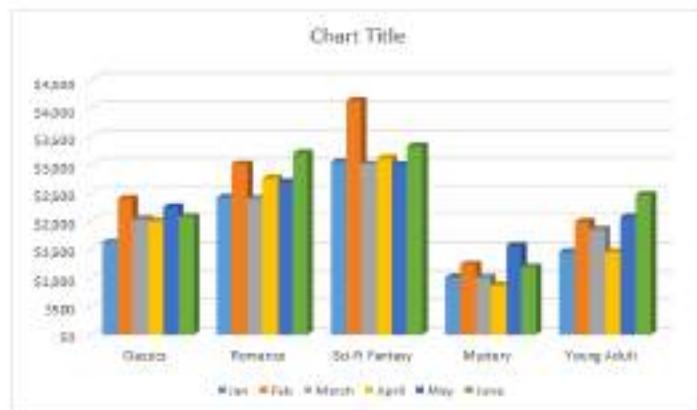
	Jan	Feb	March	April	May	June
Classics	4.3	2.4	2			
Romance	2.5	4.4	2			
Sci-Fi Fanta	3.5	1.8	3			
Mystery	4.5	2.8	3			
Young Adult						4

8. When you're done, click X to close the spreadsheet window.

The figure shows the Microsoft Word document with the completed table. The X button in the top right corner of the spreadsheet window is highlighted with a red box, indicating where it should be clicked to close the window.

	Jan	Feb	March	April	May	June
Classics	\$1,625	\$2,393	\$2,025	\$1,996	\$2,251	\$2,073
Romance	\$2,413	\$3,012	\$2,294	\$2,761	\$2,689	\$3,202
Sci-Fi Fanta	\$3,051	\$4,125	\$3,008	\$3,117	\$2,999	\$3,317
Mystery	\$1,009	\$1,239	\$998	\$872	\$1,554	\$1,187
Young Adult	\$1,451	\$1,982	\$1,853	\$1,452	\$2,008	\$2,455

9. The chart will be complete.



To edit your chart again, simply select it, then click the **Edit Data** command on the Design tab. The spreadsheet window will reappear.



Creating charts with existing Excel data

If you already have data in an existing Excel file that you'd like to use in Word, you can copy and paste it instead of entering it by hand. Just open the spreadsheet in Excel, copy the data, then paste it as the source data in Word.

You can also embed an existing Excel chart into your Word document. This is useful if you know you're going to be updating your Excel file later; the chart in Word will update automatically any time a change is made.

modifying charts with chart tools

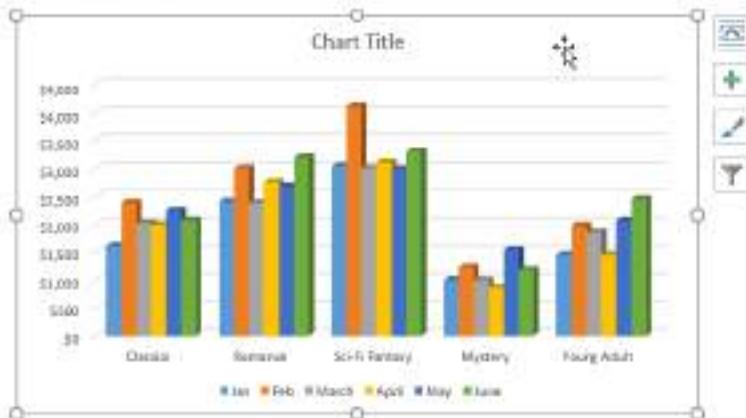
There are many ways to customize and organize your chart in Word. For example, you can quickly change the chart type, rearrange the data, and even change the chart's appearance.

To switch row and column data:

Sometimes you may want to change the way your chart data is grouped. For example, in the chart below the data is grouped by genre, with columns for each month. If we switched the rows and columns, the data would be grouped by month instead. In both cases, the chart contains the same data—it's just presented in a different way.

1. Select the chart you want to modify. The Design tab will appear on the right side of the Ribbon.

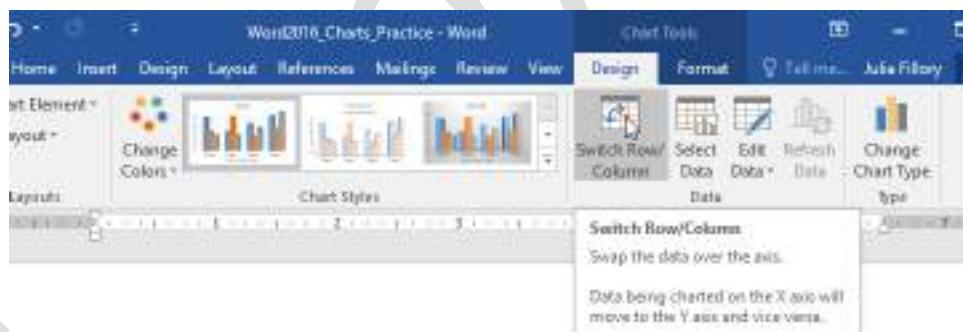
 Ballard Books
Monthly Sales Progress Report



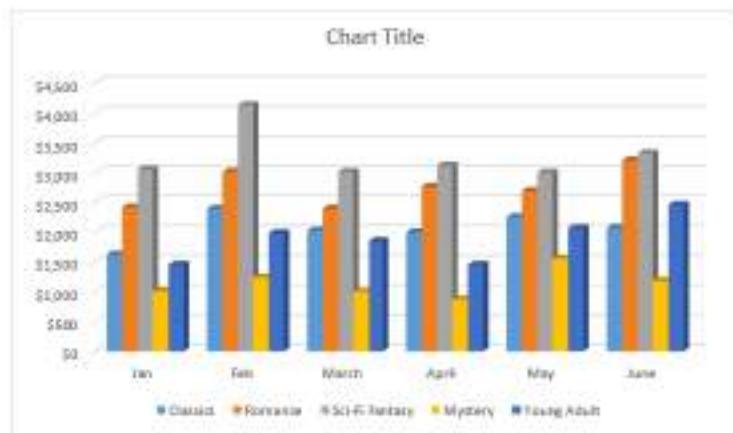
2. From the Design tab, click the Edit Data command in the Data group.



3. Click the chart again to reselect it, then click the Switch Row/Column command.



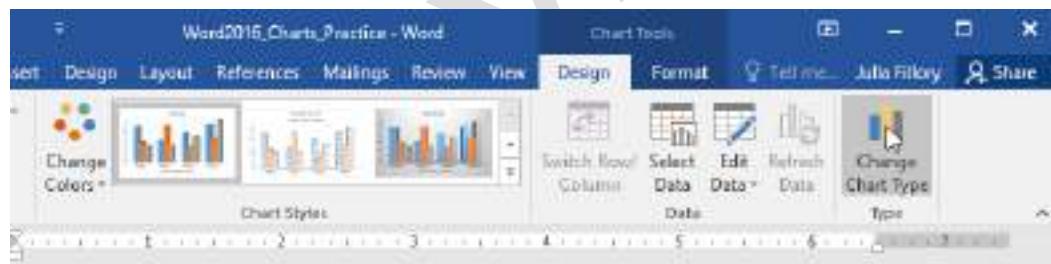
4. The rows and columns will be switched. In our example, the data is now grouped by month, with columns for each genre.



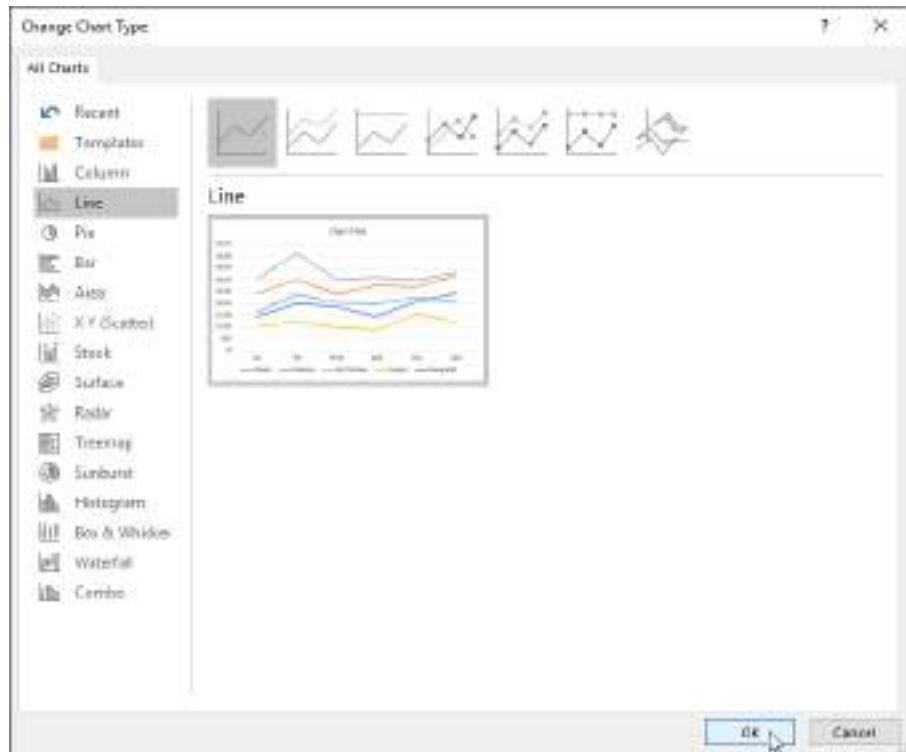
To change the chart type:

If you find that your chosen chart type isn't suited to your data, you can change it to a different one. In our example, we'll change the chart type from a column chart to a line chart.

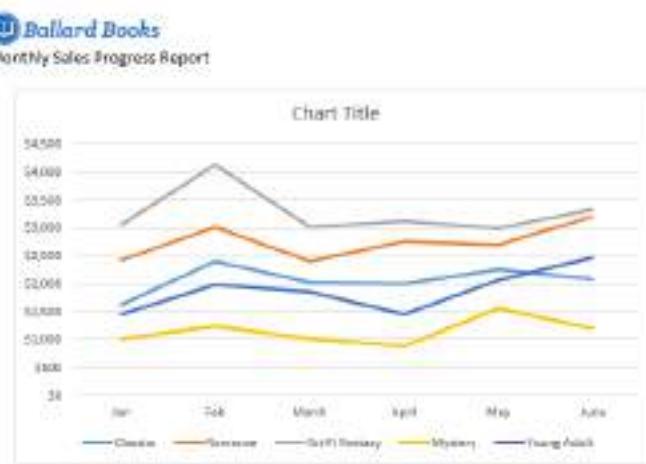
1. Select the chart you want to change. The Design tab will appear.
2. From the Design tab, click the Change Chart Type command.



3. A dialog box will appear. Select the desired chart, then click OK.



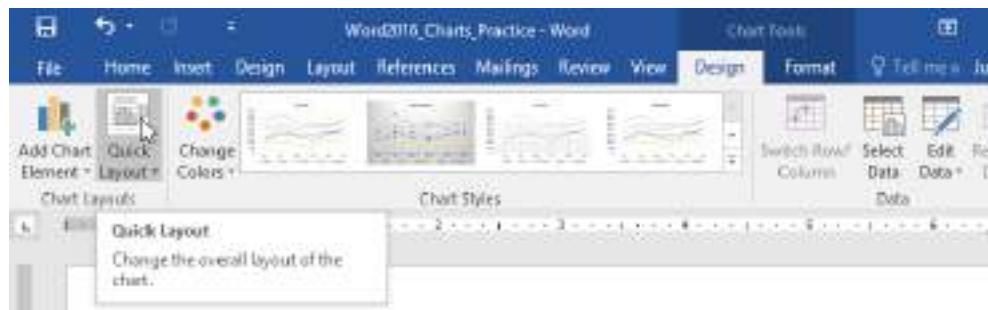
4. The new chart type will be applied. In our example, the line chart makes it easier to see trends over time.



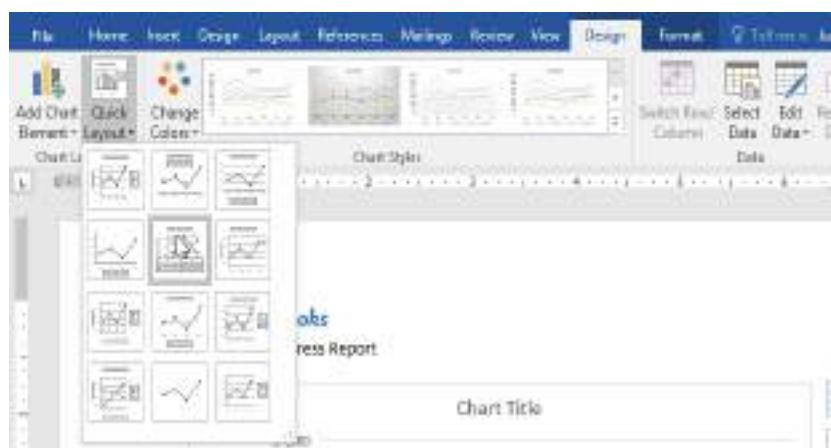
To change the chart layout:

To change the arrangement of your chart, try choosing a different layout. Layout can affect several elements, including the chart title and data labels.

1. Select the chart you want to modify. The Design tab will appear.
2. From the Design tab, click the Quick Layout command.



3. Choose the desired layout from the drop-down menu.

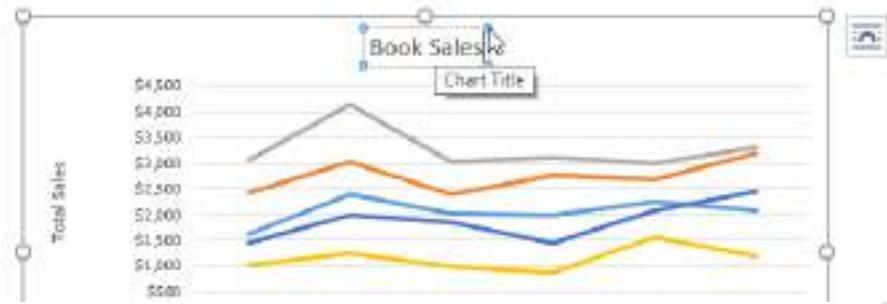


4. The chart will update to reflect the new layout.



If you don't see a chart layout that has exactly what you need, you can click the Add Chart Element command on the Design tab to add axis titles, gridlines, and other chart elements.

To fill in a placeholder (such as the chart title or axis title), click the element and enter your text.



To change the chart style:

Word's chart styles give you an easy way to change your chart's design, including the color, style, and certain layout elements.

- 1. Select the chart you want to modify. The Design tab will appear.**
- 2. From the Design tab, click the More drop-down arrow in the Chart Styles group.**



- 3. A drop-down menu of styles will appear. Select the style you want.**



- 4. The chart style will be applied.**



For even faster customization, use the formatting shortcuts to the right of your chart. These allow you to adjust the chart style, chart elements, and even add filters to your



data.

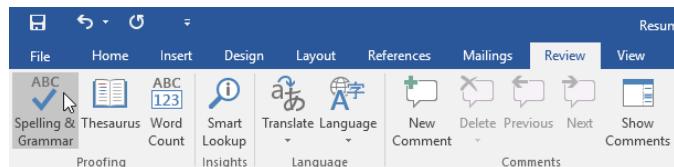
Lesson 25: Checking Spelling and Grammar

Introduction

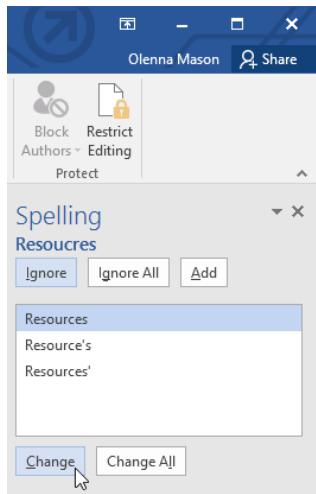
Worried about making mistakes when you type? Don't be. Word provides you with several proofing features—including the Spelling and Grammar tool—that can help you produce professional, error-free documents.

To run a Spelling and Grammar check:

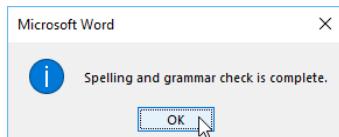
- 1. From the Review tab, click the Spelling & Grammar command.**



2. The Spelling and Grammar pane will appear on the right. For each error in your document, Word will try to offer one or more suggestions. You can select a suggestion and click Change to correct the error.



3. Word will move through each error until you have reviewed all of them. After the last error has been reviewed, a dialog box will appear confirming that the spelling and grammar check is complete. Click OK.



If no suggestions are given, you can manually type the correct spelling in your document.

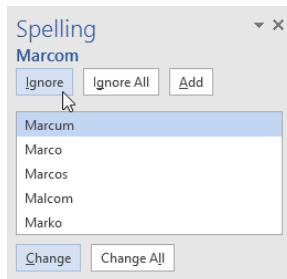
Ignoring "errors"

The spelling and grammar check is not always correct. Particularly with grammar, there are many errors Word will not notice. There are also times when the spelling and grammar check will say something is an error when it's actually not. This often happens with names and other proper nouns, which may not be in the dictionary.

If Word says something is an error, you can choose not to change it. Depending on whether it's a spelling or grammatical error, you can choose from several options.

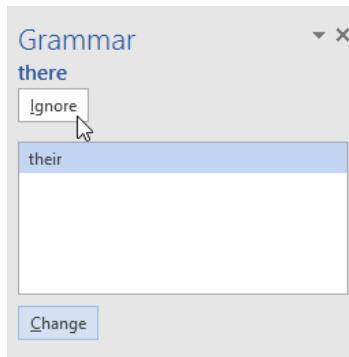
For spelling "errors":

- **Ignore:** This will skip the word without changing it.
- **Ignore All:** This will skip the word without changing it, and it will also skip all other instances of the word in the document.
- **Add:** This adds the word to the dictionary so it will never come up as an error. Make sure the word is spelled correctly before choosing this option.

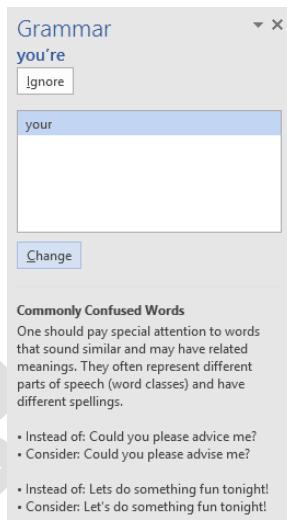


For grammar "errors":

- **Ignore:** This will skip the word or phrase without changing it.



For some grammatical errors, Word will provide an explanation for why it thinks something is incorrect. This can help you determine whether you want to change or ignore it.



Automatic spelling and grammar checking

By default, Word automatically checks your document for spelling and grammar errors, so you may not even need to run a separate check. These errors are indicated by colored wavy lines.

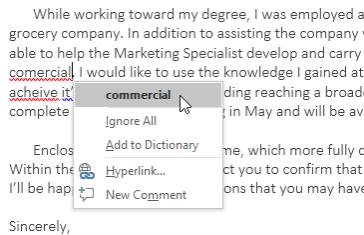
- **The red line indicates a misspelled word.**
- **The blue line indicates a grammatical error, including misused words.**

While working toward my degree, I was employed as a marketing assistant with a local grocery company. In addition to assisting the company with there summer promotions, I was able to help the Marketing Specialist develop and carry through ideas for the company's next comercial. I would like to use the knowledge I gained at Fresh Foods to help you're company achieve it's marketing goals, including reaching a broader audience across country. I will complete my degree in marketing in May and will be available for employment in early June.

A misused word—also known as a contextual spelling error—occurs when a word is spelled correctly but used incorrectly. For example, if you used the phrase Deer Mr. Theodore at the beginning of a letter, deer would be a contextual spelling error. Deer is spelled correctly, but it is used incorrectly in the letter. The correct word is Dear.

To correct spelling errors:

- 1. Right-click the underlined word, then select the correct spelling from the list of suggestions.**



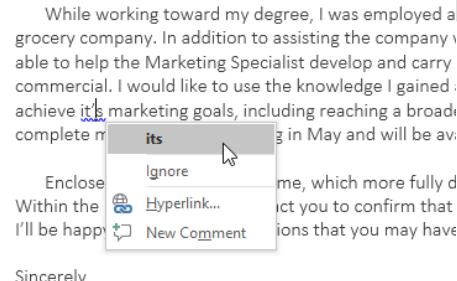
Sincerely,

- 2. The corrected word will appear in the document.**

You can also choose to Ignore All instances of an underlined word or add it to the dictionary.

To correct grammar errors:

- 1. Right-click the underlined word or phrase, then select the correct spelling or phrase from the list of suggestions.**

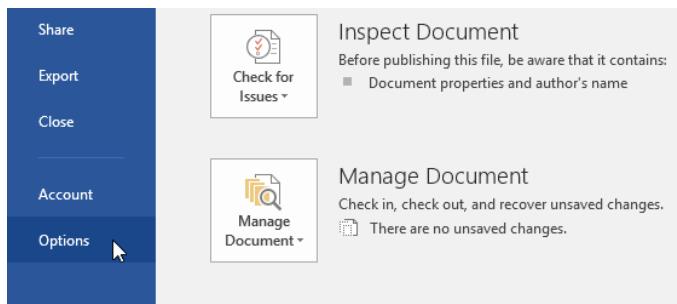


Sincerely,

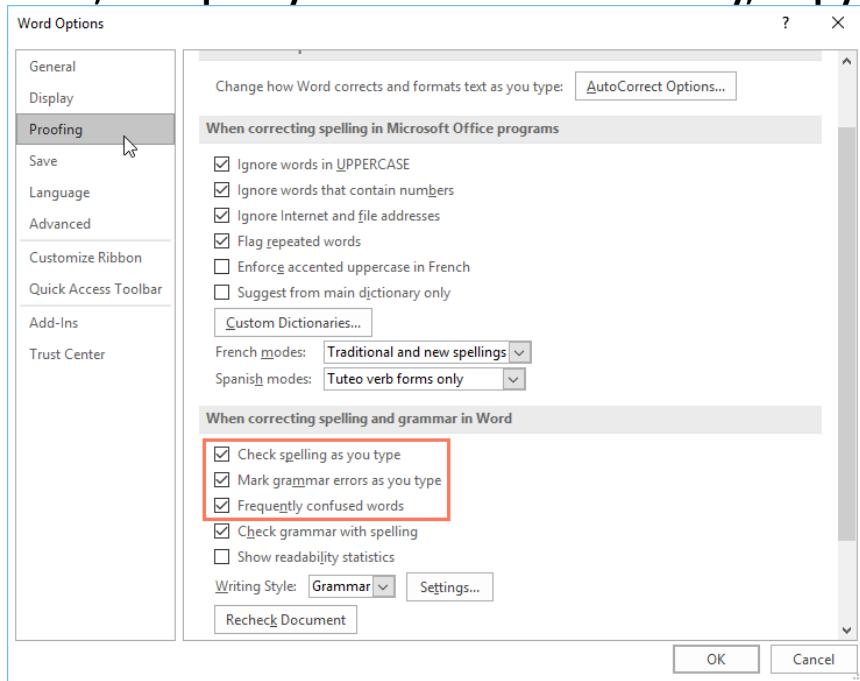
- 2. The corrected phrase will appear in the document.**

To change the automatic spelling and grammar check settings:

- 1. Click the File tab to access Backstage view, then click Options.**



2. A dialog box will appear. On the left side of the dialog box, select Proofing. From here, you have several options to choose from. For example, if you don't want Word to mark spelling errors, grammar errors, or frequently confused words automatically, simply uncheck the desired option.

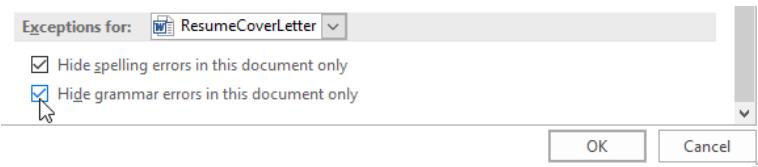


If you've turned off the automatic spelling and/or grammar checks, you can still go to the Review tab and click the Spelling & Grammar command to run a new check.

To hide spelling and grammar errors in a document:

If you're sharing a document like a resume with someone, you might not want that person to see the red and blue lines. Turning off the automatic spelling and grammar checks only applies to your computer, so the lines may still show up when someone else views your document. Fortunately, Word allows you to hide spelling and grammar errors so the lines will not show up on any computer.

1. Click the File tab to go to Backstage view, then click Options.
2. A dialog box will appear. Select Proofing, then check the box next to Hide spelling errors in this document only and Hide grammar errors in this document only, then click OK.



3. The lines in the document will be hidden.

Lesson 26: Track Changes and Comments

Introduction

Let's say someone asks you to proofread or collaborate on a document. If you had a printed copy, you might use a red pen to cross out sentences, mark misspellings, and add comments in the margins. Word allows you to do all of these things electronically using the Track Changes and Comments features.

Understanding Track Changes

When you turn on Track Changes, every change you make to the document will appear as a colored markup. If you delete text, it won't disappear—instead, the text will be crossed out. If you add text, it will be underlined. This allows you to see edits before making the changes permanent.

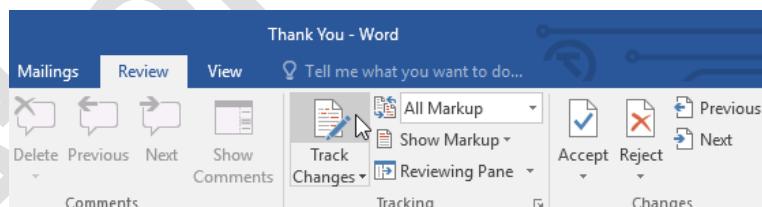
To Whom It May Concern: Dear Mr. Powell:

Thank you for taking the time to meet with me last Thursday about the Sales Associate position. I enjoyed meeting with you and touring the facility. I was very impressed with the layout of the showroom and with the competence of the staff at your companyQuality Furnishings. I would love the chance to work in such a productive and very supportive atmosphere.

If there are multiple reviewers, each person will be assigned a different markup color.

To turn on Track Changes:

1. From the Review tab, click the Track Changes command.



2. Track Changes will be turned on. From this point on, any changes you make to the document will appear as colored markups.

To Whom It May Concern:

Thank you for taking the time to meet with me last Thursday about the Sales Associate position. I enjoyed meeting with you and touring the facility. I was very impressed with the layout of the showroom and with the competence of the staff at your companyQuality Furnishings. I would love the chance to work in such a productive and very supportive atmosphere.

Reviewing changes

Tracked changes are really just suggested changes. To become permanent, they must be accepted. On the other hand, the original author may disagree with some of the tracked changes and choose to reject them.

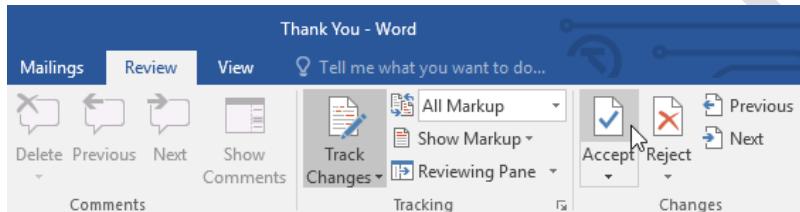
To accept or reject changes:

1. Select the change you want to accept or reject.

To Whom It May Concern:

Thank you for taking the time to meet with me last Thursday about the Sales Associate position. I enjoyed meeting with you and touring the facility. I was very impressed with the layout of the showroom and with the competence of the staff at your company Quality Furnishings. I would love the chance to work in such a productive and very-supportive atmosphere.

2. From the Review tab, click the Accept or Reject command.

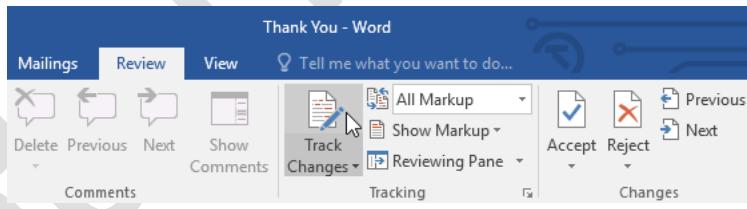


3. The markup will disappear, and Word will automatically jump to the next change. You can continue accepting or rejecting each change until you have reviewed all of them.

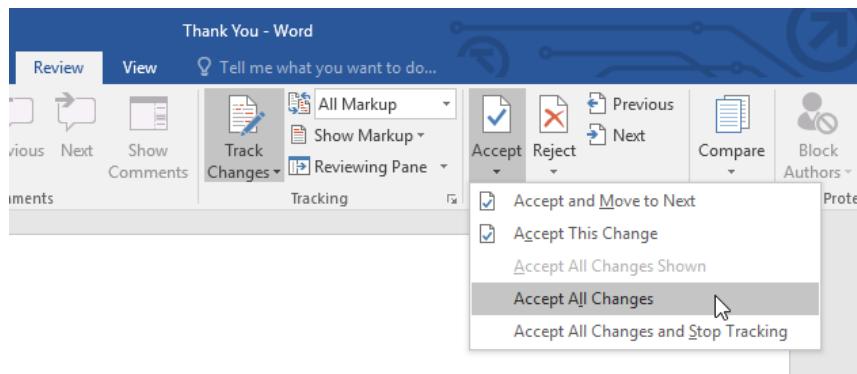
To Whom It May Concern:

Thank you for taking the time to meet with me last Thursday about the Sales Associate position. I enjoyed meeting with you and touring the facility. I was very impressed with the layout of the showroom and with the competence of the staff at your company Quality Furnishings. I would love the chance to work in such a productive and very-supportive atmosphere.

4. When you're finished, click the Track Changes command to turn off Track Changes.



To accept all changes at once, click the Accept drop-down arrow, then select Accept All. If you no longer want to track your changes, you can select Accept All and Stop Tracking.



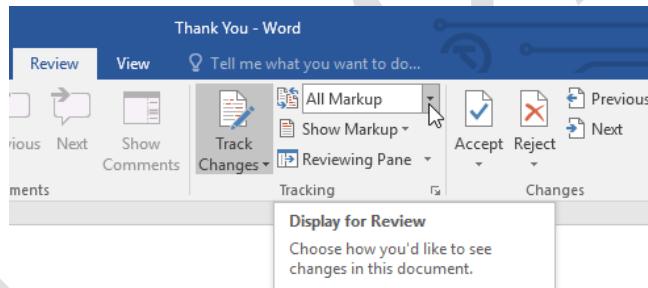
Track Changes viewing options

If you have a lot of tracked changes, they may become distracting if you're trying to read through a document. Fortunately, Word provides a few ways to customize how tracked changes appear:

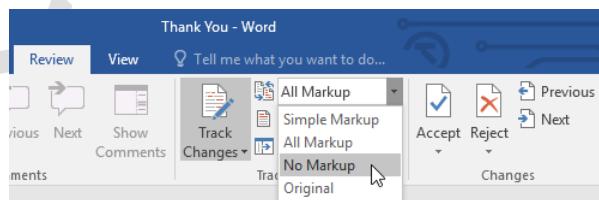
- **Simple Markup:** This shows the final version without inline markups. Red markers will appear in the left margin to indicate where a change has been made.
- **All Markup:** This shows the final version with inline markups.
- **No Markup:** This shows the final version and hides all markups.
- **Original:** This shows the original version and hides all markups.

To hide tracked changes:

1. From the Review tab, click the Display for Review command. The Display for Review command is located to the right of the Track Changes command.



2. Select the desired option from the drop-down menu. In our example, we'll select No Markup to preview the final version of the document before accepting the changes.



You can also click the marker in the left margin to switch between Simple Markup and All Markup.

To Whom It May Concern:

Thank you for taking the time to meet with me last Thursday about the Sales Associate position. I enjoyed meeting with you and touring the facility. I was very impressed with the layout of the showroom and with the competence of the staff at your company Quality Furnishings. I would love the chance to work in such a productive and very supportive atmosphere.

Hide tracked changes.

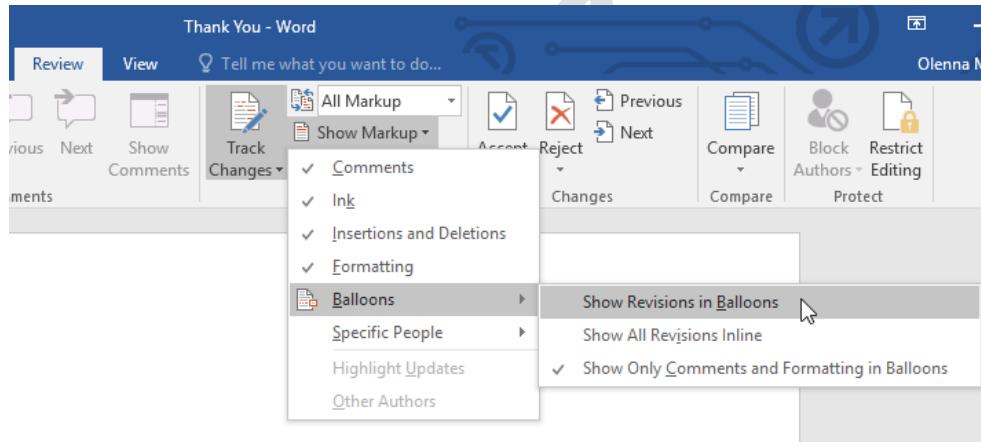
As we talked about in our meetings, my many years of sales experience, both in commissioned floor sales and in the role of Sales Supervisor, would greatly benefit Quality Furnishings. In that time, I have learned many techniques that would help drive sales and drive increase customer satisfaction ratings at Quality Furnishings.

Remember that hiding Track Changes is not the same as reviewing changes. You will still need to accept or reject the changes before sending out the final version of your document.

To show revisions in balloons:

By default, most revisions appear inline, meaning the text itself is marked. You can also choose to show the revisions in balloons, which moves most revisions to the right margin. Removing inline markups can make the document easier to read, and balloons also give you more detailed information about some markups.

1. From the Review tab, click Show Markup > Balloons > Show Revisions in Balloons.



2. Most revisions will appear in the right margin, although any added text will still appear inline.

To Whom It May Concern:

Thank you for taking the time to meet with me last Thursday about the Sales Associate position. I enjoyed meeting with you and touring the facility. I was very impressed with the layout of the showroom and with the competence of the staff at Quality Furnishings. I would love the chance to work in such a productive and supportive atmosphere.

As we talked about in our meetings, my many years of sales experience, both in commissioned floor sales and in the role of Sales Supervisor, would greatly benefit Quality Furnishings. In that time, I have learned many techniques that would help drive sales and increase customer satisfaction ratings.

In addition, I wanted to let you know that I have recently received my certificate from the Superior Sales Training program at the National Business Institute. Several techniques covered in the program are sure to bolster sales. I look forward to having the chance to implement them at Quality Furnishings.

Olenna Mason
Deleted: your company
Olenna Mason
Deleted: very
Olenna Mason
Deleted: drive
Olenna Mason
Deleted: at Quality Furnishings.

To go back to inline markups, you can select either Show All Revisions Inline or Show Only Comments and Formatting in Balloons.

Comments

Sometimes you may want to add a comment to provide feedback instead of editing a document. While it's often used in combination with Track Changes, you don't necessarily need to have Track Changes turned on to add comments.

To add comments:

1. Highlight some text, or place the insertion point where you want the comment to appear.
2. From the Review tab, click the New Comment command.
3. Type your comment. When you're done, you can close the comment box by pressing the Esc key or by clicking anywhere outside the comment box.

To delete comments:

1. Select the comment you want to delete.
2. From the Review tab, click the Delete command.
3. The comment will be deleted.

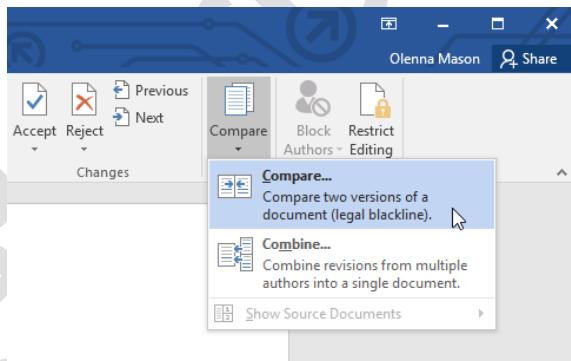
To delete all comments, click the Delete drop-down arrow and select Delete All Comments in Document.

Comparing documents

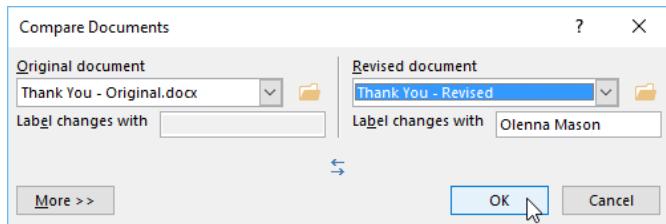
If you edit a document without tracking changes, it's still possible to use reviewing features such as Accept and Reject. You can do this by comparing two versions of the document. All you need is the original document and the revised document (the documents must also have different file names).

To compare two documents:

1. From the Review tab, click the Compare command, then select Compare from the drop-down menu.



2. A dialog box will appear. Choose your Original document by clicking the drop-down arrow and selecting the document from the list. If the file is not in the list, click the Browse button to locate it.
3. Choose the Revised document, then click OK.



- 4. Word will compare the two files to determine what was changed and then create a new document. The changes will appear as colored markups, just like Track Changes. You can then use the Accept and Reject commands to finalize the document.**

Compared Document

December 14, 2015

Roger Powell
Sales Manager
Quality Furnishings
125 West Hannover Street
Raleigh, North Carolina 27601

To Whom It May Concern:

Dear Mr. Powell:

Thank you for taking the time to meet with me last Thursday about the Sales Associate position. I enjoyed meeting with you and touring the facility. I was very impressed with the layout of the showroom and with the competence of the staff at your company, Quality Furnishings. I would love the chance to work in such a productive and very supportive atmosphere.

As we talked about in our meetings, my many years of sales experience, both in commissioned floor sales and in the role of Sales Supervisor, would greatly benefit Quality Furnishings. In that time, I have learned many techniques that would help drive sales and drive/increase customer satisfaction ratings at Quality Furnishings.

In addition, I wanted to let you know that I have recently received my certificate from the Superior Sales Training program at the National Business Institute. Several techniques covered in the program are sure to bolster sales. I look forward to having the chance to implement them at Quality Furnishings.

Thank you again for your consideration in filling this position. Please feel free to contact me if you have any questions or would like additional information. I am looking forward to hearing from you soon.

Original Document (Thank You - Original - Olenna Mason)

December 14, 2015

Roger Powell
Sales Manager
Quality Furnishings
125 West Hannover Street
Raleigh, North Carolina 27601

To Whom It May Concern:

Thank you for taking the time to meet with me last Thursday about the Sales Associate position. I enjoyed

Revised Document (Thank You - Revised - Olenna Mason)

December 14, 2015

Roger Powell
Sales Manager
Quality Furnishings
125 West Hannover Street
Raleigh, North Carolina 27601

Dear Mr. Powell:

Thank you for taking the time to meet with me last Thursday about the Sales Associate position. I enjoyed

Lesson 27: Inspecting and Protecting Documents

Introduction

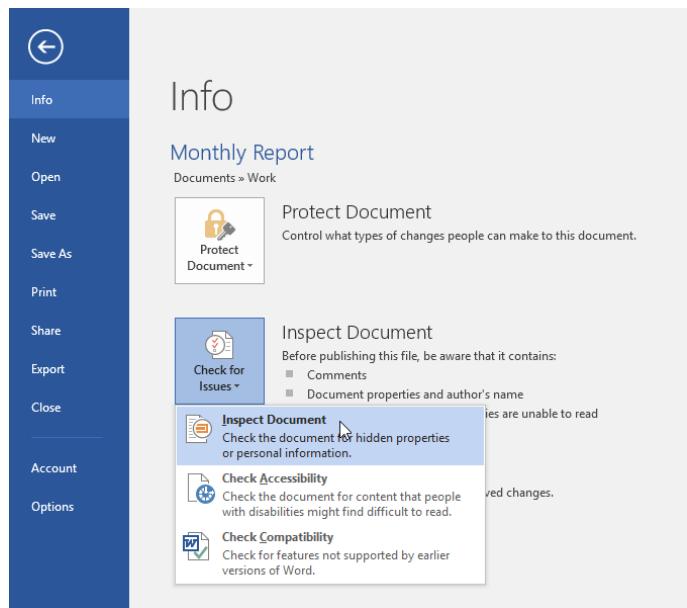
Before sharing a document, you'll want to make sure it doesn't include any information you want to keep private. You may also want to discourage others from editing your file. Fortunately, Word includes several tools to help inspect and protect your document.

Whenever you create or edit a document, certain personal information may be added to the file automatically—for example, information about the document's author. You can use Document Inspector to remove this type of information before sharing a document with others.

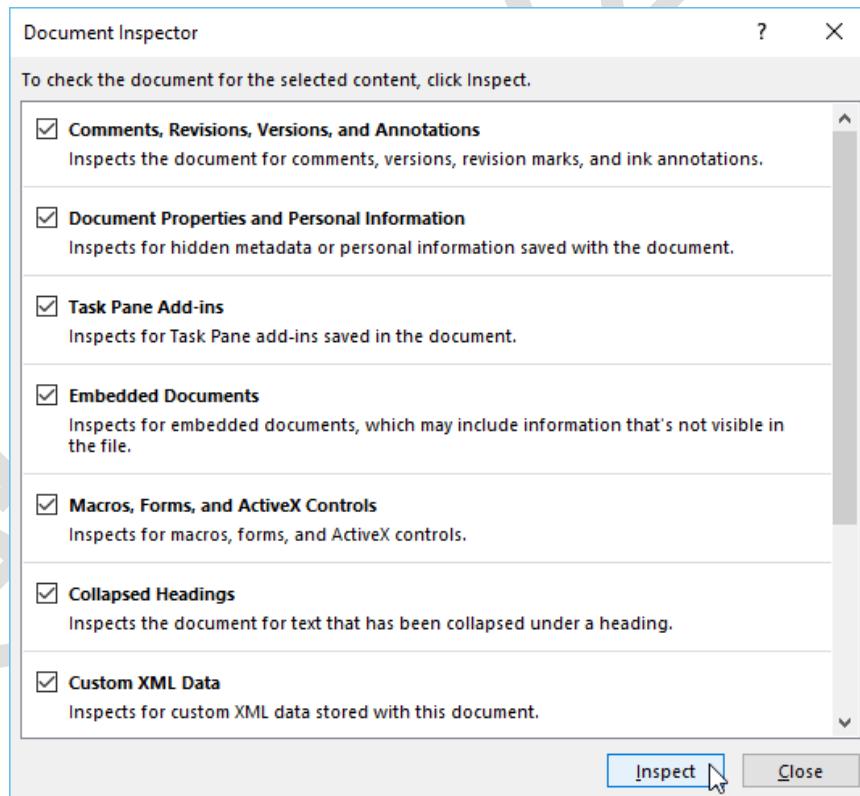
Because some changes may be permanent, it's a good idea to use Save As to create a backup copy of your document before using Document Inspector.

To use Document Inspector:

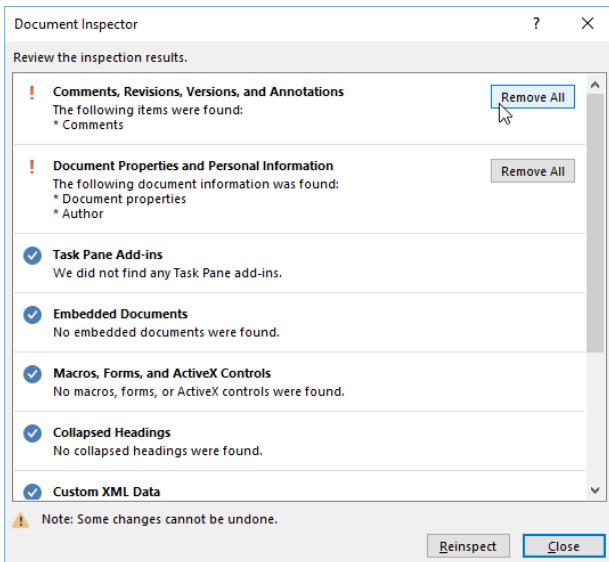
1. Click the File tab to go to Backstage view.
2. From the Info pane, click Check for Issues, then select Inspect Document from the drop-down menu.



3. Document Inspector will appear. Check or uncheck the boxes, depending on the content you want to review, then click Inspect. In our example, we'll leave everything selected.



4. The inspection results will show an exclamation mark for any categories where it found potentially sensitive data, and it will also have a Remove All button for each of these categories. Click Remove All to remove the data.



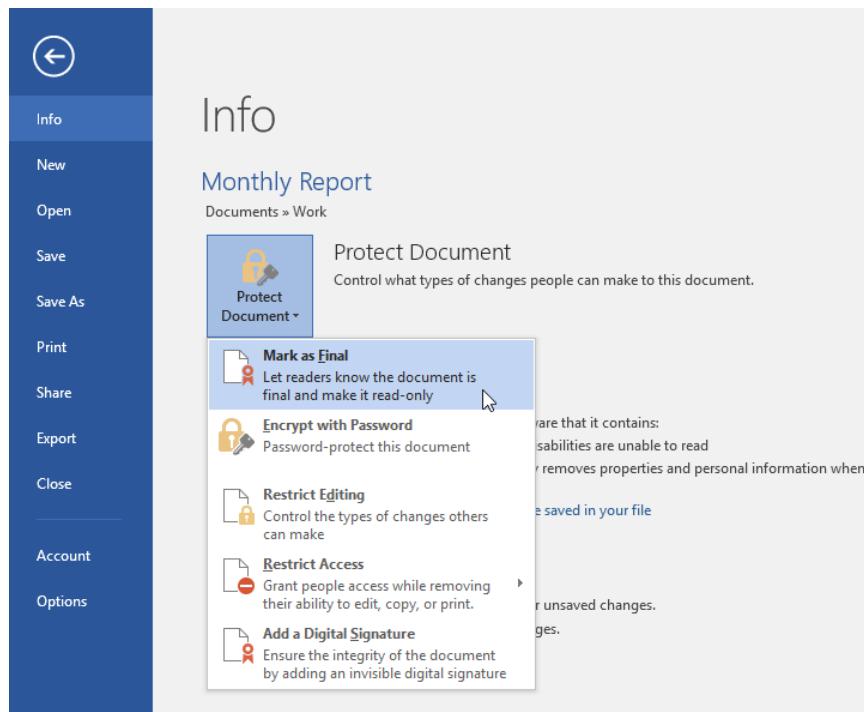
5. When you're done, click Close.

Protecting your document

By default, anyone with access to your document will be able to open, copy, and edit its content unless you protect it. There are several ways to protect a document, depending on your needs.

To protect your document:

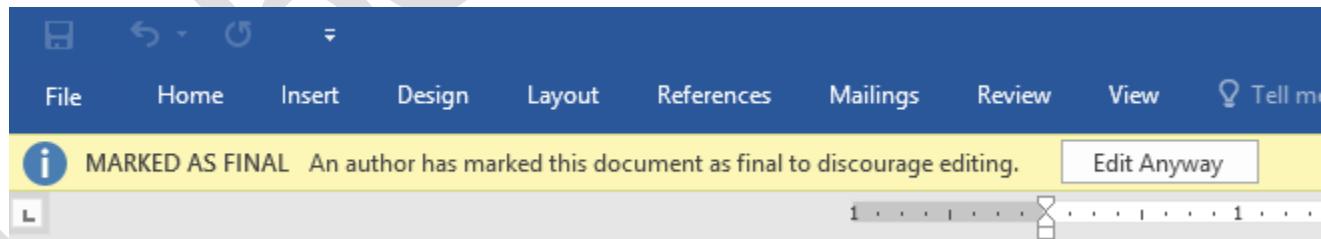
1. Click the File tab to go to Backstage view.
2. From the Info pane, click the Protect Document command.
3. In the drop-down menu, choose the option that best suits your needs. In our example, we'll select Mark as Final. Marking your document as final is a good way to discourage others from editing the file, while other options give you more control if you need it.



4. A dialog box will appear prompting you to save. Click OK.

5. Another dialog box will appear. Click OK.

6. The document will be marked as final. Whenever others open the file, a bar will appear at the top to discourage them from editing the document.



Marking a document as final will not actually prevent others from editing it because they can just select Edit Anyway. If you want to prevent people from editing the document, you can use the Restrict Access option instead.

Lesson 28: SmartArt Graphics

Introduction

SmartArt allows you to communicate information with graphics instead of just using text. There are a variety of styles to choose from, which you can use to illustrate many different types of ideas.

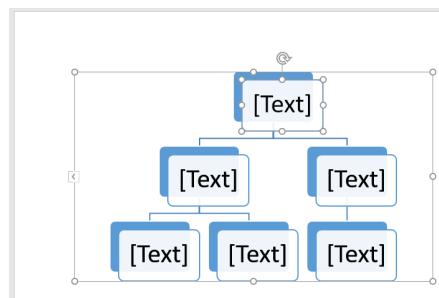
Watch the video below to learn more about working with SmartArt.

To insert a SmartArt graphic:

1. Place the insertion point in the document where you want the SmartArt graphic to appear.
2. From the Insert tab, select the SmartArt command in the Illustrations group.
3. A dialog box will appear. Select a category on the left, choose the desired SmartArt graphic, then click OK.

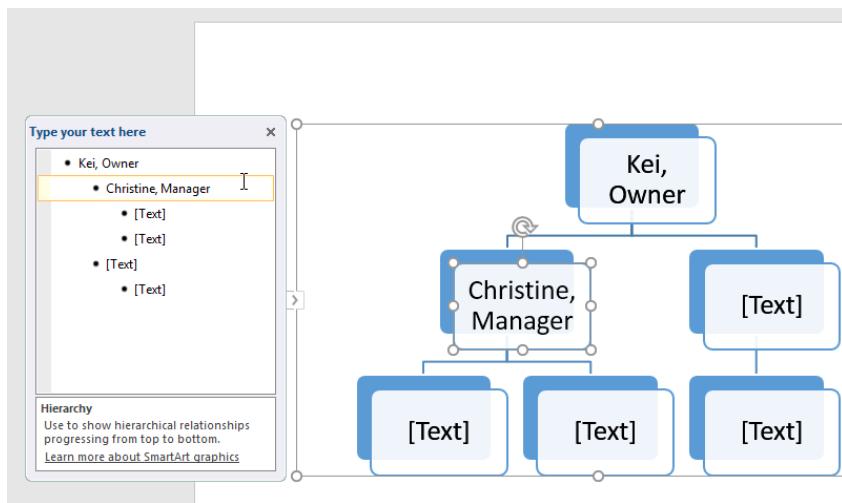


4. The SmartArt graphic will appear in your document.

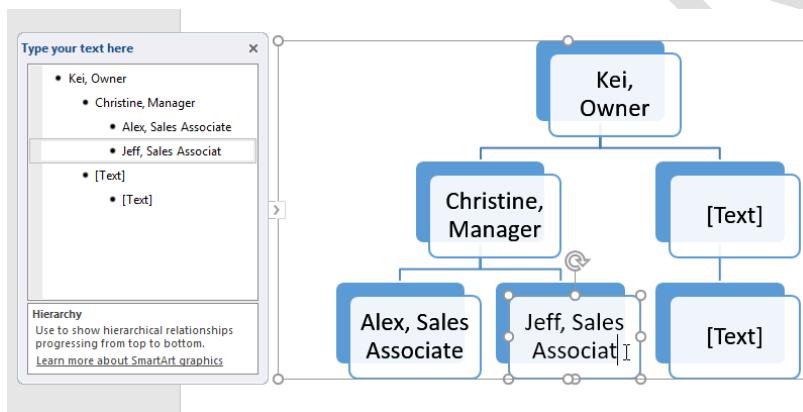


To add text to a SmartArt graphic:

1. Select the SmartArt graphic. The text pane should appear on the left side. If it doesn't appear, you can click the small arrow on the left edge of the graphic.
2. Enter text next to each bullet in the text pane. The text will appear in the corresponding shape. It will be resized automatically to fit inside the shape.



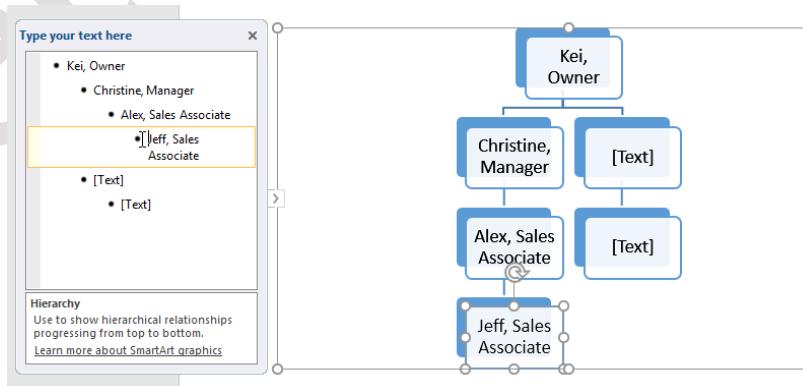
You can also add text by clicking the desired shape and then typing. This works well if you only need to add text to a few shapes. However, for more complex SmartArt graphics, working in the text pane is often quicker and easier.



To reorder, add, and delete shapes:

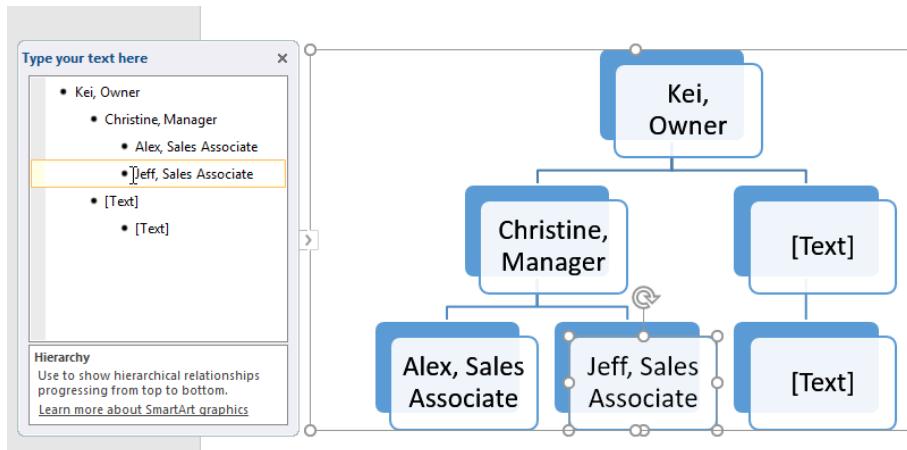
It's easy to add new shapes, change their order, and even delete shapes from your SmartArt graphic. You can do all of this in the text pane, and it's a lot like creating an outline with a multilevel list

To demote a shape, select the desired bullet, then press the Tab key. The bullet will move to the right, and the shape will move down one level.

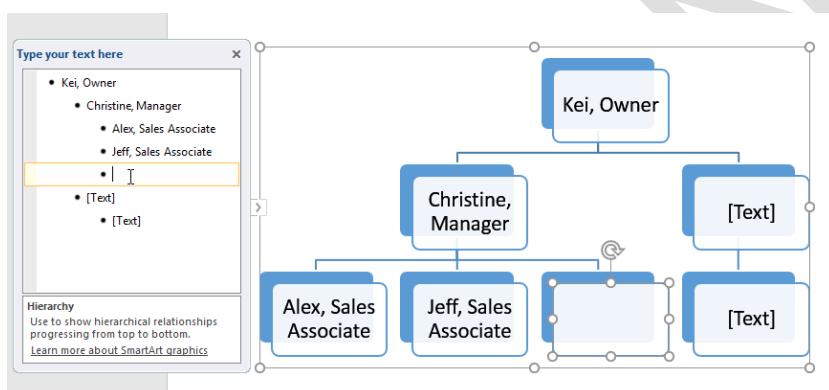


- To promote a shape, select the desired bullet, then press the Backspace key (or Shift+Tab). The bullet**

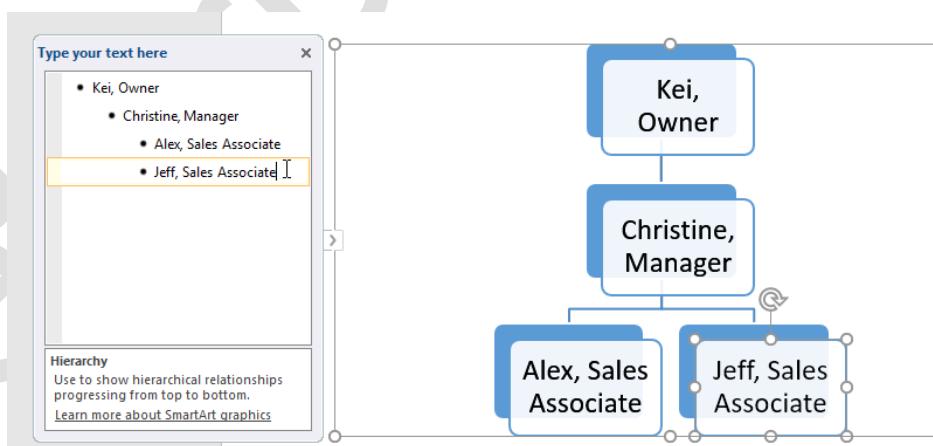
will move to the left, and the shape will move up one level.



- To add a new shape, place the insertion point after the desired bullet, then press Enter. A new bullet will appear in the text pane, and a new shape will appear in the graphic.**



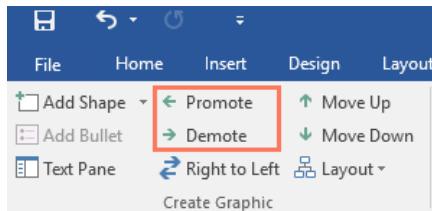
- To remove a shape, keep pressing Backspace until the bullet is deleted. The shape will then be removed. In our example, we'll delete all of the shapes without text.**



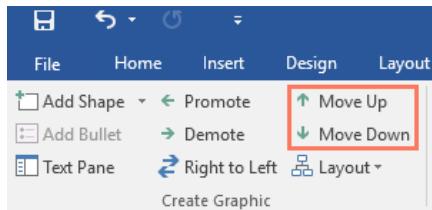
Organizing SmartArt from the Design tab

If you'd prefer not to use the text pane to organize your SmartArt, you can use the commands on the **Design** tab in the **Create Graphic** group. Just select the shape you want to modify, then choose the desired command.

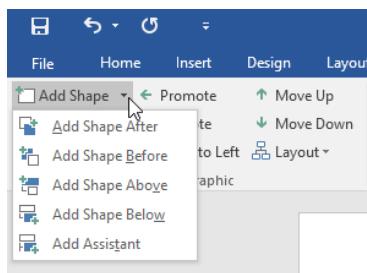
- Promote and Demote:** Use these commands to move a shape up or down between levels.



- Move Up and Move Down:** Use these commands to change the order of shapes on the same level.



- Add Shape:** Use this command to add a new shape to your graphic. You can also click the drop-down arrow for more exact placement options.

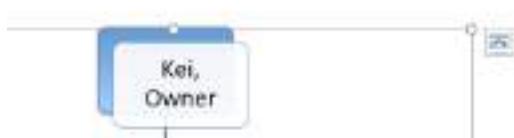


In our example, we've been organizing a graphic with a hierarchical layout. Not all SmartArt graphics use this type of layout, so remember that these commands may work differently (or not at all) depending on the layout of your graphic.

Customizing SmartArt

After inserting SmartArt, there are several things you might want to change about its appearance. Whenever you select a SmartArt graphic, the Design and Format tabs will appear on the right side of the Ribbon. From there, it's easy to edit the style and layout of a SmartArt graphic.

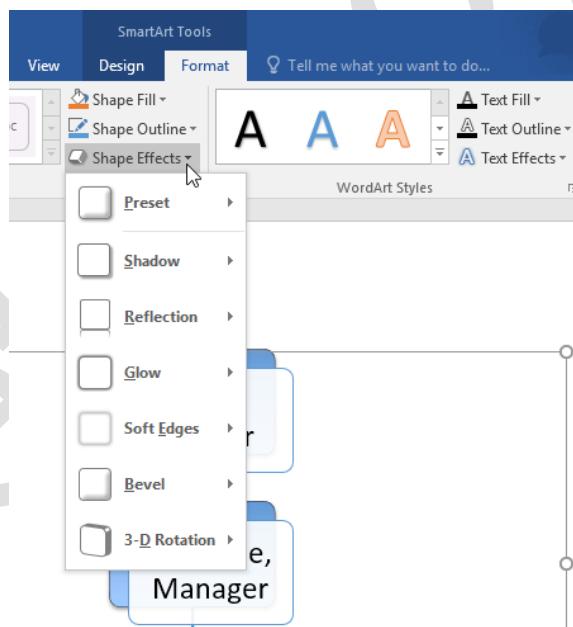
- There are several SmartArt styles, which allow you to quickly modify the look and feel of your SmartArt. To change the style, select the desired style from the SmartArt styles group.



- You have a variety of color schemes to use with SmartArt. To change the colors, click the Change Colors command and choose the desired option from the drop-down menu.



- You can also customize each shape independently. Just select any shape in the graphic, then choose the desired option from the Format tab.



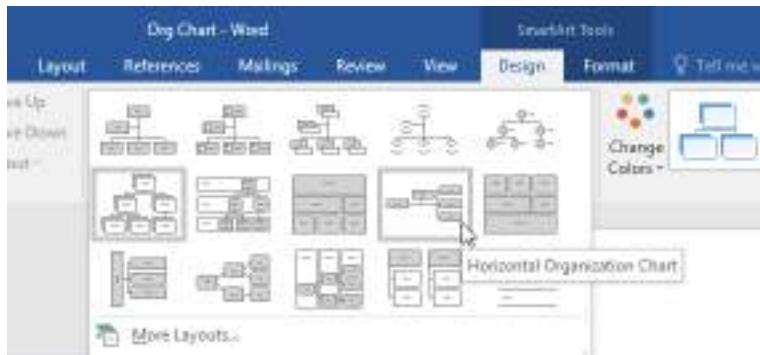
To change the SmartArt layout:

If you don't like the way your information is organized within a SmartArt graphic, you can always change its layout to better fit your content.

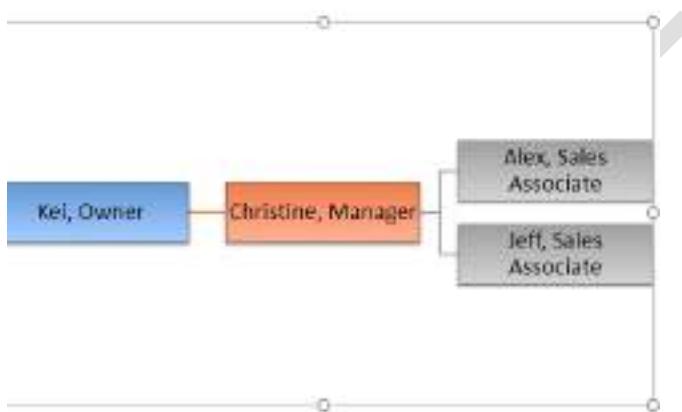
1. From the Design tab, click the More drop-down arrow in the Layouts group.



2. Choose the desired layout, or click More Layouts to see even more options.



3. The selected layout will appear.



If the new layout is too different from the original, some of your text may not appear. Before deciding on a new layout, check carefully to make sure no important information will be lost.

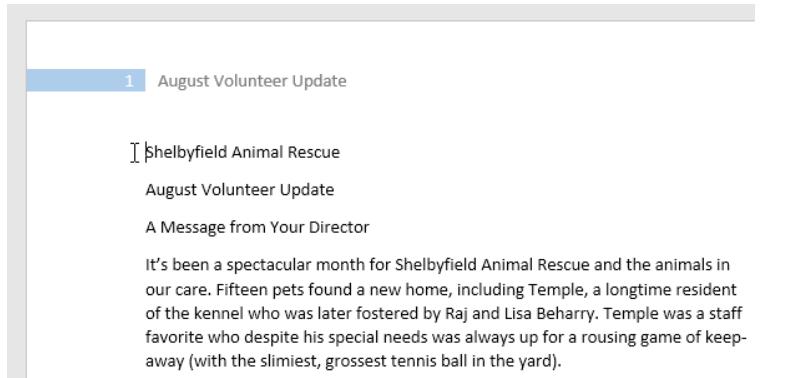
Lesson 29: Applying and Modifying Styles

Introduction

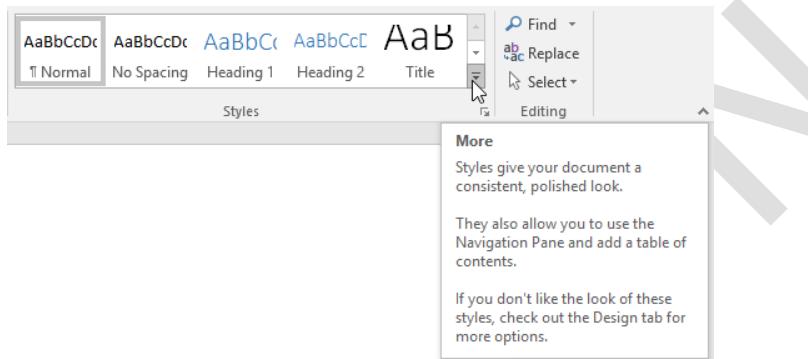
A style is a predefined combination of font style, color, and size that can be applied to any text in your document. Styles can help your documents achieve a more professional look and feel. You can also use styles to quickly change several things in your document at the same time.

To apply a style:

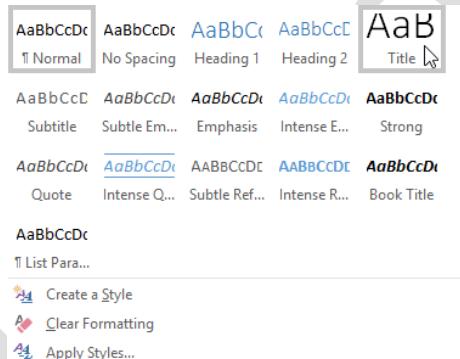
1. Select the text you want to format, or place your cursor at the beginning of the line.



2. In the Styles group on the Home tab, click the More drop-down arrow.



3. Select the desired style from the drop-down menu.



4. The text will appear in the selected style.



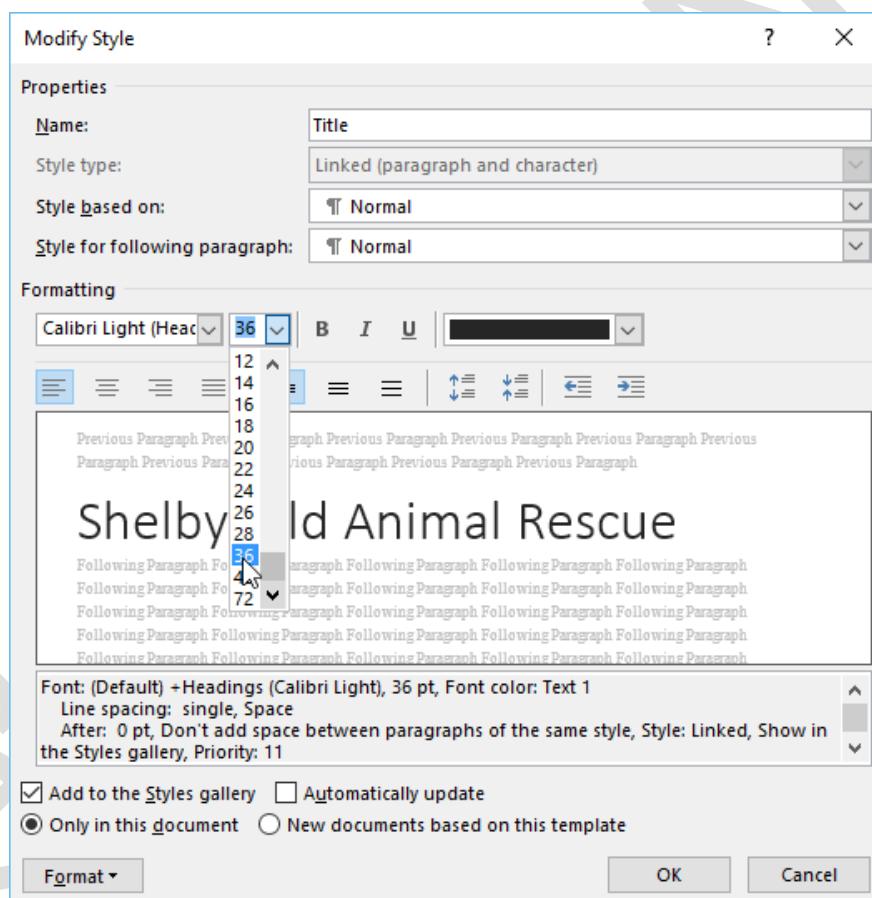
To apply a style set:

Style sets include a combination of title, heading, and paragraph styles. Style sets allow you to format all elements in your document at once instead of modifying each element separately.

1. From the Design tab, click the More drop-down arrow in the Document Formatting group.
2. Choose the desired style set from the drop-down menu.
3. The selected style set will be applied to your entire document.

To modify a style:

1. In the Styles group on the Home tab, right-click the style you want to change and select Modify from the drop-down menu.
2. A dialog box will appear. Make the desired formatting changes, such as font style, size, and color. If you want, you can also change the name of the style. Click OK to save your changes.



3. The style will be modified.

When you modify a style, you're changing every instance of that style in the document. In the example below, we've modified the Normal style to use a larger font size. Because both paragraphs use the Normal style, they've been updated automatically to use the new size.

To create a new style:

1. Click the arrow in the bottom-right corner of the Styles group.
2. The Styles task pane will appear. Select the New Style button at the bottom of the task pane.
3. A dialog box will appear. Enter a name for the style, choose the desired text formatting, then click OK.
4. The new style will be applied to the currently selected text. It will also appear in the Styles group.

You can also use styles to create a table of contents for your document.

Lesson 30: Mail Merge

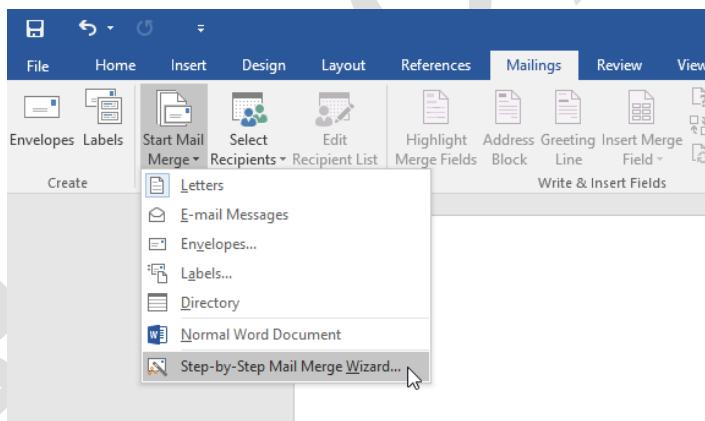
Introduction

Mail Merge is a useful tool that allows you to produce multiple letters, labels, envelopes, name tags, and more using information stored in a list, database, or spreadsheet. When performing a Mail Merge, you will need a Word document (you can start with an existing one or create a new one) and a recipient list, which is typically an Excel workbook.

Optional: If you'd like to work along with the lesson, you can download the examples below:

To use Mail Merge:

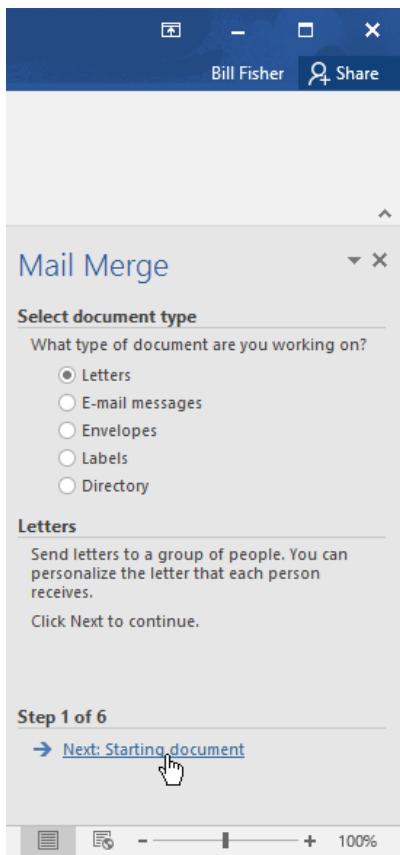
1. Open an existing Word document, or create a new one.
2. From the Mailings tab, click the Start Mail Merge command and select Step-by-Step Mail Merge Wizard from the drop-down menu.



The Mail Merge pane will appear and guide you through the six main steps to complete a merge. The following example demonstrates how to create a form letter and merge the letter with a recipient list.

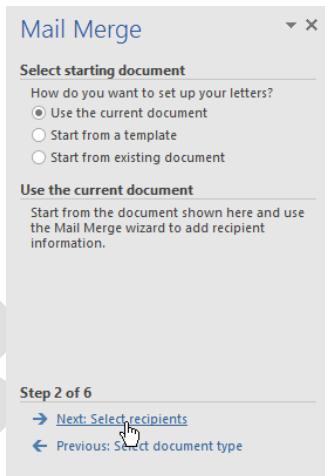
Step 1:

- From the Mail Merge task pane on the right side of the Word window, choose the type of document you want to create. In our example, we'll select Letters. Then click Next: Starting document to move to Step 2.



Step 2:

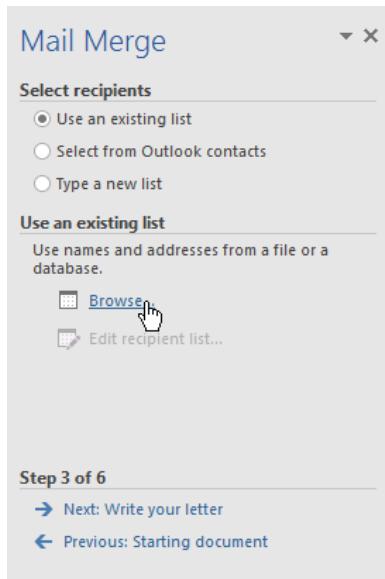
- Select Use the current document, then click Next: Select recipients to move to Step 3.



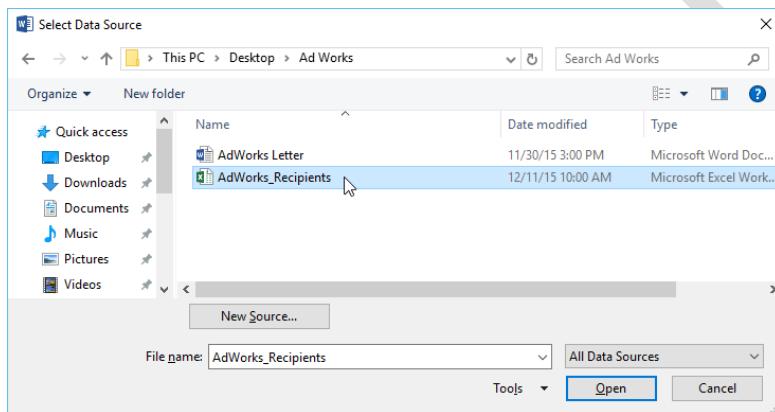
Step 3:

Now you'll need an address list so Word can automatically place each address into the document. The list can be in an existing file, such as an Excel workbook, or you can type a new address list from within the Mail Merge Wizard.

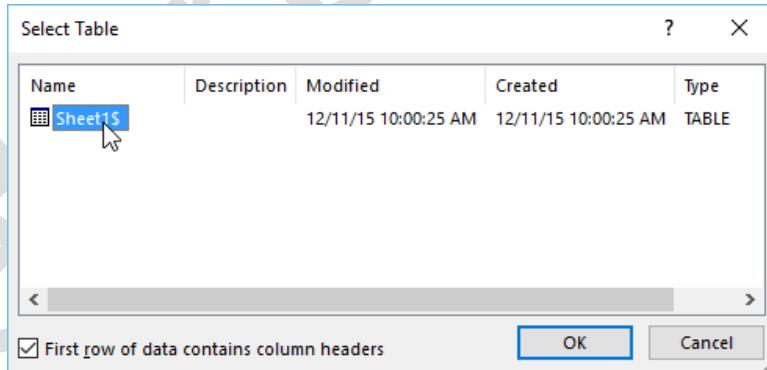
1. Select Use an existing list, then click Browse to select the file.



2. Locate your file, then click Open.



3. If the address list is in an Excel workbook, select the worksheet that contains the list, then click OK.



4. In the Mail Merge Recipients dialog box, you can check or uncheck each box to control which recipients are included in the merge. By default, all recipients should be selected. When you're done, click OK.

Mail Merge Recipients

This is the list of recipients that will be used in your merge. Use the options below to add to or change your list. Use the checkboxes to add or remove recipients from the merge. When your list is ready, click OK.

Data S...	Last Name	First Name	Title	Address
AdWorks_Recipient...	Albertson	Kathy	Ms.	1024 Lakeview Cir
AdWorks_Recipient...	Brennan	Michael	Mr.	1123 Main St
AdWorks_Recipient...	Davis	William	Mr.	540 W 4th St, Apt 121
AdWorks_Recipient...	Forest	Eliza	Ms.	PO Box 4551
AdWorks_Recipient...	Jones	Dan	Mr.	PO Box 805
AdWorks_Recipient...	Post	Melissa	Ms.	3202 Maplewood Ave
AdWorks_Recipient...	Thompson	Shannon	Ms.	500 Acme Ln, Apt 3C
AdWorks_Recipient...	Walters	Chris	Mr.	436 Church St

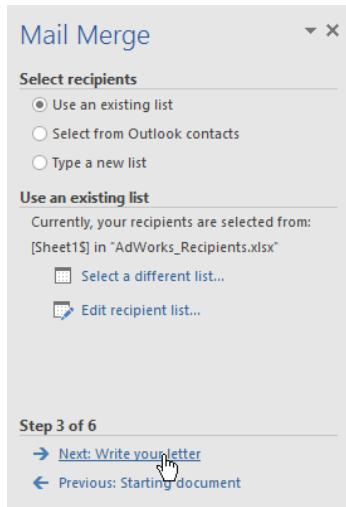
Data Source Refine recipient list

AdWorks_Recipients.xlsx

Sort... Filter... Find duplicates... Find recipient... Validate addresses...

Edit... Refresh OK

5. Click Next: Write your letter to move to Step 4.



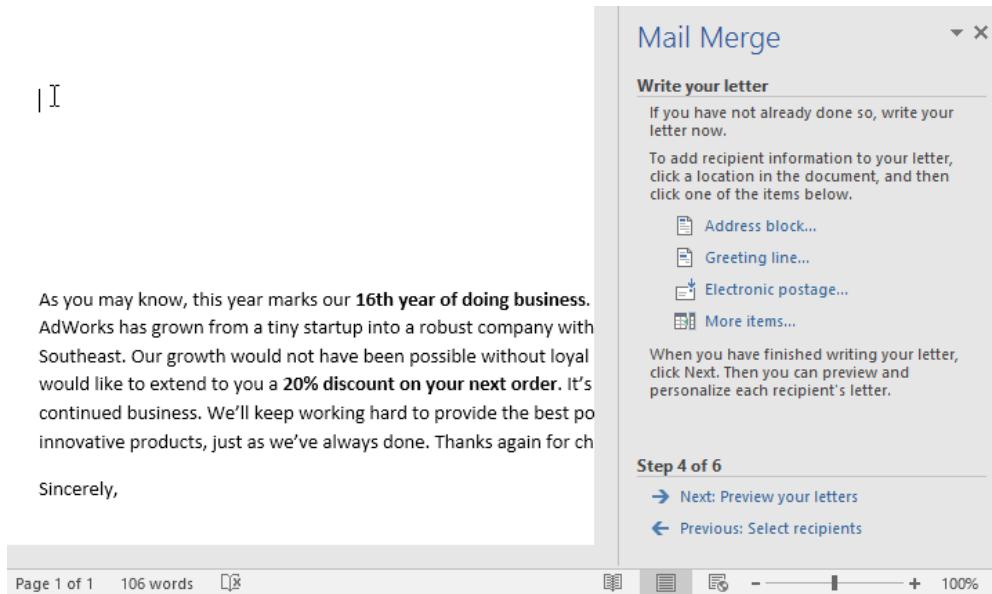
If you don't have an existing address list, you can click the Type a new list button and click Create, then type your address list manually.

Step 4:

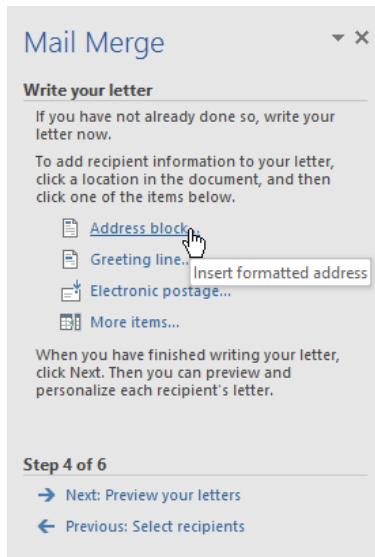
Now you're ready to write your letter. When it's printed, each copy of the letter will basically be the same; only the recipient data (such as the name and address) will be different. You'll need to add placeholders for the recipient data so Mail Merge knows exactly where to add the data.

To insert recipient data:

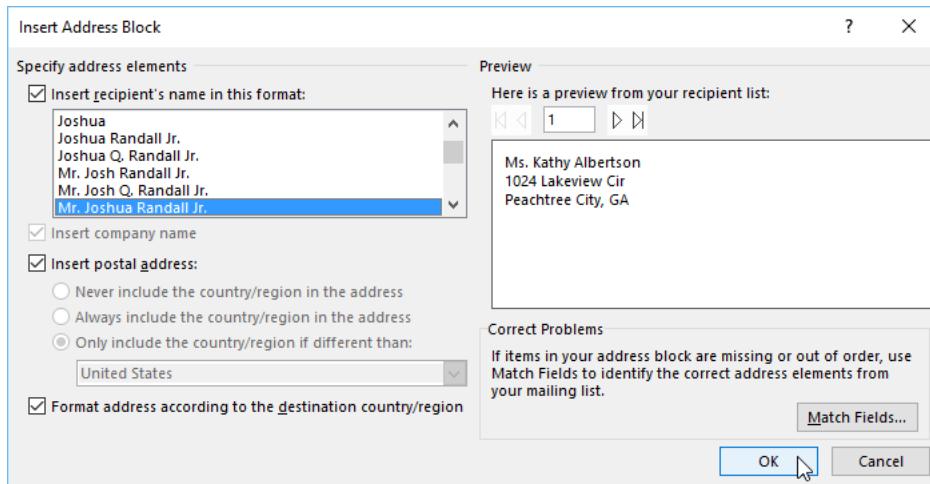
1. Place the insertion point in the document where you want the information to appear.



2. Choose one of the placeholder options. In our example, we'll select Address block.



3. Depending on your selection, a dialog box may appear with various customization options. Select the desired options, then click OK.



4. A placeholder will appear in your document (for example, «AddressBlock»).

The document contains a letter body with the placeholder «AddressBlock» highlighted by a red box. The letter body reads:

As you may know, this year marks our **16th year of doing business**. AdWorks has grown from a tiny startup into a robust company with Southeast. Our growth would not have been possible without loyal would like to extend to you a **20% discount on your next order**. It's continued business. We'll keep working hard to provide the best po innovative products, just as we've always done. Thanks again for ch

Sincerely,

To the right of the document is the 'Mail Merge' ribbon tab, which includes sections for 'Write your letter' (with instructions to click a location in the document to add recipient information), 'Step 4 of 6', and navigation links for 'Next: Preview your letters' and 'Previous: Select recipients'.

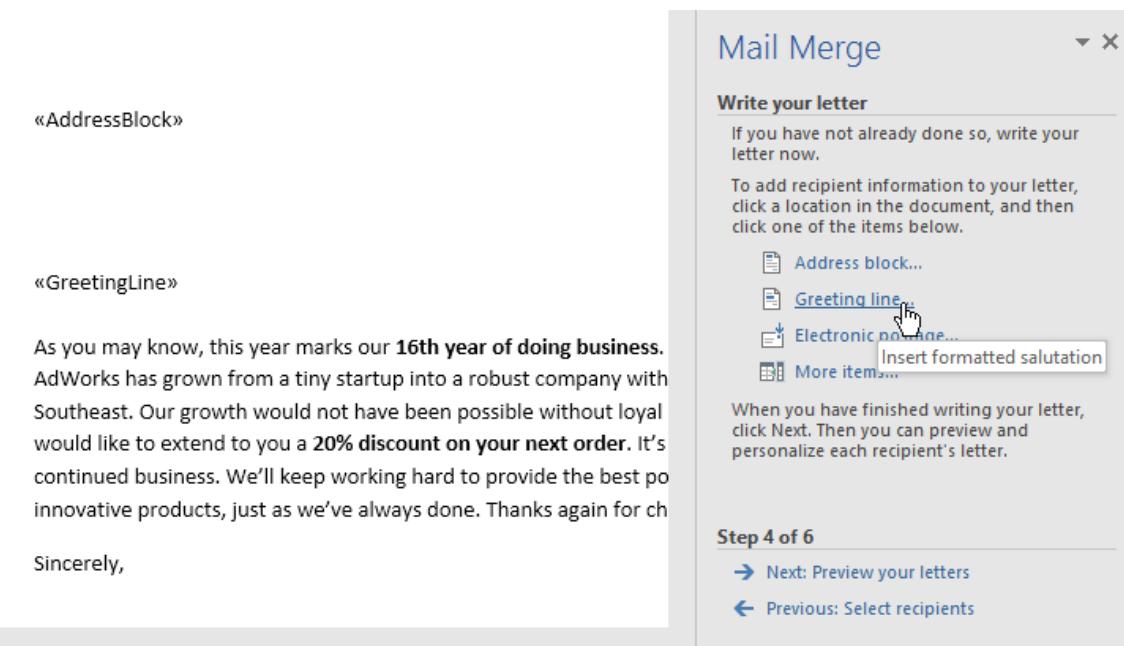
5. Add any other placeholders you want. In our example, we'll add a Greeting line placeholder just above the body of the letter.

«AddressBlock»

«GreetingLine»

As you may know, this year marks our **16th year of doing business**. AdWorks has grown from a tiny startup into a robust company with Southeast. Our growth would not have been possible without loyal would like to extend to you a **20% discount on your next order**. It's continued business. We'll keep working hard to provide the best po innovative products, just as we've always done. Thanks again for ch

Sincerely,



Mail Merge

Write your letter

If you have not already done so, write your letter now.

To add recipient information to your letter, click a location in the document, and then click one of the items below.

- Address block...
- Greeting line...
- Electronic postage...
- More items...

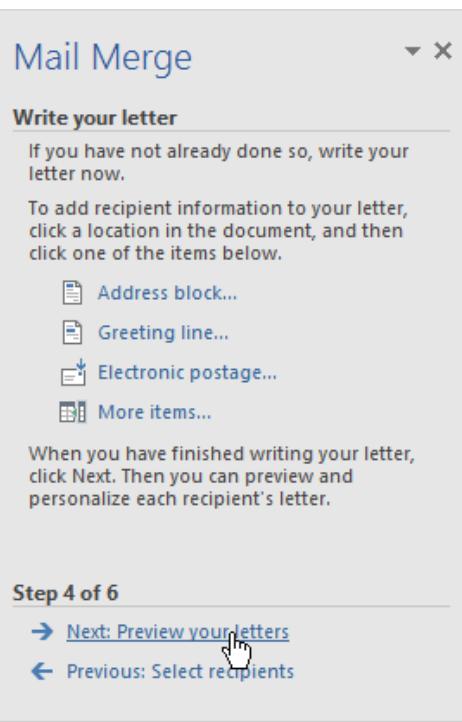
When you have finished writing your letter, click Next. Then you can preview and personalize each recipient's letter.

Step 4 of 6

→ [Next: Preview your letters](#)

← [Previous: Select recipients](#)

6. When you're done, click Next: Preview your letters to move to Step 5.



Mail Merge

Write your letter

If you have not already done so, write your letter now.

To add recipient information to your letter, click a location in the document, and then click one of the items below.

- Address block...
- Greeting line...
- Electronic postage...
- More items...

When you have finished writing your letter, click Next. Then you can preview and personalize each recipient's letter.

Step 4 of 6

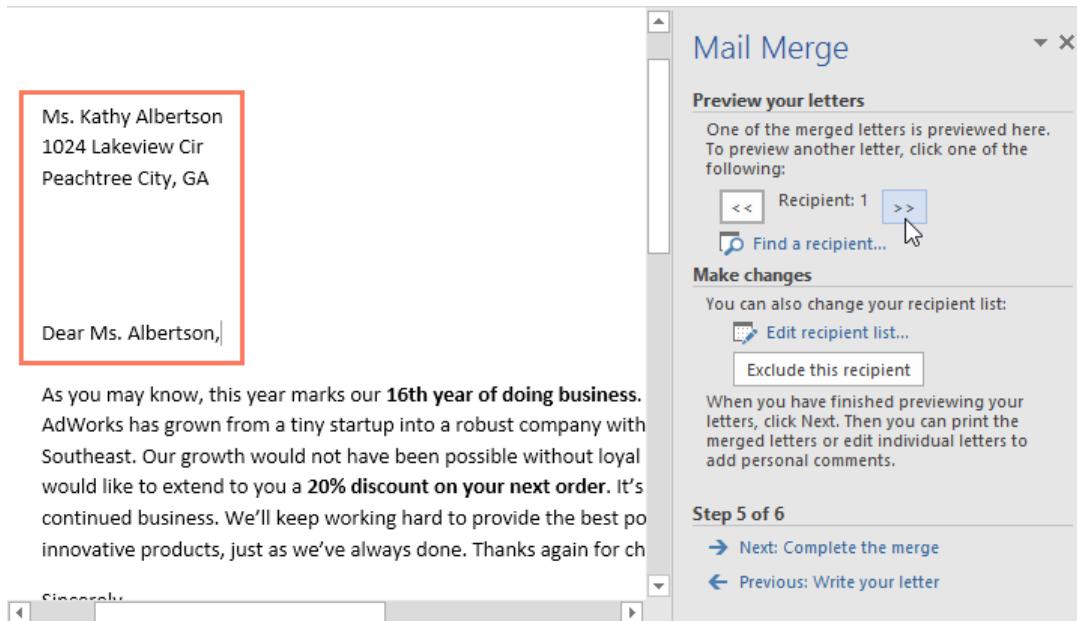
→ [Next: Preview your letters](#)

← [Previous: Select recipients](#)

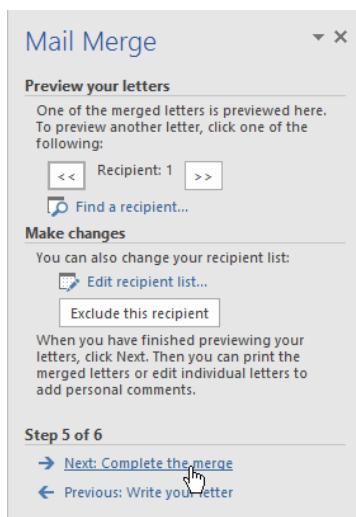
For some letters, you'll only need to add an Address block and Greeting line. But you can also add more placeholders (such as recipients' names or addresses) in the body of the letter to personalize it even further.

Step 5:

1. Preview the letters to make sure the information from the recipient list appears correctly in the letter. You can use the left and right scroll arrows to view each version of the document.

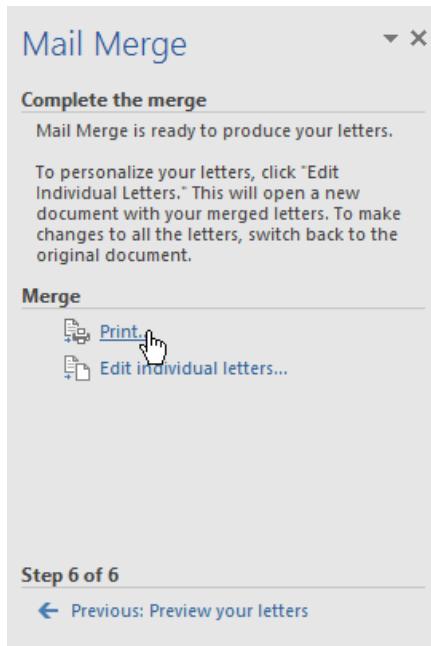


2. If everything looks correct, click Next: Complete the merge to move to Step 6.

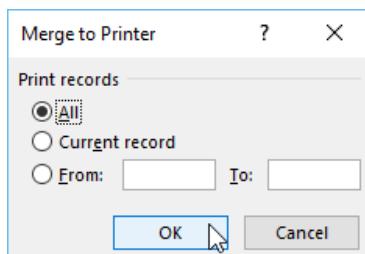


Step 6:

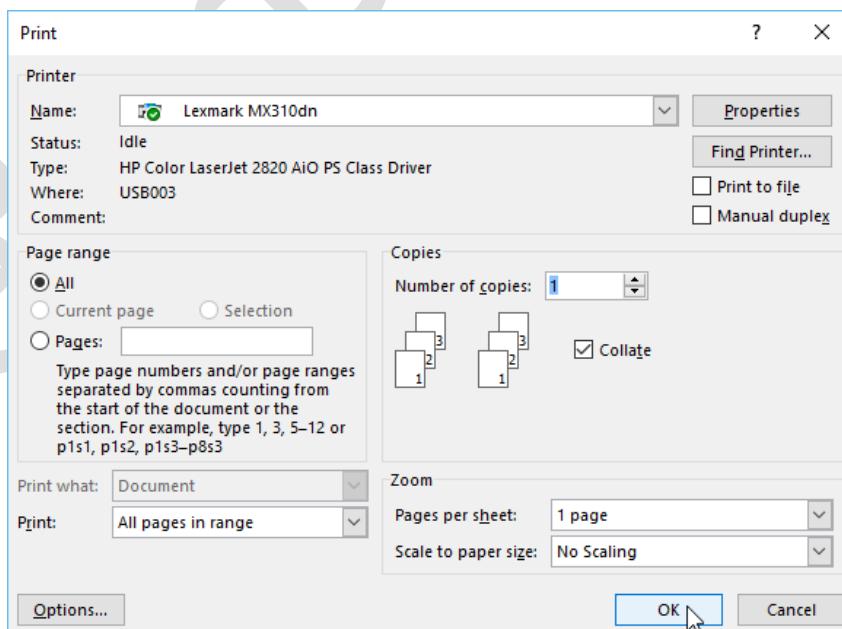
1. Click Print to print the letters.



2. A dialog box will appear. Decide if you want to print All of the letters, the current document (record), or only a select group, then click OK. In our example, we'll print all of the letters.



3. The Print dialog box will appear. Adjust the print settings if needed, then click OK. The letters will be printed.



Excel worksheet \

Introduction

Excel is a spreadsheet program that allows you to store, organize, and analyze information. While you may think Excel is only used by certain people to process complicated data, anyone can learn how to take advantage of the program's powerful features. Whether you're keeping a budget, organizing a training log, or creating an invoice, Excel makes it easy to work with different types of data.

Watch the video below to learn more about Excel.

The Excel Start Screen

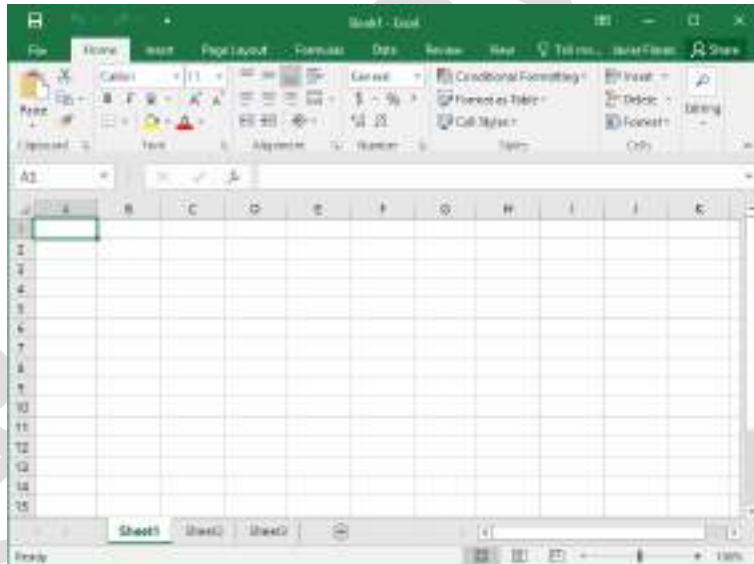
When you open Excel for the first time, the Excel Start Screen will appear. From here, you'll be able to create a new workbook, choose a template, and access your recently edited workbooks.

- **From the Excel Start Screen, locate and select Blank workbook to access the Excel interface.**

The parts of the Excel window

Some parts of the Excel window (like the Ribbon and scroll bars) are standard in most other Microsoft programs. However, there are other features that are more specific to spreadsheets, such as the formula bar, name box, and worksheet tabs.

Click the buttons in the interactive below to become familiar with the parts of the Excel interface.



Working with the Excel environment

The Ribbon and Quick Access Toolbar are where you will find the commands to perform common tasks in Excel. The Backstage view gives you various options for saving, opening a file, printing, and sharing your document.

The Ribbon

Excel uses a tabbed Ribbon system instead of traditional menus. The Ribbon contains multiple tabs, each with several groups of commands. You will use these tabs to perform the most common tasks in Excel.

- Each tab will have one or more groups.



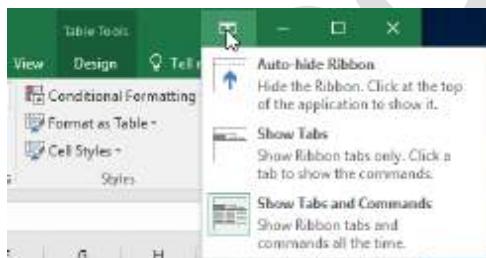
- Some groups will have an arrow you can click for more options.



- Click a tab to see more commands.



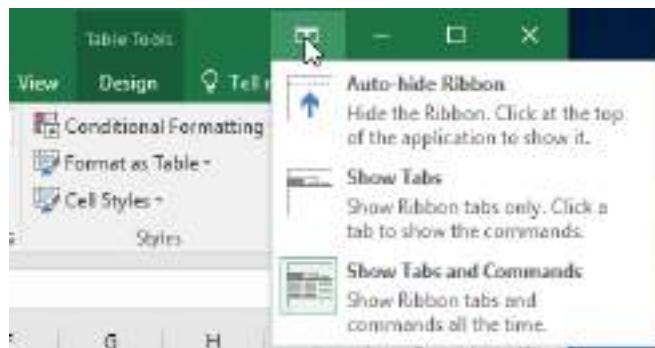
- You can adjust how the Ribbon is displayed with the Ribbon Display Options.



Certain programs, such as Adobe Acrobat Reader, may install additional tabs to the Ribbon. These tabs are called add-ins.

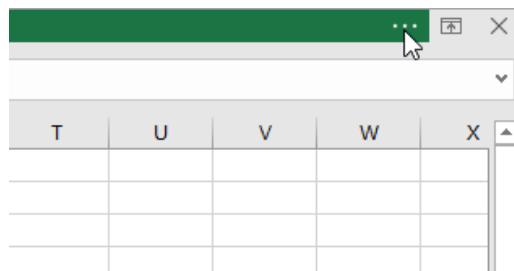
To change the Ribbon Display Options:

The Ribbon is designed to respond to your current task, but you can choose to minimize it if you find that it takes up too much screen space. Click the Ribbon Display Options arrow in the upper-right corner of the Ribbon to display the drop-down menu.



There are three modes in the Ribbon Display Options menu:

- **Auto-hide Ribbon:** Auto-hide displays your workbook in full-screen mode and completely hides the Ribbon. To show the Ribbon, click the Expand Ribbon command at the top of screen.



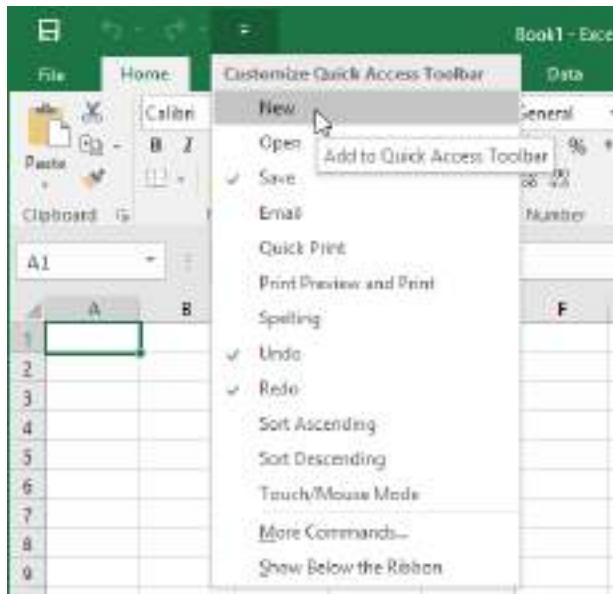
- **Show Tabs:** This option hides all command groups when they're not in use, but tabs will remain visible. To show the Ribbon, simply click a tab.
- **Show Tabs and Commands:** This option maximizes the Ribbon. All of the tabs and commands will be visible. This option is selected by default when you open Excel for the first time.

The Quick Access Toolbar

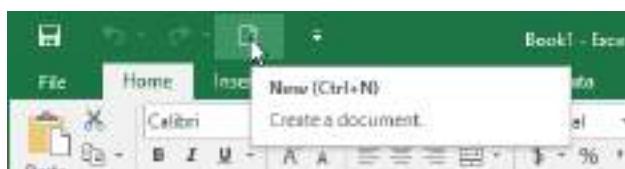
Located just above the Ribbon, the Quick Access Toolbar lets you access common commands no matter which tab is selected. By default, it includes the Save, Undo, and Repeat commands. You can add other commands depending on your preference.

To add commands to the Quick Access Toolbar:

1. Click the drop-down arrow to the right of the Quick Access Toolbar.
2. Select the command you want to add from the drop-down menu. To choose from additional commands, select More Commands.



3. The command will be added to the Quick Access Toolbar.



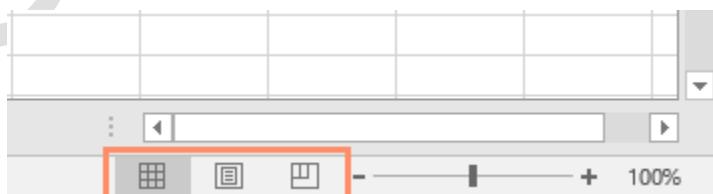
How to use Tell me:

The Tell me box works like a search bar to help you quickly find tools or commands you want to use.

1. Type in your own words what you want to do.
2. The results will give you a few relevant options. To use one, click it like you would a command on the Ribbon.

Worksheet views

Excel has a variety of viewing options that change how your workbook is displayed. These views can be useful for various tasks, especially if you're planning to print the spreadsheet. To change worksheet views, locate the commands in the bottom-right corner of the Excel window and select Normal view, Page Layout view, or Page Break view.



- Normal view is the default view for all worksheets in Excel.

- **Page Layout view** displays how your worksheets will appear when printed. You can also add headers and footers in this view.
- **Page Break view** allows you to change the location of page breaks, which is especially helpful when printing a lot of data from Excel.

Backstage view

Backstage view gives you various options for saving, opening a file, printing, and sharing your workbooks.

To access Backstage view:

1. Click the File tab on the Ribbon. Backstage view will appear.

Click the buttons in the interactive below to learn more about using Backstage view.

Lesson 2: Understanding OneDrive

Introduction

Many of the features in Microsoft Office are geared toward saving and sharing files online. OneDrive is Microsoft's online storage space that you can use to save, edit, and share your documents and other files. You can access OneDrive from your computer, smartphone, or any of the devices you use.

Once you have a Microsoft account, you'll be able to sign in to Office. Just click Sign in in the upper-right corner of the Excel window.

Benefits of using OneDrive

Once you're signed in to your Microsoft account, there are a few of the things you'll be able to do with OneDrive:

- **Access your files anywhere:** When you save your files to OneDrive, you'll be able to access them from any computer, tablet, or smartphone that has an Internet connection. You'll also be able to create new documents from OneDrive.
- **Back up your files:** Saving files to OneDrive gives them an extra layer of protection. Even if something happens to your computer, OneDrive will keep your files safe and accessible.
- **Share files:** It's easy to share your OneDrive files with friends and coworkers. You can choose whether they can edit or simply read files. This option is great for collaboration because multiple people can edit a document at the same time (this is also known as co-authoring).

Saving and opening files

When you're signed in to your Microsoft account, OneDrive will appear as an option whenever you save or open a file. You still have the option of saving files to your computer. However, saving files to your OneDrive allows you to access them from any

other computer, and it also allows you to share files with friends and coworkers.

For example, when you click Save As, you can select either OneDrive or This PC as the save location.

Lesson 3: Creating and Opening Workbooks

Introduction

Excel files are called workbooks. Whenever you start a new project in Excel, you'll need to create a new workbook. There are several ways to start working with a workbook in Excel. You can choose to create a new workbook—either with a blank workbook or a predesigned template—or open an existing workbook.

Watch the video below to learn more about creating and opening workbooks in Excel.

About OneDrive

Whenever you're opening or saving a workbook, you'll have the option of using your OneDrive, which is the online file storage service included with your Microsoft account.

To create a new blank workbook:

1. Select the File tab. Backstage view will appear.
2. Select New, then click Blank workbook.
3. A new blank workbook will appear.

To open an existing workbook:

In addition to creating new workbooks, you'll often need to open a workbook that was previously saved.

1. Navigate to Backstage view, then click Open.
2. Select Computer, then click Browse. You can also choose OneDrive to open files stored on your OneDrive.
3. The Open dialog box will appear. Locate and select your workbook, then click Open.

If you've opened the desired workbook recently, you can browse your Recent Workbooks rather than search for the file.

To pin a workbook:

If you frequently work with the same workbook, you can pin it to Backstage view for faster access.

1. Navigate to Backstage view, then click Open. Your recently edited workbooks will appear.
2. Hover your mouse over the workbook you want to pin. A pushpin icon will appear next to the workbook. Click the pushpin icon.

3. The workbook will stay in Recent Workbooks. To unpin a workbook, simply click the pushpin icon again.

Using templates

A template is a predesigned spreadsheet you can use to create a new workbook quickly. Templates often include custom formatting and predefined formulas, so they can save you a lot of time and effort when starting a new project.

To create a new workbook from a template:

1. Click the File tab to access Backstage view.
2. Select New. Several templates will appear below the Blank workbook option.
3. Select a template to review it.
4. A preview of the template will appear, along with additional information on how the template can be used.
5. Click Create to use the selected template.
6. A new workbook will appear with the selected template.

You can also browse templates by category or use the search bar to find something more specific.

It's important to note that not all templates are created by Microsoft. Many are created by third-party providers and even individual users, so some templates may work better than others.

Compatibility Mode

Sometimes you may need to work with workbooks that were created in earlier versions of Microsoft Excel, like Excel 2010 or Excel 2007. When you open these types of workbooks, they will appear in Compatibility Mode.

Compatibility Mode disables certain features, so you'll only be able to access commands found in the program that was used to create the workbook. For example, if you open a workbook created in Excel 2003, you can only use tabs and commands found in Excel 2003.

In the image below, you can see that the workbook is in Compatibility Mode, which is indicated at the top of the window to the right of the file name. This will disable some Excel features, which will be grayed out on the Ribbon.

To exit Compatibility Mode, you'll need to convert the workbook to the current version type. However, if you're collaborating with others who only have access to an earlier version of Excel, it's best to leave the workbook in Compatibility Mode so the format will not change.

To convert a workbook:

If you want access to the newer features, you can convert the spreadsheet to the current file format.

Note that converting a file may cause some changes to the original layout of the workbook.

1. Click the File tab to access Backstage view.
2. Locate and select the Convert command.
3. The Save As dialog box will appear. Select the location where you want to save the workbook, enter a file name for the workbook, and click Save.
4. The workbook will be converted to the newest file type.

Lesson 4: Saving and Sharing Workbooks

Introduction

Whenever you create a new workbook in Excel, you'll need to know how to save it in order to access and edit it later. As with previous versions of Excel, you can save files locally to your computer. You can also save a workbook to the cloud using OneDrive, as well as export and share workbooks with others directly from Excel.

Watch the video below to learn more about saving and sharing workbooks in Excel.

About OneDrive

Whenever you're opening or saving a workbook, you'll have the option of using your OneDrive, which is the online file storage service included with your Microsoft account.

Save and Save As

Excel offers two ways to save a file: Save and Save As. These options work in similar ways, with a few important differences:

- **Save:** When you create or edit a workbook, you'll use the Save command to save your changes. You'll use this command most of the time. When you save a file, you'll only need to choose a file name and location the first time. Then you can just click the Save command to save it with the same name and location.
- **Save As:** You'll use this command to create a copy of a workbook while keeping the original. When you use Save As, you'll need to choose a different name and/or location for the copied version.

To save a workbook:

It's important to save your workbook whenever you start a new project or make changes to an existing one. Saving early and often can prevent your work from being lost. You'll also need to pay close attention to where you save the workbook so it will be easy to find later.

1. Locate and select the Save command on the Quick Access Toolbar.
2. If you're saving the file for the first time, the Save As pane will appear in Backstage view.
3. You'll then need to choose where to save the file and give it a file name. To save the workbook to your computer, select Computer, then click Browse. You can also click OneDrive to save the file to your OneDrive.

4. The Save As dialog box will appear. Select the location where you want to save the workbook.
5. Enter a file name for the workbook, then click Save.
6. The workbook will be saved. You can click the Save command again to save your changes as you modify the workbook.

You can also access the Save command by pressing **Ctrl+S** on your keyboard.

Using Save As to make a copy

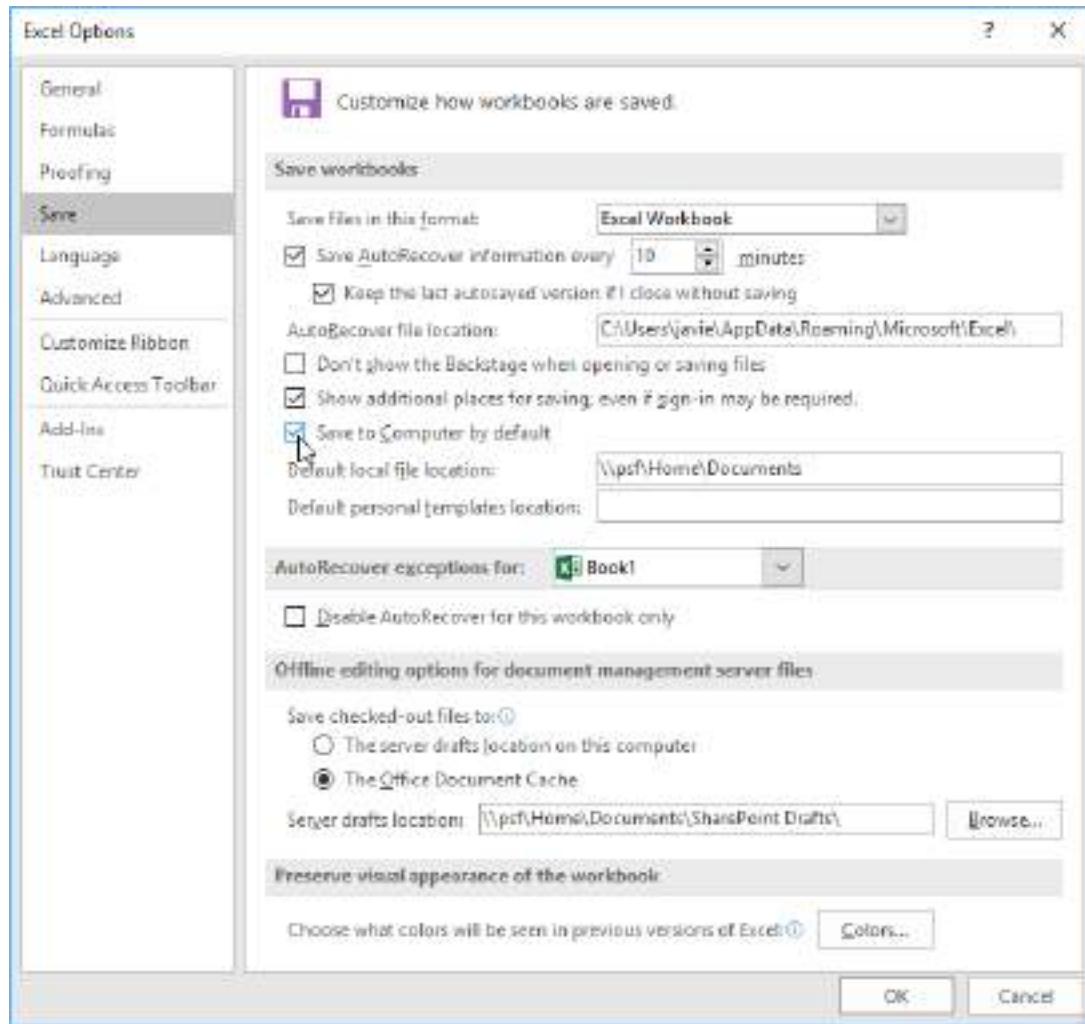
If you want to save a different version of a workbook while keeping the original, you can create a copy. For example, if you have a file named Sales Data, you could save it as Sales Data 2 so you'll be able to edit the new file and still refer back to the original version.

To do this, click the Save As command in Backstage view. Just like when saving a file for the first time, you'll need to choose where to save the file and give it a new file name.

To change the default save location:

If you don't want to use OneDrive, you may be frustrated that OneDrive is selected as the default location when saving. If you find it inconvenient to select Computer each time, you can change the default save location so Computer is selected by default.

1. Click the File tab to access Backstage view.
2. Click Options.
3. The Excel Options dialog box will appear. Select Save, check the box next to Save to Computer by default, then click OK. The default save location will be changed.



AutoRecover

Excel automatically saves your workbooks to a temporary folder while you are working on them. If you forget to save your changes or if Excel crashes, you can restore the file using AutoRecover.

To use AutoRecover:

- 1. Open Excel. If autosaved versions of a file are found, the Document Recovery pane will appear.**
- 2. Click to open an available file. The workbook will be recovered.**

By default, Excel autosaves every 10 minutes. If you are editing a workbook for less than 10 minutes, Excel may not create an autosaved version.

If you don't see the file you need, you can browse all autosaved files from Backstage view. Just select the File tab, click Manage Workbook, then choose Recover Unsaved Workbooks.

Exporting workbooks

By default, Excel workbooks are saved in the .xlsx file type. However, there may be times

when you need to use another file type, like a PDF or Excel 97-2003 workbook. It's easy to export your workbook from Excel to a variety of file types.

To export a workbook as a PDF file:

Exporting your workbook as an Adobe Acrobat document, commonly known as a PDF file, can be especially useful if you're sharing a workbook with someone who does not have Excel. A PDF will make it possible for recipients to view but not edit the content of your workbook.

- 1. Click the File tab to access Backstage view.**
- 2. Click Export, then select Create PDF/XPS.**
- 3. The Save As dialog box will appear. Select the location where you want to export the workbook, enter a file name, then click Publish.**

By default, Excel will only export the active worksheet. If you have multiple worksheets and want to save all of them in the same PDF file, click Options in the Save As dialog box. The Options dialog box will appear. Select Entire workbook, then click OK.

Whenever you export a workbook as a PDF, you'll also need to consider how your

To export a workbook to other file types:

You may also find it helpful to export your workbook to other file types, like an Excel 97-2003 workbook if you need to share with people using an older version of Excel, or a .CSV file if you need a plain-text version of your workbook.

- 1. Click the File tab to access Backstage view.**
- 2. Click Export, then select Change File Type.**
- 3. Select a common file type, then click Save As.**
- 4. The Save As dialog box will appear. Select the location where you want to export the workbook, enter a file name, then click Save.**

You can also use the Save as type: drop-down menu in the Save As dialog box to save workbooks in a variety of file types.

Sharing workbooks

Excel makes it easy to share and collaborate on workbooks using OneDrive. In the past, if you wanted to share a file with someone, you could send it as an email attachment. While convenient, this system also creates multiple versions of the same file, which can be difficult to organize.

When you share a workbook from Excel, you're actually giving others access to the exact

same file. This lets you and the people you share with edit the same workbook without having to keep track of multiple versions.

In order to share a workbook, it must first be saved to your OneDrive.

To share a workbook:

- 1. Click the File tab to access Backstage view, then click Share.**
- 2. Excel will return to Normal view and open the Share panel on the right side of the window. From here, you can invite people to share your document, see a list of who has access to the document, and set whether they can edit or only view the document.**

Lesson 5: Cell Basics

Introduction

Whenever you work with Excel, you'll enter information—or content—into cells. Cells are the basic building blocks of a worksheet. You'll need to learn the basics of cells and cell content to calculate, analyze, and organize data in Excel.

Understanding cells

Every worksheet is made up of thousands of rectangles, which are called cells. A cell is the intersection of a row and a column. In other words, it's where a row and column meet.

Columns are identified by letters (A, B, C), while rows are identified by numbers (1, 2, 3). Each cell has its own name—or cell address—based on its column and row. In the example below, the selected cell intersects column C and row 5, so the cell address is C5.

Note that the cell address also appears in the Name box in the top-left corner, and that a cell's column and row headings are highlighted when the cell is selected.

You can also select multiple cells at the same time. A group of cells is known as a cell range. Rather than a single cell address, you will refer to a cell range using the cell addresses of the first and last cells in the cell range, separated by a colon. For example, a cell range that included cells A1, A2, A3, A4, and A5 would be written as A1:A5. Take a look at the different cell ranges below:

- **Cell range A1:A8**
- **Cell range A1:F1**
- **Cell range A1:F8**

If the columns in your spreadsheet are labeled with numbers instead of letters, you'll need to change the default reference style for Excel.

To select a cell:

To input or edit cell content, you'll first need to select the cell.

1. Click a cell to select it. In our example, we'll select cell D9.
2. A border will appear around the selected cell, and the column heading and row heading will be highlighted. The cell will remain selected until you click another cell in the worksheet.

You can also select cells using the arrow keys on your keyboard.

To select a cell range:

Sometimes you may want to select a larger group of cells, or a cell range.

1. Click and drag the mouse until all of the adjoining cells you want to select are highlighted. In our example, we'll select the cell range B5:C18.
2. Release the mouse to select the desired cell range. The cells will remain selected until you click another cell in the worksheet.

Cell content

Any information you enter into a spreadsheet will be stored in a cell. Each cell can contain different types of content, including text, formatting, formulas, and functions.

- **Text:** Cells can contain text, such as letters, numbers, and dates.
- **Formatting attributes:** Cells can contain formatting attributes that change the way letters, numbers, and dates are displayed. For example, percentages can appear as 0.15 or 15%. You can even change a cell's text or background color.
- **Formulas and functions:** Cells can contain formulas and functions that calculate cell values. In our example, SUM(B2:B8) adds the value of each cell in the cell range B2:B8 and displays the total in cell B9.

To insert content:

1. Click a cell to select it. In our example, we'll select cell F9.
2. Type something into the selected cell, then press Enter on your keyboard. The content will appear in the cell and the formula bar. You can also input and edit cell content in the formula bar.

To delete (or clear) cell content:

1. Select the cell(s) with content you want to delete. In our example, we'll select the cell range A10:H10.
2. Select the Clear command on the Home tab, then click Clear Contents.
3. The cell contents will be deleted.

You can also use the Delete key on your keyboard to delete content from multiple cells at once. The Backspace key will only delete content from one cell at a time.

To delete cells:

There is an important difference between deleting the content of a cell and deleting the cell itself. If you delete the entire cell, the cells below it will shift to fill in the

gaps and replace the deleted cells.

- 1. Select the cell(s) you want to delete. In our example, we'll select A10:H10.**
- 2. Select the Delete command from the Home tab on the Ribbon.**
- 3. The cells below will shift up and fill in the gaps.**

To copy and paste cell content:

Excel allows you to copy content that is already entered into your spreadsheet and paste this content to other cells, which can save you time and effort.

- 1. Select the cell(s) you want to copy. In our example, we'll select F9.**
- 2. Click the Copy command on the Home tab, or press Ctrl+C on your keyboard.**
- 3. Select the cell(s) where you want to paste the content. In our example, we'll select F12:F17. The copied cell(s) will have a dashed box around them.**
- 4. Click the Paste command on the Home tab, or press Ctrl+V on your keyboard.**
- 5. The content will be pasted into the selected cells.**

To access additional paste options:

You can also access additional paste options, which are especially convenient when working with cells that contain formulas or formatting. Just click the drop-down arrow on the Paste command to see these options.

Instead of choosing commands from the Ribbon, you can access commands quickly by right-clicking. Simply select the cell(s) you want to format, then right-click the mouse. A drop-down menu will appear, where you'll find several commands that are also located on the Ribbon.

To cut and paste cell content:

Unlike copying and pasting, which duplicates cell content, cutting allows you to move content between cells.

- 1. Select the cell(s) you want to cut. In our example, we'll select G5:G6.**
- 2. Right-click the mouse and select the Cut command. You can also use the command on the Home tab, or press Ctrl+X on your keyboard.**
- 3. Select the cells where you want to paste the content. In our example, we'll select F10:F11. The cut cells will now have a dashed box around them.**
- 4. Right-click the mouse and select the Paste command. You can also use the command on the Home tab, or press Ctrl+V on your keyboard.**
- 5. The cut content will be removed from the original cells and pasted into the selected cells.**

To drag and drop cells:

Instead of cutting, copying, and pasting, you can drag and drop cells to move their

contents.

- 1. Select the cell(s) you want to move. In our example, we'll select H4:H12.**
- 2. Hover the mouse over the border of the selected cell(s) until the mouse changes to a pointer with four arrows.**
- 3. Click and drag the cells to the desired location. In our example, we'll move them to G4:G12.**
- 4. Release the mouse. The cells will be dropped in the selected location.**

To use the fill handle:

If you're copying cell content to adjacent cells in the same row or column, the fill handle is a good alternative to the copy and paste commands.

- 1. Select the cell(s) containing the content you want to use, then hover the mouse over the lower-right corner of the cell so the fill handle appears.**
- 2. Click and drag the fill handle until all of the cells you want to fill are selected. In our example, we'll select G13:G17.**
- 3. Release the mouse to fill the selected cells.**

To continue a series with the fill handle:

The fill handle can also be used to continue a series. Whenever the content of a row or column follows a sequential order, like numbers (1, 2, 3) or days (Monday, Tuesday, Wednesday), the fill handle can guess what should come next in the series. In most cases, you will need to select multiple cells before using the fill handle to help Excel determine the series order. Let's take a look at an example:

- 1. Select the cell range that contains the series you want to continue. In our example, we'll select E4:G4.**
- 2. Click and drag the fill handle to continue the series.**
- 3. Release the mouse. If Excel understood the series, it will be continued in the selected cells. In our example, Excel added Part 4, Part 5, and Part 6 to H4:J4.**

You can also double-click the fill handle instead of clicking and dragging. This can be useful with larger spreadsheets, where clicking and dragging may be awkward.

Watch the video below to see an example of double-clicking the fill handle.

Lesson 6: Modifying Columns, Rows, and Cells

Introduction

By default, every row and column of a new workbook is set to the same height and width. Excel allows you to modify column width and row height in different ways, including wrapping text and merging cells.

To modify column width:

In our example below, column C is too narrow to display all of the content in these cells. We can make all of this content visible by changing the width of column C.

1. Position the mouse over the column line in the column heading so the cursor becomes a double arrow.
2. Click and drag the mouse to increase or decrease the column width.
3. Release the mouse. The column width will be changed.

With numerical data, the cell will display pound signs (# #####) if the column is too narrow. Simply increase the column width to make the data visible.

To AutoFit column width:

The AutoFit feature will allow you to set a column's width to fit its content automatically.

1. Position the mouse over the column line in the column heading so the cursor becomes a double arrow.
2. Double-click the mouse. The column width will be changed automatically to fit the content.

You can also AutoFit the width for several columns at the same time. Simply select the columns you want to AutoFit, then select the AutoFit Column Width command from the Format drop-down menu on the Home tab. This method can also be used for row height.

To modify row height:

1. Position the cursor over the row line so the cursor becomes a double arrow.
2. Click and drag the mouse to increase or decrease the row height.
3. Release the mouse. The height of the selected row will be changed.

To modify all rows or columns:

Instead of resizing rows and columns individually, you can modify the height and width of every row and column at the same time. This method allows you to set a uniform size for every row and column in your worksheet. In our example, we will set a uniform row height.

1. Locate and click the Select All button just below the name box to select every cell in the worksheet.
2. Position the mouse over a row line so the cursor becomes a double arrow.
3. Click and drag the mouse to increase or decrease the row height, then release the mouse when you are satisfied. The row height will be changed for the entire worksheet.

Inserting, deleting, moving, and hiding

After you've been working with a workbook for a while, you may find that you want to insert new columns or rows, delete certain rows or columns, move them to a different location in the worksheet, or even hide them.

To insert rows:

1. Select the row heading below where you want the new row to appear. In this example, we want to insert a row between rows 4 and 5, so we'll select row 5.
2. Click the Insert command on the Home tab.
3. The new row will appear above the selected row.

When inserting new rows, columns, or cells, you will see a paintbrush icon next to the inserted cells. This button allows you to choose how Excel formats these cells. By default, Excel formats inserted rows with the same formatting as the cells in the row above. To access additional options, hover your mouse over the icon, then click the drop-down arrow.

To insert columns:

1. Select the column heading to the right of where you want the new column to appear. For example, if you want to insert a column between columns D and E, select column E.
2. Click the Insert command on the Home tab.
3. The new column will appear to the left of the selected column.

When inserting rows and columns, make sure to select the entire row or column by clicking the heading. If you select only a cell in the row or column, the Insert command will only insert a new cell.

To delete a row or column:

It's easy to delete a row or column that you no longer need. In our example we'll delete a row, but you can delete a column the same way.

1. Select the row you want to delete. In our example, we'll select row 9.
2. Click the Delete command on the Home tab.
3. The selected row will be deleted, and those around it will shift. In our example, row 10 has moved up, so it's now row 9.

It's important to understand the difference between deleting a row or column and simply clearing its contents. If you want to remove the content from a row or column without causing others to shift, right-click a heading, then select Clear Contents from the drop-down menu.

To move a row or column:

Sometimes you may want to move a column or row to rearrange the content of your worksheet. In our example we'll move a column, but you can move a row in the same way.

1. Select the desired column heading for the column you want to move.
2. Click the Cut command on the Home tab, or press Ctrl+X on your keyboard.
3. Select the column heading to the right of where you want to move the column. For example, if you want to move a column between columns E and F, select column F.
4. Click the Insert command on the Home tab, then select Insert Cut Cells from the drop-down menu.
5. The column will be moved to the selected location, and the columns around it will shift.

You can also access the Cut and Insert commands by right-clicking the mouse and selecting the desired commands from the drop-down menu.

To hide and unhide a row or column:

At times, you may want to compare certain rows or columns without changing the organization of your worksheet. To do this, Excel allows you to hide rows and columns as needed. In our example we'll hide a few columns, but you can hide rows in the same way.

1. Select the columns you want to hide, right-click the mouse, then select Hide from the formatting menu. In our example, we'll hide columns C, D, and E.
2. The columns will be hidden. The green column line indicates the location of the hidden columns.
3. To unhide the columns, select the columns on both sides of the hidden columns. In our example, we'll select columns B and F. Then right-click the mouse and select Unhide from the formatting menu.
4. The hidden columns will reappear.

Wrapping text and merging cells

Whenever you have too much cell content to be displayed in a single cell, you may decide to wrap the text or merge the cell rather than resize a column. Wrapping the text will automatically modify a cell's row height, allowing cell contents to be displayed on multiple lines. Merging allows you to combine a cell with adjacent empty cells to create one large cell.

To wrap text in cells:

1. Select the cells you want to wrap. In this example, we'll select the cells in column C.
2. Click the Wrap Text command on the Home tab.
3. The text in the selected cells will be wrapped.

Click the Wrap Text command again to unwrap the text.

To merge cells using the Merge & Center command:

1. Select the cell range you want to merge. In our example, we'll select A1:F1.
2. Click the Merge & Center command on the Home tab. In our example, we'll select the cell range A1:F1.
3. The selected cells will be merged, and the text will be centered.

To access additional merge options:

If you click the drop-down arrow next to the Merge & Center command on the Home tab, the Merge drop-down menu will appear.

From here, you can choose to:

- **Merge & Center:** This merges the selected cells into one cell and centers the text.

- **Merge Across:** This merges the selected cells into larger cells while keeping each row separate.
- **Merge Cells:** This merges the selected cells into one cell but does not center the text.
- **Unmerge Cells:** This unmerges selected cells.

Be careful when using this feature. If you merge multiple cells that all contain data, Excel will keep only the contents of the upper-left cell and discard everything else.

Centering across selection

Merging can be useful for organizing your data, but it can also create problems later on. For example, it can be difficult to move, copy, and paste content from merged cells. A good alternative to merging is to Center Across Selection, which creates a similar effect without actually combining cells.

Watch the video below to learn why you should use Center Across Selection instead of merging cells.

To use Center Across Selection:

1. Select the desired cell range. In our example, we'll select A1:F1. Note: If you already merged these cells, you should unmerge them before continuing to step 2.
2. Click the small arrow in the lower-right corner of the Alignment group on the Home tab.
3. A dialog box will appear. Locate and select the Horizontal drop-down menu, select Center Across Selection, then click OK.
4. The content will be centered across the selected cell range. As you can see, this creates the same visual result as merging and centering, but it preserves each cell within A1:F1.

Lesson 7: Formatting Cells

Introduction

All cell content uses the same formatting by default, which can make it difficult to read a workbook with a lot of information. Basic formatting can customize the look and feel of your workbook, allowing you to draw attention to specific sections and making your content easier to view and understand.

To change the font size:

1. Select the cell(s) you want to modify.
2. On the Home tab, click the drop-down arrow next to the Font Size command, then select the desired font size. In our example, we will choose 24 to make the text larger.
3. The text will change to the selected font size.

You can also use the Increase Font Size and Decrease Font Size commands or enter

a custom font size using your keyboard.

To change the font:

By default, the font of each new workbook is set to Calibri. However, Excel provides many other fonts you can use to customize your cell text. In the example below, we'll format our title cell to help distinguish it from the rest of the worksheet.

1. Select the cell(s) you want to modify.
2. On the Home tab, click the drop-down arrow next to the Font command, then select the desired font. In our example, we'll choose Century Gothic.
3. The text will change to the selected font.

When creating a workbook in the workplace, you'll want to select a font that is easy to read. Along with Calibri, standard reading fonts include Cambria, Times New Roman, and Arial.

To change the font color:

1. Select the cell(s) you want to modify.
2. On the Home tab, click the drop-down arrow next to the Font Color command, then select the desired font color. In our example, we'll choose Green.
3. The text will change to the selected font color.

Select More Colors at the bottom of the menu to access additional color options. We've changed the font color to a bright pink.

To use the Bold, Italic, and Underline commands:

1. Select the cell(s) you want to modify.
2. Click the Bold (B), Italic (I), or Underline (U) command on the Home tab. In our example, we'll make the selected cells bold.
3. The selected style will be applied to the text.

You can also press Ctrl+B on your keyboard to make selected text bold, Ctrl+I to apply italics, and Ctrl+U to apply an underline.

Cell borders and fill colors

Cell borders and fill colors allow you to create clear and defined boundaries for different sections of your worksheet. Below, we'll add cell borders and fill color to our header cells to help distinguish them from the rest of the worksheet.

To add a fill color:

1. Select the cell(s) you want to modify.
2. On the Home tab, click the drop-down arrow next to the Fill Color command, then select the fill color you want to use. In our example, we'll choose a dark gray.
3. The selected fill color will appear in the selected cells. We've also changed the font color to white to

make it more readable with this dark fill color.

To add a border:

1. Select the cell(s) you want to modify.
2. On the Home tab, click the drop-down arrow next to the Borders command, then select the border style you want to use. In our example, we'll choose to display All Borders.
3. The selected border style will appear.

You can draw borders and change the line style and color of borders with the Draw Borders tools at the bottom of the Borders drop-down menu.

Cell styles

Instead of formatting cells manually, you can use Excel's predesigned cell styles. Cell styles are a quick way to include professional formatting for different parts of your workbook, like titles and headers.

To apply a cell style:

In our example, we'll apply a new cell style to our existing title and header cells.

1. Select the cell(s) you want to modify.
2. Click the Cell Styles command on the Home tab, then choose the desired style from the drop-down menu.
3. The selected cell style will appear.

Applying a cell style will replace any existing cell formatting except for text alignment. You may not want to use cell styles if you've already added a lot of formatting to your workbook.

Text alignment

By default, any text entered into your worksheet will be aligned to the bottom-left of a cell, while any numbers will be aligned to the bottom-right. Changing the alignment of your cell content allows you to choose how the content is displayed in any cell, which can make your cell content easier to read.

Click the arrows in the slideshow below to learn more about the different text alignment options.

[arrow_back_ios](#)

Left Align: Aligns content to the left border of the cell

Center Align: Aligns content an equal distance from the left and right borders of the cell

Right Align: Aligns content to the right border of the cell

Top Align: Aligns content to the top border of the cell

Middle Align: Aligns content an equal distance from the top and bottom borders of the cell

Bottom Align: Aligns content to the bottom border of the cell

arrow_back_ios

To change horizontal text alignment:

In our example below, we'll modify the alignment of our title cell to create a more polished look and further distinguish it from the rest of the worksheet.

1. Select the cell(s) you want to modify.
2. Select one of the three horizontal alignment commands on the Home tab. In our example, we'll choose Center Align.
3. The text will realign.

To change vertical text alignment:

1. Select the cell(s) you want to modify.
2. Select one of the three vertical alignment commands on the Home tab. In our example, we'll choose Middle Align.
3. The text will realign.

You can apply both vertical and horizontal alignment settings to any cell.

The Format Painter

If you want to copy formatting from one cell to another, you can use the Format Painter command on the Home tab. When you click the Format Painter, it will copy all of the formatting from the selected cell. You can then click and drag over any cells where you want to paste the formatting.

Lesson 8: Understanding Number Formats

What are number formats?

Whenever you're working with a spreadsheet, it's a good idea to use appropriate number formats for your data. Number formats tell your spreadsheet exactly what type of data you're using, like percentages (%), currency (\$), times, dates, and so on.

Watch the video below to learn more about number formats in Excel.

Why use number formats?

Number formats not only make your spreadsheet easier to read, but they also make it easier to use. When you apply a number format, you're telling your spreadsheet exactly what types of values are stored in a cell. For example, the date format tells the spreadsheet that you're entering specific calendar dates. This allows the spreadsheet to better understand your data, which can help ensure that your data remains consistent and that your formulas are calculated correctly.

If you don't need to use a specific number format, the spreadsheet will usually apply the general number format by default. However, the general format may apply some small formatting changes to your data.

Applying number formats

Just like other types of formatting, like changing the font color, you'll apply number formats by selecting cells and choosing the desired formatting option. There are two main ways to choose a number format:

- Go to the Home tab, click the Number Format drop-down menu in the Number group, and select the desired format.
- Click one of the quick number-formatting commands below the drop-down menu.

You can also select the desired cells and press **Ctrl+1** on your keyboard to access additional number-formatting options.

In this example, we've applied the Currency number format, which adds currency symbols (\$) and displays two decimal places for any numerical values.

If you select any cells with number formatting, you can see the actual value of the cell in the formula bar. The spreadsheet will use this value for formulas and other calculations.

Using number formats correctly

There's more to number formatting than selecting cells and applying a format. Spreadsheets can actually apply number formatting automatically based on the way you enter data. This means you'll need to enter data in a way the program can understand, then ensure that cells are using the proper number format. For example, the image below shows how to use number formats correctly for dates, percentages, and times:

	Wrong	Right
Date	January 1st	1/1/2014
Percent	50	50%
Time	Noon	12:00 pm

Now that you know more about how number formats work, we'll look at a few number formats in action.

Percentage formats

One of the most helpful number formats is the percentage (%) format. It displays values as percentages, like 20% or 55%. This is especially helpful when calculating things like the cost of sales tax or a tip. When you type a percent sign (%) after a number, the percentage number format will be applied to that cell automatically.

As you may remember from math class, a percentage can also be written as a decimal. So 15% is the same thing as 0.15, 7.5% is 0.075, 20% is 0.20, 55% is 0.55, and so on.

There are many times when percentage formatting will be useful. For example, in the images below notice how the sales tax rate is formatted differently for each spreadsheet (5, 5%, and 0.05):

As you can see, the calculation in the spreadsheet on the left didn't work correctly. Without the percentage number format, our spreadsheet thinks we want to multiply \$22.50 by 5, not 5%. And while the spreadsheet on the right still works without percentage formatting, the spreadsheet in the middle is easier to read.

Date formats

Whenever you're working with dates, you'll want to use a date format to tell the spreadsheet that you're referring to specific calendar dates, like July 15, 2014. Date formats also allow you to work with a powerful set of date functions that use time and date information to calculate an answer.

Spreadsheets don't understand information the same way a person would. For instance, if you type October into a cell, the spreadsheet won't know you're entering a date so it will treat it like any other text. Instead, when you enter a date, you'll need to use a specific format your spreadsheet understands, like month/day/year (or day/month/year depending on which country you're in). In the example below, we'll type 10/12/2014 for October 12, 2014. Our spreadsheet will then automatically apply the date number format for the cell.

Now that we have our date correctly formatted, we can do different things with this data. For example, we could use the fill handle to continue the dates through the column, so a different day appears in each cell:

If the date formatting isn't applied automatically, it means the spreadsheet did not understand the data you entered. In the example below, we've typed March 15th. The spreadsheet did not understand that we were referring to a date, so this cell is still using the general number format.

On the other hand, if we type March 15 (without the "th"), the spreadsheet will recognize it as a date. Because it doesn't include a year, the spreadsheet will automatically add the current year so the date will have all of the necessary information. We could also type the date several other ways, like 3/15, 3/15/2014, or March 15 2014, and the spreadsheet would still recognize it as a date.

Try entering the dates below into a spreadsheet and see if the date format is applied automatically:

- 10/12
- October
- October 12
- October 2016
- 10/12/2016
- October 12, 2016
- 2016

- **October 12th**

If you want to add the current date to a cell, you can use the Ctrl+; shortcut, as shown in the video below.

Other date formatting options

To access other date formatting options, select the Number Format drop-down menu and choose More Number Formats. These are options to display the date differently, such as including the day of the week or omitting the year.

The Format Cells dialog box will appear. From here, you can choose the desired date formatting option.

As you can see in the formula bar, a custom date format not only changes the actual date in our cell but also the way it's displayed.

Number formatting tips

Here are a few tips for getting the best results with number formatting:

- **Apply number formatting to an entire column:** If you're planning to use one column for a certain type of data, like dates or percentages, you may find it easiest to select the entire column by clicking the column letter and applying the desired number formatting. This way, any data you add to this column in the future will already have the correct number format. Note that the header row usually won't be affected by number formatting.
- **Double-check your values after applying number formatting:** If you apply number formatting to existing data, you may have unexpected results. For example, applying percentage (%) formatting to a cell with a value of 5 will give you 500%, not 5%. In this case, you'd need to retype the values correctly in each cell.
- **If you reference a cell with number formatting in a formula,** the spreadsheet may automatically apply the same number formatting to the new cell. For example, if you use a value with currency formatting in a formula, the calculated value will also use the currency number format.
- **If you want your data to appear exactly as entered,** you'll need to use the text number format. This format is especially good for numbers you don't want to perform calculations with, like phone numbers, zip codes, or numbers that begin with 0, like 02415. For best results, you may want to apply the text number format before entering data into these cells.

Increase Decimal and Decrease Decimal

The Increase Decimal and Decrease Decimal commands allow you to control how many decimal places are displayed in a cell. These commands don't change the value of the cell; instead, they display the value to a set number of decimal places.

Decreasing the decimal will display the value rounded to that decimal place, but the actual value in the cell will still be displayed in the formula bar.

The Increase Decimal and Decrease Decimal commands don't work with some number formats, like Date and Fraction.

Lesson 9: Working with Multiple Worksheets

Introduction

Every workbook contains at least one worksheet by default. When working with a large amount of data, you can create multiple worksheets to help organize your workbook and make it easier to find content. You can also group worksheets to quickly add information to multiple worksheets at the same time.

To insert a new worksheet:

1. Locate and select the New sheet button near the bottom-right corner of the Excel window.
2. A new blank worksheet will appear.

By default, any new workbook you create in Excel will contain one worksheet, called Sheet1. To change the default number of worksheets, navigate to Backstage view, click Options, then choose the desired number of worksheets to include in each new workbook.

To copy a worksheet:

If you need to duplicate the content of one worksheet to another, Excel allows you to copy an existing worksheet.

1. Right-click the worksheet you want to copy, then select Move or Copy from the worksheet menu.
2. The Move or Copy dialog box will appear. Choose where the sheet will appear in the Before sheet: field. In our example, we'll choose (move to end) to place the worksheet to the right of the existing worksheet.
3. Check the box next to Create a copy, then click OK.
4. The worksheet will be copied. It will have the same title as the original worksheet, as well as a version number. In our example, we copied the November worksheet, so our new worksheet is named November (2). All content from the November worksheet has also been copied to the new worksheet.

You can also copy a worksheet to an entirely different workbook. You can select any workbook that is currently open from the To book: drop-down menu.

To rename a worksheet:

1. Right-click the worksheet you want to rename, then select Rename from the worksheet menu.
2. Type the desired name for the worksheet.
3. Click anywhere outside the worksheet tab, or press Enter on your keyboard. The worksheet will be renamed.

To move a worksheet:

1. Click and drag the worksheet you want to move until a small black arrow appears above the desired location.

2. Release the mouse. The worksheet will be moved.

To change the worksheet tab color:

1. Right-click the desired worksheet tab, and hover the mouse over Tab Color. The Color menu will appear.
2. Select the desired color.
3. The worksheet tab color will be changed.

The worksheet tab color is considerably less noticeable when the worksheet is selected. Select another worksheet to see how the color will appear when the worksheet is not selected.

To delete a worksheet:

1. Right-click the worksheet you want to delete, then select Delete from the worksheet menu.
2. The worksheet will be deleted from your workbook.

If you want to prevent specific worksheets from being edited or deleted, you can protect them by right-clicking the desired worksheet and selecting Protect Sheet from the worksheet menu.

Switching between worksheets

If you want to view a different worksheet, you can simply click the tab to switch to that worksheet. However, with larger workbooks this can sometimes become tedious, as it may require scrolling through all of the tabs to find the one you want. Instead, you can simply right-click the scroll arrows in the lower-left corner, as shown below.

A dialog box will appear with a list of all of the sheets in your workbook. You can then double-click the sheet you want to jump to.

Watch the video below to see this shortcut in action.

Grouping and ungrouping worksheets

You can work with each worksheet individually, or you can work with multiple worksheets at the same time. Several worksheets can be combined into a group. Any changes made to one worksheet in a group will be made to every worksheet in that group.

To group worksheets:

1. Select the first worksheet you want to include in the worksheet group.
2. Press and hold the Ctrl key on your keyboard. Select the next worksheet you want in the group.
3. Continue to select worksheets until all of the worksheets you want to group are selected, then release the Ctrl key. The worksheets are now grouped.

While worksheets are grouped, you can navigate to any worksheet within the group. Any changes made to one worksheet will appear on every worksheet in the group.

However, if you select a worksheet that is not in the group, all of your worksheets will become ungrouped.

To ungroup worksheets:

1. Right-click a worksheet in the group, then select Ungroup Sheets from the worksheet menu.
2. The worksheets will be ungrouped. You can also click any worksheet not included in the group to ungroup all worksheets.

Lesson 10: Using Find & Replace

Introduction

When working with a lot of data in Excel, it can be difficult and time consuming to locate specific information. You can easily search your workbook using the Find feature, which also allows you to modify content using the Replace feature.

To find cell content:

In our example, we'll use the Find command to locate a specific department in this list.

1. From the Home tab, click the Find and Select command, then select Find from the drop-down menu.
2. The Find and Replace dialog box will appear. Enter the content you want to find. In our example, we'll type the department's name.
3. Click Find Next. If the content is found, the cell containing that content will be selected.
4. Click Find Next to find more instances or Find All to see every instance of the search term.
5. When you are finished, click Close to exit the Find and Replace dialog box.

You can also access the Find command by pressing **Ctrl+F** on your keyboard.

Click Options to see advanced search criteria in the Find and Replace dialog box.

To replace cell content:

At times, you may discover that you've repeatedly made a mistake throughout your workbook (like misspelling someone's name) or that you need to exchange a particular word or phrase for another. You can use Excel's Find and Replace feature to make quick revisions. In our example, we'll use Find and Replace to correct a list of department names.

1. From the Home tab, click the Find & Select command, then select Replace... from the drop-down menu.
2. The Find and Replace dialog box will appear. Type the text you want to find in the Find what: field.
3. Type the text you want to replace it with in the Replace with: field, then click Find Next.
4. If the content is found, the cell containing this content will be selected.

5. Review the text to make sure you want to replace it.
6. If you want to replace it, select one of the replace options. Choosing Replace will replace individual instances, while Replace All will replace every instance of the text throughout the workbook. In our example, we'll choose this option to save time.
7. A dialog box will appear, confirming the number of replacements made. Click OK to continue.
8. The selected cell content will be replaced.
9. When you're finished, click Close to exit the Find and Replace dialog box.

Generally, it's best to avoid using Replace All because it doesn't give you the option of skipping anything you don't want to change. You should only use this option if you're absolutely sure it won't replace anything you didn't intend it to.

Lesson 11: Checking Spelling

Introduction

Before sharing a workbook, you'll want to make sure it doesn't include any spelling errors. Fortunately, Excel includes a spell check tool you can use to make sure everything in your workbook is spelled correctly.

If you've used the spell check feature in Microsoft Word, just be aware that the spell check tool in Excel, while helpful, is not as powerful. For example, it won't check for grammar issues or check spelling as you type.

To use spell check:

1. From the Review tab, click the Spelling command.
2. The Spelling dialog box will appear. For each spelling error in your worksheet, it will try to offer suggestions for the correct spelling. Choose a suggestion, then click Change to correct the error.
3. A dialog box will appear after reviewing all spelling errors. Click OK to close spell check.

If there are no appropriate suggestions, you can also enter the correct spelling manually.

Ignoring spelling "errors"

Spell check isn't always correct. It will sometimes mark certain words as incorrect even if they're spelled correctly. This often happens with names, which may not be in the dictionary. You can choose not to change a spelling "error" using one of the following three options:

- **Ignore Once:** This will skip the word without changing it.
- **Ignore All:** This will skip the word without changing it and also skip all other instances of the word in your worksheet.
- **Add:** This adds the word to the dictionary so it will never appear as an error again. Make sure the word is spelled correctly before choosing this option.

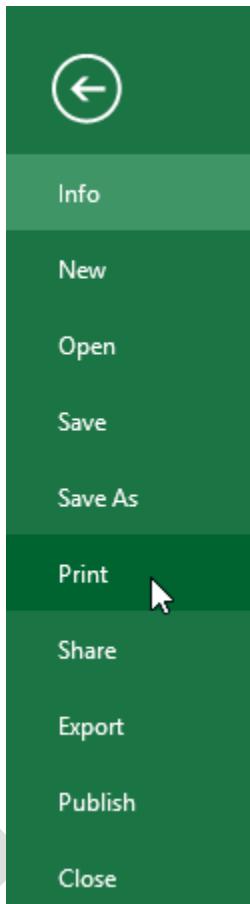
Lesson 12: Page Layout and Printing

Introduction

There may be times when you want to print a workbook to view and share your data offline. Once you've chosen your page layout settings, it's easy to preview and print a workbook from Excel using the Print pane.

To access the Print pane:

1. Select the File tab. Backstage view will appear.
2. Select Print. The Print pane will appear.



Click the buttons in the interactive below to learn more about using the Print pane.

To print a workbook:

1. Navigate to the Print pane, then select the desired printer.
2. Enter the number of copies you want to print.
3. Select any additional settings if needed (see above interactive).
4. Click Print.

Choosing a print area

Before you print an Excel workbook, it's important to decide exactly what information you want to print. For example, if you have multiple worksheets in your workbook, you will need to decide if you want to print the entire workbook or only active worksheets. There may also be times when you want to print only a selection of content from your workbook.

To print active sheets:

Worksheets are considered active when selected.

1. Select the worksheet you want to print. To print multiple worksheets, click the first worksheet, hold the Ctrl key on your keyboard, then click any other worksheets you want to select.
2. Navigate to the Print pane.
3. Select Print Active Sheets from the Print Range drop-down menu.
4. Click the Print button.

To print the entire workbook:

1. Navigate to the Print pane.
2. Select Print Entire Workbook from the Print Range drop-down menu.
3. Click the Print button.

To print a selection:

In our example, we'll print the records for the top 40 salespeople on the Central worksheet.

1. Select the cells you want to print.
2. Navigate to the Print pane.
3. Select Print Selection from the Print Range drop-down menu.
4. A preview of your selection will appear in the Preview pane.
5. Click the Print button to print the selection.

If you prefer, you can also set the print area in advance so you'll be able to visualize which cells will be printed as you work in Excel. Simply select the cells you want to print, click the Page Layout tab, select the Print Area command, then choose Set Print Area. Keep in mind that if you ever need to print the entire workbook, you'll need to clear the print area.

Adjusting content

On occasion, you may need to make small adjustments from the Print pane to fit your workbook content neatly onto a printed page. The Print pane includes several tools to

help fit and scale your content, including scaling and page margins.

To change page orientation:

Excel offers two page orientation options: landscape and portrait. Landscape orients the page horizontally, while portrait orients the page vertically. In our example, we'll set the page orientation to landscape.

- 1. Navigate to the Print pane.**
- 2. Select the desired orientation from the Page Orientation drop-down menu. In our example, we'll select Landscape Orientation.**
- 3. The new page orientation will be displayed in the Preview pane.**

To fit content before printing:

If some of your content is being cut off by the printer, you can use scaling to fit your workbook to the page automatically.

- 1. Navigate to the Print pane. In our example, we can see in the Preview pane that our content will be cut off when printed.**
- 2. Select the desired option from the Scaling drop-down menu. In our example, we'll select Fit All Columns on One Page.**
- 3. The worksheet will be condensed to fit onto a single page.**

Keep in mind that worksheets will become more difficult to read as they are scaled down, so you may not want to use this option when printing a worksheet with a lot of information. In our example, we'll change the scaling setting back to No Scaling.

To include Print Titles:

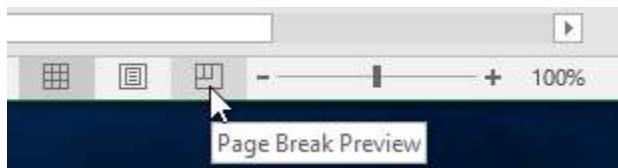
If your worksheet uses title headings, it's important to include these headings on each page of your printed worksheet. It would be difficult to read a printed workbook if the title headings appeared only on the first page. The Print Titles command allows you to select specific rows and columns to appear on each page.

- 1. Click the Page Layout tab on the Ribbon, then select the Print Titles command.**
- 2. The Page Setup dialog box will appear. From here, you can choose rows or columns to repeat on each page. In our example, we'll repeat a row first.**
- 3. Click the Collapse Dialog button next to the Rows to repeat at top: field.**
- 4. The cursor will become a small selection arrow, and the Page Setup dialog box will be collapsed. Select the row(s) you want to repeat at the top of each printed page. In our example, we'll select row 1.**
- 5. Row 1 will be added to the Rows to repeat at top: field. Click the Collapse Dialog button again.**
- 6. The Page Setup dialog box will expand. To repeat a column as well, use the same process shown in steps 4 and 5. In our example, we've selected to repeat row 1 and column A.**
- 7. When you're satisfied with your selections, click OK.**

8. In our example, row 1 appears at the top of every page, and column A appears at the left of every page.

To adjust page breaks:

1. Click the Page Break Preview command to change to Page Break view.



2. Vertical and horizontal blue dotted lines denote the page breaks. Click and drag one of these lines to adjust the page break.
3. In our example, we've set the horizontal page break between rows 21 and 22.
4. In our example, all of the pages now show the same number of rows due to the change in the page break.

To modify margins in the Preview pane:

A margin is the space between your content and the edge of the page. Sometimes you may need to adjust the margins to make your data fit more comfortably. You can modify page margins from the Print pane.

1. Navigate to the Print pane.
2. Select the desired margin size from the Page Margins drop-down menu. In our example, we'll select Narrow.
3. The new page margins will be displayed in the Preview pane.

You can adjust the margins manually by clicking the Show Margins button in the lower-right corner, then dragging the margin markers in the Preview pane.

Lesson 13: Intro to Formulas

Introduction

One of the most powerful features in Excel is the ability to calculate numerical information using formulas. Just like a calculator, Excel can add, subtract, multiply, and divide. In this lesson, we'll show you how to use cell references to create simple formulas.

Mathematical operators

Excel uses standard operators for formulas: a plus sign for addition (+), minus sign for subtraction (-), asterisk for multiplication (*), forward slash for division (/), and caret (^) for exponents.

All formulas in Excel must begin with an equals sign (=). This is because the cell contains, or is equal to, the formula and the value it calculates.

Understanding cell references

While you can create simple formulas in Excel using numbers (for example, $=2+2$ or $=5*5$), most of the time you will use cell addresses to create a formula. This is known as making a cell reference. Using cell references will ensure that your formulas are always accurate because you can change the value of referenced cells without having to rewrite the formula.

In the formula below, cell A3 adds the values of cells A1 and A2 by making cell references:

When you press Enter, the formula calculates and displays the answer in cell A3:

If the values in the referenced cells change, the formula automatically recalculates:

By combining a mathematical operator with cell references, you can create a variety of simple formulas in Excel. Formulas can also include a combination of cell references and numbers, as in the examples below:

To create a formula:

In our example below, we'll use a simple formula and cell references to calculate a budget.

- 1. Select the cell that will contain the formula. In our example, we'll select cell D12.**
- 2. Type the equals sign (=). Notice how it appears in both the cell and the formula bar.**
- 3. Type the cell address of the cell you want to reference first in the formula: cell D10 in our example. A blue border will appear around the referenced cell.**
- 4. Type the mathematical operator you want to use. In our example, we'll type the addition sign (+).**
- 5. Type the cell address of the cell you want to reference second in the formula: cell D11 in our example. A red border will appear around the referenced cell.**
- 6. Press Enter on your keyboard. The formula will be calculated, and the value will be displayed in the cell. If you select the cell again, notice that the cell displays the result, while the formula bar displays the formula.**

If the result of a formula is too large to be displayed in a cell, it may appear as pound signs (# #####) instead of a value. This means the column is not wide enough to display the cell content. Simply increase the column width to show the cell content.

Modifying values with cell references

The true advantage of cell references is that they allow you to update data in your worksheet without having to rewrite formulas. In the example below, we've modified the value of cell D10 from \$1,200 to \$1,800. The formula in D12 will automatically recalculate and display the new value in cell D12.

Excel will not always tell you if your formula contains an error, so it's up to you to check all of your formulas.

To create a formula using the point-and-click method:

Instead of typing cell addresses manually, you can point and click the cells you want to include in your formula. This method can save a lot of time and effort when creating formulas. In our example below, we'll create a formula to calculate the cost of ordering several boxes of plastic silverware.

- 1. Select the cell that will contain the formula. In our example, we'll select cell D4.**
- 2. Type the equals sign (=).**
- 3. Select the cell you want to reference first in the formula: cell B4 in our example. The cell address will appear in the formula.**
- 4. Type the mathematical operator you want to use. In our example, we'll type the multiplication sign (*).**
- 5. Select the cell you want to reference second in the formula: cell C4 in our example. The cell address will appear in the formula.**
- 6. Press Enter on your keyboard. The formula will be calculated, and the value will be displayed in the cell.**

Copying formulas with the fill handle

Formulas can also be copied to adjacent cells with the fill handle, which can save a lot of time and effort if you need to perform the same calculation multiple times in a worksheet. The fill handle is the small square at the bottom-right corner of the selected cell(s).

- 1. Select the cell containing the formula you want to copy. Click and drag the fill handle over the cells you want to fill.**
- 2. After you release the mouse, the formula will be copied to the selected cells.**

To edit a formula:

Sometimes you may want to modify an existing formula. In the example below, we've entered an incorrect cell address in our formula, so we'll need to correct it.

- 1. Select the cell containing the formula you want to edit. In our example, we'll select cell D12.**
- 2. Click the formula bar to edit the formula. You can also double-click the cell to view and edit the formula directly within the cell.**
- 3. A border will appear around any referenced cells. In our example, we'll change the first part of the formula to reference cell D10 instead of cell D9.**
- 4. When you're finished, press Enter on your keyboard or select the Enter command in the formula bar.**
- 5. The formula will be updated, and the new value will be displayed in the cell.**

If you change your mind, you can press the Esc key on your keyboard or click the Cancel command in the formula bar to avoid accidentally making changes to your formula.

To show all of the formulas in a spreadsheet, you can hold the Ctrl key and press ` (grave accent). The grave accent key is usually located in the top-left corner of the keyboard. You can press Ctrl+` again to switch back to the normal view.

Lesson 14: Creating More Complex Formulas

Introduction

You may have experience working with formulas that contain only one operator, like $7+9$. More complex formulas can contain several mathematical operators, like $5+2*8$. When there's more than one operation in a formula, the order of operations tells Excel which operation to calculate first. To write formulas that will give you the correct answer, you'll need to understand the order of operations.

The order of operations

Excel calculates formulas based on the following order of operations:

1. Operations enclosed in parentheses
2. Exponential calculations (3^2 , for example)
3. Multiplication and division, whichever comes first
4. Addition and subtraction, whichever comes first

A mnemonic that can help you remember the order is PEMDAS, or Please Excuse My Dear Aunt Sally.

Click the arrows in the slideshow below to learn how the order of operations is used to calculate formulas in Excel.

[arrow_back_ios](#)

Using the Order of Operations

P
E
M
D
A
S

$10+(6-3)/2^2*4-1$

While this formula may look complicated, we can use the order of operations step by step to find the right answer.

Using the Order of Operations

Parentheses

$10+(6-3)/2^2*4-1$

E
M
D
A
S

First, we'll start by calculating anything inside parentheses. In this case, there's only one thing we need to calculate: $6-3=3$.

As you can see, the formula already looks simpler. Next, we'll look to see if there are any exponents. There is one: $2^2=4$.

Next, we'll solve any multiplication and division, working from left to right. Because the division operation comes before the multiplication, it's calculated first: $3/4=0.75$.

Now, we'll solve our remaining multiplication operation: $0.75*4=3$.

Next, we'll calculate any addition or subtraction, again working from left to right. Addition comes first: $10+3=13$.

Finally, we have one remaining subtraction operation: $13-1=12$.

Now we have our answer: 12. And this is the exact same result you would get if you entered the formula into Excel.

arrow_back_ios

Creating complex formulas

In the example below, we'll demonstrate how Excel uses the order of operations to solve a more complex formula. Here, we want to calculate the cost of sales tax for a catering invoice. To do this, we'll write our formula as $=(D3+D4+D5)*0.075$ in cell D6. This formula will add the prices of our items, then multiply that value by the 7.5% tax rate (which is written as 0.075) to calculate the answer.

Excel follows the order of operations and first adds the values inside the parentheses: $(45.80+68.70+159.60) = 274.10$. It then multiplies that value by the tax

rate: $274.10 * 0.075$. The result will show that the sales tax is \$20.56.

It's especially important to follow the order of operations when creating a formula. Otherwise, Excel won't calculate the results accurately. In our example, if the parentheses are not included, the multiplication is calculated first and the result is incorrect. Parentheses are often the best way to define which calculations will be performed first in Excel.

To create a complex formula using the order of operations:

In the example below, we'll use cell references along with numerical values to create a complex formula that will calculate the subtotal for a catering invoice. The formula will calculate the cost of each menu item first, then add these values.

1. Select the cell that will contain the formula. In our example, we'll select cell C5.
2. Enter your formula. In our example, we'll type =B3*C3+B4*C4. This formula will follow the order of operations, first performing the multiplication: $2.79 * 35 = 97.65$ and $2.29 * 20 = 45.80$. It then will add these values to calculate the total: $97.65 + 45.80$.
3. Double-check your formula for accuracy, then press Enter on your keyboard. The formula will calculate and display the result. In our example, the result shows that the subtotal for the order is \$143.45.

You can add parentheses to any equation to make it easier to read. While it won't change the result of the formula in this example, we could enclose the multiplication operations within parentheses to clarify that they will be calculated before the addition.

Excel will not always tell you if your formula contains an error, so it's up to you to check all of your formulas.

Lesson 15: Relative and Absolute Cell References

Introduction

There are two types of cell references: relative and absolute. Relative and absolute references behave differently when copied and filled to other cells. Relative references change when a formula is copied to another cell. Absolute references, on the other hand, remain constant no matter where they are copied.

Relative references

By default, all cell references are relative references. When copied across multiple cells, they change based on the relative position of rows and columns. For example, if you copy the formula =A1+B1 from row 1 to row 2, the formula will become =A2+B2. Relative references are especially convenient whenever you need to repeat the same calculation across multiple rows or columns.

To create and copy a formula using relative references:

In the following example, we want to create a formula that will multiply each item's price by the quantity. Instead of creating a new formula for each row, we can create a single formula in cell D4 and then copy it to the other rows. We'll use relative

references so the formula calculates the total for each item correctly.

1. Select the cell that will contain the formula. In our example, we'll select cell D4.
2. Enter the formula to calculate the desired value. In our example, we'll type =B4*C4.
3. Press Enter on your keyboard. The formula will be calculated, and the result will be displayed in the cell.
4. Locate the fill handle in the bottom-right corner of the desired cell. In our example, we'll locate the fill handle for cell D4.
5. Click and drag the fill handle over the cells you want to fill. In our example, we'll select cells D5:D13.
6. Release the mouse. The formula will be copied to the selected cells with relative references, displaying the result in each cell.

You can double-click the filled cells to check their formulas for accuracy. The relative cell references should be different for each cell, depending on their rows.

Absolute references

There may be a time when you don't want a cell reference to change when copied to other cells. Unlike relative references, absolute references do not change when copied or filled. You can use an absolute reference to keep a row and/or column constant.

An absolute reference is designated in a formula by the addition of a dollar sign (\$). It can precede the column reference, the row reference, or both.

You will generally use the \$A\$2 format when creating formulas that contain absolute references. The other two formats are used much less frequently.

When writing a formula, you can press the F4 key on your keyboard to switch between relative and absolute cell references, as shown in the video below. This is an easy way to quickly insert an absolute reference.

To create and copy a formula using absolute references:

In the example below, we'll use cell E2 (which contains the tax rate of 7.5%) to calculate the sales tax for each item in column D. To make sure the reference to the tax rate stays constant—even when the formula is copied and filled to other cells—we'll need to make cell \$E\$2 an absolute reference.

1. Select the cell that will contain the formula. In our example, we'll select cell D4.
2. Enter the formula to calculate the desired value. In our example, we'll type =(B4*C4)*\$E\$2, making \$E\$2 an absolute reference.
3. Press Enter on your keyboard. The formula will calculate, and the result will display in the cell.
4. Locate the fill handle in the bottom-right corner of the desired cell. In our example, we'll locate the fill handle for cell D4.
5. Click and drag the fill handle over the cells you want to fill (cells D5:D13 in our example).
6. Release the mouse. The formula will be copied to the selected cells with an absolute reference, and the values will be calculated in each cell.

You can double-click the filled cells to check their formulas for accuracy. The absolute

reference should be the same for each cell, while the other references are relative to the cell's row.

Be sure to include the dollar sign (\$) whenever you're making an absolute reference across multiple cells. The dollar signs were omitted in the example below. This caused Excel to interpret it as a relative reference, producing an incorrect result when copied to other cells.

Using cell references with multiple worksheets

Excel allows you to refer to any cell on any worksheet, which can be especially helpful if you want to reference a specific value from one worksheet to another. To do this, you'll simply need to begin the cell reference with the worksheet name followed by an exclamation point (!). For example, if you wanted to reference cell A1 on Sheet1, its cell reference would be Sheet1!A1.

Note that if a worksheet name contains a space, you'll need to include single quotation marks (' ') around the name. For example, if you wanted to reference cell A1 on a worksheet named July Budget, its cell reference would be 'July Budget'!A1.

To reference cells across worksheets:

In our example below, we'll refer to a cell with a calculated value between two worksheets. This will allow us to use the exact same value on two different worksheets without rewriting the formula or copying data.

- 1. Locate the cell you want to reference, and note its worksheet. In our example, we want to reference cell E14 on the Menu Order worksheet.**
- 2. Navigate to the desired worksheet. In our example, we'll select the Catering Invoice worksheet.**
- 3. Locate and select the cell where you want the value to appear. In our example, we'll select cell C4.**
- 4. Type the equals sign (=), the sheet name followed by an exclamation point (!), and the cell address. In our example, we'll type ='Menu Order'!E14.**
- 5. Press Enter on your keyboard. The value of the referenced cell will appear. Now, if the value of cell E14 changes on the Menu Order worksheet, it will be updated automatically on the Catering Invoice worksheet.**

If you rename your worksheet at a later point, the cell reference will be updated automatically to reflect the new worksheet name.

If you enter a worksheet name incorrectly, the #REF! error will appear in the cell. In our example below, we've mistyped the name of the worksheet. To edit, ignore, or investigate the error, click the Error button beside the cell and choose an option from the menu.

Lesson 16: Functions

Introduction

A function is a predefined formula that performs calculations using specific values in a particular order. Excel includes many common functions that can be used to quickly find the sum, average, count, maximum value, and minimum value for a range of cells. In order to use functions correctly, you'll need to understand the different parts of a function and how to create arguments to calculate values and cell references.

The parts of a function

In order to work correctly, a function must be written a specific way, which is called the syntax. The basic syntax for a function is the equals sign (=), the function name (SUM, for example), and one or more arguments. Arguments contain the information you want to calculate. The function in the example below would add the values of the cell range A1:A20.

Working with arguments

Arguments can refer to both individual cells and cell ranges and must be enclosed within parentheses. You can include one argument or multiple arguments, depending on the syntax required for the function.

For example, the function =AVERAGE(B1:B9) would calculate the average of the values in the cell range B1:B9. This function contains only one argument.

Multiple arguments must be separated by a comma. For example, the function =SUM(A1:A3, C1:C2, E1) will add the values of all of the cells in the three arguments.

Creating a function

There are a variety of functions available in Excel. Here are some of the most common functions you'll use:

- **SUM:** This function adds all of the values of the cells in the argument.
- **AVERAGE:** This function determines the average of the values included in the argument. It calculates the sum of the cells and then divides that value by the number of cells in the argument.
- **COUNT:** This function counts the number of cells with numerical data in the argument. This function is useful for quickly counting items in a cell range.
- **MAX:** This function determines the highest cell value included in the argument.
- **MIN:** This function determines the lowest cell value included in the argument.

To create a function using the AutoSum command:

The AutoSum command allows you to automatically insert the most common functions into your formula, including SUM, AVERAGE, COUNT, MAX, and MIN. In the example below, we'll use the SUM function to calculate the total cost for a list of recently ordered items.

1. Select the cell that will contain the function. In our example, we'll select cell D13.

2. In the Editing group on the Home tab, click the arrow next to the AutoSum command. Next, choose the desired function from the drop-down menu. In our example, we'll select Sum.
3. Excel will place the function in the cell and automatically select a cell range for the argument. In our example, cells D3:D12 were selected automatically; their values will be added to calculate the total cost. If Excel selects the wrong cell range, you can manually enter the desired cells into the argument.
4. Press Enter on your keyboard. The function will be calculated, and the result will appear in the cell. In our example, the sum of D3:D12 is \$765.29.

The AutoSum command can also be accessed from the Formulas tab on the Ribbon.

You can also use the Alt+= keyboard shortcut instead of the AutoSum command. To use this shortcut, hold down the Alt key and then press the equals sign.

Watch the video below to see this shortcut in action.

To enter a function manually:

If you already know the function name, you can easily type it yourself. In the example below (a tally of cookie sales), we'll use the AVERAGE function to calculate the average number of units sold by each troop.

1. Select the cell that will contain the function. In our example, we'll select cell C10.
2. Type the equals sign (=), then enter the desired function name. You can also select the desired function from the list of suggested functions that appears below the cell as you type. In our example, we'll type =AVERAGE.
3. Enter the cell range for the argument inside parentheses. In our example, we'll type (C3:C9). This formula will add the values of cells C3:C9, then divide that value by the total number of values in the range.
4. Press Enter on your keyboard. The function will be calculated, and the result will appear in the cell. In our example, the average number of units sold by each troop is 849.

Excel will not always tell you if your formula contains an error, so it's up to you to check all of your formulas.

The Function Library

While there are hundreds of functions in Excel, the ones you'll use the most will depend on the type of data your workbooks contain. There's no need to learn every single function, but exploring some of the different types of functions will help as you create new projects. You can even use the Function Library on the Formulas tab to browse functions by category, including Financial, Logical, Text, and Date & Time.

To access the Function Library, select the Formulas tab on the Ribbon. Look for the Function Library group.

Click the buttons in the interactive below to learn more about the different types of

functions in Excel.

To insert a function from the Function Library:

In the example below, we'll use the COUNTA function to count the total number of items in the Items column. Unlike COUNT, COUNTA can be used to tally cells that contain data of any kind, not just numerical data.

1. Select the cell that will contain the function. In our example, we'll select cell B17.
2. Click the Formulas tab on the Ribbon to access the Function Library.
3. From the Function Library group, select the desired function category. In our example, we'll choose More Functions, then hover the mouse over Statistical.
4. Select the desired function from the drop-down menu. In our example, we'll select the COUNTA function, which will count the number of cells in the Items column that are not empty.
5. The Function Arguments dialog box will appear. Select the Value1 field, then enter or select the desired cells. In our example, we'll enter the cell range A3:A12. You can continue to add arguments in the Value2 field, but in this case we only want to count the number of cells in the cell range A3:A12.
6. When you're satisfied, click OK.
7. The function will be calculated, and the result will appear in the cell. In our example, the result shows that 10 items were ordered.

The Insert Function command

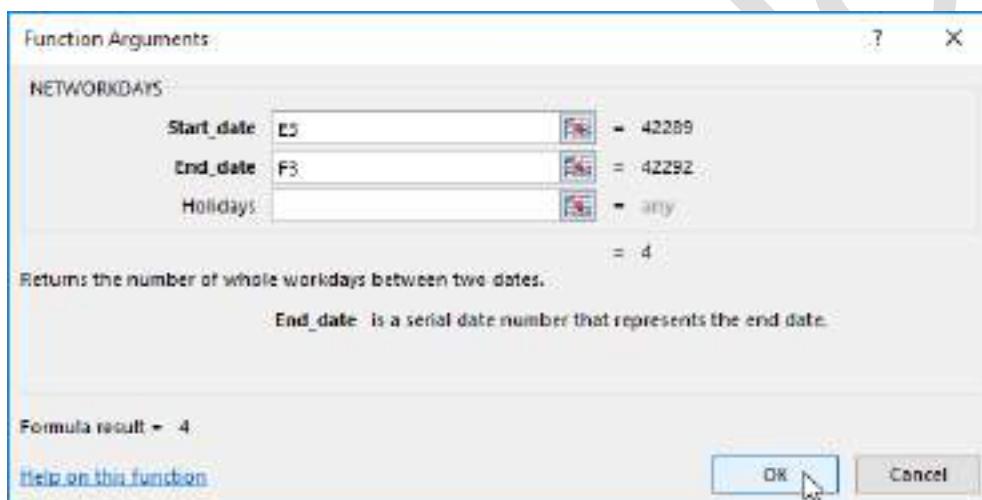
While the Function Library is a great place to browse for functions, sometimes you may prefer to search for one instead. You can do so using the Insert Function command. It may take some trial and error depending on the type of function you're looking for, but with practice the Insert Function command can be a powerful way to find a function quickly.

To use the Insert Function command:

In the example below, we want to find a function that will calculate the number of business days it took to receive items after they were ordered. We'll use the dates in columns E and F to calculate the delivery time in column G.

1. Select the cell that will contain the function. In our example, we'll select cell G3.
2. Click the Formulas tab on the Ribbon, then click the Insert Function command.

3. The Insert Function dialog box will appear.
4. Type a few keywords describing the calculation you want the function to perform, then click Go. In our example, we'll type count days, but you can also search by selecting a category from the drop-down list.
5. Review the results to find the desired function, then click OK. In our example, we'll choose NETWORKDAYS, which will count the number of business days between the ordered date and received date.
6. The Function Arguments dialog box will appear. From here, you'll be able to enter or select the cells that will make up the arguments in the function. In our example, we'll enter E3 in the Start_date field and F3 in the End_date field.
7. When you're satisfied, click OK.



8. The function will be calculated, and the result will appear in the cell. In our example, the result shows that it took four business days to receive the order.

G3 : =NETWORKDAYS(E3,F3)

A	E	F	G
ITEM	ORDERED	RECEIVED	IN TRANSIT
Tomatoes (case of 12)	12-Oct	15-Oct	4
Black Beans (case of 10)	12-Oct	17-Oct	
All Purpose Flour (50 lb.)	12-Oct	14-Oct	
Corn Meal/Maza (25 lb.)	12-Oct	15-Oct	
Brown Rice (25 lb.)	12-Oct	15-Oct	
Lime Juice (1 gallon)	16-Oct	20-Oct	
Tomato Juice (case of 10)	16-Oct	19-Oct	
Hot Sauce (1 gallon)	16-Oct	20-Oct	
Salsa, Medium (1 gallon)	19-Oct	23-Oct	
Olive Oil (2.5 gallon)	19-Oct	24-Oct	
13			

Like formulas, functions can be copied to adjacent cells. Simply select the cell that contains the function, then click and drag the fill handle over the cells you want to fill. The function will be copied, and values for those cells will be calculated relative to their rows or columns.

G3 : =NETWORKDAYS(E3,F3)

A	E	F	G
ITEM	ORDERED	RECEIVED	IN TRANSIT
Tomatoes (case of 12)	12-Oct	15-Oct	4
Black Beans (case of 10)	12-Oct	17-Oct	
All Purpose Flour (50 lb.)	12-Oct	14-Oct	
Corn Meal/Maza (25 lb.)	12-Oct	15-Oct	
Brown Rice (25 lb.)	12-Oct	15-Oct	
Lime Juice (1 gallon)	16-Oct	20-Oct	
Tomato Juice (case of 10)	16-Oct	19-Oct	
Hot Sauce (1 gallon)	16-Oct	20-Oct	
Salsa, Medium (1 gallon)	19-Oct	23-Oct	
Olive Oil (2.5 gallon)	19-Oct	24-Oct	
13			

To learn more:

If you're comfortable with basic functions, you may want to try a more advanced one like VLOOKUP.

Lesson 17: Basic Tips for Working with Data

Introduction

Excel workbooks are designed to store a lot of information. Whether you're working with 20 cells or 20,000, Excel has several features to help you organize your data and find what you need. You can see some of the most useful features below. And be sure to review the other lessons in this tutorial to get step-by-step instructions for each of these features.

Freezing rows and columns

You may want to see certain rows or columns all the time in your worksheet, especially header cells. By [freezing rows or columns](#) in place, you'll be able to scroll through your content while continuing to view the frozen cells. In this example, we've frozen the top two rows, which allows us to view the dates no matter where we scroll in the spreadsheet.

Sorting data

You can quickly reorganize a worksheet by [sorting your data](#). Content can be sorted alphabetically, numerically, and in several other ways. For example, you can organize a list of contact information by last name.

Filtering data

[Filters](#) can be used to narrow down the data in your worksheet, allowing you to view only the information you need. In this example, we're filtering the worksheet to show only rows that contain the words Laptop or Projector in column B.

Summarizing data

The [Subtotal command](#) allows you to quickly summarize data. In our example, we've created a subtotal for each T-shirt size, which makes it easy to see how many we'll need in each size.

Formatting data as a table

Just like regular formatting, [tables](#) can improve the look and feel of your workbook, but they'll also help organize your content and make your data easier to use. For example, tables have built-in sorting and filtering options. Excel also includes several predefined table styles, allowing you to create tables quickly.

Visualizing data with charts

It can be difficult to interpret Excel workbooks that contain a lot of data. [Charts](#) allow you to illustrate your workbook data graphically, which makes it easy to visualize comparisons and trends.

Adding conditional formatting

Let's say you have a worksheet with thousands of rows of data. It would be extremely difficult to see patterns and trends just from examining the raw information. [Conditional formatting](#) allows you to automatically apply cell formatting—including colors, icons, and data bars—to one or more cells based on the cell value.

	A	B	C	D	E	F	G
1	WP	Westbrook Parker Sales Data					
2	Salesperson	May	June	July	August	September	October
3	Albertson, Kathy	\$3,799.00	\$557.00	\$3,863.00	\$1,117.00	\$8,237.00	\$8,690.00
4	Allenson, Carol	\$18,930.00	\$1,042.00	\$9,355.00	\$1,100.00	\$10,185.00	\$18,749.00
5	Altman, Zoey	\$5,725.00	\$3,072.00	\$6,702.00	\$2,116.00	\$13,452.00	\$8,046.00
6	Bittiman, William	\$1,344.00	\$3,755.00	\$4,415.00	\$1,089.00	\$4,404.00	\$20,114.00
7	Brennan, Michael	\$8,296.00	\$3,152.00	\$11,601.00	\$1,122.00	\$3,170.00	\$10,733.00
8	Carlson, David	\$3,945.00	\$4,056.00	\$3,726.00	\$1,135.00	\$8,817.00	\$18,524.00
9	Collman, Harry	\$8,337.00	\$4,906.00	\$9,007.00	\$2,113.00	\$13,090.00	\$13,953.00
10	Counts, Elizabeth	\$3,742.00	\$521.00	\$4,505.00	\$1,024.00	\$3,528.00	\$15,275.00
11	David, Chloe	\$7,605.00	\$3,428.00	\$3,973.00	\$1,716.00	\$4,839.00	\$13,085.00
12	Davis, William	\$5,304.00	\$1,562.00	\$2,945.00	\$1,176.00	\$9,642.00	\$13,714.00
13	Dumilao, Richard	\$9,333.00	\$2,779.00	\$7,549.00	\$1,101.00	\$5,850.00	\$15,065.00
14	Farmer, Kim	\$1,103.00	\$3,470.00	\$3,862.00	\$1,040.00	\$10,024.00	\$18,389.00
15	Ferguson, Elizabeth	\$1,333.00	\$1,913.00	\$4,596.00	\$1,126.00	\$5,503.00	\$10,686.00
16	Flores, Tia	\$12,398.00	\$2,883.00	\$2,142.00	\$2,014.00	\$13,547.00	\$21,083.00
17	Ford, Victor	\$3,251.00	\$4,931.00	\$8,283.00	\$1,054.00	\$9,543.00	\$11,967.00
18	Hodges, Melissa	\$4,624.00	\$4,798.00	\$8,420.00	\$1,389.00	\$10,468.00	\$12,677.00
19	Jameson, Robinson	\$2,552.00	\$4,459.00	\$2,248.00	\$1,058.00	\$6,267.00	\$14,982.00
20	Kellerman, Frances	\$4,281.00	\$4,172.00	\$11,074.00	\$1,282.00	\$2,365.00	\$9,380.00

Using Find and Replace

When working with a lot of data, it can be difficult and time consuming to locate specific information. You can easily search your workbook using the [Find feature](#), which also allows you to modify content using the Replace feature.

Lesson 18: Freezing Panes and View Options

Introduction

Whenever you're working with a lot of data, it can be difficult to compare information in your workbook. Fortunately, Excel includes several tools that make it easier to view content from different parts of your workbook at the same time, including the ability to freeze panes and split your worksheet.

Optional: Download our [practice workbook](#).

Watch the video below to learn more about freezing panes in Excel.

To freeze rows:

You may want to see certain rows or columns all the time in your worksheet,

especially header cells. By freezing rows or columns in place, you'll be able to scroll through your content while continuing to view the frozen cells.

- 1. Select the row below the row(s) you want to freeze. In our example, we want to freeze rows 1 and 2, so we'll select row 3.**
- 2. On the View tab, select the Freeze Panes command, then choose Freeze Panes from the drop-down menu.**
- 3. The rows will be frozen in place, as indicated by the gray line. You can scroll down the worksheet while continuing to view the frozen rows at the top. In our example, we've scrolled down to row 18.**

To freeze columns:

- 1. Select the column to the right of the column(s) you want to freeze. In our example, we want to freeze column A, so we'll select column B.**
- 2. On the View tab, select the Freeze Panes command, then choose Freeze Panes from the drop-down menu.**
- 3. The column will be frozen in place, as indicated by the gray line. You can scroll across the worksheet while continuing to view the frozen column on the left. In our example, we've scrolled across to column E.**

If you only need to freeze the top row (row 1) or first column (column A) in the worksheet, you can simply select Freeze Top Row or Freeze First Column from the drop-down menu.

To unfreeze panes:

If you want to select a different view option, you may first need to reset the spreadsheet by unfreezing panes. To unfreeze rows or columns, click the Freeze Panes command, then select Unfreeze Panes from the drop-down menu.

Other view options

If your workbook contains a lot of content, it can sometimes be difficult to compare different sections. Excel includes additional options to make your workbooks easier to view and compare. For example, you can choose to open a new window for your workbook or split a worksheet into separate panes.

To open a new window for the current workbook:

Excel allows you to open multiple windows for a single workbook at the same time. In our example, we'll use this feature to compare two different worksheets from the same workbook.

- 1. Click the View tab on the Ribbon, then select the New Window command.**
- 2. A new window for the workbook will appear.**

3. You can now compare different worksheets from the same workbook across windows. In our example, we'll select the 2013 Sales Detailed View worksheet to compare 2012 and 2013 sales.

If you have several windows open at the same time, you can use the Arrange All command to rearrange them quickly.

To split a worksheet:

Sometimes you may want to compare different sections of the same workbook without creating a new window. The Split command allows you to divide the worksheet into multiple panes that scroll separately.

1. Select the cell where you want to split the worksheet. In our example, we'll select cell D6.
2. Click the View tab on the Ribbon, then select the Split command.
3. The workbook will be split into different panes. You can scroll through each pane separately using the scroll bars, allowing you to compare different sections of the workbook.
4. After creating a split, you can click and drag the vertical and horizontal dividers to change the size of each section.

To remove the split, click the Split command again.

Lesson 19: Sorting Data

Introduction

As you add more content to a worksheet, organizing this information becomes especially important. You can quickly reorganize a worksheet by sorting your data. For example, you can organize a list of contact information by last name. Content can be sorted alphabetically, numerically, and in several other ways.

Types of sorting

When sorting data, it's important to first decide if you want the sort to apply to the entire worksheet or just a cell range.

- Sort sheet organizes all of the data in your worksheet by one column. Related information across each row is kept together when the sort is applied. In the example below, the Contact Name column (column A) has been sorted to display the names in alphabetical order.
- Sort range sorts the data in a range of cells, which can be helpful when working with a sheet that

contains several tables. Sorting a range will not affect other content in the worksheet.

To sort a sheet:

In our example, we'll sort a T-shirt order form alphabetically by Last Name (column C).

1. Select a cell in the column you want to sort. In our example, we'll select cell C2.
2. Select the Data tab on the Ribbon, then click the A-Z command to sort A to Z, or the Z-A command to sort Z to A. In our example, we'll sort A to Z.
3. The worksheet will be sorted by the selected column. In our example, the worksheet is now sorted by last name.

To sort a range:

In our example, we'll select a separate table in our T-shirt order form to sort the number of shirts that were ordered in each grade.

1. Select the cell range you want to sort. In our example, we'll select cell range G2:H6.
2. Select the Data tab on the Ribbon, then click the Sort command.
3. The Sort dialog box will appear. Choose the column you want to sort. In our example, we want to sort the data by the number of T-shirt orders, so we'll select Orders.
4. Decide the sorting order (either ascending or descending). In our example, we'll use Largest to Smallest.
5. Once you're satisfied with your selection, click OK.
6. The cell range will be sorted by the selected column. In our example, the Orders column will be sorted from highest to lowest. Notice that the other content in the worksheet was not affected by the sort.

If your data isn't sorting properly, double-check your cell values to make sure they are entered into the worksheet correctly. Even a small typo could cause problems when sorting a large worksheet. In the example below, we forgot to include a hyphen in cell A18, causing our sort to be slightly inaccurate.

Custom sorting

Sometimes you may find that the default sorting options can't sort data in the order you need. Fortunately, Excel allows you to create a custom list to define your own sorting

order.

To create a custom sort:

In our example, we want to sort the worksheet by T-Shirt Size (column D). A regular sort would organize the sizes alphabetically, which would be incorrect. Instead, we'll create a custom list to sort from smallest to largest.

1. Select a cell in the column you want to sort. In our example, we'll select cell D2.
2. Select the Data tab, then click the Sort command.
3. The Sort dialog box will appear. Select the column you want to sort, then choose Custom List... from the Order field. In our example, we will choose to sort by T-Shirt Size.
4. The Custom Lists dialog box will appear. Select NEW LIST from the Custom Lists: box.
5. Type the items in the desired custom order in the List entries: box. In our example, we want to sort our data by T-shirt size from smallest to largest, so we'll type Small, Medium, Large, and X-Large, pressing Enter on the keyboard after each item.
6. Click Add to save the new sort order. The new list will be added to the Custom lists: box. Make sure the new list is selected, then click OK.
7. The Custom Lists dialog box will close. Click OK in the Sort dialog box to perform the custom sort.
8. The worksheet will be sorted by the custom order. In our example, the worksheet is now organized by T-shirt size from smallest to largest.

Sorting levels

If you need more control over how your data is sorted, you can add multiple levels to any sort. This allows you to sort your data by more than one column.

To add a level:

In our example below, we'll sort the worksheet by T-Shirt Size (Column D), then by Homeroom # (column A).

1. Select a cell in the column you want to sort. In our example, we'll select cell A2.
2. Click the Data tab, then select the Sort command.
3. The Sort dialog box will appear. Select the first column you want to sort. In this example, we will sort by T-Shirt Size (column D) with the custom list we previously created for the Order field.
4. Click Add Level to add another column to sort.
5. Select the next column you want to sort, then click OK. In our example, we'll sort by Homeroom # (column A).

6. The worksheet will be sorted according to the selected order. In our example, the orders are sorted by T-shirt size. Within each group of T-shirt sizes, students are sorted by homeroom number.

If you need to change the order of a multilevel sort, it's easy to control which column is sorted first. Simply select the desired column, then click the Move Up or Move Down arrow to adjust its priority.

Lesson 20: Filtering Data

Introduction

If your worksheet contains a lot of content, it can be difficult to find information quickly. Filters can be used to narrow down the data in your worksheet, allowing you to view only the information you need.

To filter data:

In our example, we'll apply a filter to an equipment log worksheet to display only the laptops and projectors that are available for checkout.

1. In order for filtering to work correctly, your worksheet should include a header row, which is used to identify the name of each column. In our example, our worksheet is organized into different columns identified by the header cells in row 1: ID#, Type, Equipment Detail, and so on.
2. Select the Data tab, then click the Filter command.
3. A drop-down arrow will appear in the header cell for each column.
4. Click the drop-down arrow for the column you want to filter. In our example, we will filter column B to view only certain types of equipment.
5. The Filter menu will appear.
6. Uncheck the box next to Select All to quickly deselect all data.
7. Check the boxes next to the data you want to filter, then click OK. In this example, we will check Laptop and Projector to view only these types of equipment.

8. The data will be filtered,

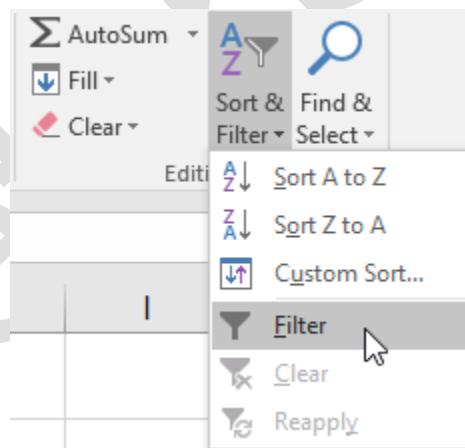
temporarily hiding

any content that

doesn't match the criteria. In our example, only laptops and projectors are visible.

	A	B	C	D	E	Ch
1	ID #	Type	Equipment Detail	Checked Out	Checked In	Ch
4	1021	Laptop	15" EDI SmartPad L200-3 Laptop	15-Sep-15	01-Oct-15	Sofie
5	1022	Laptop	15" EDI SmartPad L200-3 Laptop	14-Aug-15	16-Aug-15	Hank
6	1023	Laptop	15" EDI SmartPad L200-3 Laptop	08-Aug-15	15-Aug-15	Jenni
8	1025	Laptop	15" EDI SmartPad L200-4X	26-Sep-15	04-Oct-15	Min S
9	1031	Laptop	17" Saris X-10 Laptop	04-Oct-15		Nick C
10	1032	Laptop	17" Saris X-10 Laptop	19-Sep-15		Stanle
11	1033	Laptop	17" Saris X-10 Laptop	24-Sep-15	26-Sep-15	Georg
12	1034	Laptop	17" Saris X-10 Laptop	25-Aug-15	27-Aug-15	Jay Pe
20	6100	Projector	Omega VisX 1.0	28-Sep-15	01-Oct-15	Win A
21	6101	Projector	Omega VisX 1.0	26-Sep-15	27-Sep-15	Micha
22	6102	Projector	Omega VisX 1.0	22-Aug-15	23-Aug-15	Jamila
23	6200	Projector	Saris Lux T-80	01-Sep-15	04-Sep-15	Jolie C
24	6301	Projector	Saris Lux T-81 Lite	10-Sep-15		Marq
25	6302	Projector	Saris Lux T-81 Lite	08-Sep-15	15-Sep-15	Dean
31						
32						

Filtering options can also be accessed from the Sort & Filter command on the Home tab.



To apply multiple filters:

Filters are cumulative, which means you can apply multiple filters to help narrow down your results. In this example, we've already filtered our worksheet to show laptops and projectors, and we'd like to narrow it down further to only show laptops and projectors

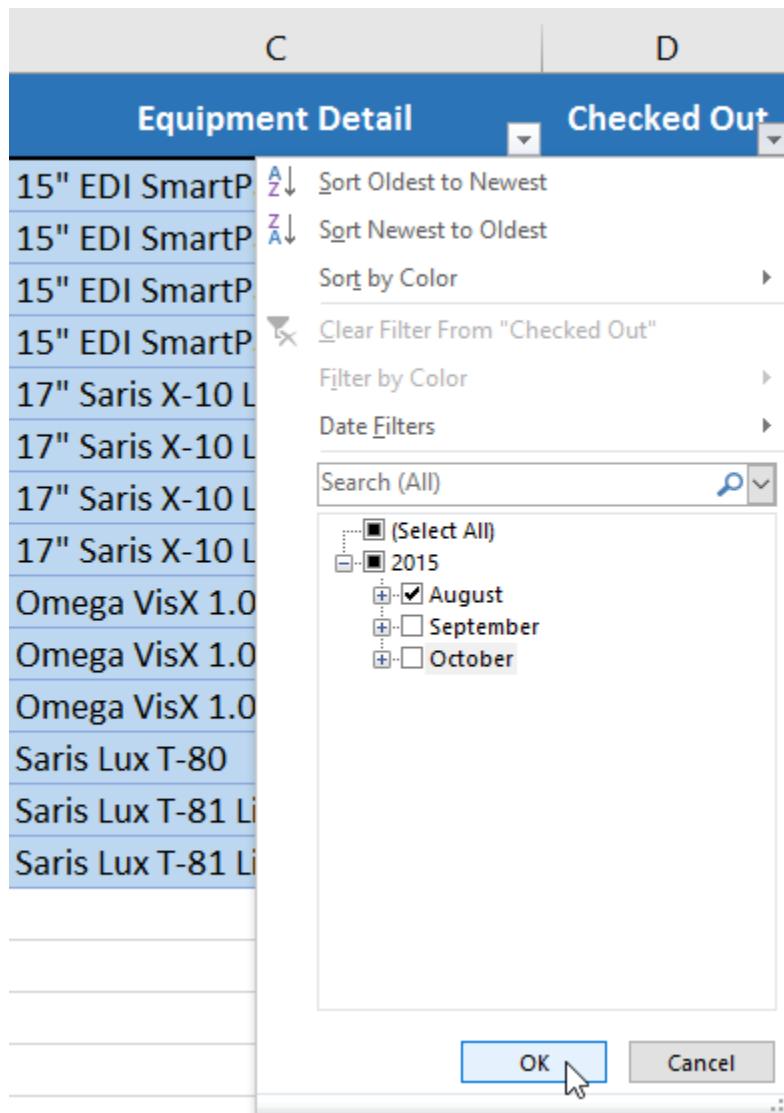
that were checked out in August.

1. Click the drop-down arrow for the column you want to filter. In this example, we will add a filter to column D to view information by date.

	A	B	C	D	E	F	G	H
1	ID #	Type	Equipment Detail	Checked Out	Checked In	Ch	Ch	Ch
4	1021	Laptop	15" EDI SmartPad L200-3 Laptop	15-Sep-15	01-Oct-15 Checked Out: (Showing All) 15	Sofie		
5	1022	Laptop	15" EDI SmartPad L200-3 Laptop	14-Aug-15	15-Aug-15 15	Hank		
6	1023	Laptop	15" EDI SmartPad L200-3 Laptop	08-Aug-15	15-Aug-15	Jenni		
8	1025	Laptop	15" EDI SmartPad L200-4X	26-Sep-15	04-Oct-15	Min S		
9	1031	Laptop	17" Saris X-10 Laptop	04-Oct-15		Nick C		
10	1032	Laptop	17" Saris X-10 Laptop	19-Sep-15		Stanle		
11	1033	Laptop	17" Saris X-10 Laptop	24-Sep-15	26-Sep-15	Georg		
12	1034	Laptop	17" Saris X-10 Laptop	25-Aug-15	27-Aug-15	Jay Pe		
20	6100	Projector	Omega VisX 1.0	28-Sep-15	01-Oct-15	Win A		
21	6101	Projector	Omega VisX 1.0	26-Sep-15	27-Sep-15	Micha		
22	6102	Projector	Omega VisX 1.0	22-Aug-15	23-Aug-15	Jamilia		
23	6200	Projector	Saris Lux T-80	01-Sep-15	04-Sep-15	Jolie C		
24	6301	Projector	Saris Lux T-81 Lite	10-Sep-15		Marq		
25	6302	Projector	Saris Lux T-81 Lite	08-Sep-15	15-Sep-15	Dean		
31								
32								

2. The Filter menu will appear.

3. Check or uncheck the boxes depending on the data you want to filter, then click OK. In our example, we'll uncheck everything except for August.



4. The new filter will be applied. In our example, the worksheet is now filtered to show only laptops and projectors that were checked out in August.

	A	B	C	D	E	F
1	ID #	Type	Equipment Detail	Checked Out	Checked In	Comments
5	1022	Laptop	15" EDI SmartPad L200-3 Laptop	14-Aug-15	16-Aug-15	Hank
6	1023	Laptop	15" EDI SmartPad L200-3 Laptop	08-Aug-15	15-Aug-15	Jennif
12	1034	Laptop	17" Saris X-10 Laptop	25-Aug-15	27-Aug-15	Jay Pe
22	6102	Projector	Omega VisX 1.0	22-Aug-15	23-Aug-15	Jamilia
31						
32						

To clear a filter:

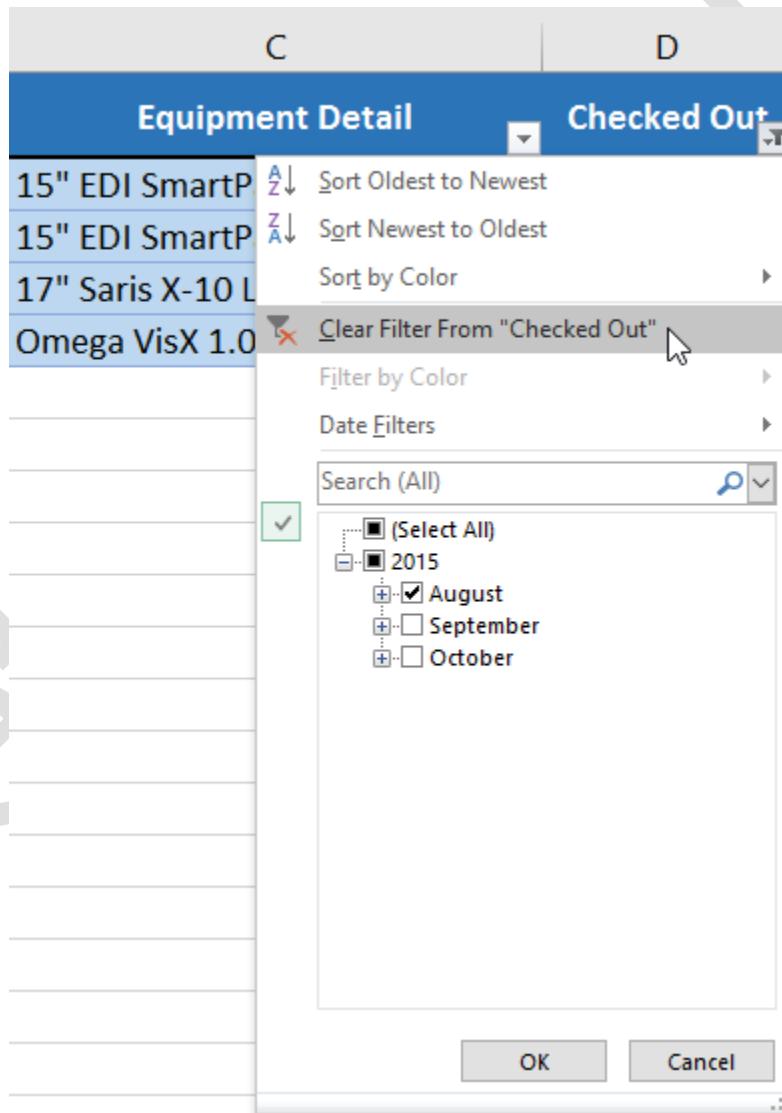
After applying a filter, you may want to remove—or clear—it from your worksheet so you'll be able to filter content in different ways.

1. Click the drop-down arrow for the filter you want to clear. In our example, we'll clear the filter in column D.

	A	B	C	D	E	F	G
1	ID #	Type	Equipment Detail	Checked Out	Checked In	Ch	Ch
5	1022	Laptop	15" EDI SmartPad L200-3 Laptop	14-Aug-15	16-Aug-15	Hank	
6	1023	Laptop	15" EDI SmartPad L200-3 Laptop	08-Aug-15		Jennif	
12	1034	Laptop	17" Saris X-10 Laptop	25-Aug-15	27-Aug-15	Jay Pe	
22	6102	Projector	Omega VisX 1.0	22-Aug-15	23-Aug-15	Jamilia	
31							
32							

2. The Filter menu will appear.

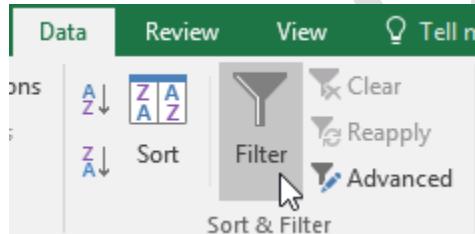
3. Choose Clear Filter From [COLUMN NAME] from the Filter menu. In our example, we'll select Clear Filter From "Checked Out".



4. The filter will be cleared from the column. The previously hidden data will be displayed.

	A	B	C	D	E	F	G	H
1	ID #	Type	Equipment Detail	Checked Out	Checked In	Ch		
4	1021	Laptop	15" EDI SmartPad L200-3 Laptop	15-Sep-15	01-Oct-15 Checked Out: (Showing All)	15	Sofie	
5	1022	Laptop	15" EDI SmartPad L200-3 Laptop	14-Aug-15	15-Aug-15	15	Hank	
6	1023	Laptop	15" EDI SmartPad L200-3 Laptop	08-Aug-15	15-Aug-15	15	Jenni	
8	1025	Laptop	15" EDI SmartPad L200-4X	26-Sep-15	04-Oct-15	15	Min S	
9	1031	Laptop	17" Saris X-10 Laptop	04-Oct-15		15	Nick C	
10	1032	Laptop	17" Saris X-10 Laptop	19-Sep-15		15	Stanle	
11	1033	Laptop	17" Saris X-10 Laptop	24-Sep-15	26-Sep-15	15	George	
12	1034	Laptop	17" Saris X-10 Laptop	25-Aug-15	27-Aug-15	15	Jay Pe	
20	6100	Projector	Omega VisX 1.0	28-Sep-15	01-Oct-15	15	Win A	
21	6101	Projector	Omega VisX 1.0	26-Sep-15	27-Sep-15	15	Micha	
22	6102	Projector	Omega VisX 1.0	22-Aug-15	23-Aug-15	15	Jamila	
23	6200	Projector	Saris Lux T-80	01-Sep-15	04-Sep-15	15	Jolie C	
24	6301	Projector	Saris Lux T-81 Lite	10-Sep-15		15	Marq	
25	6302	Projector	Saris Lux T-81 Lite	08-Sep-15	15-Sep-15	15	Dean	
31								
32								

To remove all filters from your worksheet, click the Filter command on the Data tab.



Advanced filtering

If you need a filter for something specific, basic filtering may not give you enough options. Fortunately, Excel includes several advanced filtering tools, including search, text, date, and number filtering, which can narrow your results to help find exactly what you need.

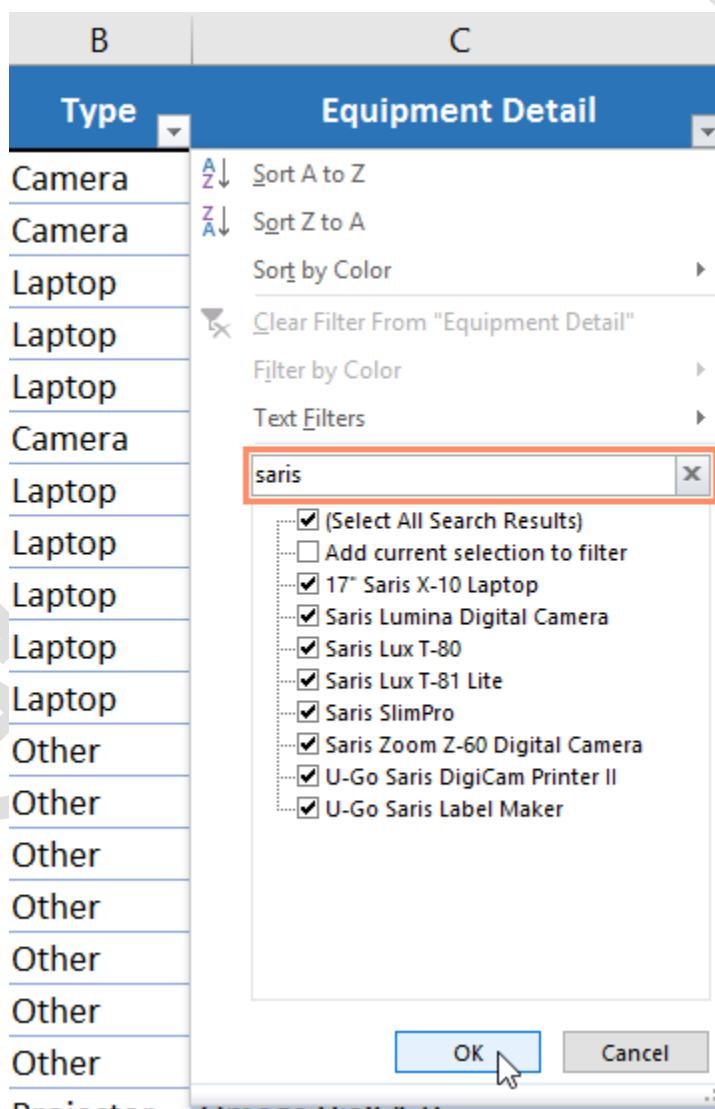
To filter with search:

Excel allows you to search for data that contains an exact phrase, number, date, and more. In our example, we'll use this feature to show only Saris brand products in our equipment log.

1. Select the Data tab, then click the Filter command. A drop-down arrow will appear in the header cell for each column. Note: If you've already added filters to your worksheet, you can skip this step.
2. Click the drop-down arrow for the column you want to filter. In our example, we'll filter column C.

1	ID #	Type	Equipment Detail	Checked Out	Checked In	Ch
2	3000	Camera	Saris Lumina Digital Camera	12-May-15 Equipment Detail: (Showing All)	15-May-15	Shan
3	3005	Camera	Saris Zoom Z-60 Digital Camera		06-Aug-15	Sela S
4	1021	Laptop	15" EDI SmartPad L200-3 Laptop	15-Sep-15	01-Oct-15	Sofie
5	1022	Laptop	15" EDI SmartPad L200-3 Laptop	14-Aug-15	16-Aug-15	Hank
6	1023	Laptop	15" EDI SmartPad L200-3 Laptop	08-Aug-15	15-Aug-15	Jenni
7	3070	Camera	Omega PixL Digital Camcorder	06-Oct-15		Min S
8	1025	Laptop	15" EDI SmartPad L200-4X	26-Sep-15	04-Oct-15	Min S
9	1031	Laptop	17" Saris X-10 Laptop	04-Oct-15		Nick C
10	1032	Laptop	17" Saris X-10 Laptop	19-Sep-15		Stanle

3. The Filter menu will appear. Enter a search term into the search box. Search results will appear automatically below the Text Filters field as you type. In our example, we'll type saris to find all Saris brand equipment. When you're done, click OK.



4. The worksheet will be filtered according to your search term. In our example, the worksheet is now filtered to show only Saris brand equipment.

	A	B	C	D	E	F	G
1	ID #	Type	Equipment Detail	Checked Out	Checked In	Ch	Ch
2	3000	Camera	Saris Lumina Digital Camera	12-May-15	15-May-15	Shan	
3	3005	Camera	Saris Zoom Z-60 Digital Camera	27-Jul-15	06-Aug-15	Sela S	
9	1031	Laptop	17" Saris X-10 Laptop	04-Oct-15		Nick C	
10	1032	Laptop	17" Saris X-10 Laptop	19-Sep-15		Stanle	
11	1033	Laptop	17" Saris X-10 Laptop	24-Sep-15	26-Sep-15	Georg	
12	1034	Laptop	17" Saris X-10 Laptop	25-Aug-15	27-Aug-15	Jay Pe	
15	3800	Other	U-Go Saris DigiCam Printer II	04-Aug-15	05-Aug-15	Hank	
16	3900	Other	U-Go Saris Label Maker	13-Jun-15	20-Jun-15	Clint C	
23	6200	Projector	Saris Lux T-80	01-Sep-15	04-Sep-15	Jolie C	
24	6301	Projector	Saris Lux T-81 Lite	10-Sep-15		Marq	
25	6302	Projector	Saris Lux T-81 Lite	08-Sep-15	15-Sep-15	Dean	
26	1011	Tablet	Saris SlimPro	04-Oct-15		Jay Pe	
27	1012	Tablet	Saris SlimPro	29-Sep-15		Augu	
31							
32							

To use advanced text filters:

Advanced text filters can be used to display more specific information, like cells that contain a certain number of characters or data that excludes a specific word or number. In our example, we'd like to exclude any item containing the word laptop.

1. Select the Data tab, then click the Filter command. A drop-down arrow will appear in the header cell for each column. Note: If you've already added filters to your worksheet, you can skip this step.
2. Click the drop-down arrow for the column you want to filter. In our example, we'll filter column C.

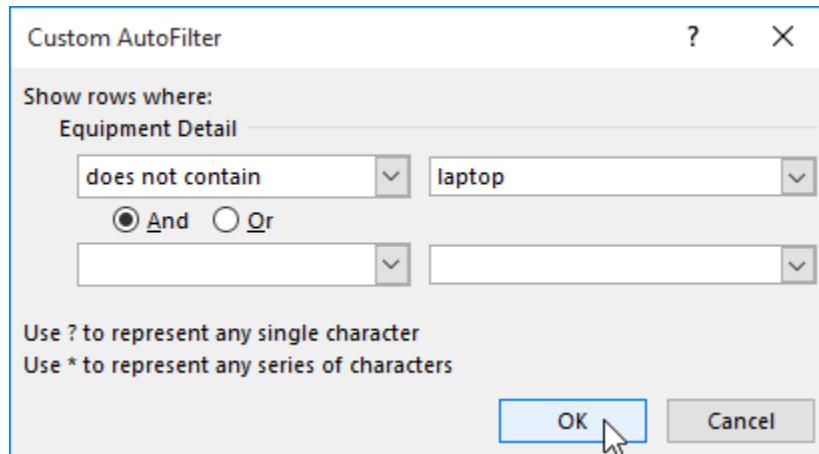
	A	B	C	D	E	F	G
1	ID #	Type	Equipment Detail	Checked Out	Checked In	Ch	Ch
2	3000	Camera	Saris Lumina Digital Camera	12-May-15 Equipment Detail: (Showing All)	15-May-15	Shan	
3	3005	Camera	Saris Zoom Z-60 Digital Camera		06-Aug-15	Sela S	
4	1021	Laptop	15" EDI SmartPad L200-3 Laptop	15-Sep-15	01-Oct-15	Sofie	
5	1022	Laptop	15" EDI SmartPad L200-3 Laptop	14-Aug-15	16-Aug-15	Hank	
6	1023	Laptop	15" EDI SmartPad L200-3 Laptop	08-Aug-15	15-Aug-15	Jenni	
7	3070	Camera	Omega PixL Digital Camcorder	06-Oct-15		Min S	
8	1025	Laptop	15" EDI SmartPad L200-4X	26-Sep-15	04-Oct-15	Min S	
9	1031	Laptop	17" Saris X-10 Laptop	04-Oct-15		Nick C	
10	1032	Laptop	17" Saris X-10 Laptop	19-Sep-15		Stanle	

3. The Filter menu will appear. Hover the mouse over Text Filters, then select the desired text filter from the drop-down menu. In our example, we'll choose Does Not Contain... to view data that does not contain specific text.

B	C	D	E
Type	Equipment Detail	Checked Out	Checked In
Camera	A↓ Sort A to Z Z↓ Sort Z to A Sort by Color Clear Filter From "Equipment Detail" Filter by Color Text Filters	12-May-15	15-May-15
Camera		27-Jul-15	06-Aug-15
Laptop		04-Oct-15	
Laptop		19-Sep-15	
Laptop		24-Sep-15	26-Sep-15
Laptop			Aug-15
Other			Aug-15
Other			Jun-15
Projector			Sep-15
Projector			
Projector			
Tablet			
Tablet			

The screenshot shows a Microsoft Excel spreadsheet titled 'PEW'. The first column is labeled 'Type' and contains items like Camera, Camera, Laptop, Laptop, Laptop, Laptop, Other, Other, Projector, Projector, Projector, Tablet, and Tablet. The second column is labeled 'Equipment Detail' and lists various equipment items such as '15" EDI SmartPad L200-3 Laptop', '15" EDI SmartPad L200-4X', '17" Saris X-10 Laptop', '32" Paragon 440 OLED TV', etc. The third column is labeled 'Checked Out' and the fourth is 'Checked In'. A context menu is open over the 'Equipment Detail' column, specifically over the 'Laptop' row. The menu path 'Text Filters' -> 'Does Not Contain...' is highlighted with a mouse cursor. A sub-menu window titled 'Text Filters' is displayed, showing options like Equals..., Does Not Equal..., Begins With..., Ends With..., Contains..., Does Not Contain..., and Custom Filter... The 'Does Not Contain...' option is selected. At the bottom of this window are 'OK' and 'Cancel' buttons.

4. The Custom AutoFilter dialog box will appear. Enter the desired text to the right of the filter, then click OK. In our example, we'll type laptop to exclude any items containing this word.



5. The data will be filtered by the selected text filter. In our example, our worksheet now displays items that do not contain the word laptop.

	A	B	C	D	E	F
1	ID #	Type	Equipment Detail	Checked Out	Checked In	Ch
2	3000	Camera	Saris Lumina Digital Camera	12-May-15	15-May-15	Shan
3	3005	Camera	Saris Zoom Z-60 Digital Camera	27-Jul-15	06-Aug-15	Sela S
7	3070	Camera	Omega PixL Digital Camcorder	06-Oct-15		Min S
8	1025	Laptop	15" EDI SmartPad L200-4X	26-Sep-15	04-Oct-15	Min S
13	2050	Other	EDI SmartBoard L500-1	05-Oct-15	06-Oct-15	Antho
14	2051	Other	EDI SmartBoard L500-1	01-Oct-15	05-Oct-15	Sofie
15	3800	Other	U-Go Saris DigiCam Printer II	04-Aug-15	05-Aug-15	Hank
16	3900	Other	U-Go Saris Label Maker	13-Jun-15	20-Jun-15	Clint C
17	4800	Other	7N Deluxe Camera Travel Bag	27-Jul-15	06-Aug-15	Sela S
20	6100	Projector	Omega VisX 1.0	28-Sep-15	01-Oct-15	Win A
21	6101	Projector	Omega VisX 1.0	26-Sep-15	27-Sep-15	Micha
22	6102	Projector	Omega VisX 1.0	22-Aug-15	23-Aug-15	Jamil

To use advanced number filters:

Advanced number filters allow you to manipulate numbered data in different ways. In this example, we'll display only certain types of equipment based on the range of ID numbers.

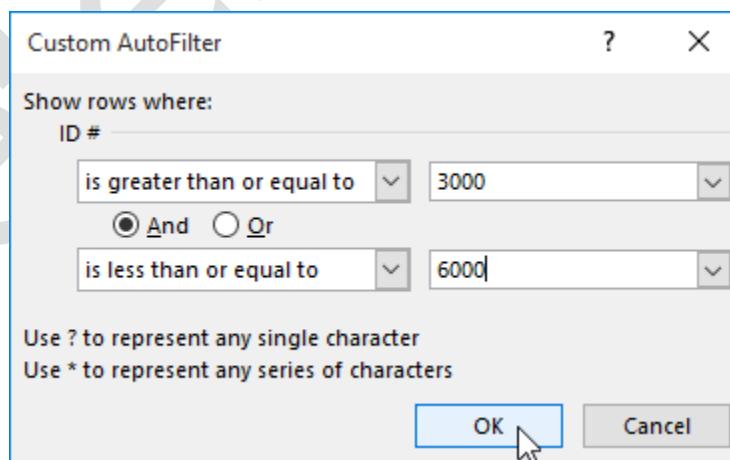
1. Select the Data tab on the Ribbon, then click the Filter command. A drop-down arrow will appear in the header cell for each column. Note: If you've already added filters to your worksheet, you can skip this step.
2. Click the drop-down arrow for the column you want to filter. In our example, we'll filter column A to view only a certain range of ID numbers.

	A	B	C	D	E	F
1	ID #	Type	Equipment Detail	Checked Out	Checked In	Ch
2	3000	Cameras	Saris Lumina Digital Camera	12-May-15	15-May-15	Shan
3	3005	(Showing All)	Saris Zoom Z-60 Digital Camera	27-Jul-15	06-Aug-15	Sela S
7	3070	Camera	Omega PixL Digital Camcorder	06-Oct-15		Min S
8	1025	Laptop	15" EDI SmartPad L200-4X	26-Sep-15	04-Oct-15	Min S
13	2050	Other	EDI SmartBoard L500-1	05-Oct-15	06-Oct-15	Antho
14	2051	Other	EDI SmartBoard L500-1	01-Oct-15	05-Oct-15	Sofie
15	3800	Other	U-Go Saris DigiCam Printer II	04-Aug-15	05-Aug-15	Hank
16	3900	Other	U-Go Saris Label Maker	13-Jun-15	20-Jun-15	Clint C
17	4800	Other	7N Deluxe Camera Travel Bag	27-Jul-15	06-Aug-15	Sela S
20	6100	Projector	Omega VisX 1.0	28-Sep-15	01-Oct-15	Win A
21	6101	Projector	Omega VisX 1.0	26-Sep-15	27-Sep-15	Micha

3. The Filter menu will appear. Hover the mouse over Number Filters, then select the desired number filter from the drop-down menu. In our example, we'll choose Between to view ID numbers between a specific number range.

	A	B	C
1	ID #	Type	Equipment Detail
	A Sort Smallest to Largest		Sony Digital Camera
	Z Sort Largest to Smallest		Sony Z-60 Digital Camera
	Sort by Color		Sony XL Digital Camcorder
	Clear Filter From "ID #"		Sony SmartPad L200-4X
	Filter by Color		Sony Board L500-1
	Number Filters		
	<div style="border: 1px solid #ccc; padding: 5px;"> <p>Search </p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> (Select All) <input checked="" type="checkbox"/> 1011 <input checked="" type="checkbox"/> 1012 <input checked="" type="checkbox"/> 1025 <input checked="" type="checkbox"/> 2050 <input checked="" type="checkbox"/> 2051 <input checked="" type="checkbox"/> 3000 <input checked="" type="checkbox"/> 3005 <input checked="" type="checkbox"/> 3070 <input checked="" type="checkbox"/> 3800 <input checked="" type="checkbox"/> 3900 <input checked="" type="checkbox"/> 4800 <input checked="" type="checkbox"/> 5020 <input checked="" type="checkbox"/> 5022 <input checked="" type="checkbox"/> 5023 <input type="checkbox"/> 5100 <p><input type="button" value="OK"/> <input type="button" value="Cancel"/></p> </div>		
	<div style="border: 1px solid #ccc; padding: 5px;"> <p>Equals...</p> <p>Does Not Equal...</p> <p>Greater Than...</p> <p>Greater Than Or Equal To...</p> <p>Less Than...</p> <p>Less Than Or Equal To...</p> <p>Between... </p> <p>Top 10...</p> <p>Above Average</p> <p>Below Average</p> <p>Custom Filter...</p> </div>		
	<div style="border: 1px solid #ccc; padding: 5px;"> <p>Pro</p> <p>Pro</p> <p>Sony 440 OLED TV</p> <p>Sony 440 OLED TV</p> </div>		

4. The Custom AutoFilter dialog box will appear. Enter the desired number(s) to the right of each filter, then click OK. In our example, we want to filter for ID numbers greater than or equal to 3000 but less than or equal to 6000, which will display ID numbers in the 3000-6000 range.



5. The data will be filtered by the selected number filter. In our example, only items with an ID number

between 3000 and 6000 are visible.

1	A	B	C	D	E	F	G	H	I	J	K
	ID #	Type	Equipment Detail	Checked Out	Checked In	Ch					
2	3000	Camera	Saris Lumina Digital Camera	12-May-15	15-May-15	Shan					
3	3005	Camera	Saris Zoom Z-60 Digital Camera	27-Jul-15	06-Aug-15	Sela S					
7	3070	Camera	Omega PixL Digital Camcorder	06-Oct-15		Min S					
15	3800	Other	U-Go Saris DigiCam Printer II	04-Aug-15	05-Aug-15	Hank					
16	3900	Other	U-Go Saris Label Maker	13-Jun-15	20-Jun-15	Clint C					
17	4800	Other	7N Deluxe Camera Travel Bag	27-Jul-15	06-Aug-15	Sela S					
28	5020	TV	32" Paragon 440 OLED TV	11-Aug-15	13-Aug-15	Marta					
29	5022	TV	32" Paragon 440 OLED TV	17-Jul-15	17-Jul-15	Carl L					
30	5023	TV	50" Paragon 490L LED TV	01-Oct-15	01-Oct-15	Marg					
31											
32											

To use advanced date filters:

Advanced date filters can be used to view information from a certain time period, such as last year, next quarter, or between two dates. In this example, we'll use advanced date filters to view only equipment that has been checked out between July 15 and August 15.

- 1. Select the Data tab, then click the Filter command. A drop-down arrow will appear in the header cell for each column. Note: If you've already added filters to your worksheet, you can skip this step.**
- 2. Click the drop-down arrow for the column you want to filter. In our example, we'll filter column D to view only a certain range of dates.**

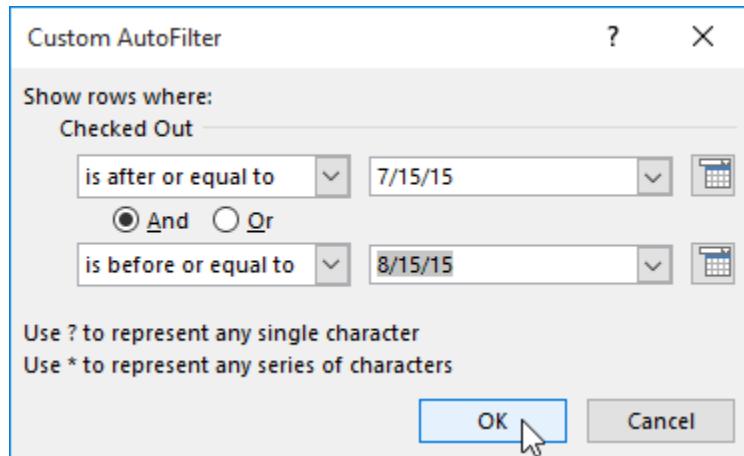
1	A	B	C	D	E	F	G	H	I	J	K
	ID #	Type	Equipment Detail	Checked Out	Checked In	Ch					
2	3000	Camera	Saris Lumina Digital Camera	12-May-15	15-May-15	Shan					
3	3005	Camera	Saris Zoom Z-60 Digital Camera	27-Jul-15	06-Aug-15	Sela S					
7	3070	Camera	Omega PixL Digital Camcorder	06-Oct-15		Min S					
15	3800	Other	U-Go Saris DigiCam Printer II	04-Aug-15	05-Aug-15	Hank					
16	3900	Other	U-Go Saris Label Maker	13-Jun-15	20-Jun-15	Clint C					
17	4800	Other	7N Deluxe Camera Travel Bag	27-Jul-15	06-Aug-15	Sela S					
28	5020	TV	32" Paragon 440 OLED TV	11-Aug-15	13-Aug-15	Marta					
29	5022	TV	32" Paragon 440 OLED TV	17-Jul-15	17-Jul-15	Carl L					
30	5023	TV	50" Paragon 490L LED TV	01-Oct-15	01-Oct-15	Marg					
31											
32											

- 3. The Filter menu will appear. Hover the mouse over Date Filters, then select the desired date filter from the drop-down menu. In our example, we'll select Between... to view equipment that has been**

checked out between July 15 and August 15.

C	D	E	F
Equipment Detail	Checked Out	Checked In	Check
Saris Lumina Dig	A ^z Sort Oldest to Newest	15-May-15	Shann
Saris Zoom Z-60	Z ^A Sort Newest to Oldest	06-Aug-15	Sela S
Omega PixL Digi	Sort by Color		Min Se
U-Go Saris DigiC	Clear Filter From "Checked Out"	05-Aug-15	Hank
U-Go Saris Label	Filter by Color	20-Jun-15	Clint G
7N Deluxe Came	Date Filters		Equals...
32" Paragon 44	Search (All)		Before...
32" Paragon 44	(Select All)		After...
50" Paragon 49	2015		Between...
	May		Tomorrow
	June		Today
	July		Yesterday
	August		Next Week
	October		This Week
			Last Week
			Next Month
			This Month
			Last Month
			Next Quarter
			This Quarter
			Last Quarter

4. The Custom AutoFilter dialog box will appear. Enter the desired date(s) to the right of each filter, then click OK. In our example, we want to filter for dates after or equal to July 15, 2015, and before or equal to August 15, 2015, which will display a range between these dates.



- The worksheet will be filtered by the selected date filter. In our example, we can now see which items have been checked out between July 15 and August 15.

	A	B	C	D	E	Ch
1	ID #	Type	Equipment Detail	Checked Out	Checked In	Ch
3	3005	Camera	Saris Zoom Z-60 Digital Camera	27-Jul-15	06-Aug-15	Sela S
15	3800	Other	U-Go Saris DigiCam Printer II	04-Aug-15	05-Aug-15	Hank
17	4800	Other	7N Deluxe Camera Travel Bag	27-Jul-15	06-Aug-15	Sela S
28	5020	TV	32" Paragon 440 OLED TV	11-Aug-15	13-Aug-15	Marta
29	5022	TV	32" Paragon 440 OLED TV	17-Jul-15	17-Jul-15	Carl L
31						
32						

Challenge!

- Open our [practice workbook](#).
- Click the Challenge tab in the bottom-left of the workbook.
- Apply a filter to show only Electronics and Instruments.
- Use the Search feature to filter item descriptions that contain the word Sansei. After you do this, you should have six entries showing.
- Clear the Item Description filter.
- Using a number filter, show loan amounts greater than or equal to \$100.
- Filter to show only items that have deadlines in 2016.
- When you're finished, your workbook should look like this:

	A	B	C	D	E
1	ID#	Customer Last Name	Item Description	Item Type	Loan Amo
7	2046	Smith	15" Suzu Laptop	Electronics	\$150
13	2985	Haley	Milano 4/4 Size Cello with Hard Case	Instrument	\$200
14	2345	Marquez-Jimenez	Sansel Portable Gaming System Black	Electronics	\$100
19	1056	Dwivedi	1950s Steel Lap Slide Guitar	Instrument	\$175
25	4956	Gorecki	15.6" 500 GB Sansel Laptop	Electronics	\$205

Lesson 21: Groups and Subtotals

Introduction

Worksheets with a lot of content can sometimes feel overwhelming and can even become difficult to read. Fortunately, Excel can organize data into groups, allowing you to easily show and hide different sections of your worksheet. You can also summarize different groups using the Subtotal command and create an outline for your worksheet.

Optional: Download our [practice workbook](#).

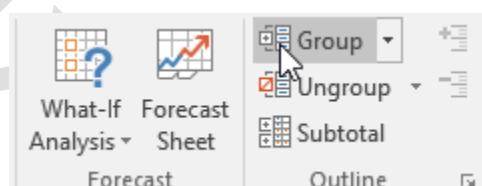
Watch the video below to learn more about groups and subtotals in Excel.

To group rows or columns:

- Select the rows or columns you want to group. In this example, we'll select columns B, C, and D.

	A	B	C	D	E
1	Homeroom #	First Name	Last Name	Payment Method	T-Shirt Size
2	105	Melissa	White	Debit Card	Small
3	105	Esther	Yaron	Pending	Small
4	135	Anisa	Naser	Check Bounced	Small
5	220-A	Brigid	Ellison	Cash	Small
6	220-A	Christopher	Peyton-Gomez	Check	Small
7	220-B	Michael	Lazar	Cash	Small
8	220-B	Malik	Reynolds	Cash	Small
9	220-B	Wendy	Shaw	Cash	Small
10	105	Nathan	Albee	Check	Medium

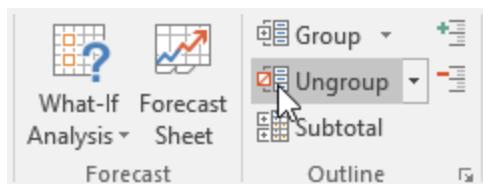
- Select the Data tab on the Ribbon, then click the Group command.



- The selected rows or columns will be grouped. In our example, columns B, C, and D are grouped.

	A	B	C	D	E
1	Homeroom #	First Name	Last Name	Payment Method	T-Shirt Size
2	105	Melissa	White	Debit Card	Small
3	105	Esther	Yaron	Pending	Small
4	135	Anisa	Naser	Check Bounced	Small
5	220-A	Brigid	Ellison	Cash	Small
6	220-A	Christopher	Peyton-Gomez	Check	Small
7	220-B	Michael	Lazar	Cash	Small
8	220-B	Malik	Reynolds	Cash	Small
9	220-B	Wendy	Shaw	Cash	Small
10	105	Nathan	Albee	Check	Medium

To ungroup data, select the grouped rows or columns, then click the Ungroup command.



To hide and show groups:

1. To hide a group, click the minus sign, also known as the Hide Detail button.

	A	B	C	D	E
1	Homeroom #	First Name	Last Name	Payment Method	T-Shirt Size
2	105	Melissa	White	Debit Card	Small
3	105	Esther	Yaron	Pending	Small
4	135	Anisa	Naser	Check Bounced	Small
5	220-A	Brigid	Ellison	Cash	Small
6	220-A	Christopher	Peyton-Gomez	Check	Small
7	220-B	Michael	Lazar	Cash	Small
8	220-B	Malik	Reynolds	Cash	Small
9	220-B	Wendy	Shaw	Cash	Small
10	105	Nathan	Albee	Check	Medium

2. The group will be hidden. To show a hidden group, click the plus sign, also known as the Show Detail button.

	A	E	F	G
1	Homeroom #	T-Shirt Size		
2	105	Small		
3	105	Small		
4	135	Small		
5	220-A	Small		
6	220-A	Small		
7	220-B	Small		
8	220-B	Small		
9	220-B	Small		
10	105	Medium		

Creating subtotals

The Subtotal command allows you to automatically create groups and use common functions like SUM, COUNT, and AVERAGE to help summarize your data. For example, the Subtotal command could help to calculate the cost of office supplies by type from a large inventory order. It will create a hierarchy of groups, known as an outline, to help organize your worksheet.

Your data must be correctly sorted before using the Subtotal command, so you may want to review our lesson on [Sorting Data](#) to learn more.

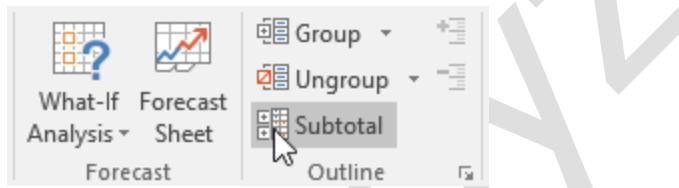
To create a subtotal:

In our example, we'll use the Subtotal command with a T-shirt order form to determine how many T-shirts were ordered in each size (Small, Medium, Large, and X-Large). This will create an outline for our worksheet with a group for each T-shirt size and then count the total number of shirts in each group.

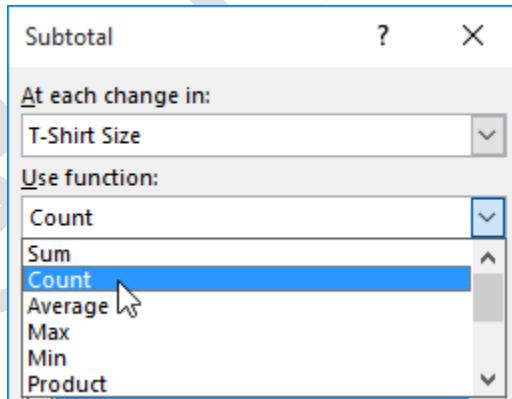
1. First, sort your worksheet by the data you want to subtotal. In this example, we'll create a subtotal for each T-shirt size, so our worksheet has been sorted by T-shirt size from smallest to largest.

	A	B	C	D	E
1	Homeroom #	First Name	Last Name	Payment Method	T-Shirt Size
2	105	Melissa	White	Debit Card	Small
3	105	Esther	Yaron	Pending	Small
4	135	Anisa	Naser	Check Bounced	Small
5	220-A	Brigid	Ellison	Cash	Small
6	220-A	Christopher	Peyton-Gomez	Check	Small
7	220-B	Michael	Lazar	Cash	Small
8	220-B	Malik	Reynolds	Cash	Small
9	220-B	Wendy	Shaw	Cash	Small
10	105	Nathan	Albee	Check	Medium
11	105	Christiana	Chen	Check Bounced	Medium
12	105	Sidney	Kelly	Check	Medium
13	110	Matt	Benson	Money Order	Medium
14	110	Gabriel	Del Toro	Cash	Medium

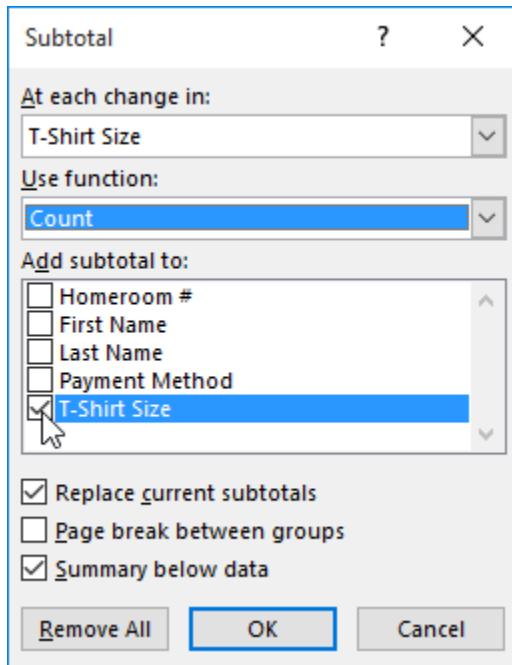
2. Select the Data tab, then click the Subtotal command.



- 3. The Subtotal dialog box will appear. Click the drop-down arrow for the At each change in: field to select the column you want to subtotal. In our example, we'll select T-Shirt Size.**
- 4. Click the drop-down arrow for the Use function: field to select the function you want to use. In our example, we'll select COUNT to count the number of shirts ordered in each size.**



- 5. In the Add subtotal to: field, select the column where you want the calculated subtotal to appear. In our example, we'll select T-Shirt Size. When you're satisfied with your selections, click OK.**



6. The worksheet will be outlined into groups, and the subtotal will be listed below each group. In our example, the data is now grouped by T-shirt size, and the number of shirts ordered in that size appears below each group.

	A	B	C	D	E
1	Homeroom #	First Name	Last Name	Payment Method	T-Shirt Size
2	105	Melissa	White	Debit Card	Small
3	105	Esther	Yaron	Pending	Small
4	135	Anisa	Naser	Check Bounced	Small
5	220-A	Brigid	Ellison	Cash	Small
6	220-A	Christopher	Peyton-Gomez	Check	Small
7	220-B	Michael	Lazar	Cash	Small
8	220-B	Malik	Reynolds	Cash	Small
9	220-B	Wendy	Shaw	Cash	Small
10				Small Count	8
11	105	Nathan	Albee	Check	Medium
12	105	Christiana	Chen	Check Bounced	Medium
13	105	Sidney	Kelly	Check	Medium
14	110	Matt	Benson	Money Order	Medium
15	110	Gabriel	Del Toro	Cash	Medium
16	135	James	Panarello	Check	Medium
17	135	Chantal	Weller	Debit Card	Medium
18	220-A	Chevonne	Means	Money Order	Medium
19	220-B	Samantha	Bell	Check	Medium
20	220-B	Avery	Kelly	Debit Card	Medium
21				Medium Count	10

To view groups by level:

When you create subtotals, your worksheet it is divided into different levels. You can switch among these levels to quickly control how much information is displayed in the worksheet by clicking the Level buttons to the left of the worksheet. In our example, we'll switch among all three levels in our outline. While this example contains only three levels, Excel can accommodate up to eight.

1. Click the lowest level to display the least detail. In our example, we'll select level 1, which contains only the Grand Count, or total number of T-shirts ordered.

	A	B	C	D	E
1	Homeroom #	First Name	Last Name	Payment Method	T-Shirt Size
33				Grand Count	27
34					
35					

2. Click the next level to expand the detail. In our example, we'll select level 2, which contains each subtotal row but hides all other data from the worksheet.

	A	B	C	D	E
1	Homeroom #	First Name	Last Name	Payment Method	T-Shirt Size
10				Small Count	8
21				Medium Count	10
27				Large Count	5
32				X-Large Count	4
33				Grand Count	27

3. Click the highest level to view and expand all of your worksheet data. In our example, we'll select level 3.

	A	B	C	D	E
1	Homeroom #	First Name	Last Name	Payment Method	T-Shirt Size
2	105	Melissa	White	Debit Card	Small
3	105	Esther	Yaron	Pending	Small
4	135	Anisa	Naser	Check Bounced	Small
5	220-A	Brigid	Ellison	Cash	Small
6	220-A	Christopher	Peyton-Gomez	Check	Small
7	220-B	Michael	Lazar	Cash	Small
8	220-B	Malik	Reynolds	Cash	Small
9	220-B	Wendy	Shaw	Cash	Small
10				Small Count	8
11	105	Nathan	Albee	Check	Medium
12	105	Christiana	Chen	Check Bounced	Medium
13	105	Sidney	Kelly	Check	Medium

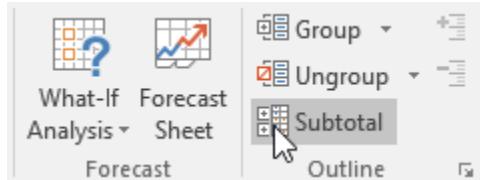
You can also use the Show Detail and Hide Detail buttons to show and hide the groups within the outline.

	A	B	C	D	E
1	Homeroom #	First Name	Last Name	Payment Method	T-Shirt Size
10				Small Count	8
21				Medium Count	10
22	105	Derek	MacDonald	Cash	Large
23	110	Kris	Ackerman	Money Order	Large
24	110	Regina	Olivera	Pending	Large
25	135	Jordan	Weller	Money Order	Large
26	135	Alex	Yuen	Wrong Amount	Large
27				Large Count	5
32				X-Large Count	4
33				Grand Count	27

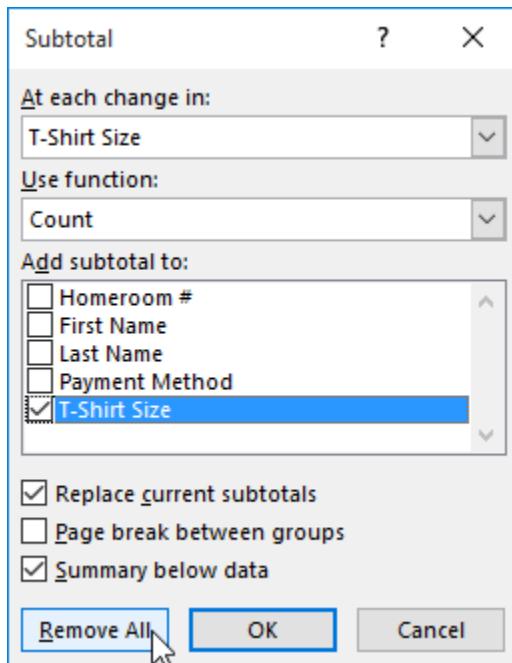
To remove subtotals:

Sometimes you may not want to keep subtotals in your worksheet, especially if you want to reorganize data in different ways. If you no longer want to use subtotaling, you'll need to remove it from your worksheet.

1. Select the Data tab, then click the Subtotal command.



2. The Subtotal dialog box will appear. Click Remove All.



3. All worksheet data will be ungrouped, and the subtotals will be removed.

To remove all groups without deleting the subtotals, click the Ungroup command drop-down arrow, then choose Clear Outline.



Challenge!

1. Open our [practice workbook](#).
2. Click the Challenge tab in the bottom-left of the workbook.

- 3. Sort the workbook by Grade from smallest to largest.**
- 4. Use the Subtotal command to group at each change in Grade. Use the SUM function and add subtotals to Amount Raised.**
- 5. Select level 2 so you only see the subtotals and grand total.**
- 6. When you're finished, your workbook should look like this:**

	A	B	C	D
1	First Name	Last Name	Grade	Amount Raised
8			8 Total	\$311.00
15			9 Total	\$583.00
22			10 Total	\$432.00
29			11 Total	\$345.00
35			12 Total	\$240.00
36			Grand Total	\$1,911.00

Lesson 22: Tables

Introduction

Once you've entered information into your worksheet, you may want to format your data as a table. Just like regular formatting, tables can improve the look and feel of your workbook, and they'll also help organize your content and make your data easier to use. Excel includes several tools and predefined table styles, allowing you to create tables quickly and easily.

Optional: Download our [practice workbook](#).

Watch the video below to learn more about working with tables.

To format data as a table:

- 1. Select the cells you want to format as a table. In our example, we'll select the cell range A2:D9.**

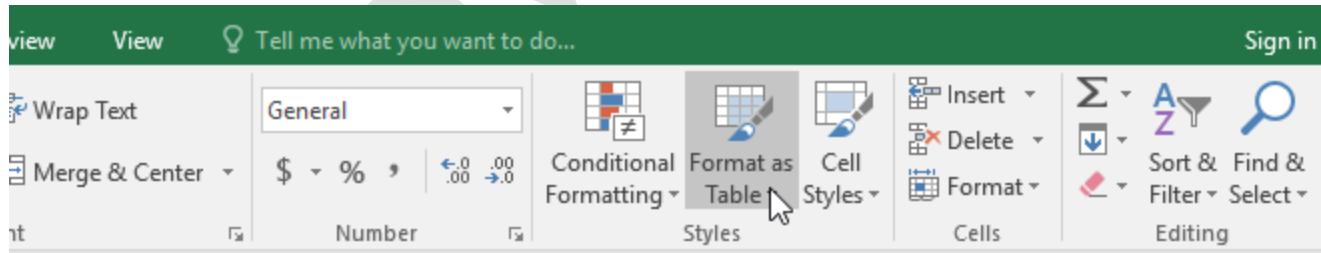
SABROSA
Empanadas & More

Catering Invoice
Sabrosa Empanadas & More
1202 Biscayne Bay Drive
Orlando, FL 32804

Invoice #: 56
Date: 05/10/2023

	MENU ITEM	UNIT PRICE	QUANTITY	LINE TOTAL
1	Empanadas: Beef Picadillo	\$2.99	15	\$44.85
2	Empanadas: Chipotle Shrimp	\$3.99	10	\$39.90
3	Tamales: Chicken Tinga	\$2.29	20	\$45.80
4	Tamales: Vegetable	\$2.29	30	\$68.70
5	Arepas: Carnitas	\$2.89	10	\$28.90
6	Arepas: Queso Blanco	\$2.49	20	\$49.80
7	Beverages: Horchata	\$1.89	25	\$47.25
8				
9				
10				

2. From the Home tab, click the Format as Table command in the Styles group.



3. Select a table style from the drop-down menu.

View View Tell me what you want to do... Sign in

Wrap Text General \$ % , .00 .00

Merge & Center Conditional Formatting Insert Σ

Format as Table Delete \downarrow

Cell Styles Format A

Format Z

Sort & Find & Filter Select

ice
s & More
Drive

Invoice #: 568
Date: 05/10

QUANTITY	LINE TOTAL
15	\$44
10	\$39
20	\$45
30	\$68
10	\$28

Light

Medium

Table Style Medium 9

4. A dialog box will appear, confirming the selected cell range for the table.
5. If your table has headers, check the box next to My table has headers, then click OK.

	A	B	C	D
1		Catering Invoice Sabrosa Empanadas & More 1202 Biscayne Bay Drive Orlando, FL 32804	Invoice #: 56 Date: 05/10	
2	MENU ITEM	UNIT PRICE	QUANTITY	LINE TOTAL
3	Empanadas: Beef Picadillo		15	\$45.00
4	Empanadas: Chipotle Shrimp		10	\$35.00
5	Tamales: Chicken Tinga		20	\$40.00
6	Tamales: Vegetable		30	\$60.00
7	Arepas: Carnitas		10	\$20.00
8	Arepas: Queso Blanco		20	\$40.00
9	Beverages: Horchata	\$1.89	25	\$47.25
10				

6. The cell range will be formatted in the selected table style.

	A	B	C	D
1		Catering Invoice Sabrosa Empanadas & More 1202 Biscayne Bay Drive Orlando, FL 32804	Invoice #: 56 Date: 05/10	
2	MENU ITEM	UNIT PRICE	QUANTITY	LINE TOTAL
3	Empanadas: Beef Picadillo	\$2.99	15	\$44.85
4	Empanadas: Chipotle Shrimp	\$3.99	10	\$39.90
5	Tamales: Chicken Tinga	\$2.29	20	\$45.80
6	Tamales: Vegetable	\$2.29	30	\$68.70
7	Arepas: Carnitas	\$2.89	10	\$28.90
8	Arepas: Queso Blanco	\$2.49	20	\$49.80
9	Beverages: Horchata	\$1.89	25	\$47.25
10				

Tables include filtering by default. You can filter your data at any time using the drop-down arrows in the header cells. To learn more, review our lesson on [Filtering Data](#).

Modifying tables

It's easy to modify the look and feel of any table after adding it to a worksheet. Excel includes several options for customizing tables, including adding rows or columns and changing the table style.

To add rows or columns to a table:

If you need to fit more content into your table, you can modify the table size by including additional rows and columns. There are two simple ways to change the table size:

- Enter new content into any adjacent row or column. The row or column will be added into the table automatically.

	A	B	C	D
1	Catering Invoice Sabrosa Empanadas & More 1202 Biscayne Bay Drive Orlando, FL 32804 Invoice #: 56 Date: 05/10			
2	MENU ITEM	UNIT PRICE	QUANTITY	LINE TOTAL
3	Empanadas: Beef Picadillo	\$2.99	15	\$44.85
4	Empanadas: Chipotle Shrimp	\$3.99	10	\$39.90
5	Tamales: Chicken Tinga	\$2.29	20	\$45.80
6	Tamales: Vegetable	\$2.29	30	\$68.70
7	Arepas: Carnitas	\$2.89	10	\$28.90
8	Arepas: Queso Blanco	\$2.49	20	\$49.80
9	Beverages: Horchata	\$1.89	25	\$47.25
10	Beverages: Lemonade			
11				

- Click and drag the bottom-right corner of the table to create additional rows or columns.

	A	B	C	D
1		Catering Invoice		
2	MENU ITEM	UNIT PRICE	QUANTITY	LINE TOTAL
3	Empanadas: Beef Picadillo	\$2.99	15	\$44.85
4	Empanadas: Chipotle Shrimp	\$3.99	10	\$39.90
5	Tamales: Chicken Tinga	\$2.29	20	\$45.80
6	Tamales: Vegetable	\$2.29	30	\$68.70
7	Arepas: Carnitas	\$2.89	10	\$28.90
8	Arepas: Queso Blanco	\$2.49	20	\$49.80
9	Beverages: Horchata	\$1.89	25	\$47.25
10				
11				
12				
13				

To change the table style:

1. Select any cell in your table, then click the Design tab.

Table Name: Table3

Summarize with PivotTable
Remove Duplicates
Resize Table
Convert to Range
Properties

Insert Slicer
Export Refresh
Unlink
External Table Data

A3 : Empanadas: Beef Picadillo

Catering Invoice
Sabrosa Empanadas & More
1202 Biscayne Bay Drive
Orlando, FL 32804
Invoice #: 5678
Date: 05/10/2023

	MENU ITEM	UNIT PRICE	QUANTITY	LINE TOTAL
1	Empanadas: Beef Picadillo	\$2.99	15	\$44.85
2	Empanadas: Chipotle Shrimp	\$3.99	10	\$39.90
3	Tamales: Chicken Tinga	\$2.29	20	\$45.80
4	Tamales: Vegetable	\$2.29	30	\$68.70

2. Locate the Table Styles group, then click the More drop-down arrow to see all available table styles.

Header Row
First Column
Total Row
Last Column
Banded Rows
Banded Columns

Table Style Options

Table Styles

More
Quickly change the visual style of your table.

3. Select the desired table style.

The screenshot shows the Microsoft Word ribbon with the 'Table Tools' tab selected. A table is open on the page, showing two columns: 'QUANTITY' and 'LINE TOTAL'. The 'Table Style' dropdown menu is open, displaying a grid of 60 different table styles. The style 'Table Style Dark 11' is highlighted with a mouse cursor. The table data is as follows:

QUANTITY	LINE TOTAL
15	\$44.85
10	\$39.90
20	\$45.80
30	\$68.70
10	\$28.90
20	\$49.80
25	\$47.25

More
Invoice #: 5686B
Date: 05/10/16

4. The table style will be applied.

	A	B	C	D
1	SABROSA Empanadas & More	Catering Invoice Sabrosa Empanadas & More 1202 Biscayne Bay Drive Orlando, FL 32804 Invoice #: 56 Date: 05/1		
2	MENU ITEM	UNIT PRICE	QUANTITY	LINE TOTAL
3	Empanadas: Beef Picadillo	\$2.99	15	\$44.85
4	Empanadas: Chipotle Shrimp	\$3.99	10	\$39.90
5	Tamales: Chicken Tinga	\$2.29	20	\$45.80
6	Tamales: Vegetable	\$2.29	30	\$68.70
7	Arepas: Carnitas	\$2.89	10	\$28.90
8	Arepas: Queso Blanco	\$2.49	20	\$49.80
9	Beverages: Horchata	\$1.89	25	\$47.25
10				

To modify table style options:

You can turn various options on or off to change the appearance of any table. There are several options: Header Row, Total Row, Banded Rows, First Column, Last Column, Banded Columns, and Filter Button.

1. Select any cell in your table, then click the Design tab.
2. Check or uncheck the desired options in the Table Style Options group. In our example, we'll check Total Row to automatically include a total for our table.

The screenshot shows the Microsoft Excel ribbon with the 'Design' tab selected. In the 'Table Style Options' group, the 'Total Row' checkbox is checked and highlighted with a red box. A tooltip for 'Total Row' is visible, stating: 'Turn on or off the total row of the table.' The table below the ribbon shows a list of menu items with their unit price, quantity, and line total.

3. The table style will be modified. In our example, a new row has been added to the table with a formula that automatically calculates the total value of the cells in column D.

SABROSA
Empanadas & More

Catering Invoice

Sabrosa Empanadas & More
1202 Biscayne Bay Drive
Orlando, FL 32804

Invoice #: 56
Date: 05/10/2023

	MENU ITEM	UNIT PRICE	QUANTITY	LINE TOTAL
3	Empanadas: Beef Picadillo	\$2.99	15	\$44.85
4	Empanadas: Chipotle Shrimp	\$3.99	10	\$39.90
5	Tamales: Chicken Tinga	\$2.29	20	\$45.80
6	Tamales: Vegetable	\$2.29	30	\$68.70
7	Arepas: Carnitas	\$2.89	10	\$28.90
8	Arepas: Queso Blanco	\$2.49	20	\$49.80
9	Beverages: Horchata	\$1.89	25	\$47.25
10	Total			\$325.60
11				

Depending on the type of content you have—and the table style you've chosen—these options can affect your table's appearance in various ways. You may need to experiment with a few options to find the exact style you want.

To remove a table:

It's possible to remove a table from your workbook without losing any of your data. However, this can cause issues with certain types of formatting, including colors, fonts, and banded rows. Before using this option, be prepared to reformat your cells if necessary.

1. Select any cell in your table, then click the Design tab.
2. Click the Convert to Range command in the Tools group.

Design

Table Name:

Summarize with PivotTable

Insert Slicer

Export Refresh

Convert to Range

External Table Data

Header Row Total Row Banded Rows

Convert this table into a normal range of cells.

3. A dialog box will appear. Click Yes.

	A	B	C	D
1		Catering Invoice		
2	MENU ITEM	UNIT PRICE	QUANTITY	LINE TOTAL
3	Empanadas: Beef F		x 15	\$45.00
4	Empanadas: Chipo		10	\$30.00
5	Tamales: Chicken T		20	\$40.00
6	Tamales: Vegetabl		30	\$60.00
7	Arepas: Carnitas	\$2.89	10	\$28.90
8	Arepas: Queso Blanco	\$2.49	20	\$49.80
9	Beverages: Horchata	\$1.89	25	\$47.25
10	Total			\$325.95
11				

Microsoft Excel

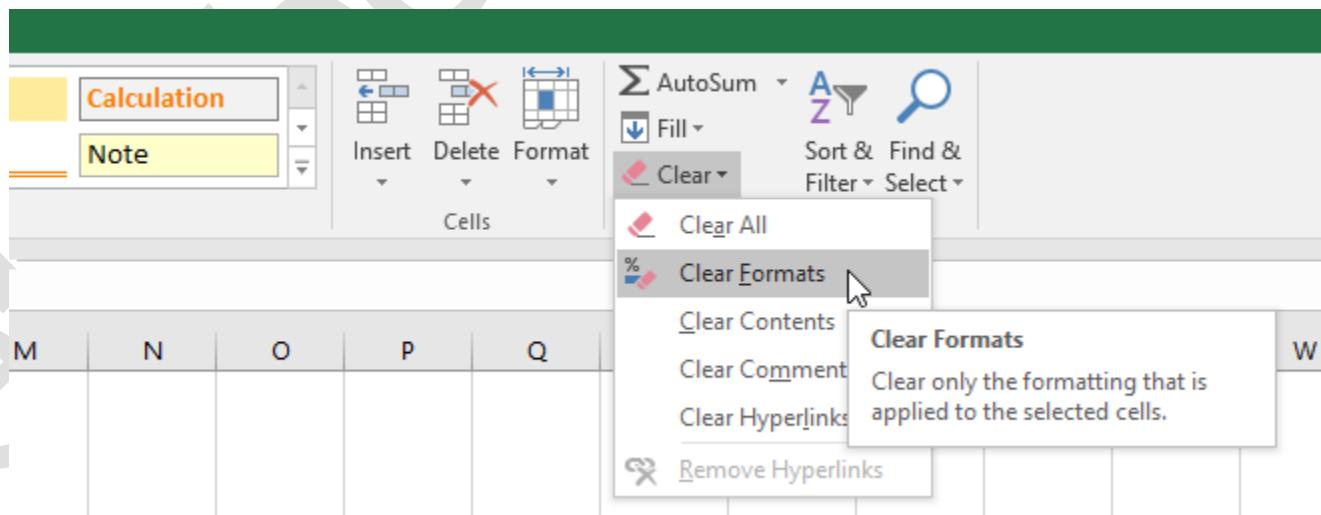
i Do you want to convert the table to a normal range?

Yes No

4. The range will no longer be a table, but the cells will retain their data and formatting.

	A	B	C	D
1		Catering Invoice		
2	MENU ITEM	UNIT PRICE	QUANTITY	LINE TOTAL
3	Empanadas: Beef Picadillo	\$2.99	15	\$44.85
4	Empanadas: Chipotle Shrimp	\$3.99	10	\$39.90
5	Tamales: Chicken Tinga	\$2.29	20	\$45.80
6	Tamales: Vegetable	\$2.29	30	\$68.70
7	Arepas: Carnitas	\$2.89	10	\$28.90
8	Arepas: Queso Blanco	\$2.49	20	\$49.80
9	Beverages: Horchata	\$1.89	25	\$47.25
10	Total			\$325.60
11				

To restart your formatting from scratch, click the **Clear** command on the Home tab. Next, choose **Clear Formats** from the menu.



Challenge!

1. Open our [practice workbook](#).
2. Click the Challenge tab in the bottom-left of the workbook.
3. Select cells A2:D9 and format as a table. Choose one of the light styles.

- 4. Insert a row between rows 4 and 5. In the row you just created, type Empanadas: Banana and Nutella, with a unit price of \$3.25 and a quantity of 12.**
- 5. Change the table style to Table Style Medium 10.**
- 6. In Table Style Options, uncheck banded rows and check banded columns.**
- 7. When you're finished, your workbook should look like this:**

Catering Invoice
Sabrosa Empanadas & More
1202 Biscayne Bay Drive
Orlando, FL 32804
Invoice #
Date: 1

	MENU ITEM	UNIT PRICE	QUANTITY	LINE TOTAL
1	Tacos: Korean BBQ & Kimchi	\$2.99	20	
2	Tacos: Grilled Fish & Mango Salsa	\$3.75	15	
3	Empanadas: Banana and Nutella	\$3.25	12	
4	Empanadas: Ground Beef & Cheese	\$3.59	30	
5	Empanadas: Philly Cheese Steak	\$3.29	35	
6	Sides: Queso Dip	\$2.89	15	
7	Sides: Fried Plantains	\$3.24	10	
8	Beverages: Limonada con Albahaca	\$1.89	20	

Lesson 23: Charts

Introduction

It can be difficult to interpret Excel workbooks that contain a lot of data. Charts allow you to illustrate your workbook data graphically, which makes it easy to visualize comparisons and trends.

Optional: Download our [practice workbook](#).

Watch the video below to learn more about charts.

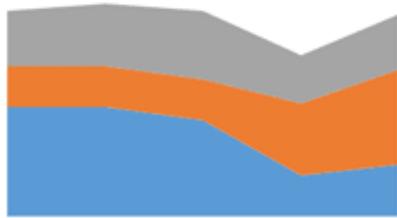
Understanding charts

Excel has several types of charts, allowing you to choose the one that best fits your data. To use charts effectively, you'll need to understand how different charts are used.

Click the arrows in the slideshow below to learn more about the types of charts in Excel.

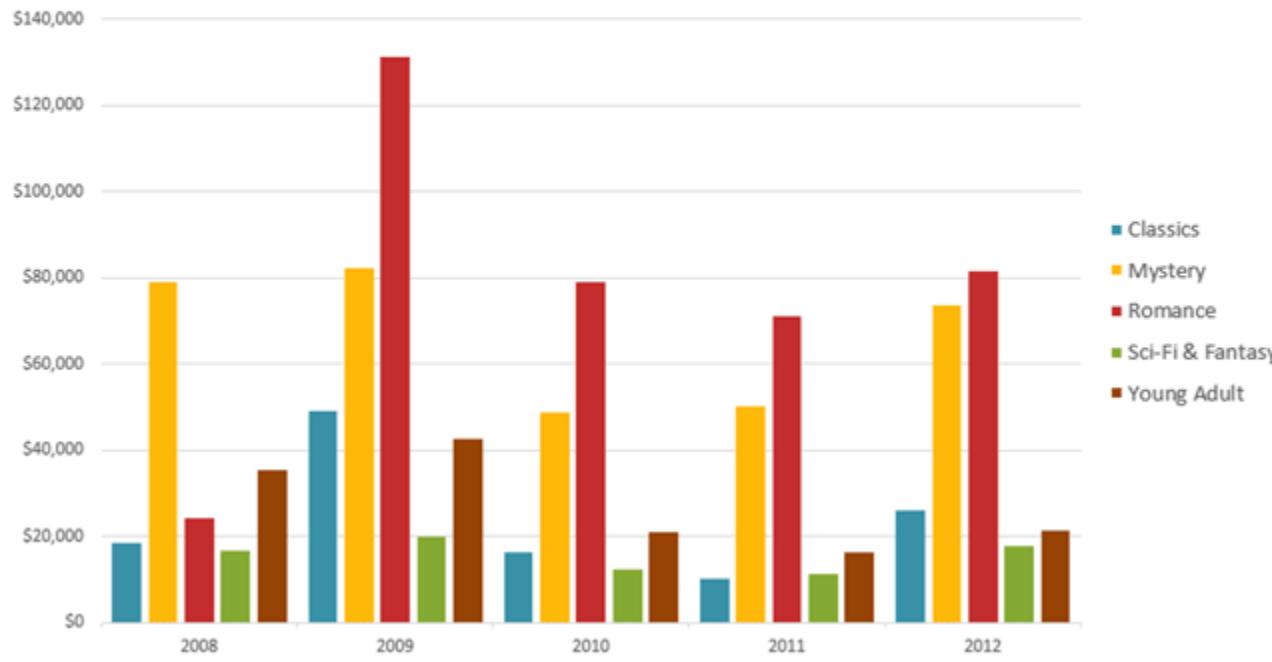
arrow_back_ios

Types of Charts



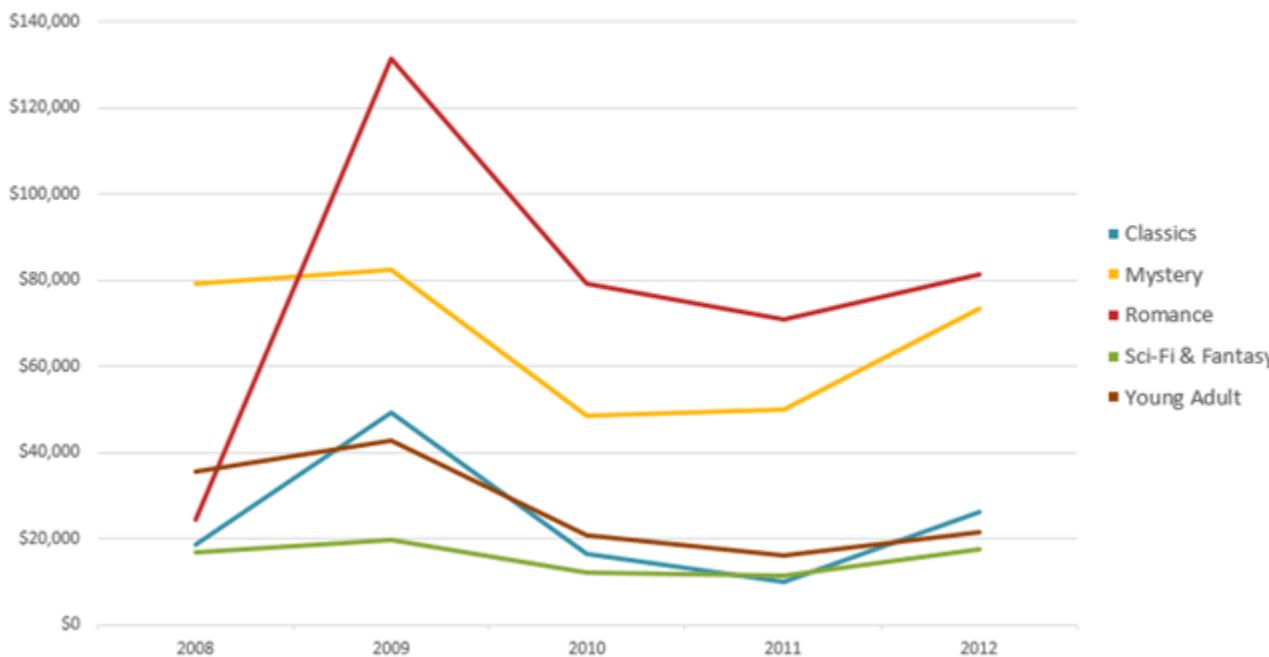
Excel has a variety of chart types, each with its own advantages. Click the arrows to see some of the different types of charts available in Excel.

Column



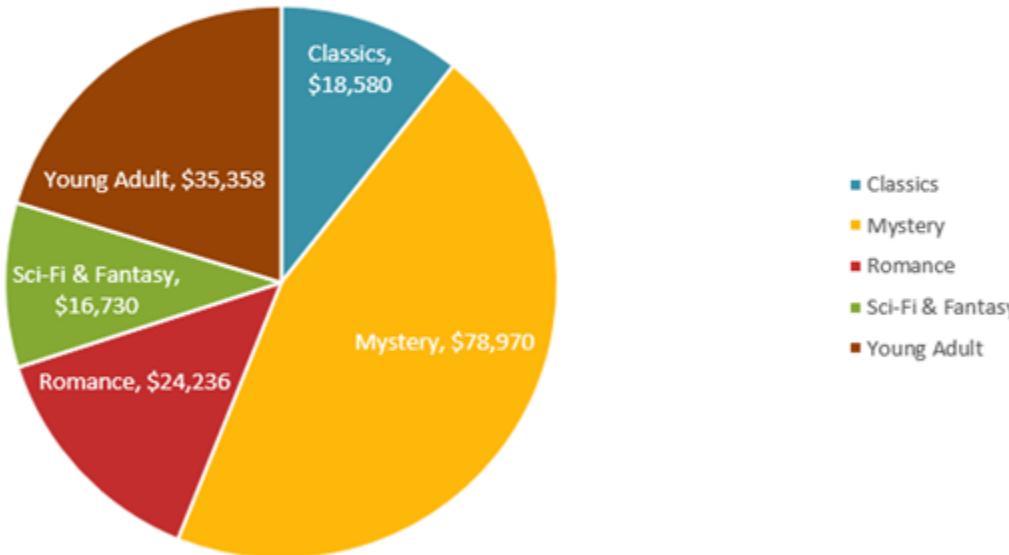
• Column charts use vertical bars to represent data. They can work with many different types of data, but they're most frequently used for comparing information.

Line



• Line charts are ideal for showing trends. The data points are connected with lines, making it easy to see whether values are increasing or decreasing over time.

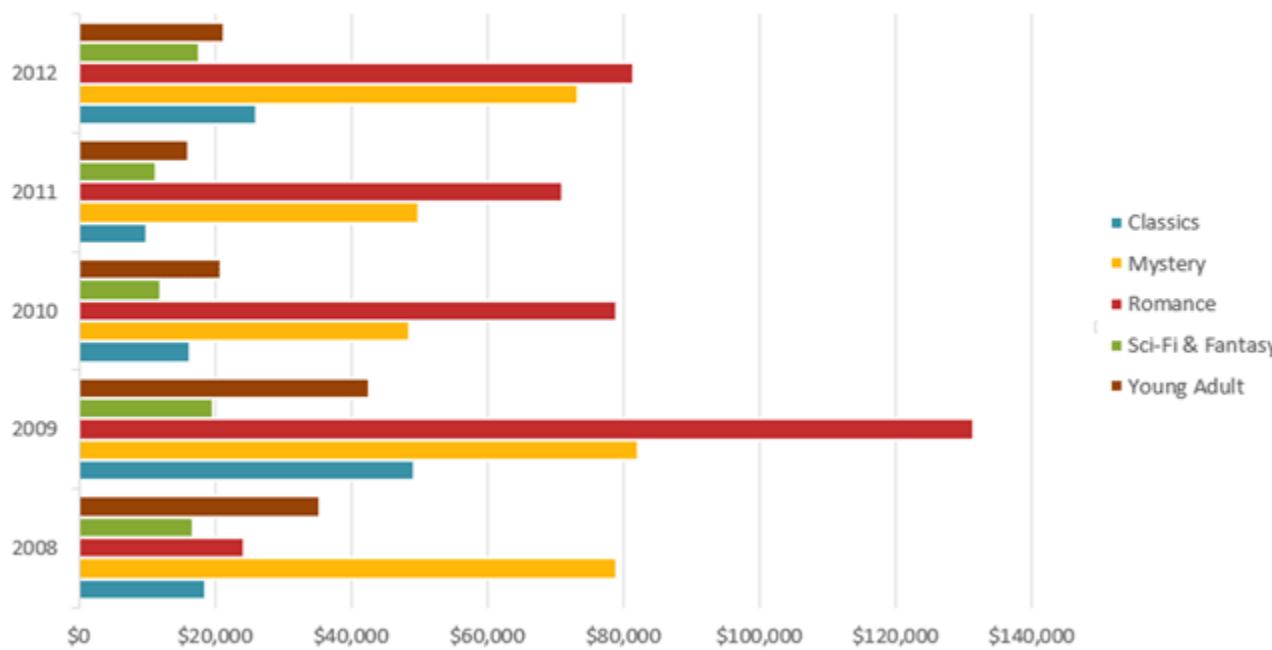
Pie



- Pie charts make it easy to compare proportions. Each value is shown as a slice of the pie, so it's easy to see which values make up the percentage of a whole.

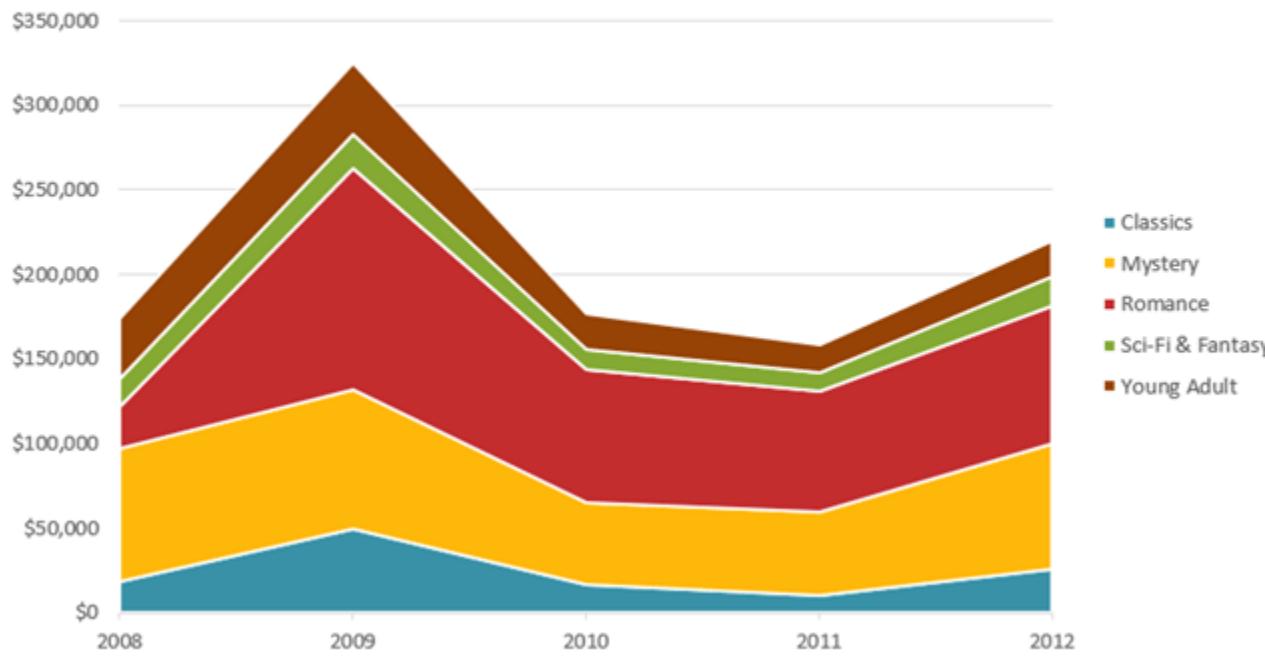
Peterboy

Bar



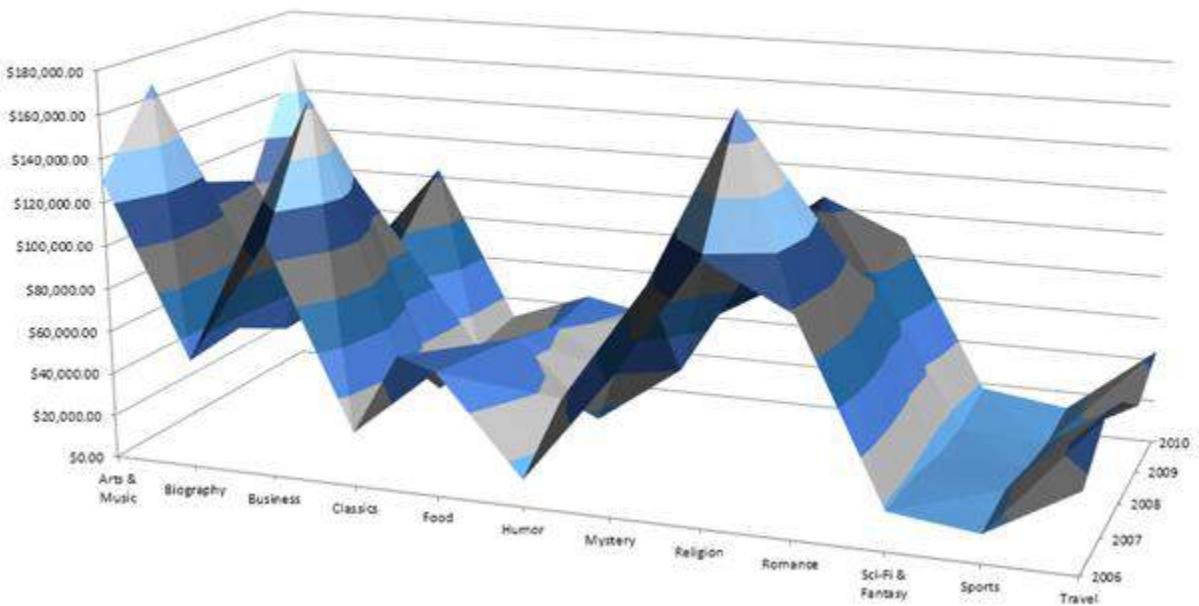
• Bar charts work just like column charts, but they use horizontal rather than vertical bars.

Area



Area charts are similar to line charts, except the areas under the lines are filled in.

Surface



- Surface charts allow you to display data across a 3D landscape. They work best with large data sets, allowing you to see a variety of information at the same time.

Peterboy



-

[arrow_back_ios](#)

In addition to chart types, you'll need to understand how to read a chart. Charts contain several elements, or parts, that can help you interpret data.

Click the buttons in the interactive below to learn about the different parts of a chart.

Peterboy

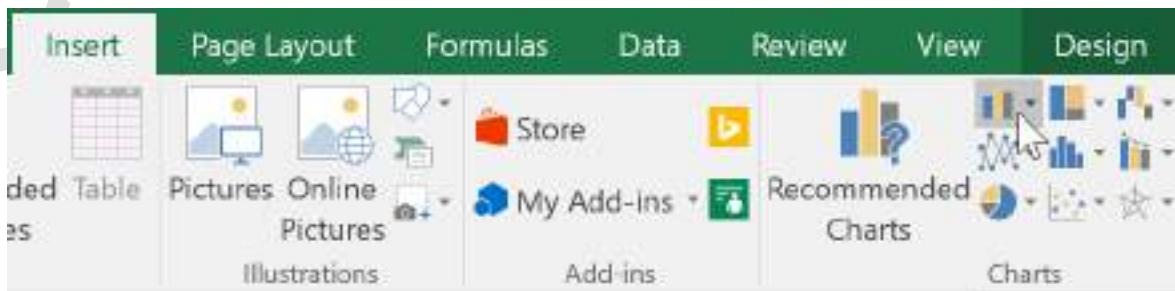


To insert a chart:

1. Select the cells you want to chart, including the column titles and row labels. These cells will be the source data for the chart. In our example, we'll select cells A1:F6.

Genre	January	February	March	April	May
Classics	\$18,580	\$49,225	\$16,326	\$10,017	\$24,973
Mystery	\$78,970	\$82,262	\$48,640	\$49,985	\$73,121
Romance	\$24,236	\$131,390	\$79,022	\$71,009	\$81,254
Sci-Fi & Fantasy	\$16,730	\$19,730	\$12,109	\$11,355	\$17,024
Young Adult	\$35,358	\$42,685	\$20,893	\$16,065	\$21,528

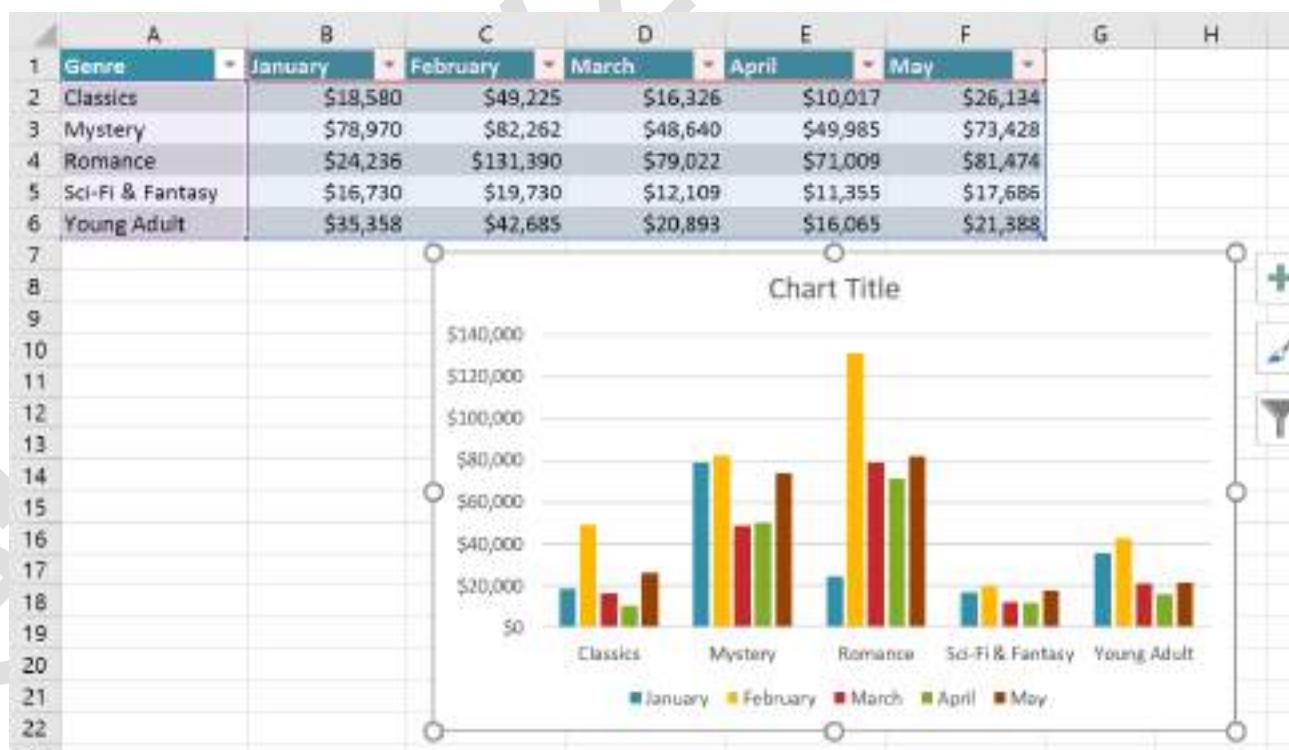
2. From the Insert tab, click the desired Chart command. In our example, we'll select Column.



3. Choose the desired chart type from the drop-down menu.



4. The Selected chart will be inserted into the worksheet.



If you're not sure which type of chart to use, the Recommended Charts command will suggest several charts based on the source data.

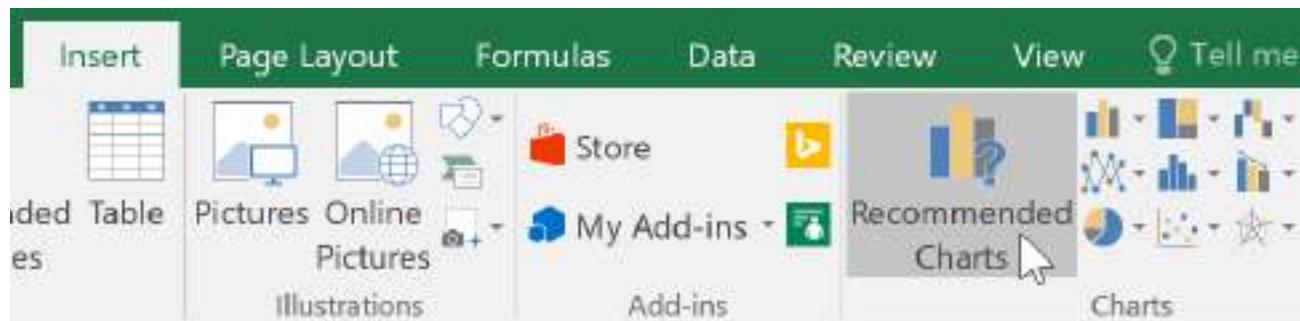
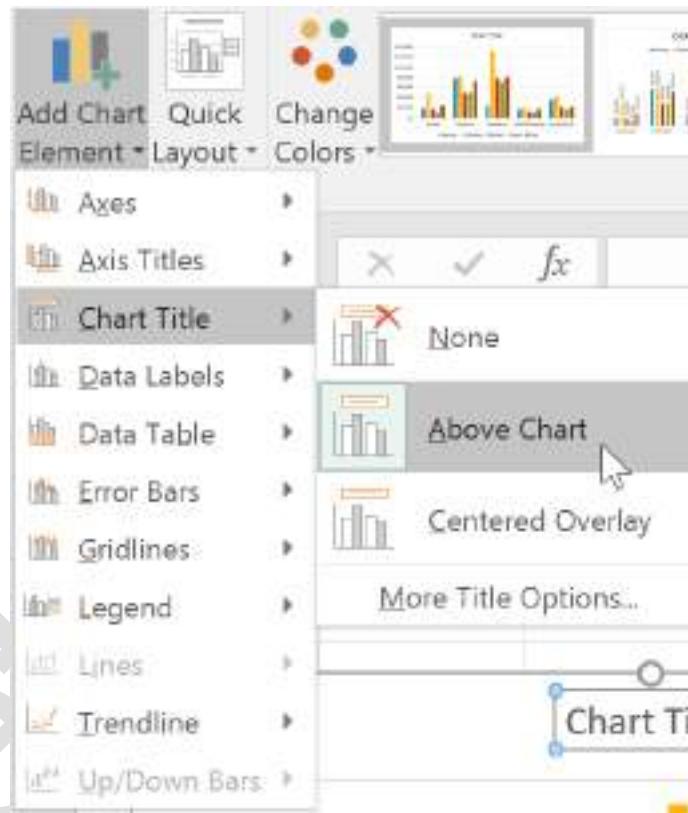


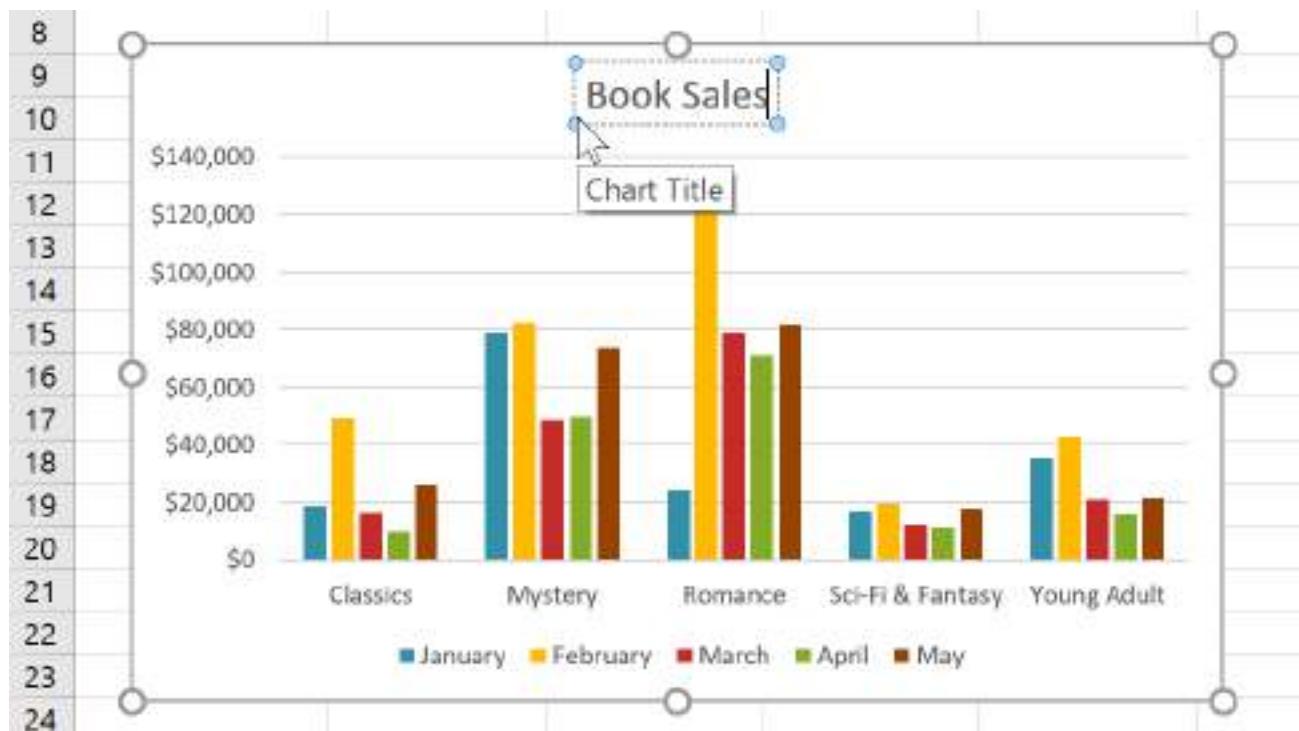
Chart and layout style

After inserting a chart, there are several things you may want to change about the way your data is displayed. It's easy to edit a chart's layout and style from the Design tab.

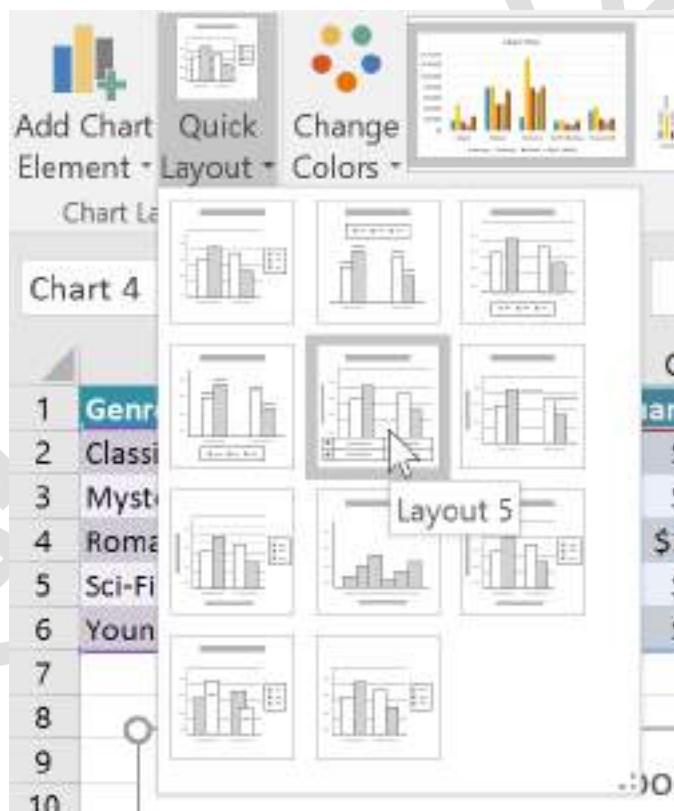
- Excel allows you to add chart elements—including chart titles, legends, and data labels—to make your chart easier to read. To add a chart element, click the Add Chart Element command on the Design tab, then choose the desired element from the drop-down menu.



- To edit a chart element, like a chart title, simply double-click the placeholder and begin typing.



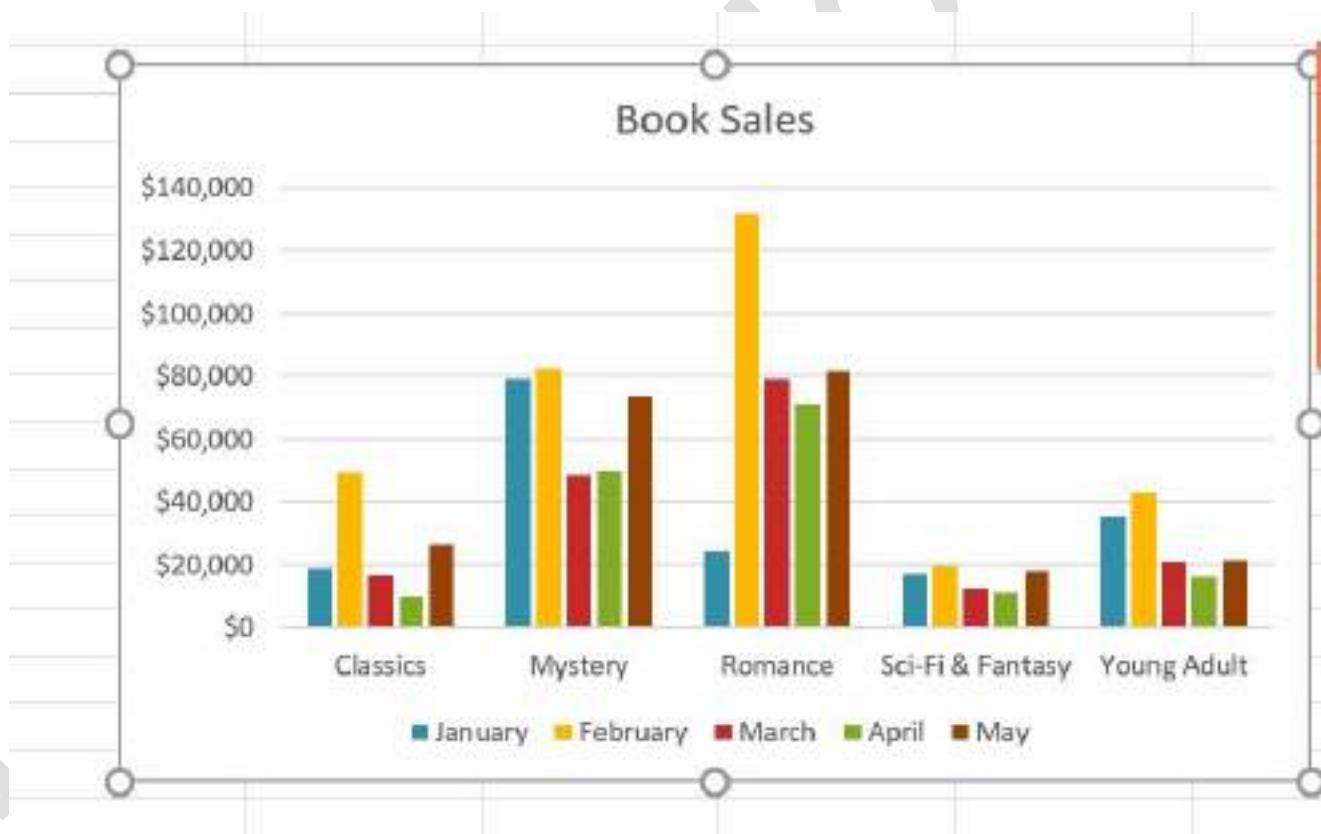
- If you don't want to add chart elements individually, you can use one of Excel's predefined layouts. Simply click the Quick Layout command, then choose the desired layout from the drop-down menu.



- Excel also includes several chart styles, which allow you to quickly modify the look and feel of your chart. To change the chart style, select the desired style from the Chart styles group. You can also click the drop-down arrow on the right to see more styles.



You can also use the chart formatting shortcut buttons to quickly add chart elements, change the chart style, and filter chart data.



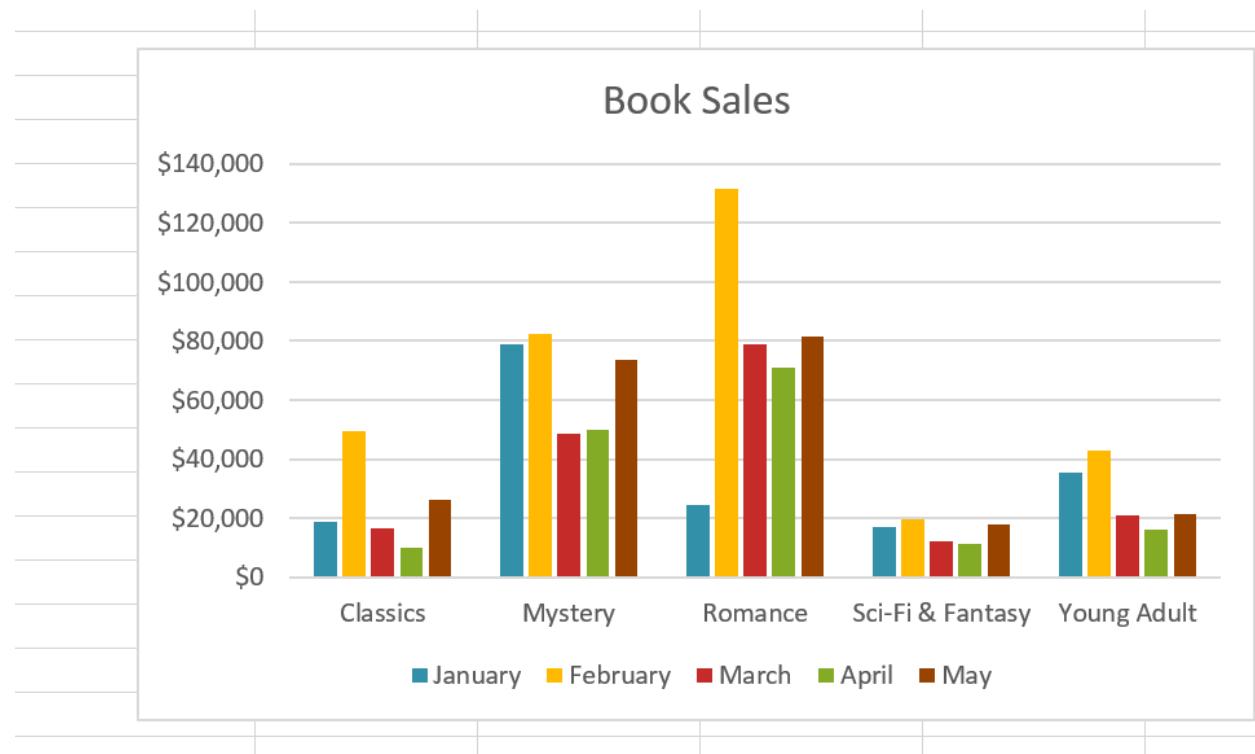
Other chart options

There are many other ways to customize and organize your charts. For example, Excel allows you to rearrange a chart's data, change the chart type, and even move the chart to a different location in a workbook.

To switch row and column data:

Sometimes you may want to change the way charts group your data. For example, in the chart below Book Sales data is grouped by genre, with columns for each month.

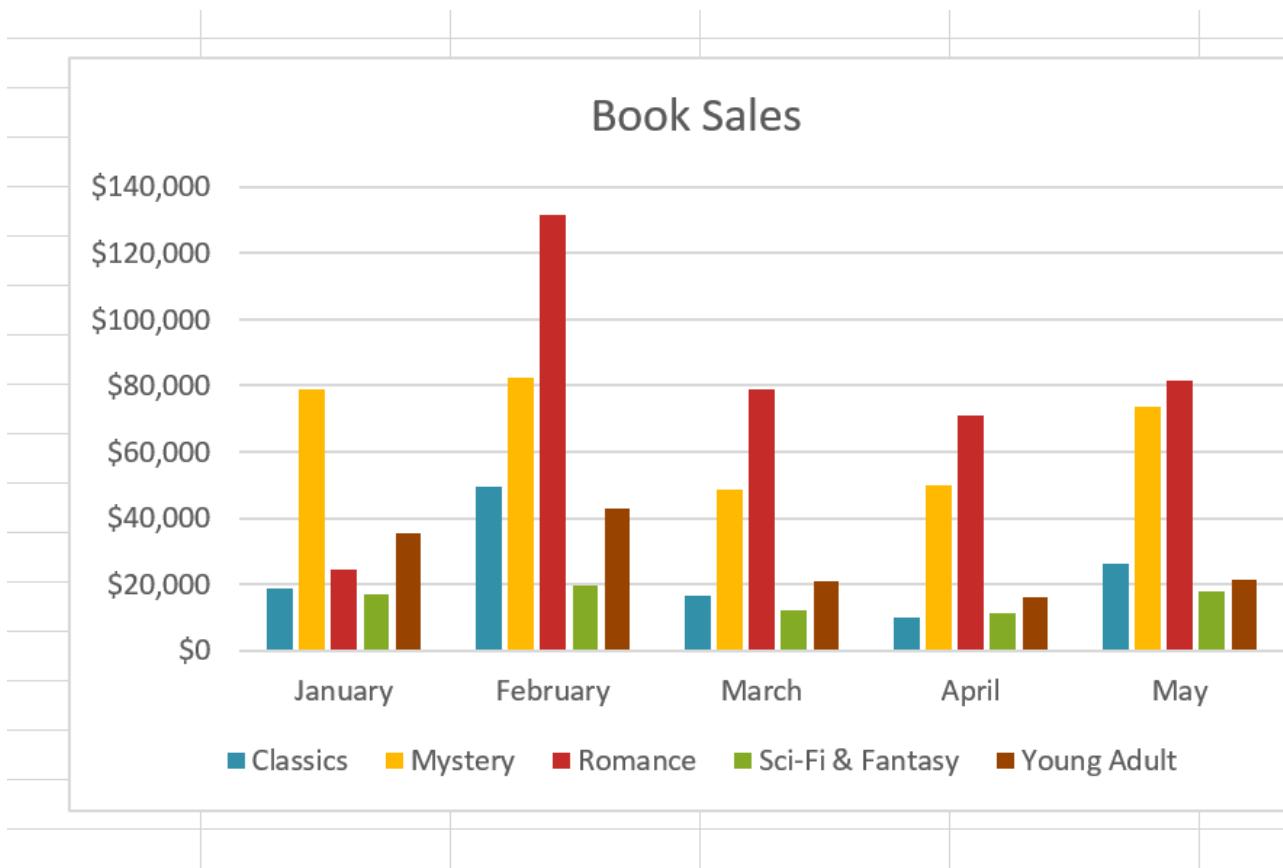
However, we could switch the rows and columns so the chart will group the data by month, with columns for each genre. In both cases, the chart contains the same data—it's just organized differently.



- 1. Select the chart you want to modify.**
- 2. From the Design tab, select the Switch Row/Column command.**



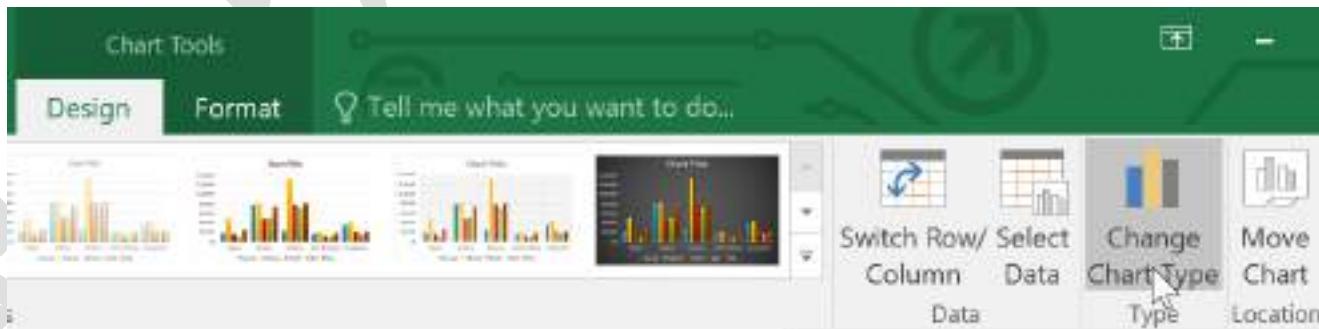
- 3. The rows and columns will be switched. In our example, the data is now grouped by month, with columns for each genre.**



To change the chart type:

If you find that your data isn't working well in a certain chart, it's easy to switch to a new chart type. In our example, we'll change our chart from a column chart to a line chart.

- From the Design tab, click the Change Chart Type command.



- The Change Chart Type dialog box will appear. Select a new chart type and layout, then click OK. In our example, we'll choose a Line chart.

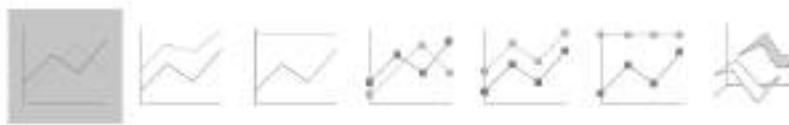
Change Chart Type

?

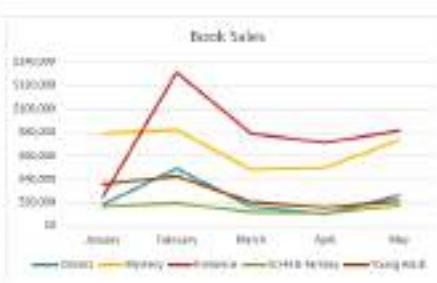
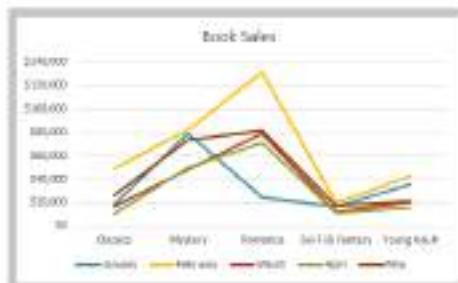
X

Recommended Charts: All Charts

- Recent
- Templates
- Column
- Line
- Pie
- Bar
- Area
- X Y (Scatter)
- Stock
- Surface
- Radar
- Treemap
- Sunburst
- Histogram
- Box & Whisker
- Waterfall
- Combo



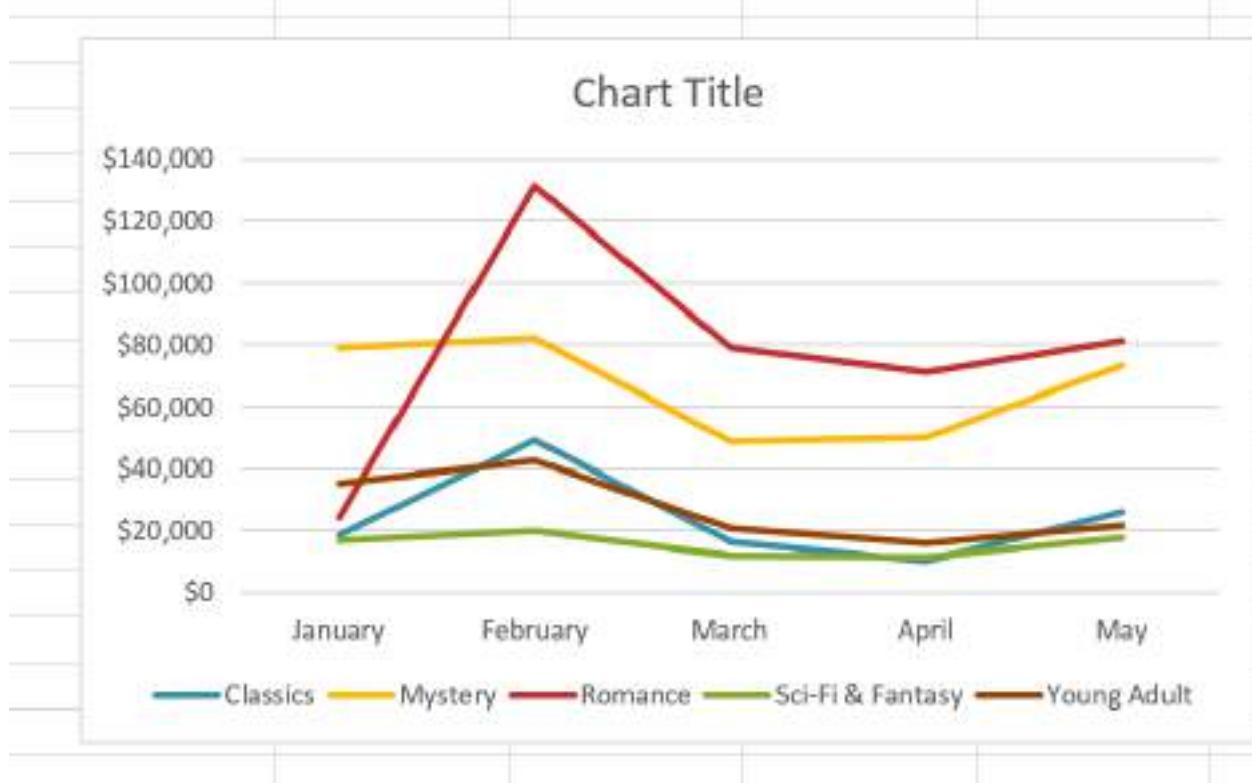
Line



OK

Cancel

3. The selected chart type will appear. In our example, the line chart makes it easier to see trends in sales data over time.



To move a chart:

Whenever you insert a new chart, it will appear as an object on the same worksheet that contains its source data. You can easily move the chart to a new worksheet to help keep your data organized.

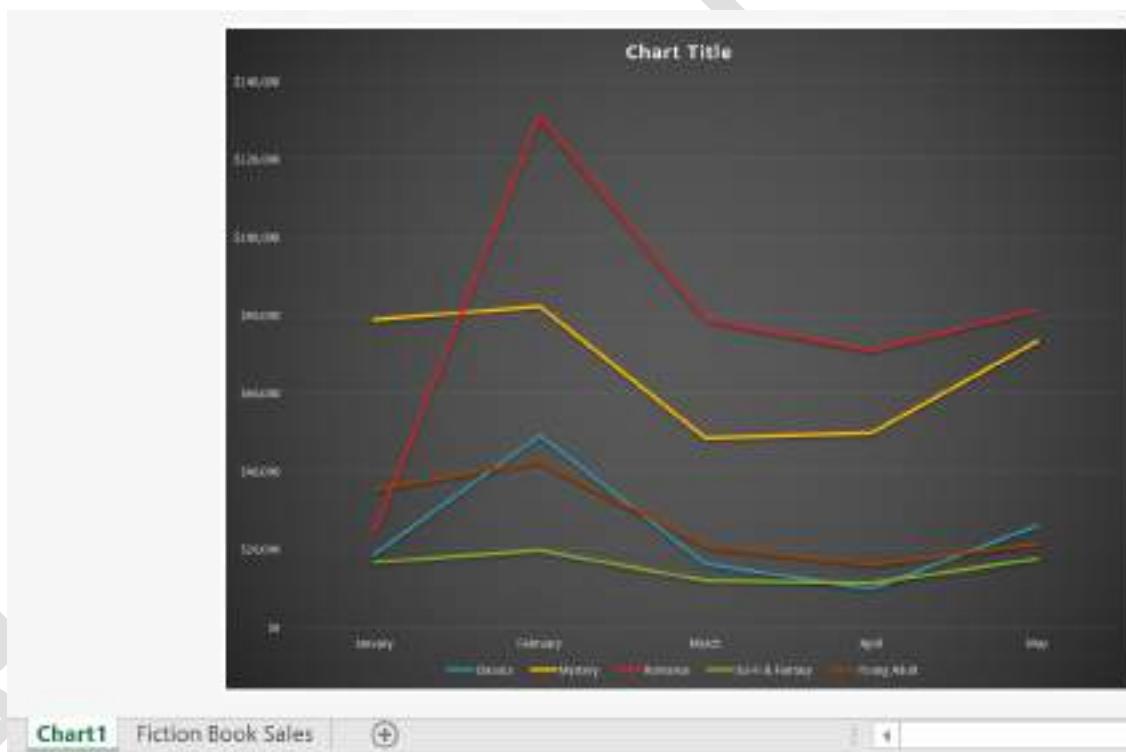
1. Select the chart you want to move.
2. Click the Design tab, then select the Move Chart command.



3. The Move Chart dialog box will appear. Select the desired location for the chart. In our example, we'll choose to move it to a New sheet, which will create a new worksheet.
4. Click OK.



5. The chart will appear in the selected location. In our example, the chart now appears on a new worksheet.



Keeping charts up to date

By default, when you add more data to your spreadsheet, the chart may not include the new data. To fix this, you can adjust the data range. Simply click the chart, and it will highlight the data range in your spreadsheet. You can then click and drag the handle in the lower-right corner to change the data range.

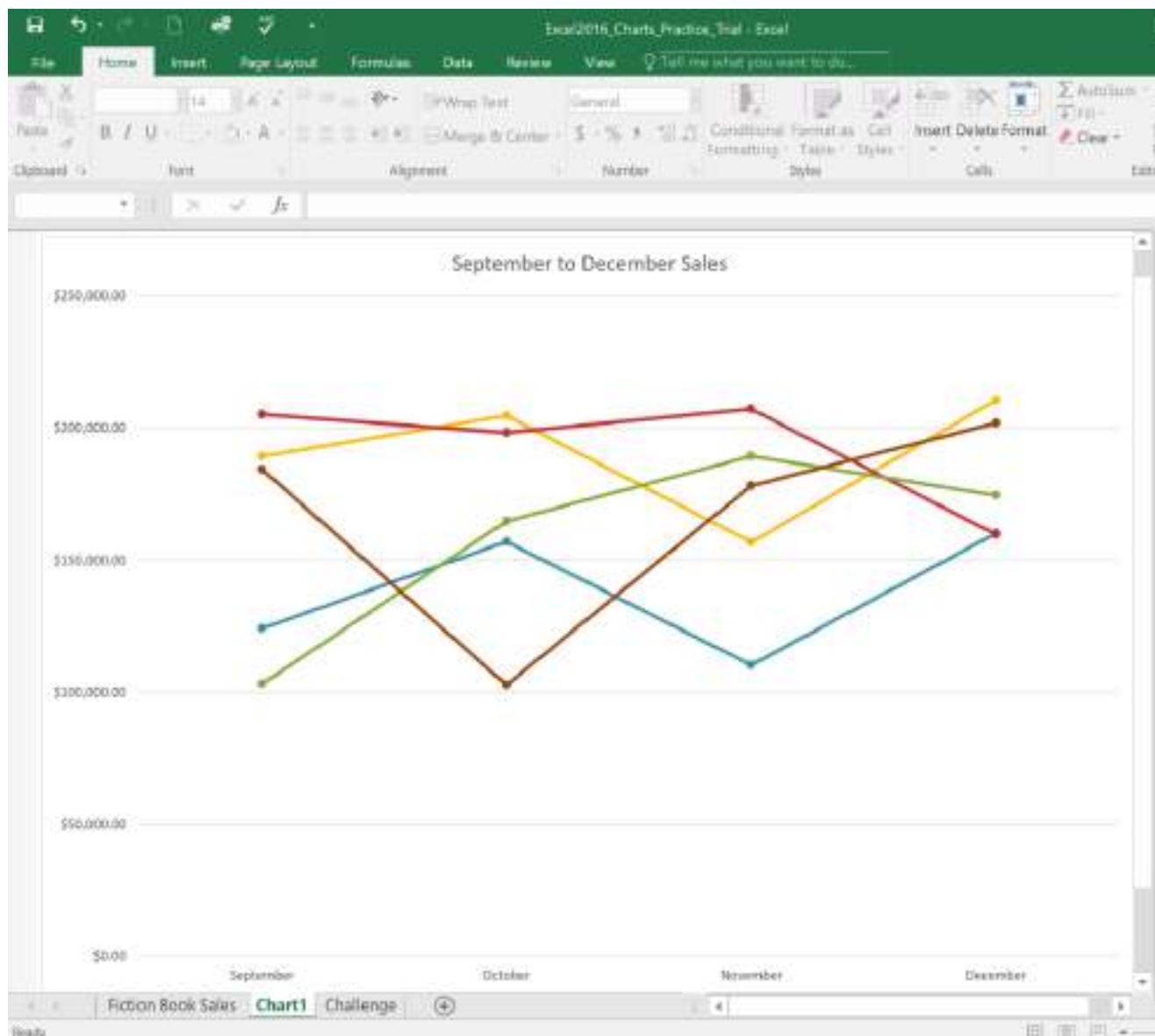
B	C	D	E	F
January	February	March	April	May
\$18,580	\$49,225	\$16,326	\$10,017	\$26,134
\$78,970	\$82,262	\$48,640	\$49,985	\$73,428
\$24,236	\$131,390	\$79,022	\$71,009	\$81,474
\$16,730	\$19,730	\$12,109	\$11,355	\$17,686
\$35,358	\$42,685	\$20,893	\$16,065	\$21,388

If you frequently add more data to your spreadsheet, it may become tedious to update the data range. Luckily, there is an easier way. Simply format your source data as a table, then create a chart based on that table. When you add more data below the table, it will automatically be included in both the table and the chart, keeping everything consistent and up to date.

Watch the video below to learn how to use tables to keep charts up to date.

Challenge!

1. Open our [practice workbook](#).
2. Click the Challenge tab in the bottom-left of the workbook.
3. Select cells A1:E6 and insert a 2D Clustered Column chart.
4. Change the chart title to September to December Sales.
5. Use the Switch Row/Column command. The columns should now be grouped by month, with a different color for each salesperson.
6. Move the chart to a new sheet.
7. Change the chart type to line with markers.
8. Use the Quick Layout command to change the layout of the chart.
9. When you're finished, your workbook should look something like this:



Lesson 24: Conditional Formatting

Introduction

Let's say you have a worksheet with thousands of rows of data. It would be extremely difficult to see patterns and trends just from examining the raw information. Similar to charts and sparklines, conditional formatting provides a way to visualize data and make worksheets easier to understand.

Optional: Download our [practice workbook](#).

Watch the video below to learn more about conditional formatting in Excel.

Understanding conditional formatting

Conditional formatting allows you to automatically apply formatting—such as colors, icons, and data bars—to one or more cells based on the cell value. To do this, you'll need to create a conditional formatting rule. For example, a conditional formatting rule might be: If the value is less than \$2000, color the cell red. By applying this rule,

you'd be able to quickly see which cells contain values less than \$2000.

	A	B	C	D	E
2	Salesperson	May	June	July	August
3	Albertson, Kathy	\$3,799.00	\$557.00	\$3,863.00	\$1,117.00
4	Allenson, Carol	\$18,930.00	\$1,042.00	\$9,355.00	\$1,100.00
5	Altman, Zoey	\$5,725.00	\$3,072.00	\$6,702.00	\$2,116.00
6	Bittiman, William	\$1,344.00	\$3,755.00	\$4,415.00	\$1,089.00
7	Brennan, Michael	\$8,296.00	\$3,152.00	\$11,601.00	\$1,122.00
8	Carlson, David	\$3,945.00	\$4,056.00	\$3,726.00	\$1,135.00
9	Collman, Harry	\$8,337.00	\$4,906.00	\$9,007.00	\$2,113.00
10	Counts, Elizabeth	\$3,742.00	\$521.00	\$4,505.00	\$1,024.00
11	David, Chloe	\$7,605.00	\$3,428.00	\$3,973.00	\$1,716.00

To create a conditional formatting rule:

In our example, we have a worksheet containing sales data, and we'd like to see which salespeople are meeting their monthly sales goals. The sales goal is \$4000 per month, so we'll create a conditional formatting rule for any cells containing a value higher than 4000.

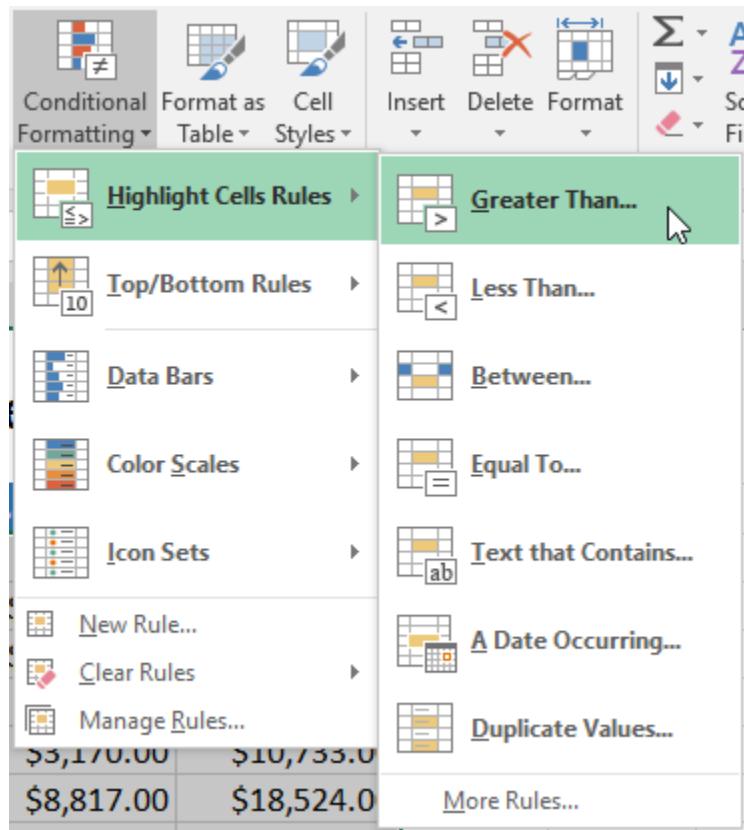
- 1. Select the desired cells for the conditional formatting rule.**

WP

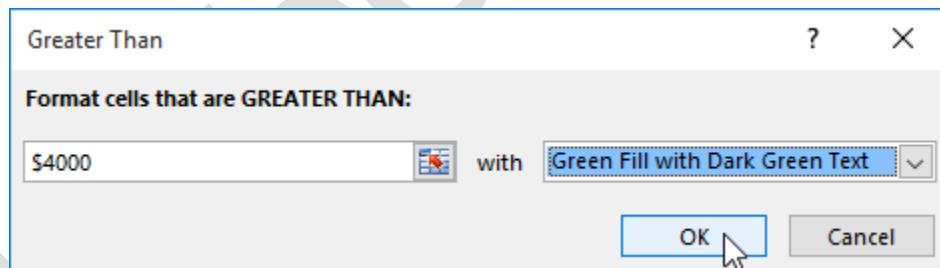
Westbrook Parker Sales

1	A	B	C	D	E	F
2	Salesperson	May	June	July	August	September
3	Albertson, Kathy	\$3,799.00	\$557.00	\$3,863.00	\$1,117.00	\$8,237.00
4	Allenson, Carol	\$18,930.00	\$1,042.00	\$9,355.00	\$1,100.00	\$10,185.00
5	Altman, Zoey	\$5,725.00	\$3,072.00	\$6,702.00	\$2,116.00	\$13,452.00
6	Bittiman, William	\$1,344.00	\$3,755.00	\$4,415.00	\$1,089.00	\$4,404.00
7	Brennan, Michael	\$8,296.00	\$3,152.00	\$11,601.00	\$1,122.00	\$3,170.00
8	Carlson, David	\$3,945.00	\$4,056.00	\$3,726.00	\$1,135.00	\$8,817.00
9	Collman, Harry	\$8,337.00	\$4,906.00	\$9,007.00	\$2,113.00	\$13,090.00
10	Counts, Elizabeth	\$3,742.00	\$521.00	\$4,505.00	\$1,024.00	\$3,528.00
11	David, Chloe	\$7,605.00	\$3,428.00	\$3,973.00	\$1,716.00	\$4,839.00
12	Davis, William	\$5,304.00	\$1,562.00	\$2,945.00	\$1,176.00	\$9,642.00
13	Dumlao, Richard	\$9,333.00	\$2,779.00	\$7,549.00	\$1,101.00	\$5,850.00
14	Farmer, Kim	\$1,103.00	\$3,470.00	\$3,862.00	\$1,040.00	\$10,024.00
15	Ferguson, Elizabeth	\$1,333.00	\$1,913.00	\$4,596.00	\$1,126.00	\$5,503.00
16	Flores, Tia	\$12,398.00	\$2,883.00	\$2,142.00	\$2,014.00	\$13,547.00
17	Ford, Victor	\$3,251.00	\$4,931.00	\$8,283.00	\$1,054.00	\$9,543.00
18	Hodges, Melissa	\$4,624.00	\$4,798.00	\$8,420.00	\$1,389.00	\$10,468.00
19	Jameson, Robinson	\$2,552.00	\$4,459.00	\$2,248.00	\$1,058.00	\$6,267.00
20	Kellerman, Frances	\$4,281.00	\$4,172.00	\$11,074.00	\$1,282.00	\$2,365.00

- From the Home tab, click the Conditional Formatting command. A drop-down menu will appear.
- Hover the mouse over the desired conditional formatting type, then select the desired rule from the menu that appears. In our example, we want to highlight cells that are greater than \$4000.



4. A dialog box will appear. Enter the desired value(s) into the blank field. In our example, we'll enter 4000 as our value.
5. Select a formatting style from the drop-down menu. In our example, we'll choose Green Fill with Dark Green Text, then click OK.



6. The conditional formatting will be applied to the selected cells. In our example, it's easy to see which salespeople reached the \$4000 sales goal for each month.

	A	B	C	D	E	F
1						
2	Salesperson	May	June	July	August	September
3	Albertson, Kathy	\$3,799.00	\$557.00	\$3,863.00	\$1,117.00	\$8,237.00
4	Allenson, Carol	\$18,930.00	\$1,042.00	\$9,355.00	\$1,100.00	\$10,185.00
5	Altman, Zoey	\$5,725.00	\$3,072.00	\$6,702.00	\$2,116.00	\$13,452.00
6	Bittiman, William	\$1,344.00	\$3,755.00	\$4,415.00	\$1,089.00	\$4,404.00
7	Brennan, Michael	\$8,296.00	\$3,152.00	\$11,601.00	\$1,122.00	\$3,170.00
8	Carlson, David	\$3,945.00	\$4,056.00	\$3,726.00	\$1,135.00	\$8,817.00
9	Collman, Harry	\$8,337.00	\$4,906.00	\$9,007.00	\$2,113.00	\$13,090.00
10	Counts, Elizabeth	\$3,742.00	\$521.00	\$4,505.00	\$1,024.00	\$3,528.00
11	David, Chloe	\$7,605.00	\$3,428.00	\$3,973.00	\$1,716.00	\$4,839.00
12	Davis, William	\$5,304.00	\$1,562.00	\$2,945.00	\$1,176.00	\$9,642.00
13	Dumlao, Richard	\$9,333.00	\$2,779.00	\$7,549.00	\$1,101.00	\$5,850.00
14	Farmer, Kim	\$1,103.00	\$3,470.00	\$3,862.00	\$1,040.00	\$10,024.00
15	Ferguson, Elizabeth	\$1,333.00	\$1,913.00	\$4,596.00	\$1,126.00	\$5,503.00
16	Flores, Tia	\$12,398.00	\$2,883.00	\$2,142.00	\$2,014.00	\$13,547.00
17	Ford, Victor	\$3,251.00	\$4,931.00	\$8,283.00	\$1,054.00	\$9,543.00
18	Hodges, Melissa	\$4,624.00	\$4,798.00	\$8,420.00	\$1,389.00	\$10,468.00
19	Jameson, Robinson	\$2,552.00	\$4,459.00	\$2,248.00	\$1,058.00	\$6,267.00
20	Kellerman, Frances	\$4,281.00	\$4,172.00	\$11,074.00	\$1,282.00	\$2,365.00

You can apply multiple conditional formatting rules to a cell range or worksheet, allowing you to visualize different trends and patterns in your data.

	A	B	C	D	E	F
1						
2	Salesperson	May	June	July	August	September
3	Albertson, Kathy	\$3,799.00	\$557.00	\$3,863.00	\$1,117.00	\$8,237.00
4	Allenson, Carol	\$18,930.00	\$1,042.00	\$9,355.00	\$1,100.00	\$10,185.00
5	Altman, Zoey	\$5,725.00	\$3,072.00	\$6,702.00	\$2,116.00	\$13,452.00
6	Bittiman, William	\$1,344.00	\$3,755.00	\$4,415.00	\$1,089.00	\$4,404.00
7	Brennan, Michael	\$8,296.00	\$3,152.00	\$11,601.00	\$1,122.00	\$3,170.00
8	Carlson, David	\$3,945.00	\$4,056.00	\$3,726.00	\$1,135.00	\$8,817.00
9	Collman, Harry	\$8,337.00	\$4,906.00	\$9,007.00	\$2,113.00	\$13,090.00
10	Counts, Elizabeth	\$3,742.00	\$521.00	\$4,505.00	\$1,024.00	\$3,528.00
11	David, Chloe	\$7,605.00	\$3,428.00	\$3,973.00	\$1,716.00	\$4,839.00
12	Davis, William	\$5,304.00	\$1,562.00	\$2,945.00	\$1,176.00	\$9,642.00
13	Dumlao, Richard	\$9,333.00	\$2,779.00	\$7,549.00	\$1,101.00	\$5,850.00
14	Farmer, Kim	\$1,103.00	\$3,470.00	\$3,862.00	\$1,040.00	\$10,024.00
15	Ferguson, Elizabeth	\$1,333.00	\$1,913.00	\$4,596.00	\$1,126.00	\$5,503.00
16	Flores, Tia	\$12,398.00	\$2,883.00	\$2,142.00	\$2,014.00	\$13,547.00
17	Ford, Victor	\$3,251.00	\$4,931.00	\$8,283.00	\$1,054.00	\$9,543.00
18	Hodges, Melissa	\$4,624.00	\$4,798.00	\$8,420.00	\$1,389.00	\$10,468.00
19	Jameson, Robinson	\$2,552.00	\$4,459.00	\$2,248.00	\$1,058.00	\$6,267.00
20	Kellerman, Frances	\$4,281.00	\$4,172.00	\$11,074.00	\$1,282.00	\$2,365.00

Conditional formatting presets

Excel has several predefined styles—or **presets**—you can use to quickly apply conditional formatting to your data. They are grouped into three categories:

- **Data Bars** are horizontal bars added to each cell, much like a bar graph.

\$3,863.00	\$1,117.00	\$8,237.00	\$8,690.00
\$9,355.00	\$1,100.00	\$10,185.00	\$18,749.00
\$6,702.00	\$2,116.00	\$13,452.00	\$8,046.00
\$4,415.00	\$1,089.00	\$4,404.00	\$20,114.00

- **Color Scales** change the color of each cell based on its value. Each color scale uses a two- or three-color gradient. For example, in the Green-Yellow-Red color scale, the highest values are green, the average values are yellow, and the lowest values are red.

\$3,863.00	\$1,117.00	\$8,237.00	\$8,690.00
\$9,355.00	\$1,100.00	\$10,185.00	\$18,749.00
\$6,702.00	\$2,116.00	\$13,452.00	\$8,046.00
\$4,415.00	\$1,089.00	\$4,404.00	\$20,114.00

- **Icon Sets** add a specific icon to each cell based on its value.

▼ \$3,863.00	▼ \$1,117.00	▬ \$8,237.00	▬ \$8,690.00
▬ \$9,355.00	▼ \$1,100.00	▬ \$10,185.00	▲ \$18,749.00
▼ \$6,702.00	▼ \$2,116.00	▬ \$13,452.00	▬ \$8,046.00
▼ \$4,415.00	▼ \$1,089.00	▼ \$4,404.00	▲ \$20,114.00

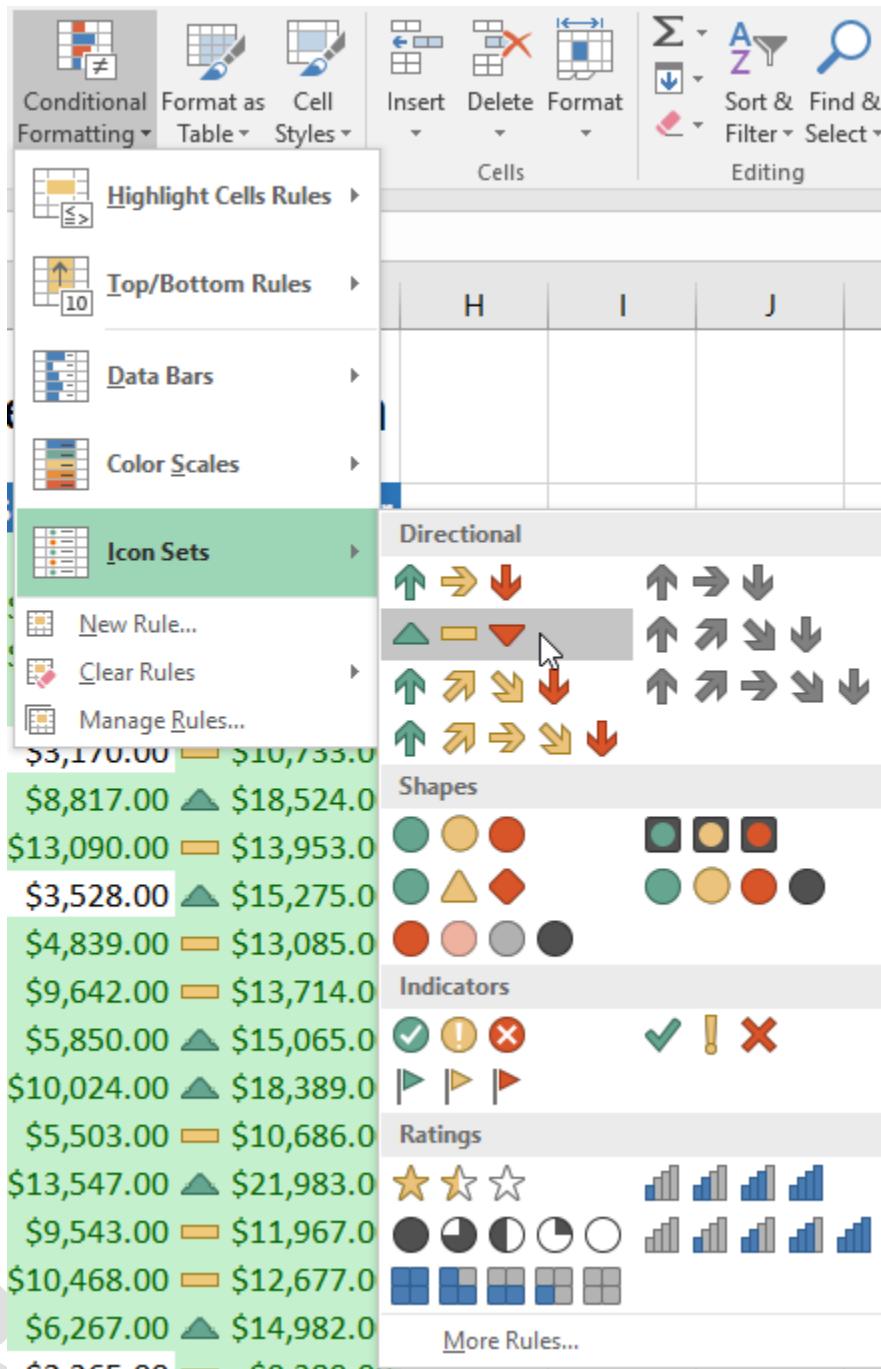
To use preset conditional formatting:

1. Select the desired cells for the conditional formatting rule.

A	B	C	D	E	F	
Westbrook Parker Sales						
1						
2	Salesperson	May	June	July	August	September
3	Albertson, Kathy	\$3,799.00	\$557.00	\$3,863.00	\$1,117.00	\$8,237.00
4	Allenson, Carol	\$18,930.00	\$1,042.00	\$9,355.00	\$1,100.00	\$10,185.00
5	Altman, Zoey	\$5,725.00	\$3,072.00	\$6,702.00	\$2,116.00	\$13,452.00
6	Bittiman, William	\$1,344.00	\$3,755.00	\$4,415.00	\$1,089.00	\$4,404.00
7	Brennan, Michael	\$8,296.00	\$3,152.00	\$11,601.00	\$1,122.00	\$3,170.00
8	Carlson, David	\$3,945.00	\$4,056.00	\$3,726.00	\$1,135.00	\$8,817.00
9	Collman, Harry	\$8,337.00	\$4,906.00	\$9,007.00	\$2,113.00	\$13,090.00
10	Counts, Elizabeth	\$3,742.00	\$521.00	\$4,505.00	\$1,024.00	\$3,528.00
11	David, Chloe	\$7,605.00	\$3,428.00	\$3,973.00	\$1,716.00	\$4,839.00
12	Davis, William	\$5,304.00	\$1,562.00	\$2,945.00	\$1,176.00	\$9,642.00
13	Dumlao, Richard	\$9,333.00	\$2,779.00	\$7,549.00	\$1,101.00	\$5,850.00
14	Farmer, Kim	\$1,103.00	\$3,470.00	\$3,862.00	\$1,040.00	\$10,024.00
15	Ferguson, Elizabeth	\$1,333.00	\$1,913.00	\$4,596.00	\$1,126.00	\$5,503.00
16	Flores, Tia	\$12,398.00	\$2,883.00	\$2,142.00	\$2,014.00	\$13,547.00
17	Ford, Victor	\$3,251.00	\$4,931.00	\$8,283.00	\$1,054.00	\$9,543.00
18	Hodges, Melissa	\$4,624.00	\$4,798.00	\$8,420.00	\$1,389.00	\$10,468.00
19	Jameson, Robinson	\$2,552.00	\$4,459.00	\$2,248.00	\$1,058.00	\$6,267.00
20	Kellerman, Frances	\$4,281.00	\$4,172.00	\$11,074.00	\$1,282.00	\$2,365.00

2. Click the Conditional Formatting command. A drop-down menu will appear.

3. Hover the mouse over the desired preset, then choose a preset style from the menu that appears.



4. The conditional formatting will be applied to the selected cells.



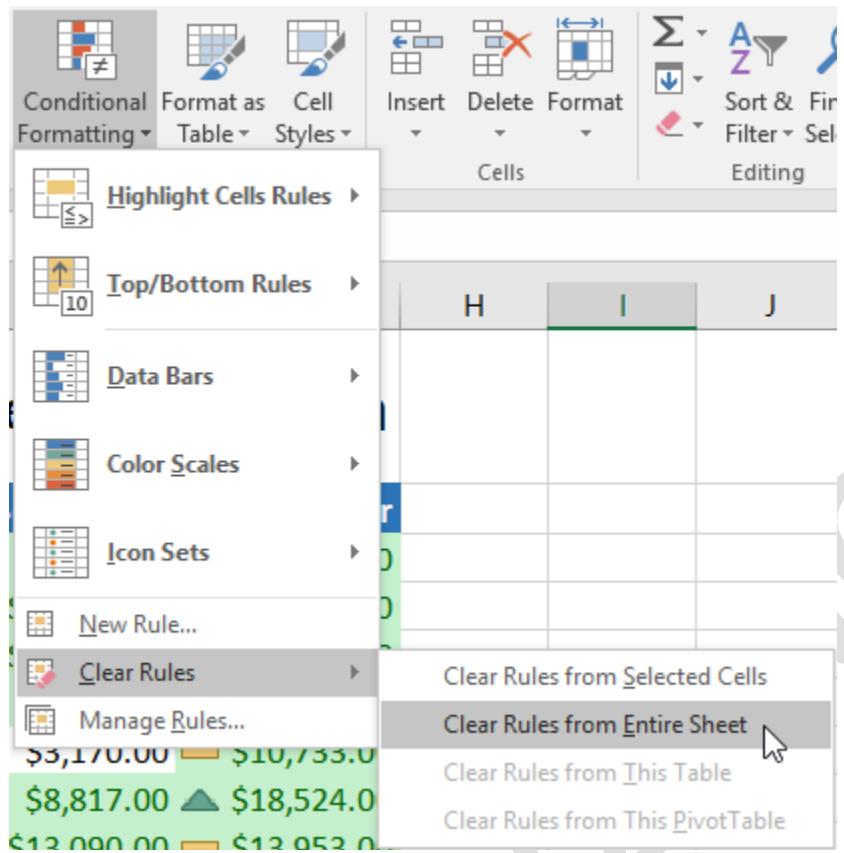
Westbrook Parker Sales

	A	B	C	D	E	F
1						
2	Salesperson	May	June	July	August	September
3	Albertson, Kathy	\$3,799.00	\$557.00	\$3,863.00	\$1,117.00	\$8,237.00
4	Allenson, Carol	\$18,930.00	\$1,042.00	\$9,355.00	\$1,100.00	\$10,185.00
5	Altman, Zoey	\$5,725.00	\$3,072.00	\$6,702.00	\$2,116.00	\$13,452.00
6	Bittiman, William	\$1,344.00	\$3,755.00	\$4,415.00	\$1,089.00	\$4,404.00
7	Brennan, Michael	\$8,296.00	\$3,152.00	\$11,601.00	\$1,122.00	\$3,170.00
8	Carlson, David	\$3,945.00	\$4,056.00	\$3,726.00	\$1,135.00	\$8,817.00
9	Collman, Harry	\$8,337.00	\$4,906.00	\$9,007.00	\$2,113.00	\$13,090.00
10	Counts, Elizabeth	\$3,742.00	\$521.00	\$4,505.00	\$1,024.00	\$3,528.00
11	David, Chloe	\$7,605.00	\$3,428.00	\$3,973.00	\$1,716.00	\$4,839.00
12	Davis, William	\$5,304.00	\$1,562.00	\$2,945.00	\$1,176.00	\$9,642.00
13	Dumlao, Richard	\$9,333.00	\$2,779.00	\$7,549.00	\$1,101.00	\$5,850.00
14	Farmer, Kim	\$1,103.00	\$3,470.00	\$3,862.00	\$1,040.00	\$10,024.00
15	Ferguson, Elizabeth	\$1,333.00	\$1,913.00	\$4,596.00	\$1,126.00	\$5,503.00
16	Flores, Tia	\$12,398.00	\$2,883.00	\$2,142.00	\$2,014.00	\$13,547.00
17	Ford, Victor	\$3,251.00	\$4,931.00	\$8,283.00	\$1,054.00	\$9,543.00
18	Hodges, Melissa	\$4,624.00	\$4,798.00	\$8,420.00	\$1,389.00	\$10,468.00
19	Jameson, Robinson	\$2,552.00	\$4,459.00	\$2,248.00	\$1,058.00	\$6,267.00
20	Kellerman, Frances	\$4,281.00	\$4,172.00	\$11,074.00	\$1,282.00	\$2,365.00

Removing conditional formatting

To remove conditional formatting:

1. Click the Conditional Formatting command. A drop-down menu will appear.
2. Hover the mouse over Clear Rules, then choose which rules you want to clear. In our example, we'll select Clear Rules from Entire Sheet to remove all conditional formatting from the worksheet.

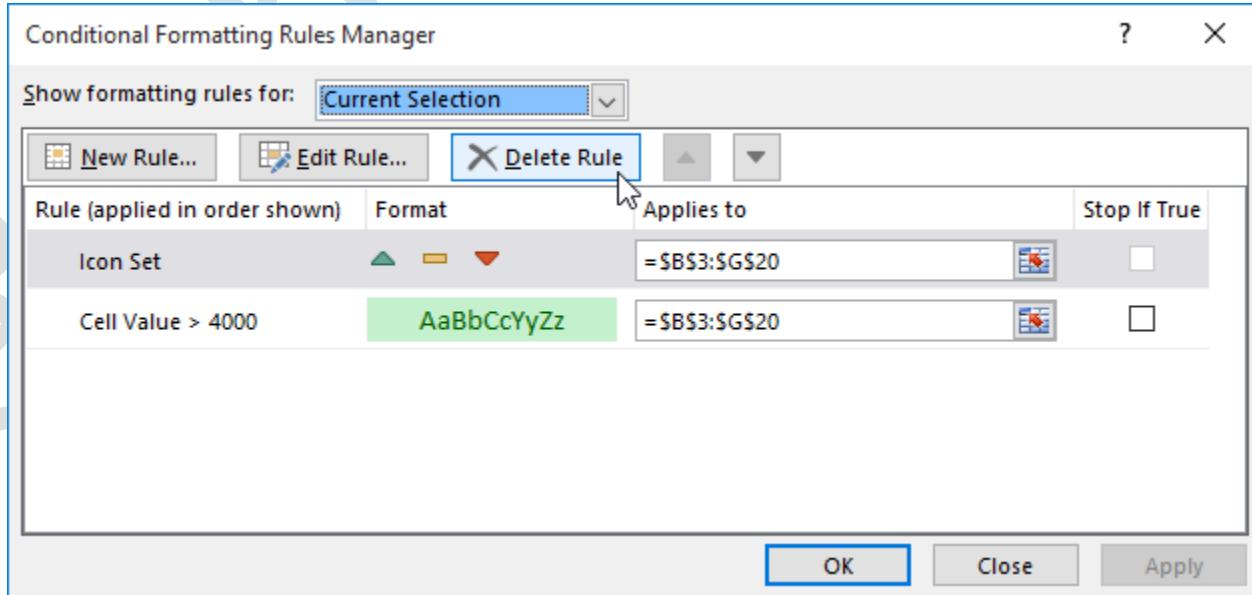


3. The conditional formatting will be removed.



	A	B	C	D	E	F
1						
2	Salesperson	May	June	July	August	September
3	Albertson, Kathy	\$3,799.00	\$557.00	\$3,863.00	\$1,117.00	\$8,237.00
4	Allenson, Carol	\$18,930.00	\$1,042.00	\$9,355.00	\$1,100.00	\$10,185.00
5	Altman, Zoey	\$5,725.00	\$3,072.00	\$6,702.00	\$2,116.00	\$13,452.00
6	Bittiman, William	\$1,344.00	\$3,755.00	\$4,415.00	\$1,089.00	\$4,404.00
7	Brennan, Michael	\$8,296.00	\$3,152.00	\$11,601.00	\$1,122.00	\$3,170.00
8	Carlson, David	\$3,945.00	\$4,056.00	\$3,726.00	\$1,135.00	\$8,817.00
9	Collman, Harry	\$8,337.00	\$4,906.00	\$9,007.00	\$2,113.00	\$13,090.00
10	Counts, Elizabeth	\$3,742.00	\$521.00	\$4,505.00	\$1,024.00	\$3,528.00
11	David, Chloe	\$7,605.00	\$3,428.00	\$3,973.00	\$1,716.00	\$4,839.00
12	Davis, William	\$5,304.00	\$1,562.00	\$2,945.00	\$1,176.00	\$9,642.00
13	Dumlao, Richard	\$9,333.00	\$2,779.00	\$7,549.00	\$1,101.00	\$5,850.00
14	Farmer, Kim	\$1,103.00	\$3,470.00	\$3,862.00	\$1,040.00	\$10,024.00
15	Ferguson, Elizabeth	\$1,333.00	\$1,913.00	\$4,596.00	\$1,126.00	\$5,503.00
16	Flores, Tia	\$12,398.00	\$2,883.00	\$2,142.00	\$2,014.00	\$13,547.00
17	Ford, Victor	\$3,251.00	\$4,931.00	\$8,283.00	\$1,054.00	\$9,543.00
18	Hodges, Melissa	\$4,624.00	\$4,798.00	\$8,420.00	\$1,389.00	\$10,468.00
19	Jameson, Robinson	\$2,552.00	\$4,459.00	\$2,248.00	\$1,058.00	\$6,267.00
20	Kellerman, Frances	\$4,281.00	\$4,172.00	\$11,074.00	\$1,282.00	\$2,365.00

Click Manage Rules to edit or delete individual rules. This is especially useful if you've applied multiple rules to a worksheet.



Challenge!

1. Open our [practice workbook](#).

2. Click the Challenge worksheet tab in the bottom-left of the workbook.
3. Select cells B3:J17.
4. Let's say you're the teacher and want to easily see all of the grades that are below passing. Apply Conditional Formatting so it Highlights Cells containing values Less Than 70 with a light red fill.
5. Now you want to see how the grades compare to each other. Under the Conditional Formatting tab, select the Icon Set called 3 Symbols (Circled). Hint: The names of the icon sets will appear when you hover over them.
6. Your spreadsheet should look like this:

A screenshot of an Excel spreadsheet titled "First Quarter Grades". The table has 18 rows and 13 columns. Row 1 contains column headers: "Student Name" and then "Unit 1 Quiz 1" through "1st Quarter Test". Row 2 contains student names from Jackson Love to Quanisha Johnson. Rows 3 through 17 contain their respective scores. A conditional format is applied to cells in rows 3-17 where the value is less than 70, turning the background light red and the cell icon orange with a red exclamation mark. The last column, "1st Quarter", contains the sum of the scores.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1													
2	Student Name	Unit 1 Quiz 1	Unit 1 Test	Unit 2 Quiz 1	Unit 2 Quiz 2	Unit 2 Test	Unit 3 Quiz 1	Unit 3 Quiz 2	Unit 3 Test	1st Quarter			
3	Jackson Love	⚠ 70	⚠ 75	✓ 88	✓ 90	⚠ 72	⚠ 69	⚠ 75	✓ 93	✓ 93	✓ 93	✓ 93	✓ 93
4	Priya Patel	✓ 97	✓ 100	✓ 92	✓ 95	✓ 96	⚠ 68	✓ 95	✓ 95	✓ 95	✓ 95	✓ 95	✓ 95
5	Sharia Clemons	✓ 95	✓ 97	✗ 45	⚠ 79	✓ 83	✓ 95	✓ 95	✓ 94	✓ 94	✓ 94	✓ 94	✓ 100
6	Ming Lu	✓ 91	✓ 93	✓ 89	✓ 95	✓ 97	✓ 84	✓ 85	✓ 74	✓ 85	✓ 85	✓ 85	✓ 88
7	Sadie Carter	✓ 86	✓ 84	✓ 93	✓ 89	✓ 94	⚠ 77	✓ 88	✓ 88	✓ 88	✓ 88	✓ 87	✓ 87
8	Jensen Howard	✗ 54	⚠ 70	✓ 87	⚠ 72	✓ 85	⚠ 65	⚠ 74	✓ 94	✓ 94	✓ 94	✓ 94	✓ 94
9	Tyriq Hilton	⚠ 77	✓ 85	⚠ 76	✓ 90	⚠ 68	⚠ 72	✓ 78	✓ 94	✓ 94	✓ 94	✓ 94	✓ 94
10	Maria Saldana	✓ 100	✓ 96	✓ 93	✓ 87	✓ 88	✓ 87	✓ 92	✓ 95	✓ 95	✓ 95	✓ 95	✓ 95
11	Kyle Jacobs	✓ 90	✓ 89	✓ 91	✓ 93	✓ 94	✓ 88	✓ 95	✓ 88	✓ 88	✓ 88	✓ 88	✓ 88
12	John Feinstein	✓ 89	⚠ 67	✓ 84	✓ 87	✓ 85	⚠ 80	✓ 90	✓ 93	✓ 93	✓ 93	✓ 93	✓ 93
13	Carter Zhou	⚠ 75	⚠ 68	✓ 82	✓ 83	✓ 85	✓ 84	⚠ 66	✓ 99	✓ 99	✓ 99	✓ 99	✓ 99
14	Jose Marco Hernandez	✓ 93	✓ 87	✓ 86	✓ 91	✓ 93	✓ 95	✓ 82	✓ 82	✓ 82	✓ 82	✓ 82	✓ 82
15	Betsy Michaels	✓ 90	✓ 95	⚠ 80	⚠ 73	⚠ 76	⚠ 71	✓ 88	✓ 88	✓ 88	✓ 88	✓ 85	✓ 85
16	Dexter Cooper	✗ 62	⚠ 71	⚠ 76	✓ 84	⚠ 80	✓ 85	✓ 87	✓ 93	✓ 93	✓ 93	✓ 93	✓ 93
17	Quanisha Johnson	✓ 100	✓ 98	✓ 86	✓ 89	✓ 93	✓ 95	✓ 96	✓ 96	✓ 96	✓ 96	✓ 96	✓ 96

7. Using the Manage Rules feature, remove the light red fill, but keep the icon set.

Lesson 25: Comments and Co-authoring

Introduction

There may be times when you're working on a workbook and find that you need the help of others. Excel offers two powerful features that allow you to work with others on the same spreadsheet: comments and co-authoring.

Optional: Download our [practice workbook](#).

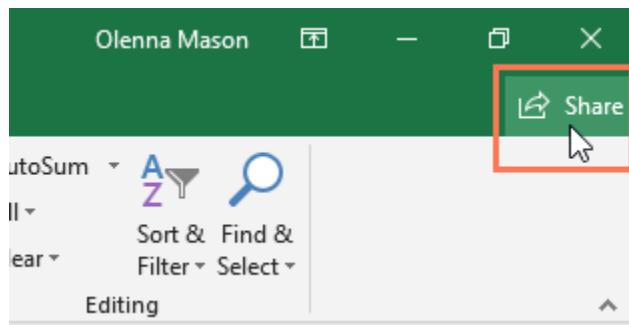
Watch the video below to learn more about comments and co-authoring.

The Track Changes feature can also be helpful to review changes before making them permanent. It's still available in Office 365, but it's now hidden by default. You can learn more about Track Changes in our Excel 2016 lesson [here](#).

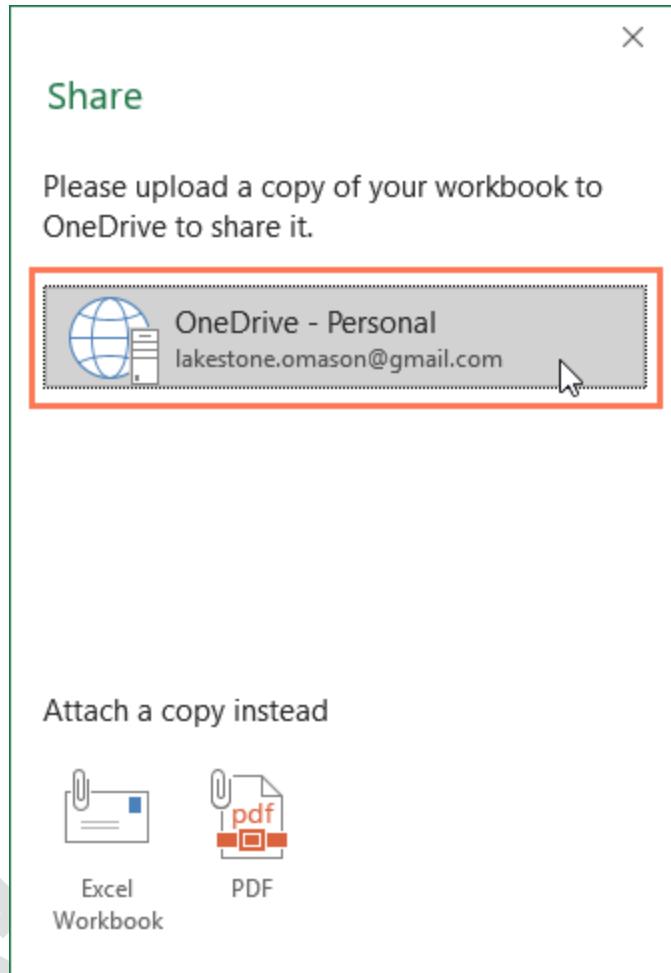
Sharing a workbook with others

In order for others to collaborate on a workbook, you'll need to share it with them first.

1. Click the Share button in the top-right corner.



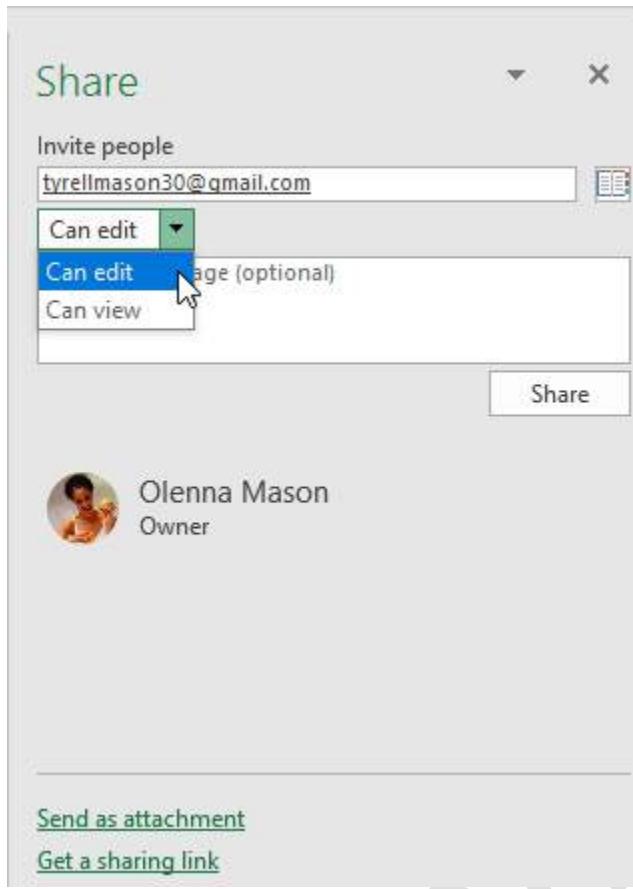
- 2. Click the OneDrive option associated with your account in order to upload the workbook.**



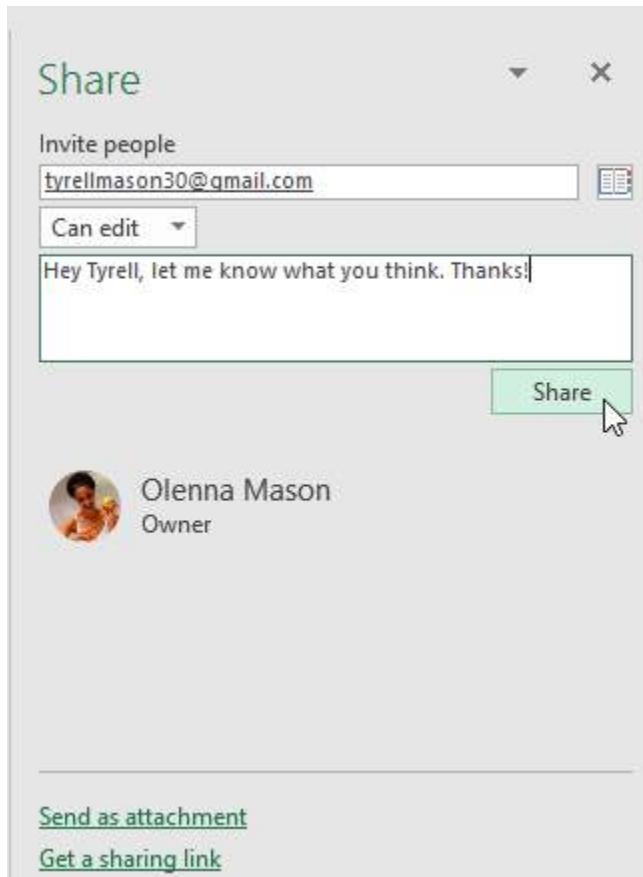
- 3. The Share pane will appear on the right side of the screen. Type the email address of the person you'd like to share the workbook with.**

The screenshot shows a Microsoft Excel spreadsheet titled "AGENDA PLANNER". The spreadsheet has columns E, F, and G. In column E, there is a list of names under the heading "Facilitator": "Exec team", "Garth", "Garth, Dean, Liz", "Tyler", "Julia", "See Liz for info", "Dean", and "Garth, exec team". The "Garth, Dean, Liz" entry is highlighted with a green background. A "Share" dialog box is open on the right side of the screen, with the email address "tyrellmason30@gmail.com" entered in the "Invite people" field. The dialog also includes options to "Send as attachment" and "Get a sharing link".

4. Select Can edit from the drop-down menu to allow this person to edit the workbook.



5. Type a message if you want to include one, then click Share.



6. Your collaborators will now be able to access the workbook.

Comments

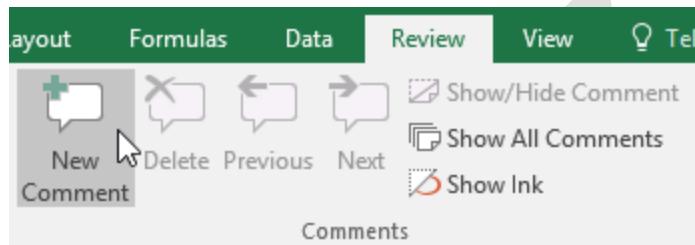
One way to collaborate on a workbook is through commenting. Sometimes you may want to provide feedback or ask a question without editing the contents of a cell. You can do this by adding a comment.

To add a comment:

1. Select the cell where you want the comment to appear. In our example, we'll select cell D17.

	A	B	C	D	E
6	Start	End	Length	Item	Facilitator
7	8:00 AM	9:00 AM	1:00	Breakfast, welcome	Exec team
8	9:00 AM	9:30 AM	0:30	Introduction	Garth
9	9:30 AM	10:30 AM	1:00	Work relationships exercise	Garth, Dean, Liz
10	10:30 AM	10:45 AM	0:15	Break	
11	10:45 AM	12:45 PM	2:00	Cady Falls hike (strategy game?)	Liz, Julia
12	12:45 PM	1:45 PM	1:00	Lunch (with strategy game team)	
13	1:45 PM	2:00 PM	0:15	Strategy debrief	Julia
14	2:00 PM	3:00 PM	1:00	Getting to know your team	See Liz for info
15	3:00 PM	4:00 PM	1:00	Strengths exercise	Garth
16	4:00 PM	4:30 PM	0:30	Break/snack	Wayne
17	4:00 PM	5:00 PM	1:00	Redwoods hike 	Dean
18	5:00 PM	6:00 PM	1:00	Team-building exercise	Garth, exec team
19	7:00 PM	8:00 PM	1:00	Dinner	
20	Total		11:30		

2. From the Review tab, click the New Comment command.



3. A comment box will appear. Type your comment, then click anywhere outside the box to close the comment.

D	E	F
Item	Facilitator	
Breakfast, welcome	Exec team	
Introduction	Garth	
Work relationships exercise	Garth, Dean, Liz	
Break		
Cady Falls hike (strategy game?)	Liz, Julia	
Lunch (with strategy game team)		
Strategy debrief	Julia	
Getting to know your team	See Liz for info	
Strengths exercise	Garth	
Break/snack		
Redwoods hike	Javier Flores: How long is this hike?	
Team-building exercise		
Dinner		

4. The comment will be added to the cell, represented by a red triangle in the top-right corner.

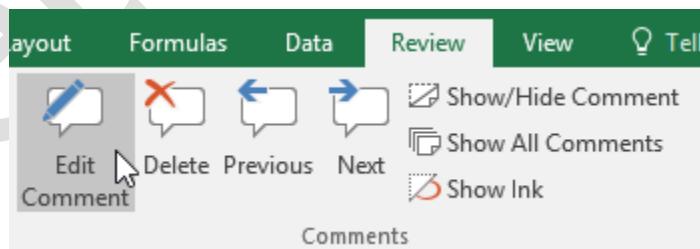
D	E
Getting to know your team	See Liz for info
Strengths exercise	Garth
Break/snack	Wayne
Redwoods hike	Dean
Team-building exercise	Garth, exec team
Dinner	

5. Select the cell again to view the comment.

D	E
Item	Facilitator
Breakfast, welcome	Exec team
Introduction	Garth
Work relationships exercise	Garth, Dean, Liz
Break	
Cady Falls hike (strategy game?)	Liz, Julia
Lunch (with strategy game team)	
Strategy debrief	Julia
Getting to know your team	See Liz for info
Strengths exercise	Garth
Break/snack	Wayne
Redwoods hike	Javier Flores: How long is this hike?
Team-building exercise	Garth
Dinner	

To edit a comment:

1. Select the cell containing the comment you want to edit.
2. From the Review tab, click the Edit Comment command.

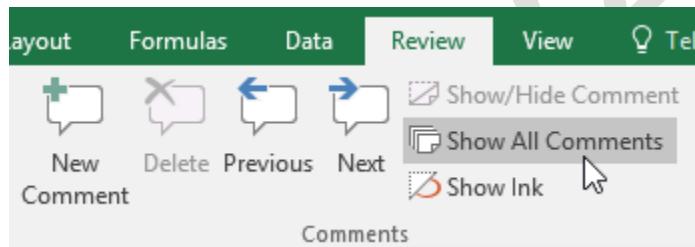


3. The comment box will appear. Edit the comment as desired, then click anywhere outside the box to close the comment.

D	E	F
Item	Facilitator	
Breakfast, welcome	Exec team	
Introduction	Garth	
Work relationships exercise	Garth, Dean, Liz	
Break		
Cady Falls hike (strategy game?)	Liz, Julia	
Lunch (with strategy game team)		
Strategy debrief	Julia	
Getting to know your team	See Liz for info	
Strengths exercise	Garth	
Break/snack		
Redwoods hike		
Team-building exercise		
Dinner	Javier Flores: How long is this hike? Liz told me it was only 1 mile.	

To show or hide comments:

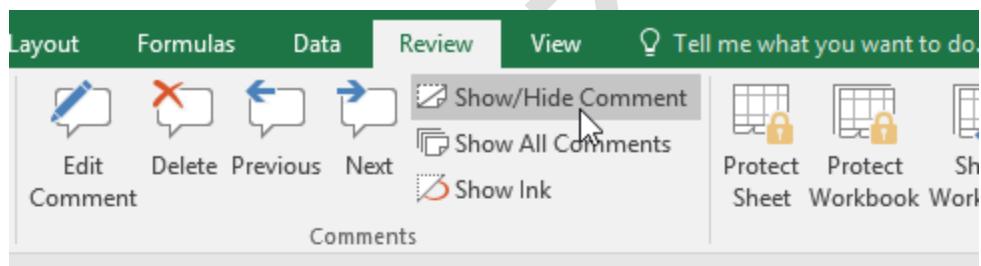
1. From the Review tab, click the Show All Comments command to view every comment in your worksheet at the same time.



2. All comments in the worksheet will appear. Click the Show All Comments command again to hide them.

D	E	F	G	H
Item	Facilitator			
Breakfast, welcome	Exec team			
Introduction	Garth			
Work relationships exercise	Garth, Dean, Liz			
Break				
Cady Falls hike (strategy game?)	Javier Flores: I think the game during the hike will be enough.			
Lunch (with strategy game team)	Javier Flores: Julia might be willing to lead this activity.			
Strategy debrief				
Getting to know your team	Se			
Strengths exercise	Garth			
Break/snack	Wayne			
Redwoods hike	Dean			
Team-building exercise	Garth			
Dinner	Liz told me it was only 1 mile.			

You can also choose to show and hide individual comments by selecting the desired cell and clicking the Show/Hide Comment command.



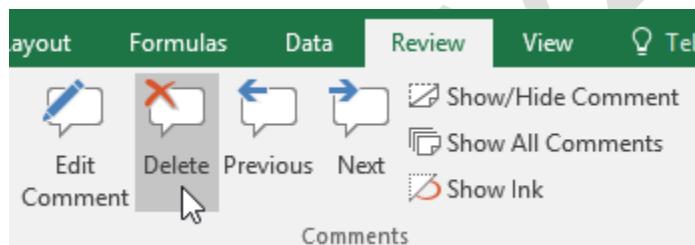
C	D	E	F
Length	Item	Facilitator	
1:00	Breakfast, welcome	Exec team	
0:30	Introduction	Garth	
1:00	Work relationships exercise	Garth, Dean, Liz	
0:15	Break		
2:00	Cady Falls hike (strategy game?)	Javier Flores: I think the game during the hike will be enough.	
1:00	Lunch (with strategy game team)	Javier Flores: Julia might be willing to lead this activity.	
0:15	Strategy debrief	Se	
1:00	Getting to know your team	Garth	
1:00	Strengths exercise	Wayne	
0:30	Break/snack	Dean	
1:00	Redwoods hike	Garth	
1:00	Team-building exercise	Garth, exec team	
1:00	Dinner		
11:30			

To delete a comment:

1. Select the cell containing the comment you want to delete. In our example, we'll select cell E13.

D	E	F	G	H
Item	Facilitator			
Breakfast, welcome	Exec team			
Introduction	Garth			
Work relationships exercise	Garth, Dean, Liz			
Break	Liz, Julia			
Cady Falls hike (strategy game?)				
Lunch (with strategy game team)				
Strategy debrief	Julia 			
Getting to know your team	See Liz for info			
Strengths exercise	Garth			
Break/snack	Wayne			
Redwoods hike	Dean			
Team-building exercise	Garth, exec team			
Dinner				

2. From the Review tab, click the Delete command in the Comments group.



3. The comment will be deleted.

D	E	F
Item	Facilitator	
Breakfast, welcome	Exec team	
Introduction	Garth	
Work relationships exercise	Garth, Dean, Liz	
Break		
Cady Falls hike (strategy game?)	Liz, Julia	
Lunch (with strategy game team)		
Strategy debrief	Julia 	
Getting to know your team	See Liz for info	
Strengths exercise	Garth	
Break/snack	Wayne	
Redwoods hike	Dean	
Team-building exercise	Garth, exec team	
Dinner		

Co-authoring

Another collaboration tool is co-authoring, which allows others to view and edit your workbook in real time. This makes it easier and quicker to collaborate on a workbook with your team. After sharing a workbook with others, they'll be able to co-author it.

Real-time co-authoring requires an Office 365 subscription.

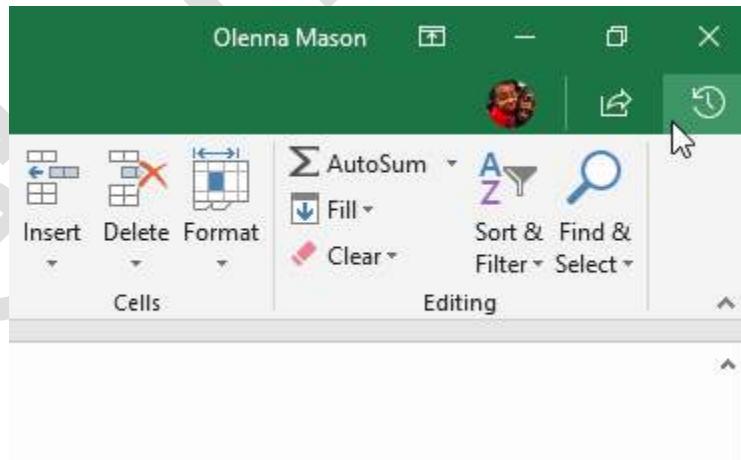
When you co-author a workbook, you can see others at work because each will have their own unique color. If you want to see who's currently editing a workbook, you can hover over the activity to see their name.

	A	B	C	D	E
1					
2			Event:	Team-Building Retreat	
3			Location:	Waverly Point Nature Preserve	
4			Date:	August 10, 2016	
5					
6	Start	End	Length	Item	Facilitator
7	8:00 AM	9:00 AM	1:00	Breakfast, welcome	Exec team
8	9:00 AM	9:30 AM	0:30	Introduction	Garth
9	9:30 AM	10:30 AM	1:00	Work relationships exercise	Garth, Dean, Liz
10	10:30 AM	10:45 AM	0:15	Break	
11	10:45 AM	12:45 PM	2:00	Cady Falls hike (strategy game?)	Tyler
12	12:45 PM	1:45 PM	1:00	Lunch (with strategy game team)	
13	1:45 PM	2:00 PM	0:15	Strategy debrief	+ Tyrell Mason
14	2:00 PM	3:00 PM	1:00	Getting to know your team	See Liz for info
15	3:00 PM	4:00 PM	1:00	Strengths exercise	
16	4:00 PM	4:15 PM	0:15	Break/snack	
17	4:15 PM	5:00 PM	0:45	Redwoods hike	Dean
18	5:00 PM	6:00 PM	1:00	Team-building exercise	Garth, exec team
19	6:00 PM	8:00 PM	2:00	Dinner	
20	Total		12:00		
21					

Restoring a previous version

When you or anyone else makes changes to a workbook, the changes are saved automatically. However, if you're unhappy with the changes, you can always restore a previous version.

1. Click the clock icon next to the Share button.



2. A Version History pane will appear on the right side of the screen. Double-click the version you'd like to restore.

C	D	E
Event:	Team-Building Retreat	
Location:	Waverly Point Nature Preserve	
Date:	August 10, 2016	
AGENDA PLANNER		
Length	Item	Facilitator
1:00	Breakfast, welcome	Exec team
0:30	Introduction	Garth
1:00	Work relationships exercise	Garth, Dean, Liz
0:15	Break	
2:00	Cady Falls hike	Tyler
1:00	Lunch (with icebreakers)	
0:15	Strategy debrief	Julia
1:00	Getting to know your team	See Liz for info
1:00	Strengths exercise	
0:15	Break/snack	
0:45	Redwoods hike	Dean
1:00	Team-building exercise	Garth, exec team
2:30	Dinner	
12:30		

Version History

Today, March 04, 2019



Tyrell Mason saved the fi



Olenna Mason saved the
Open version



- Once you've decided this is the version you want, click **Restore**.

Peterboy

A screenshot of the Microsoft Excel ribbon interface. The 'File' tab is selected. In the top right, there's a message about a previous version and a 'Restore' button, which is highlighted with a red box. Below the ribbon, the formula bar shows 'A21'. The main worksheet area contains a logo for 'Geb BIOFUELS' and a table for an 'AGENDA PLANNER'. The table has columns for Start, End, Length, Item, and Facilitator. Row 6 is a header. Rows 7 through 10 show agenda items: Breakfast, welcome (8:00 AM - 9:00 AM), Introduction (9:00 AM - 9:30 AM), Work relationships exercise (9:30 AM - 10:30 AM), and Break (10:30 AM - 10:45 AM). A green box highlights the first three rows of the table.

	Start	End	Length	Item	Facilitator
6					
7	8:00 AM	9:00 AM	1:00	Breakfast, welcome	Exec team
8	9:00 AM	9:30 AM	0:30	Introduction	Garth
9	9:30 AM	10:30 AM	1:00	Work relationships exercise	Garth, Dean, Liz
10	10:30 AM	10:45 AM	0:15	Break	

4. The previous version will be restored.

Challenge!

1. Open our [practice workbook](#).
2. Add four comments to the worksheet.
3. Delete one of the comments.
4. Make all of the comments visible, using Show All Comments.
5. When you're finished, your workbook should look something like this:



	A	B	C	D	E	F
1						
2	Event: Team-Building Retreat					
3	Location: Waverly Point Nature Preserve					
4	Date: August					
5						
6	Start	End	Length	Item	Notes	
7	8:00 AM	9:00 AM	1:00	Breakfast, welcome	Maybe bagels?	
8	9:00 AM	9:30 AM	0:30	Introduction	Ex	
9	9:30 AM	10:30 AM	1:00	Work relationships exercise	Ge	
10	10:30 AM	10:45 AM	0:15	Break	Ga	
11	10:45 AM	12:45 PM	2:00	Cady Falls hike (strategy game?)		
12	12:45 PM	1:45 PM	1:00	Lunch (with strategy game team)		
13	1:45 PM	2:00 PM	0:15	Strategy debrief	Julia	
14	2:00 PM	3:00 PM	1:00	?	See Liz for info	
15	3:00 PM	4:00 PM	1:00	Strengths exercise		
16	4:00 PM	4:30 PM	0:30	Break/snack		
17	4:15 PM	5:00 PM	0:45	Redwoods hike	John	
18	5:00 PM	6:00 PM	1:00	Team-building exercise	snack	
19	6:00 PM	7:00 PM	1:00	Dinner	Good way to end the day!	
20	Total		11:15			
21						

6. Optional: Share the document with someone you know, and experiment with some of the various co-authoring features.

Lesson 26: Inspecting and Protecting Workbooks

Introduction

Before sharing a workbook, you'll want to make sure it doesn't include any spelling errors or information you want to keep private. Fortunately, Excel includes several tools to help finalize and protect your workbook, including the Document Inspector and Protect Workbook feature.

Optional: Download our [practice workbook](#).

Watch the video below to learn more about inspecting and protecting workbooks.

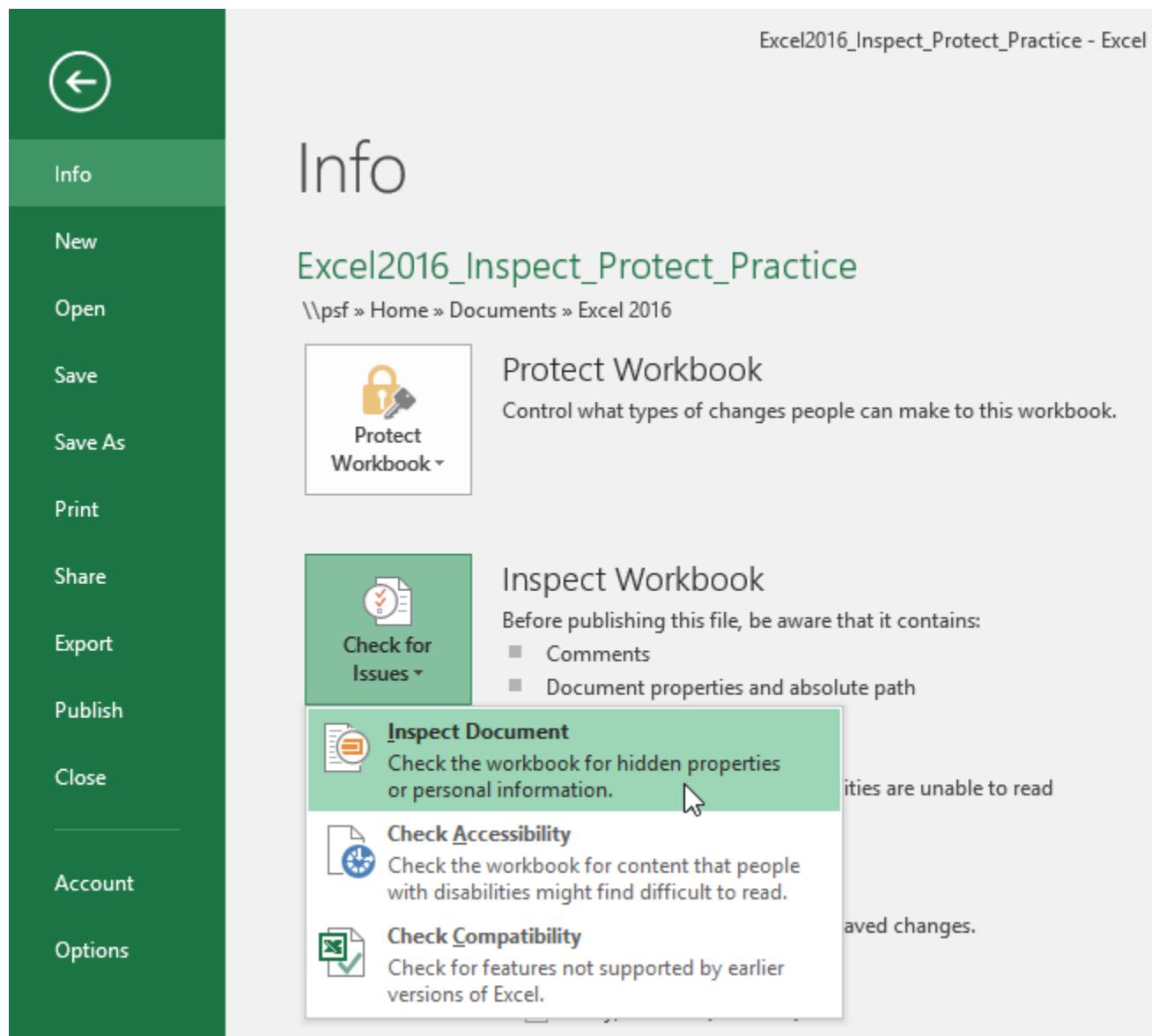
The Document Inspector

Whenever you create or edit a workbook, certain personal information may be added to the file automatically. You can use the Document Inspector to remove this information before sharing a workbook with others.

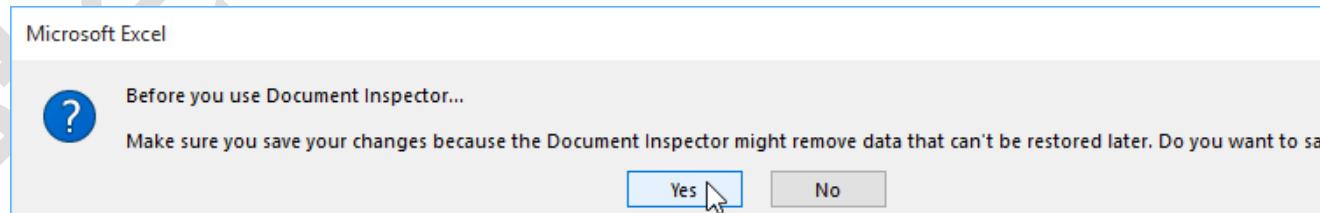
Because some changes may be permanent, it's a good idea to save an additional copy of your workbook before using the Document Inspector to remove information.

To use the Document Inspector:

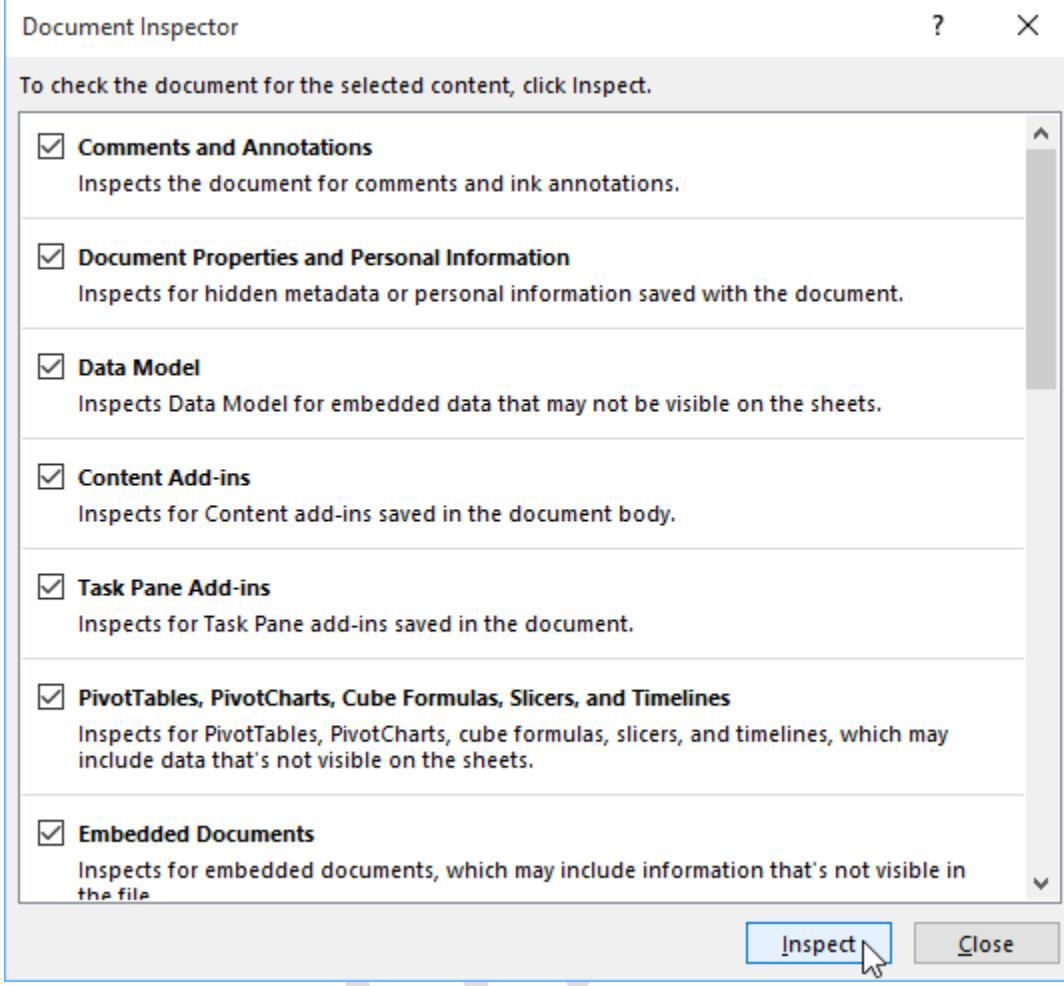
1. Click the File tab to access Backstage view.
2. From the Info pane, click Check for Issues, then select Inspect Document from the drop-down menu.



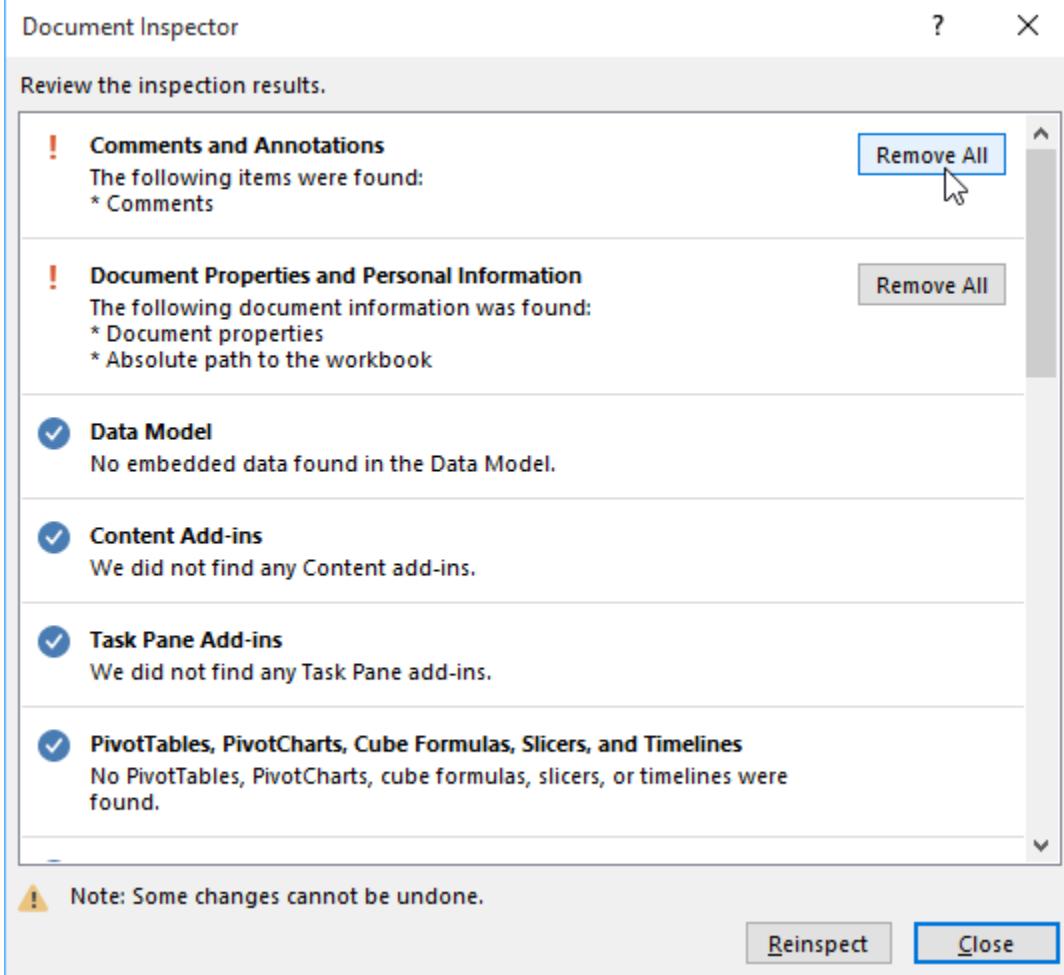
3. You may be prompted to save your file before running the Document Inspector.



4. Document Inspector will appear. Check or uncheck boxes, depending on the content you want to review, then click Inspect. In our example, we'll leave everything selected.



5. The inspection results will appear. In our example, we can see that our workbook contains comments and some personal information, so we'll click Remove All on both items to remove this information from the workbook.



6. When you're done, click Close.

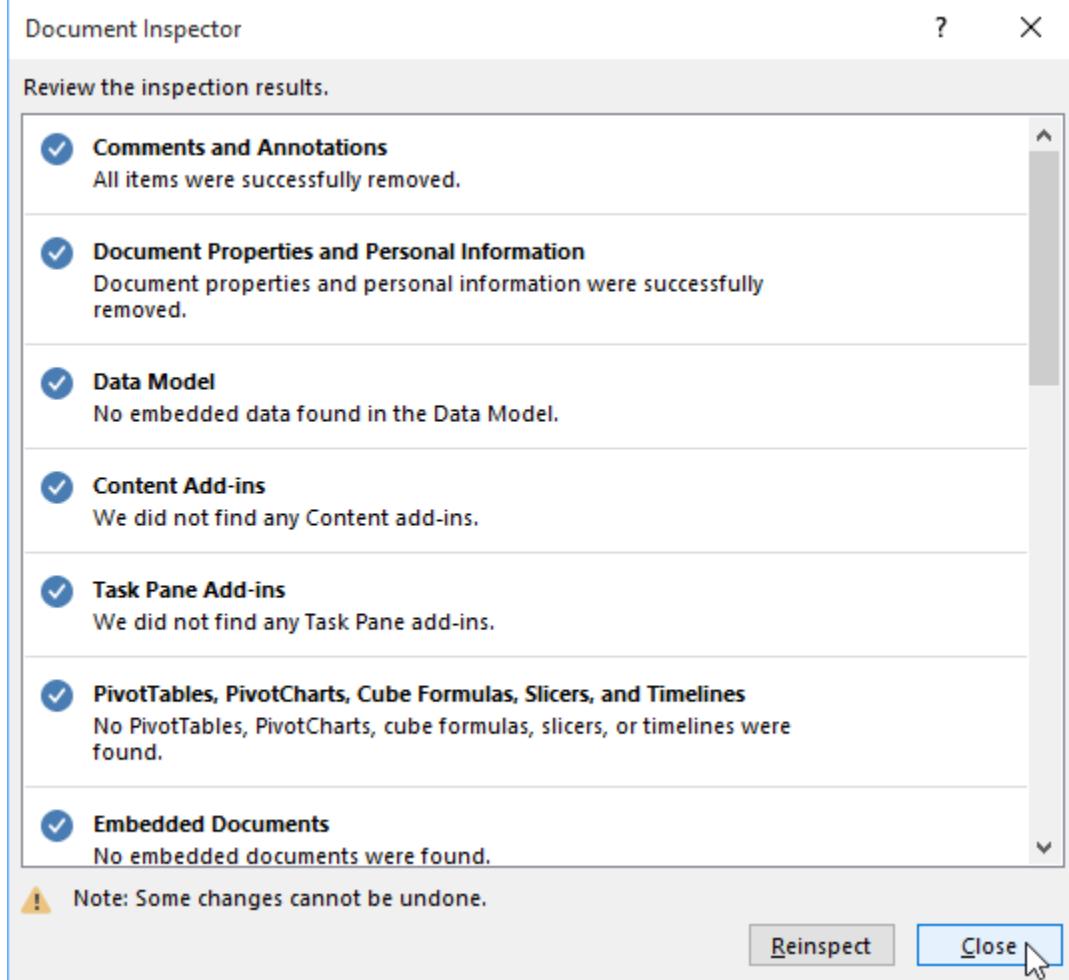
Document Inspector

Review the inspection results.

- Comments and Annotations**
All items were successfully removed.
- Document Properties and Personal Information**
Document properties and personal information were successfully removed.
- Data Model**
No embedded data found in the Data Model.
- Content Add-ins**
We did not find any Content add-ins.
- Task Pane Add-ins**
We did not find any Task Pane add-ins.
- PivotTables, PivotCharts, Cube Formulas, Slicers, and Timelines**
No PivotTables, PivotCharts, cube formulas, slicers, or timelines were found.
- Embedded Documents**
No embedded documents were found.

Note: Some changes cannot be undone.

[Reinspect](#) [Close](#)



Protecting your workbook

By default, anyone with access to your workbook will be able to open, copy, and edit its content unless you protect it. There are several ways to protect a workbook, depending on your needs.

To protect your workbook:

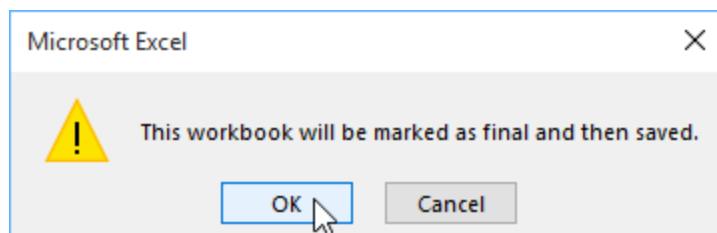
1. Click the File tab to access Backstage view.
2. From the Info pane, click the Protect Workbook command.
3. In the drop-down menu, choose the option that best suits your needs. In our example, we'll select Mark as Final. Marking your workbook as final is a good way to discourage others from editing the workbook, while the other options give you even more control if needed.

The screenshot shows the Microsoft Excel ribbon with the 'Info' tab selected. On the right, the 'Protect Workbook' section is open, displaying several options:

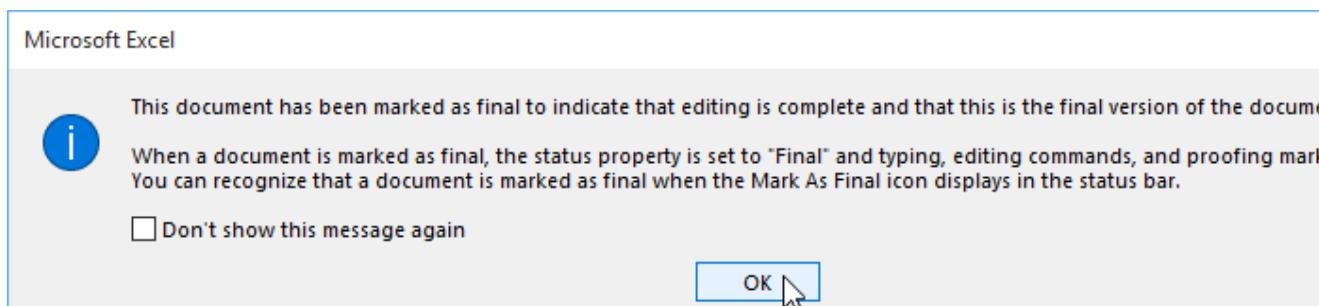
- Mark as Final**: Lets readers know the workbook is final and make it read-only.
- Encrypt with Password**: Requires a password to open this workbook.
- Protect Current Sheet**: Controls what types of changes people can make to the current sheet.
- Protect Workbook Structure**: Prevents unwanted changes to the structure of the workbook, such as adding sheets.
- Restrict Access**: Grants people access while removing their ability to edit, copy, or print.
- Add a Digital Signature**: Ensures the integrity of the workbook by adding an invisible digital signature.

Below this is the 'Browser View Options' section, which allows picking what users can see when this workbook is viewed on the Web.

4. A dialog box will appear, prompting you to save. Click OK.



5. Another dialog box will appear. Click OK.



6. The workbook will be marked as final.

The screenshot shows an Excel spreadsheet titled 'Excel2016_Inspect_Protect_Practice [Read-Only]'. A yellow message bar at the top says 'MARKED AS FINAL An author has marked this workbook as final to discourage editing.' with a button 'Edit Anyway'. The spreadsheet contains a logo for 'Geb BIOFUELS' in cell A1. A table is located in the range C2:D4, with the following data:

Event:	Team-Building Retreat
Location:	Waverly Point Nature Preserve
Date:	August

AGENDA PLANNER

Marking a workbook as final will not prevent others from editing it. If you want to prevent people from editing it, you can use the Restrict Access option instead.

Challenge!

1. Open our [practice workbook](#).
2. Use the Document Inspector to check the workbook and remove anything it finds.
3. Protect the workbook by Marking As Final.
4. When you're finished, your workbook should look something like this:

Excel2016_Inspect_Protect_Practice_Trial [Read-Only] - Excel

File Home Insert Page Layout Formulas Data Review View Tell me what you want to do... Edit Anyway

MARKED AS FINAL An author has marked this workbook as final to discourage editing.

A2 139

	A	B	C	D	E
1	Order #	Customer Name	Item Description	Order Total	Phone Number
2	139	Seferian Wilkes	6" Double Layer Chocolate Cake	\$15.45	555-248-1756
3	394	Marla Gaston	10" White Cake with Chocolate Icing	\$17.25	555-122-9875
4	219	Juan Ricardo	15" Dutch Apple Pie	\$9.56	555-398-2839
5	150	Andrejz Gorecki	6" Double Layer Chocolate Cake	\$15.45	555-486-5387
6	265	Sing Lu	10" French Silk Pie	\$8.87	555-336-2576
7	123	Devesh Assaf	15" Dutch Apple Pie	\$9.56	555-765-9874
8	108	Jerry Cranston	10" Chocolate Cake with Espresso Icing	\$19.87	555-132-1472
9	298	Mariela Lopes	6" Double Layer Chocolate Cake	\$15.45	555-987-2315
10	304	Linda Steinwater	12" Spice Cake with Maple Icing	\$16.75	555-423-3572
11	203	Archibald Grant	10" French Silk Pie	\$8.87	555-865-2834
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					

Agenda Planner Challenge Ready

Lesson 27: Intro to PivotTables

Introduction

When you have a lot of data, it can sometimes be difficult to analyze all of the information in your worksheet. PivotTables can help make your worksheets more manageable by summarizing data and allowing you to manipulate it in different ways.

Optional: Download our [practice workbook](#).

Watch the video below to learn more about PivotTables.

Using PivotTables to answer questions

Consider the example below. Let's say we wanted to answer the question What is the amount sold by each salesperson? Answering it could be time consuming and difficult; each salesperson appears on multiple rows, and we would need to total all of their different orders individually. We could use the Subtotal command to help find the total for each salesperson, but we would still have a lot of data to work with.

	A	B	C	D	E
1	Salesperson	Region	Account	Order Amount	Month
2	Albertson, Kathy	East	29386	\$925.00	January
3	Albertson, Kathy	East	74830	\$875.00	February
4	Albertson, Kathy	East	90099	\$500.00	February
5	Albertson, Kathy	East	74830	\$350.00	March
6	Brennan, Michael	West	82853	\$400.00	January
7	Brennan, Michael	West	72949	\$850.00	January
8	Brennan, Michael	West	90044	\$1,500.00	January
9	Brennan, Michael	West	82853	\$550.00	February
10	Brennan, Michael	West	72949	\$400.00	March
11	Davis, William	South	55223	\$235.00	February
12	Davis, William	South	10354	\$850.00	January
13	Davis, William	South	50192	\$600.00	March
14	Davis, William	South	27589	\$250.00	January
15	Dumlao, Richard	West	67275	\$400.00	January
16	Dumlao, Richard	West	41828	\$965.00	February

Fortunately, a PivotTable can instantly calculate and summarize the data in a way that will make it much easier to read. When we're done, the PivotTable will look something like this:

Row Labels	Sum of Order Amount
Albertson, Kathy	\$2,650.00
Brennan, Michael	\$3,700.00
Davis, William	\$1,935.00
Dumlao, Richard	\$1,490.00
Flores, Tia	\$4,565.00
Post, Melissa	\$1,690.00
Thompson, Shannon	\$3,160.00
Walters, Chris	\$4,375.00
Grand Total	\$23,565.00

Once you've created a PivotTable, you can use it to answer different questions by rearranging—or pivoting—the data. For example, let's say we wanted to answer What is the total amount sold in each month? We could modify our PivotTable to look like this:

Row Labels	Sum of Order Amount
January	\$9,090.00
February	\$9,160.00
March	\$5,315.00
Grand Total	\$23,565.00

To create a PivotTable:

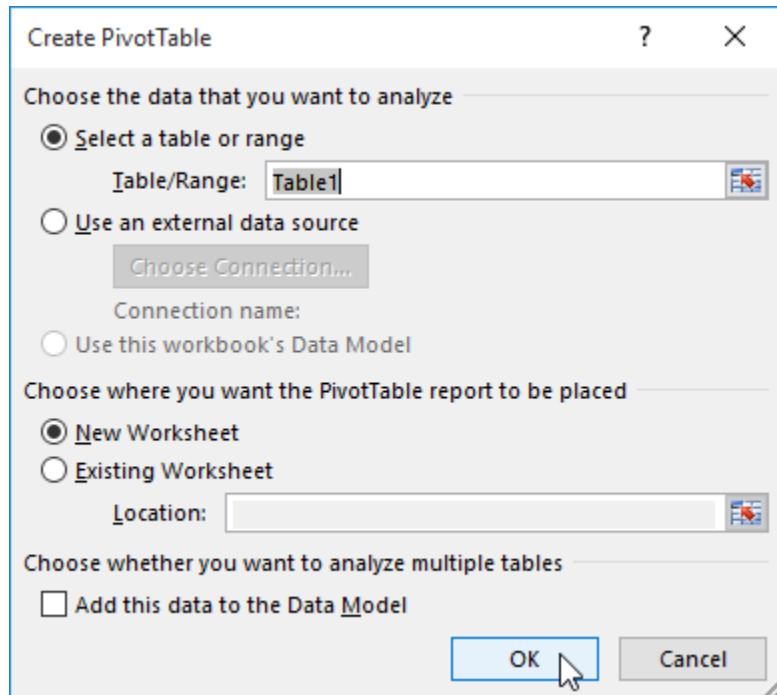
1. Select the table or cells (including column headers) you want to include in your PivotTable.

	A	B	C	D	E
1	Salesperson	Region	Account	Order Amount	Month
2	Albertson, Kathy	East	29386	\$925.00	January
3	Albertson, Kathy	East	74830	\$875.00	February
4	Albertson, Kathy	East	90099	\$500.00	February
5	Albertson, Kathy	East	74830	\$350.00	March
6	Brennan, Michael	West	82853	\$400.00	January
7	Brennan, Michael	West	72949	\$850.00	January
8	Brennan, Michael	West	90044	\$1,500.00	January
9	Brennan, Michael	West	82853	\$550.00	February
10	Brennan, Michael	West	72949	\$400.00	March
11	Davis, William	South	55223	\$235.00	February
12	Davis, William	South	10354	\$850.00	January
13	Davis, William	South	50192	\$600.00	March
14	Davis, William	South	27589	\$250.00	January
15	Dumlao, Richard	West	67275	\$400.00	January
16	Dumlao, Richard	West	41828	\$965.00	February

2. From the Insert tab, click the PivotTable command.

The screenshot shows the Microsoft Excel ribbon with the "Insert" tab selected. The "Tables" group is open, and the "PivotTable" icon is highlighted with a cursor. A tooltip for "PivotTable" contains the text: "Easily arrange and summarize complex data in a PivotTable." Below the ribbon, a preview window displays a small PivotTable with four columns: Region, Account, Order Amount, and Month, showing data for East and West regions across January and February.

3. The Create PivotTable dialog box will appear. Choose your settings, then click OK. In our example, we'll use Table1 as our source data and place the PivotTable in a new worksheet.



4. A blank PivotTable and Field List will appear in a new worksheet.

To build a report, choose fields from the PivotTable Field List

PivotTable Fields

Choose fields to add to report:

Search

Salesperson
Region
Account
Order Amount
Month

MORE TABLES...

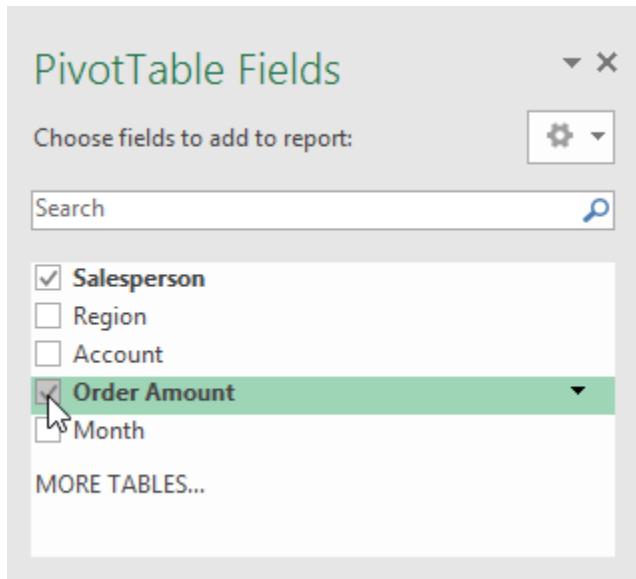
Drag fields between areas below:

FILTERS COLUMNS

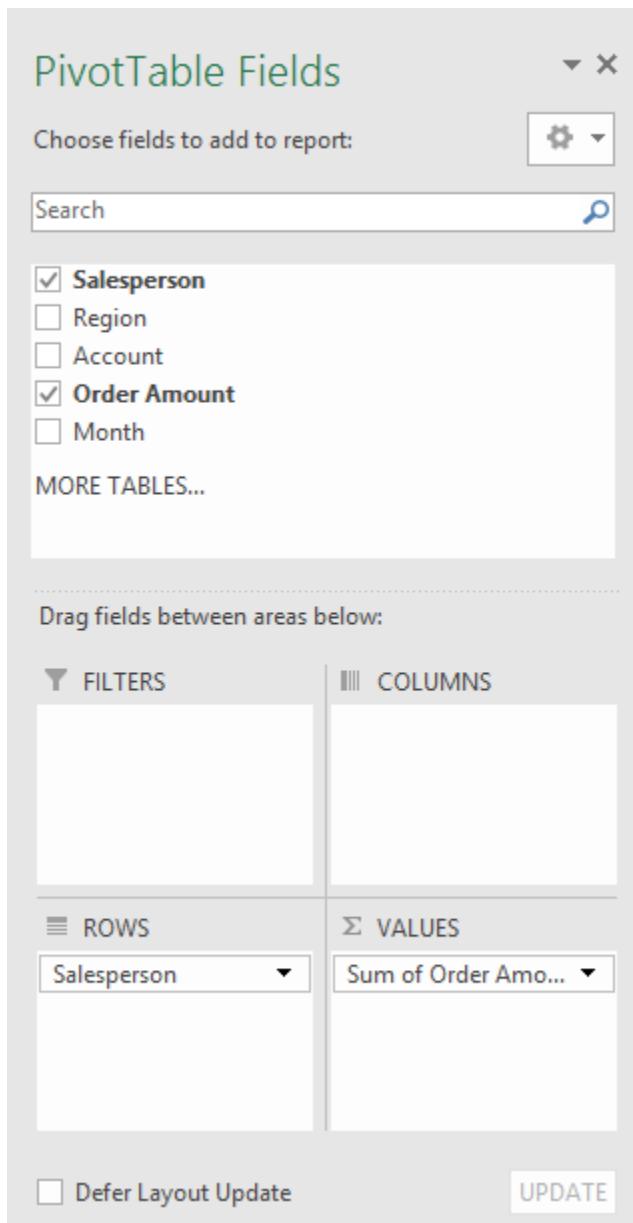
ROWS VALUES

Defer Layout Update UPDATE

5. Once you create a PivotTable, you'll need to decide which fields to add. Each field is simply a column header from the source data. In the PivotTable Fields list, check the box for each field you want to add. In our example, we want to know the total amount sold by each salesperson, so we'll check the Salesperson and Order Amount fields.



6. The selected fields will be added to one of the four areas below. In our example, the Salesperson field has been added to the Rows area, while Order Amount has been added to Values. You can also drag and drop fields directly into the desired area.



7. The PivotTable will calculate and summarize the selected fields. In our example, the PivotTable shows the amount sold by each salesperson.

	A	B
1		
2		
3	Row Labels	Sum of Order Amount
4	Albertson, Kathy	2650
5	Brennan, Michael	3700
6	Davis, William	1935
7	Dumlao, Richard	1490
8	Flores, Tia	4565
9	Post, Melissa	1690
10	Thompson, Shannon	3160
11	Walters, Chris	4375
12	Grand Total	23565
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

Sheet1

1st Quarter Sales



PivotTable Fields

Choose fields to add to report:

Search

- Salesperson
- Region
- Account
- Order Amount
- Month

MORE TABLES...

Drag fields between areas below:

FILTERS

COLUMNS

ROWS

Salesperson

VALUES

Sum of Order

Defer Layout Update

Just like with normal spreadsheets, you can sort the data in a PivotTable using the Sort & Filter command on the Home tab. You can also apply any type of number formatting you want. For example, you may want to change the number format to Currency. However, be aware that some types of formatting may disappear when you modify the PivotTable.

Row Labels	Sum of Order Amount
Flores, Tia	\$4,565.00
Walters, Chris	\$4,375.00
Brennan, Michael	\$3,700.00
Thompson, Shannon	\$3,160.00
Albertson, Kathy	\$2,650.00
Davis, William	\$1,935.00
Post, Melissa	\$1,690.00
Dumlao, Richard	\$1,490.00
Grand Total	\$23,565.00

If you change any of the data in your source worksheet, the PivotTable will not update automatically. To manually update it, select the PivotTable and then go to Analyze > Refresh.

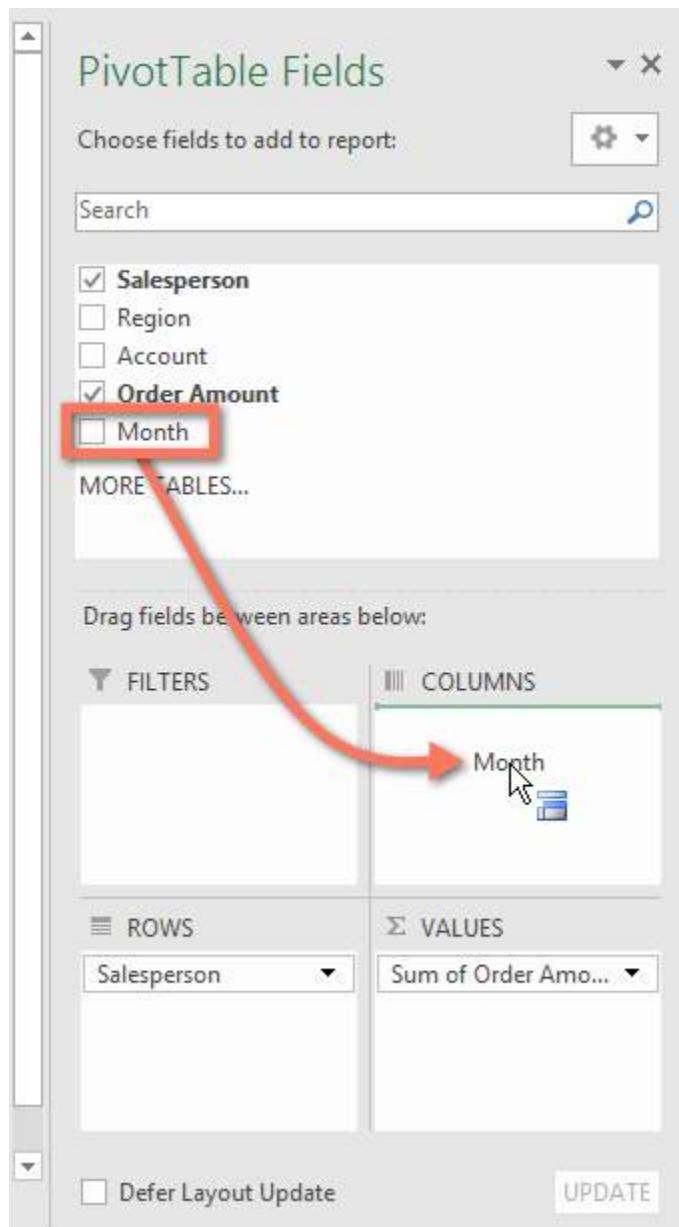
Pivoting data

One of the best things about PivotTables is that they can quickly pivot—or reorganize—your data, allowing you to examine your worksheet in several ways. Pivoting data can help you answer different questions and even experiment with your data to discover new trends and patterns.

To add columns:

So far, our PivotTable has only shown one column of data at a time. To show multiple columns, you'll need to add a field to the Columns area.

1. Drag a field from the Field List into the Columns area. In our example, we'll use the Month field.



2. The PivotTable will include multiple columns. In our example, there is now a column for each person's monthly sales, in addition to the grand total.

	A	B	C	D	E
1					
2					
3	Sum of Order Amount	Column			
4	Row Labels	January	February	March	Grand Total
5	Flores, Tia	1655	985	1925	4565
6	Walters, Chris	355	2755	1265	4375
7	Brennan, Michael	2750	550	400	3700
8	Thompson, Shannon	1140	1720	300	3160
9	Albertson, Kathy	925	1375	350	2650
10	Davis, William	1100	235	600	1935
11	Post, Melissa	765	575	350	1690
12	Dumlao, Richard	400	965	125	1490
13	Grand Total	9090	9160	5315	23565
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

PivotTable Field

Choose fields to add to report

Search

- Salesperson
- Region
- Account
- Order Amount
- Month

MORE TABLES...

Drag fields between areas

FILTERS

ROWS
Salesperson

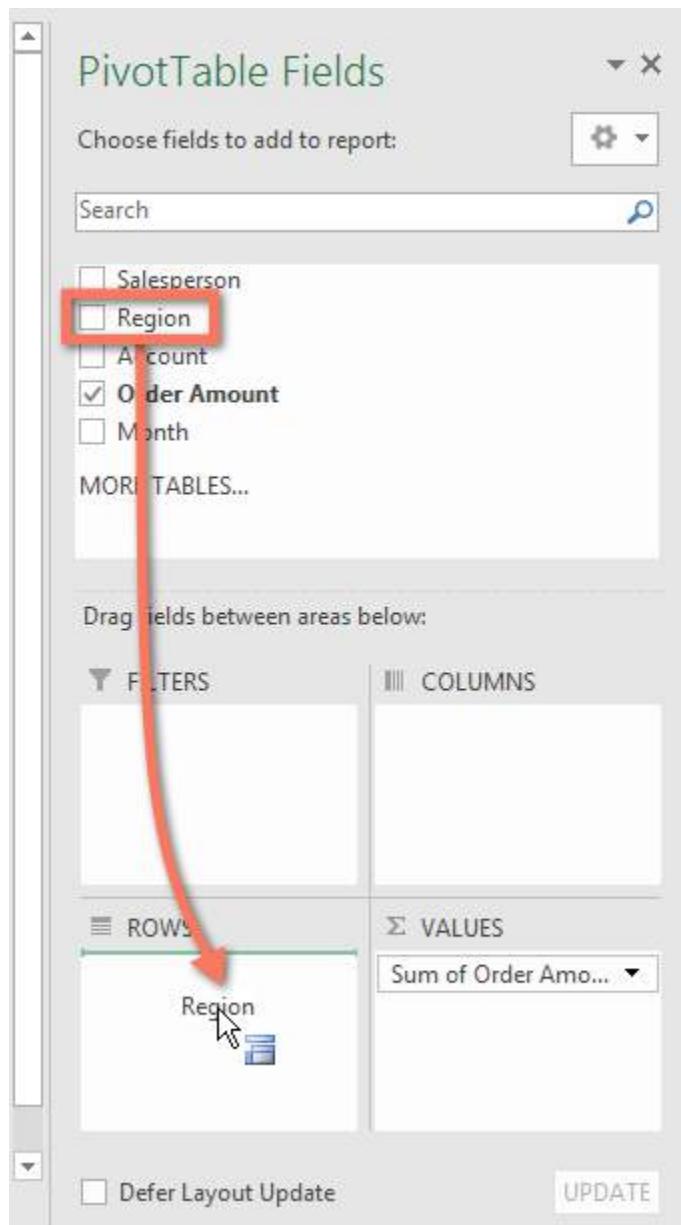
To change a row or column:

Changing a row or column can give you a completely different perspective on your data. All you have to do is remove the field in question, then replace it with another.

1. Drag the field you want to remove out of its current area. You can also uncheck the appropriate box in the Field List. In this example, we've removed the Month and Salesperson fields.

The screenshot shows the 'PivotTable Fields' ribbon in Excel. At the top, it says 'Choose fields to add to report:' with a search bar and a settings icon. Below is a list of fields: Salesperson (checked), Region, Account, Order Amount (checked), and Month (unchecked). A red box highlights the 'Month' checkbox. Below this is a link 'MORE TABLES...'. The main area is titled 'Drag fields between areas below:' and contains four sections: FILTERS (empty), COLUMNS (empty), ROWS (containing 'Salesperson'), and VALUES (containing 'Sum of Order Amo...'). A red arrow points from the 'Salesperson' label in the ROWS section to a small 'X' icon next to it. At the bottom left is a checkbox for 'Defer Layout Update', and at the bottom right is a 'UPDATE' button.

2. Drag a new field into the desired area. In our example, we'll place the Region field under Rows.



3. The PivotTable will adjust—or pivot—to show the new data. In our example, it now shows the amount sold by each region.

A

B

1

2

3 Row Labels ▾ Sum of Order Amount

4 East 4340

5 North 3160

6 South 10875

7 West 5190

8 Grand Total 23565

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

PivotTable Fields

Choose fields to add to report:

Search

Salesperson
 Region
 Account
 Order Amount
 Month

MORE TABLES...

Drag fields between areas below:

FILTERS

COLUMNS

ROWS

VALUES

Region

Sum of Order Amo...

To learn more:

Once you're comfortable with PivotTables, review our [Doing More with PivotTables](#) lesson for additional ways to customize and manipulate data.

Challenge!

1. Open our [practice workbook](#).
2. Create a PivotTable in a separate sheet.
3. We want to answer the question What is the total amount sold in each region? To do this, select Region and Order Amount. When you're finished, your workbook should look like this:

Row Labels	Sum of Order Amount
East	4340
North	3160
South	10875
West	5190
Grand Total	23565

4. In the Rows area, remove Region and replace it with Salesperson.
5. Add Month to the Columns area.
6. Change the numberformat of cells B5:E13 to Currency. Note: You might have to make columns C and D wider to see the values.
7. When you're finished, your workbook should look like this:

The screenshot shows a Microsoft Excel spreadsheet with a PivotTable. The PivotTable is located on the 'Sheet1' tab, which is currently selected. The table has 'Salesperson' as the Row Label, 'January', 'February', 'March', and 'Grand Total' as the Column Labels. The data area contains sales amounts for various salespeople. The PivotTable ribbon on the right shows that 'Salesperson' is checked under 'ROWS' and 'Order Amount' is checked under 'COLUMNS'. The 'PivotTable' ribbon also includes sections for 'Choose fields to a report', 'Search', and 'MORE TABLES...'. The bottom of the screen shows the standard Excel ribbon and status bar.

	January	February	March	Grand Total
Albertson, Kathy	\$925.00	\$1,375.00	\$350.00	\$2,650.00
Brennan, Michael	\$2,750.00	\$550.00	\$400.00	\$3,700.00
Davis, William	\$1,100.00	\$235.00	\$600.00	\$1,935.00
Dumlao, Richard	\$400.00	\$965.00	\$125.00	\$1,490.00
Flores, Tia	\$1,655.00	\$985.00	\$1,925.00	\$4,565.00
Post, Melissa	\$765.00	\$575.00	\$350.00	\$1,690.00
Thompson, Shannon	\$1,140.00	\$1,720.00	\$300.00	\$3,160.00
Walters, Chris	\$355.00	\$2,755.00	\$1,265.00	\$4,375.00
Grand Total	\$9,090.00	\$9,160.00	\$5,315.00	\$23,565.00

Lesson 28: Doing More with PivotTables

Introduction

As you learned in our [previous lesson](#), PivotTables can be used to summarize and analyze almost any type of data. To manipulate your PivotTable—and gain even more insight into your data—Excel offers three additional tools: filters, slicers, and PivotCharts.

Optional: Download our [practice workbook](#).

Watch the video below to learn more about enhancing PivotTables.

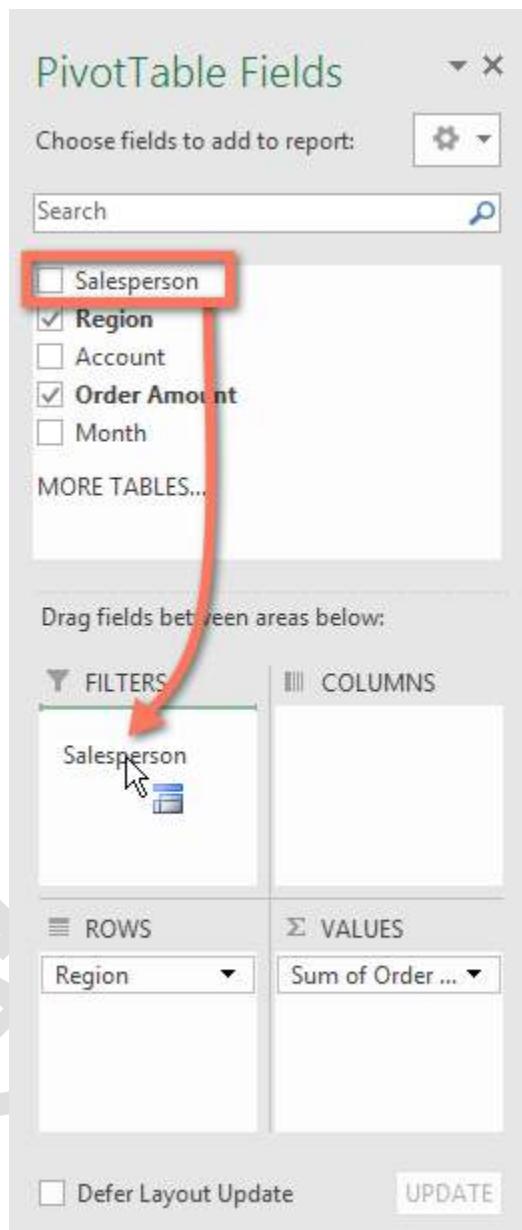
Filters

Sometimes you may want focus on a certain section of your data. Filters can be used to narrow down the data in your PivotTable so you can view only the information you need.

To add a filter:

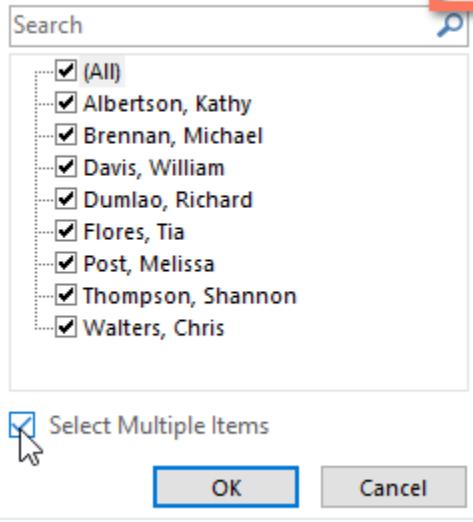
In the example below, we'll filter out certain salespeople to determine how their individual sales are impacting each region.

1. Drag a field from the Field List to the Filters area. In this example, we'll use the Salesperson field.



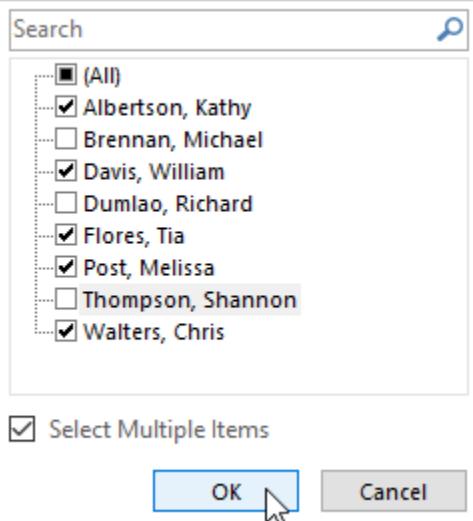
2. The filter will appear above the PivotTable. Click the drop-down arrow, then check the box next to Select Multiple Items.

A	B	C	D
1 Salesperson	(All)		
2			
3 Row Labels			
4 East			
5 North			
6 South			
7 West			
8 Grand Total			
9			
10			
11			
12			
13			
14			



3. Uncheck the box next to any item you don't want to include in the PivotTable. In our example, we'll uncheck the boxes for a few salespeople, then click OK.

A	B	C	D
1 Salesperson	(All)		
2			
3 Row Labels			
4 East			
5 North			
6 South			
7 West			
8 Grand Total			
9			
10			
11			
12			
13			
14			



4. The PivotTable will adjust to reflect the changes.

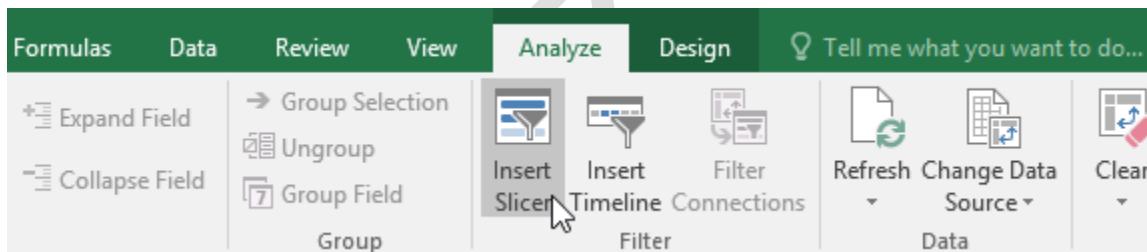
A	B	C	D
1 Salesperson	(Multiple Items)		
2			
3 Row Labels	Sum of Order Amount		
4 East	4340		
5 South	10875		
6 Grand Total	15215		
7			
8			

Slicers

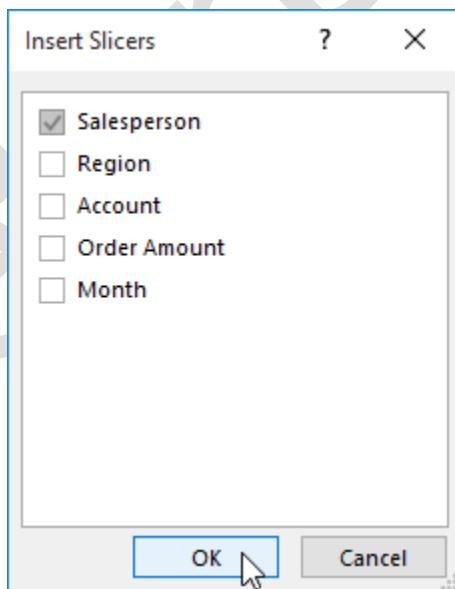
Slicers make filtering data in PivotTables even easier. Slicers are basically just filters but are easier and faster to use, allowing you to instantly pivot your data. If you frequently filter your PivotTables, you may want to consider using slicers instead of filters.

To add a slicer:

1. Select any cell in the PivotTable.
2. From the Analyze tab, click the Insert Slicer command.



3. A dialog box will appear. Check the box next to the desired field. In our example, we'll select Salesperson, then click OK.



4. The slicer will appear next to the PivotTable. Each selected item will be highlighted in blue. In the

example below, the slicer contains all eight salespeople, but only five of them are currently selected.

	A	B	C	D	E	F	G	H
1	Salesperson (Multiple Items)							
2								
3	Row Labels	Sum of Order Amount						
4	East	4340						
5	South	10875						
6	Grand Total	15215						
7								
8								
9								
10								
11								
12								
13								
14								
15								

5. Just like filters, only selected items are used in the PivotTable. When you select or deselect an item, the PivotTable will instantly reflect the change. Try selecting different items to see how they affect the PivotTable. Press and hold the Ctrl key on your keyboard to select multiple items at once.

	A	B	C	D	E	F	G	H
1	Salesperson (Multiple Items)							
2								
3	Row Labels	Sum of Order Amount						
4	North	3160						
5	South	10875						
6	West	5190						
7	Grand Total	19225						
8								
9								
10								
11								
12								
13								
14								
15								

You can also click the Filter icon in the top-right corner of the slicer to select all items at once.

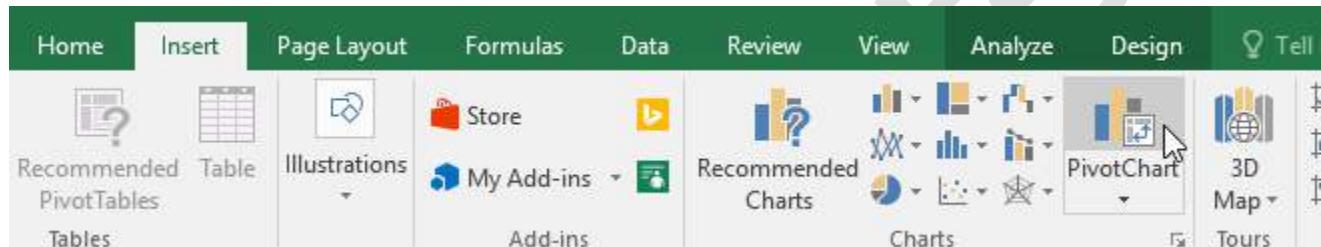
PivotCharts

PivotCharts are like regular charts, except they display data from a PivotTable. Just like regular charts, you'll be able to select a chart type, layout, and style that will best represent the data.

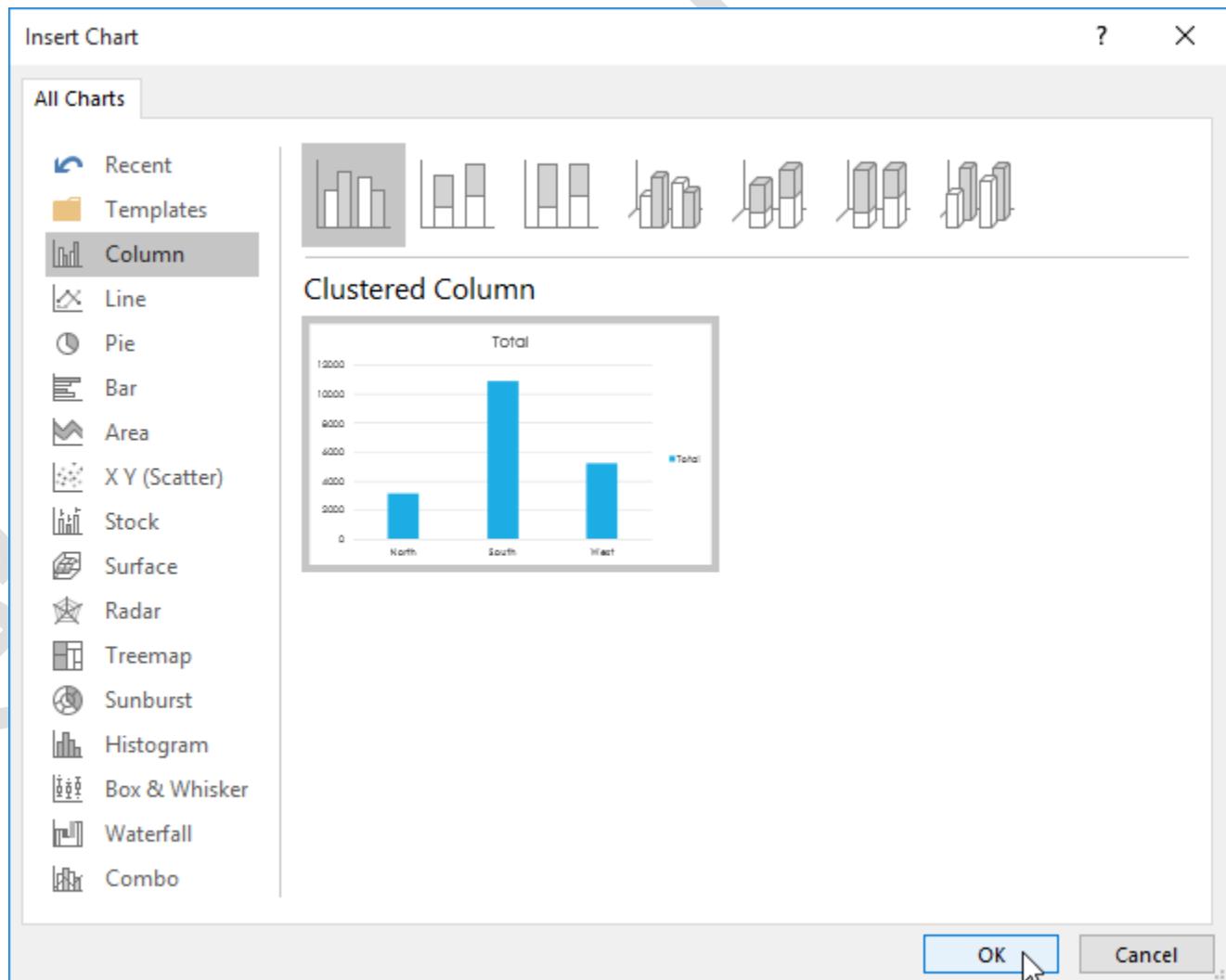
To create a PivotChart:

In the example below, our PivotTable is showing a portion of each region's sales figures. We'll use a PivotChart so we can see the information more clearly.

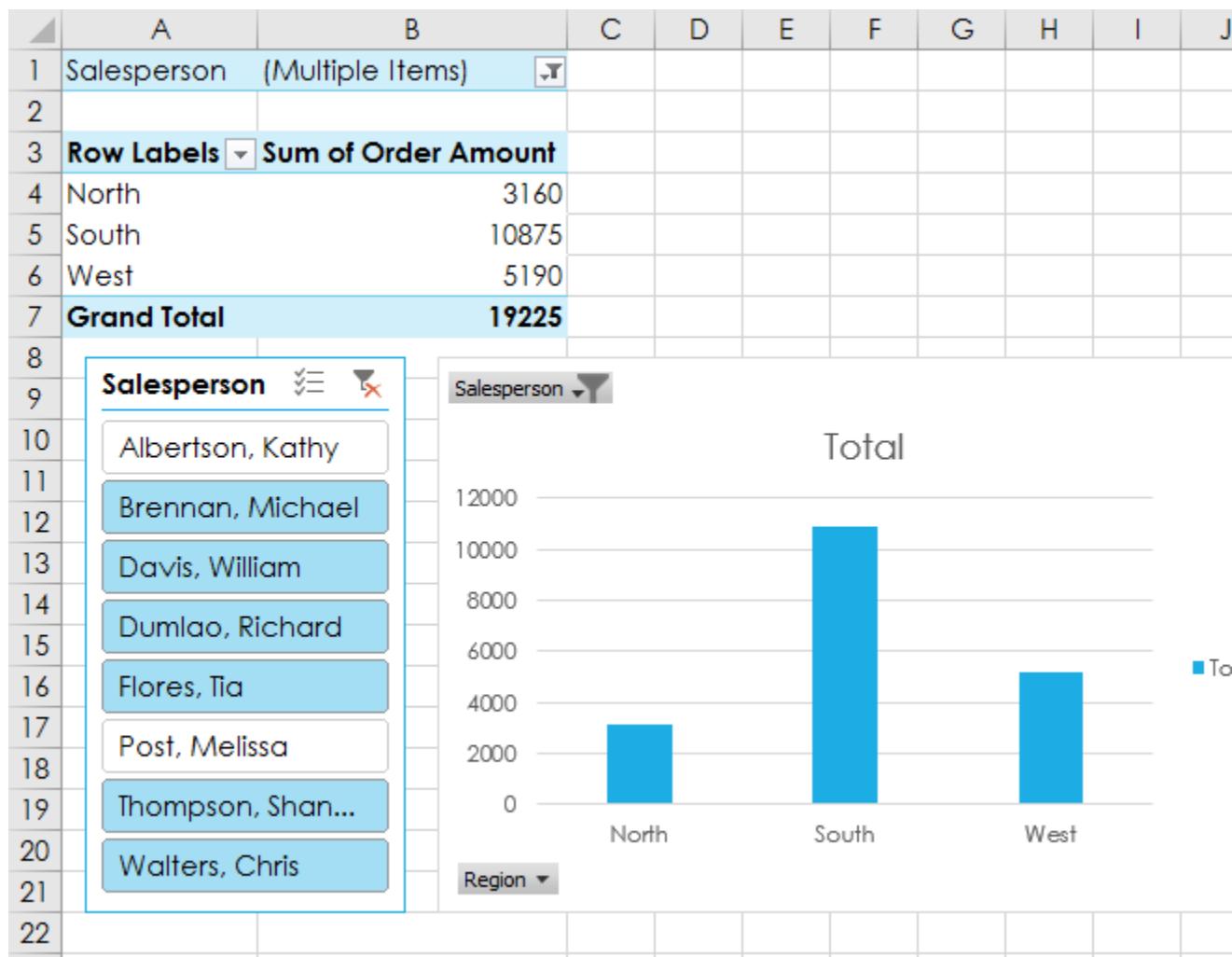
1. Select any cell in your PivotTable.
2. From the Insert tab, click the PivotChart command.



3. The Insert Chart dialog box will appear. Select the desired chart type and layout, then click OK.

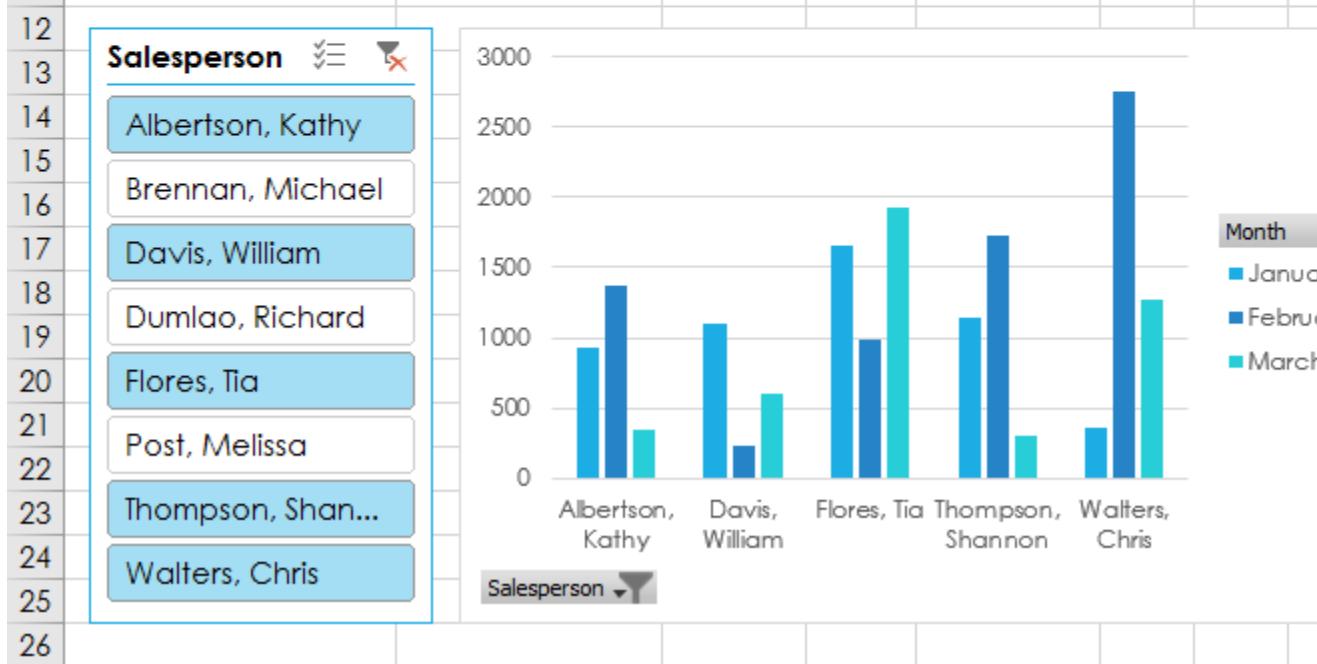


4. The PivotChart will appear.



Try using filters or slicers to narrow down the data in your PivotChart. To view different subsets of information, change the columns or rows in your PivotTable. In the example below, we've changed the PivotTable to view the monthly sales for each salesperson.

		Sum of Order Amount	Column Labels			
2						
3						
4	Row Labels	January	February	March	Grand Total	
5	Albertson, Kathy	925	1375	350	2650	
6	Davis, William	1100	235	600	1935	
7	Flores, Tia	1655	985	1925	4565	
8	Thompson, Shannon	1140	1720	300	3160	
9	Walters, Chris	355	2755	1265	4375	
10	Grand Total	5175	7070	4440	16685	



Challenge!

1. Open our [practice workbook](#).
2. In the Rows area, remove Region and replace it with Salesperson.
3. Insert a PivotChart and choose the type Line with Markers.
4. Insert a slicer for Regions.
5. Use the slicer to only show the South and East regions.
6. Change the PivotChart type to Stacked Column.
7. In the PivotChart Fields pane to the right, add Month to the Legend (Series) area. Note: You can also click the PivotTable and add Month to the Columns area for the same results.
8. When you're finished, your workbook should look something like this:



Lesson 29: What-if Analysis

Introduction

Excel includes powerful tools to perform complex mathematical calculations, including what-if analysis. This feature can help you experiment and answer questions with your data, even when the data is incomplete. In this lesson, you will learn how to use a what-if analysis tool called Goal Seek.

Optional: Download our [practice workbook](#).

Watch the video below to learn more about what-if analysis and Goal Seek.

Goal Seek

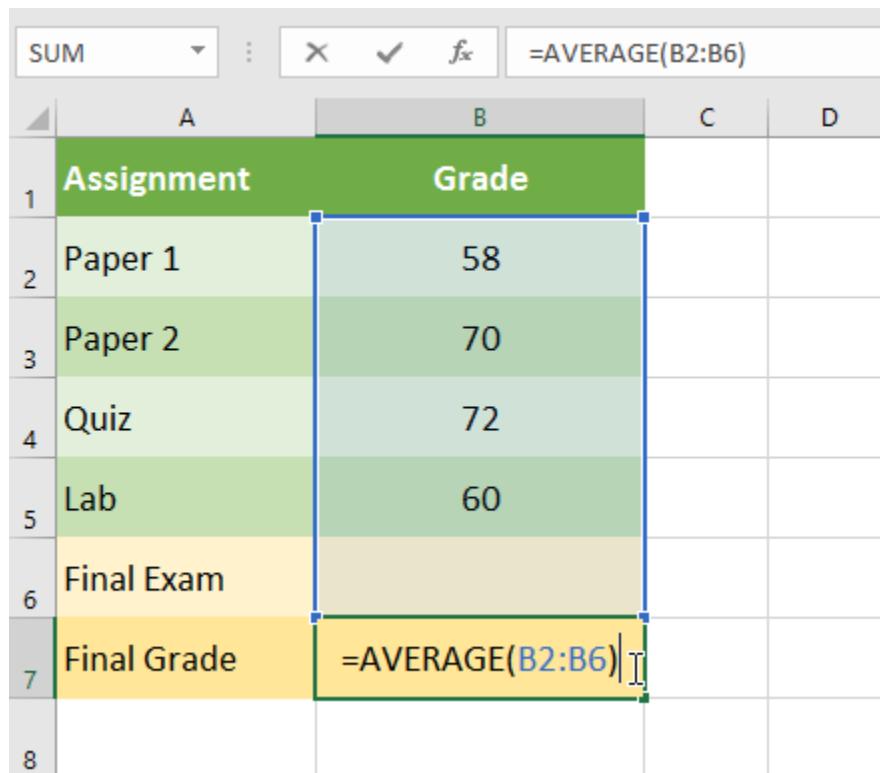
Whenever you create a formula or function in Excel, you put various parts together to calculate a result. Goal Seek works in the opposite way: It lets you start with the desired result, and it calculates the input value that will give you that result. We'll use a few examples to show how to use Goal Seek.

To use Goal Seek (example 1):

Let's say you're enrolled in a class. You currently have a grade of 65, and you need at least a 70 to pass the class. Luckily, you have one final assignment that might be able to raise your average. You can use Goal Seek to find out what grade you need on the final assignment to pass the class.

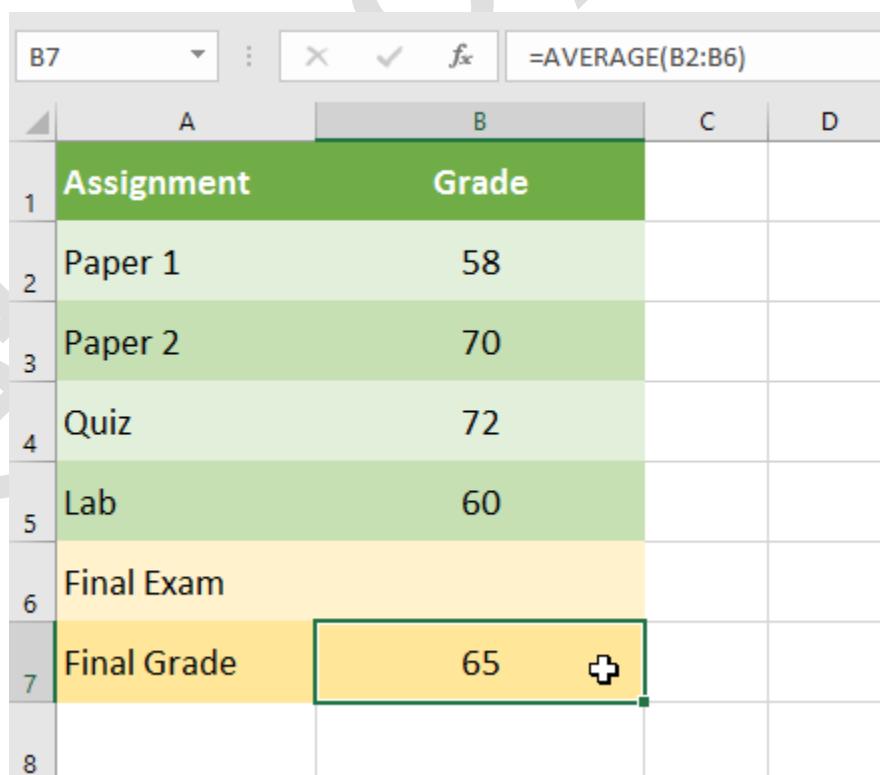
In the image below, you can see that the grades on the first four assignments are 58, 70, 72, and 60. Even though we don't know what the fifth grade will be, we can write a formula—or function—that calculates the final grade. In this case, each assignment is weighted equally, so all we have to do is average all five grades by

typing =AVERAGE(B2:B6). Once we use Goal Seek, cell B6 will show us the minimum grade we'll need to make on that assignment.



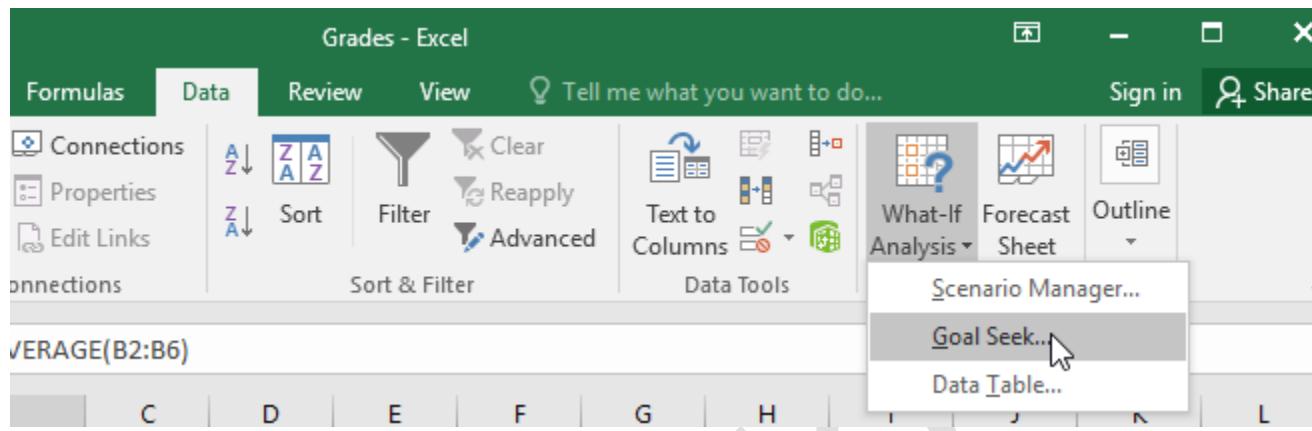
	A	B	C	D
1	Assignment	Grade		
2	Paper 1	58		
3	Paper 2	70		
4	Quiz	72		
5	Lab	60		
6	Final Exam			
7	Final Grade	=AVERAGE(B2:B6)		
8				

1. Select the cell with the value you want to change. Whenever you use Goal Seek, you'll need to select a cell that already contains a formula or function. In our example, we'll select cell B7 because it contains the formula =AVERAGE(B2:B6).



	A	B	C	D
1	Assignment	Grade		
2	Paper 1	58		
3	Paper 2	70		
4	Quiz	72		
5	Lab	60		
6	Final Exam			
7	Final Grade	65	+	
8				

2. From the Data tab, click the What-If Analysis command, then select Goal Seek from the drop-down menu.



3. A dialog box will appear with three fields. The first field, Set cell:, will contain the desired result. In our example, cell B7 is already selected.

The second field, To value:, is the desired result. In our example, we'll enter 70 because we need to earn at least that to pass the class.

The third field, By changing cell:, is the cell where Goal Seek will place its answer. In our example, we'll select cell B6 because we want to determine the grade we need to earn on the final assignment.

4. When you're done, click OK.

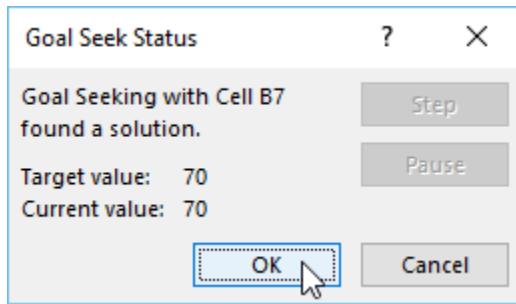
The screenshot shows an Excel spreadsheet titled 'Grades - Excel'. The table has columns 'Assignment' and 'Grade'. Row 6 contains 'Final Exam' and is selected. Row 7 contains 'Final Grade' with a value of 65. A dashed green box highlights rows 6 and 7. The formula bar shows '=AVERAGE(B2:B6)'. A 'Goal Seek' dialog box is open, containing the following settings:

Set cell:	B7
To value:	70
By changing cell:	\$B\$6

The 'OK' button is highlighted in blue.

	Assignment	Grade
1		
2	Paper 1	58
3	Paper 2	70
4	Quiz	72
5	Lab	60
6	Final Exam	
7	Final Grade	65
8		

5. The dialog box will tell you if Goal Seek was able to find a solution. Click OK.



6. The result will appear in the specified cell. In our example, Goal Seek calculated that we will need to score at least a 90 on the final assignment to earn a passing grade.

	A	B	C	D
1	Assignment	Grade		
2	Paper 1	58		
3	Paper 2	70		
4	Quiz	72		
5	Lab	60		
6	Final Exam	90		
7	Final Grade	70		
8				

To use Goal Seek (example 2):

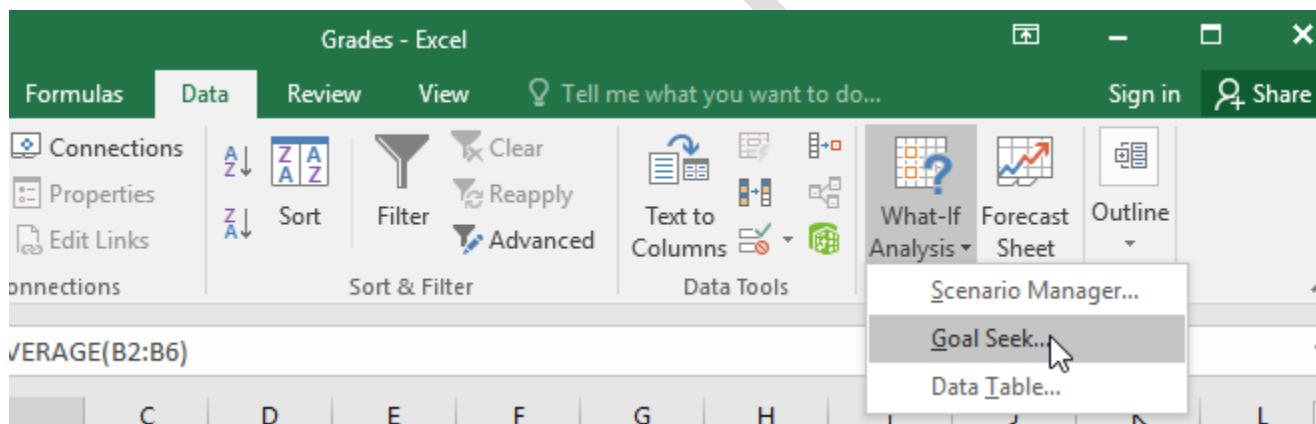
Let's say you're planning an event and want to invite as many people as you can without exceeding a budget of \$500. We can use Goal Seek to figure out how many people to invite. In our example below, cell B5 contains the formula =B2+B3*B4 to calculate the total cost of a room reservation, plus the cost per person.

1. Select the cell with the value you want to change. In our example, we'll select cell B5.

	A	B	C	D
1		Guest Budget		
2	Reservation fee	\$230.00		
3	Price per person	\$14.50		
4	Number of guests			
5	Budget	\$230.00		
6				

The formula bar at the top shows =B2+B3*B4.

- From the Data tab, click the What-If Analysis command, then select Goal Seek from the drop-down menu.



- A dialog box will appear with three fields. The first field, Set cell:, will contain the desired result. In our example, cell B5 is already selected.

The second field, To value:, is the desired result. In our example, we'll enter 500 because we only want to spend \$500.

The third field, By changing cell:, is the cell where Goal Seek will place its answer. In our example, we'll select cell B4 because we want to know how many guests we can invite without spending more than \$500.

- When you're done, click OK.

The screenshot shows a Microsoft Excel spreadsheet titled "Guest Budget". The formula bar at the top displays the formula $=B2+B3*B4$. The spreadsheet contains the following data:

	A	B
1	Guest Budget	
2	Reservation fee	\$230.00
3	Price per person	\$14.50
4	Number of guests	+ (highlighted)
5	Budget	\$230.00
6		

A "Goal Seek" dialog box is open, showing the following settings:

- Set cell: B5
- To value: 500
- By changing cell: \$B\$4

The "OK" button is highlighted.

5. The dialog box will tell you if Goal Seek was able to find a solution. Click OK.
6. The result will appear in the specified cell. In our example, Goal Seek calculated the answer to be approximately 18.62. In this case, our final answer needs to be a whole number, so we'll need to round the answer up or down. Because rounding up would cause us to exceed our budget, we'll round down to 18 guests.

The screenshot shows the same "Guest Budget" spreadsheet after the Goal Seek operation. The formula bar now displays the value 18.6206896551724 . The spreadsheet data remains the same as in the previous screenshot, except for the value in cell B4, which has been rounded down to 18.

	A	B
1	Guest Budget	
2	Reservation fee	\$230.00
3	Price per person	\$14.50
4	Number of guests	18.6207 + (highlighted)
5	Budget	\$500.00
6		

As you can see in the example above, some situations will require the answer to be a whole number. If Goal Seek gives you a decimal, you'll need to round up or down, depending on the situation.

Other types of what-if analysis

For more advanced projects, you may want to consider the other types of what-if analysis: scenarios and data tables. Instead of starting from the desired result and working backward, like with Goal Seek, these options allow you to test multiple values and see how the results change.

- Scenarios let you substitute values for multiple cells (up to 32) at the same time. You can create as many scenarios as you want and then compare them without changing the values manually. In the example below, we're using scenarios to compare different venues for an upcoming event.

The screenshot shows a Microsoft Excel spreadsheet titled "Guest Budget". The worksheet contains the following data:

Guest Budget		
Reservation fee	\$0.00	
Price per person	\$30.00	
Number of guests	21	
Budget	\$630.00	

The formula bar shows the formula $=B2+B3*B4$. To the right of the worksheet, the "Scenario Manager" dialog box is open. It lists three scenarios:

- Luigi's Pizza (12 Guests Max)
- Luella's BBQ (No deposit)** (selected)
- Casa Lloma (Hourly Rate)

The "Changing cells:" field is set to \$B\$2:\$B\$3. A "Show" button is highlighted with a cursor. The "Comment:" field is empty.

For more information on scenarios, read [this article](#) from Microsoft.

- Data tables allow you to take one or two variables in a formula and replace them with as many different values as you want, then view the results in a table. This option is especially powerful because it shows multiple results at the same time, unlike scenarios or Goal Seek. In the example below, we can view 24 possible results for a car loan.

Loan Amount	20000				
Term (months)	60				
Interest Rate					
Payment	(\$333.33)	36	48	60	72
	5.5%	-\$603.92	-\$465.13	-\$382.02	-\$326.76
	6.0%	-\$608.44	-\$469.70	-\$386.66	-\$331.46
	6.5%	-\$612.98	-\$474.30	-\$391.32	-\$336.20
	7.0%	-\$617.54	-\$478.92	-\$396.02	-\$340.98
	7.5%	-\$622.12	-\$483.58	-\$400.76	-\$345.80
	8.0%	-\$626.73	-\$488.26	-\$405.53	-\$350.66

For more information on data tables, read [this article](#) from Microsoft.

Challenge!

1. Open our [practice workbook](#).
2. Click the Challenge tab in the bottom-left of the workbook.
3. In cell B8, create a function that calculates the average of the sales in B2:B7.
4. The workbook shows Dave's monthly sales amounts for the first half of the year. If he reaches a \$200,000 mid-year average, he will receive a 5% bonus. Use Goal Seek to find how much he needs to sell in June in order to make the \$200,000 average.
5. When you're finished, your workbook should look like this:

	A	B
1	Month	Sales
2	January	\$157,274.00
3	February	\$187,349.00
4	March	\$179,291.00
5	April	\$202,025.00
6	May	\$212,685.00
7	June	\$261,376.00
8	Mid-Year Average	\$200,000.00

Lesson 30: What is Office 365?

What is Office 365?

Introduction

Let's say you really like the style of a theme, but you'd like to experiment with

different color schemes. That's not a problem. You can mix and match colors, fonts, and effects to create a unique look for your presentation. If it still doesn't look exactly right, you can customize the theme any way you want.

If you're new to PowerPoint, you may want to review our lesson on [Applying Themes](#) to learn the basics of using themes.

Optional: Download our [practice presentation](#).

Watch the video to learn more about modifying themes.

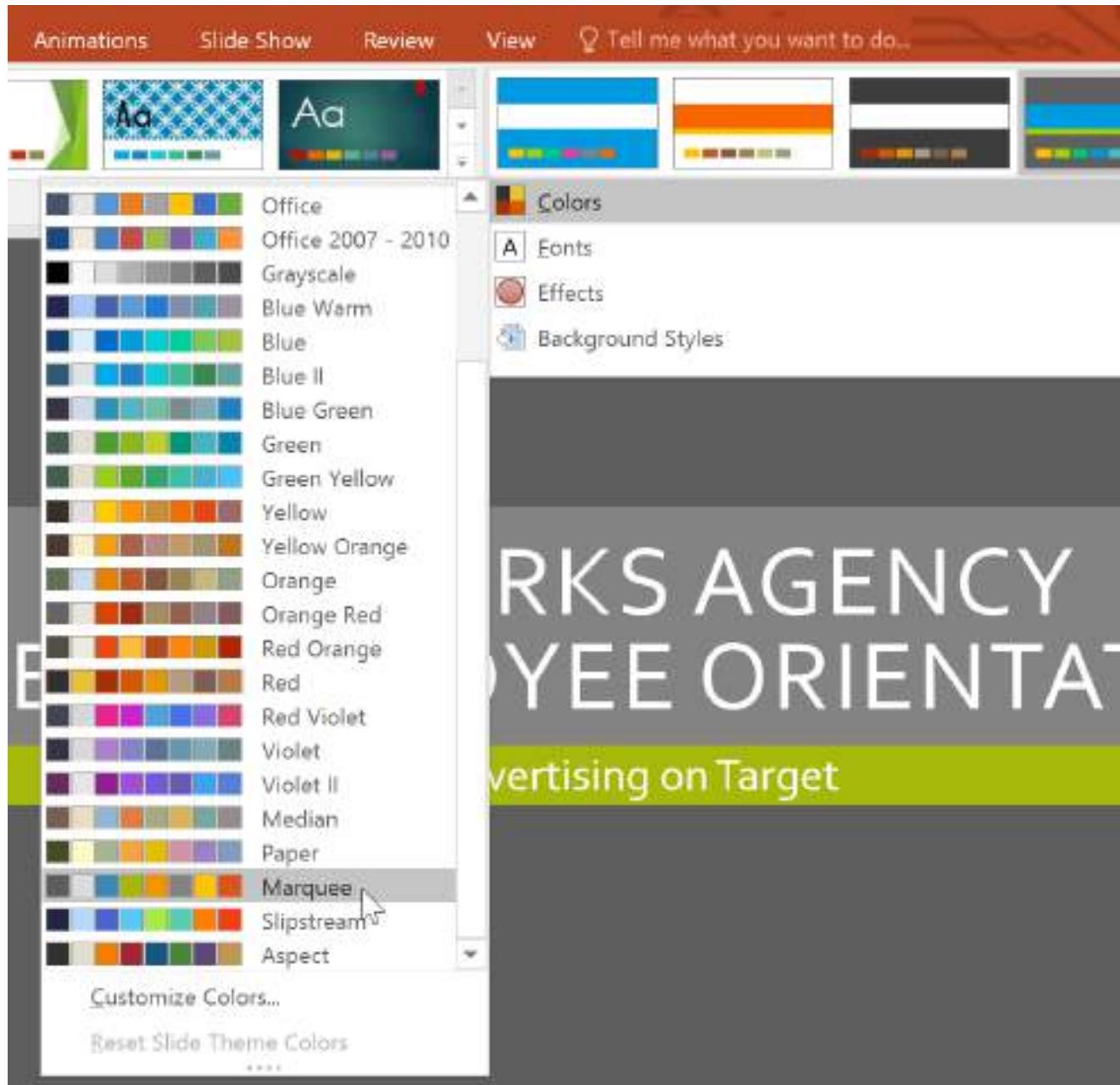
To select new theme colors:

If you don't like the colors of a particular theme, it's easy to apply new theme colors; everything else about the theme will remain unchanged.

1. From the Design tab, click the drop-down arrow in the Variants group and select Colors.



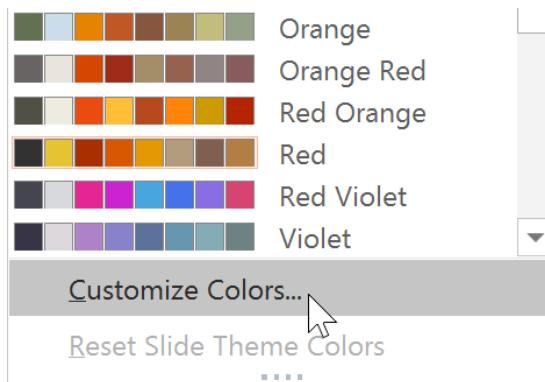
2. Select the desired theme colors.
3. The presentation will update to show the new theme colors.



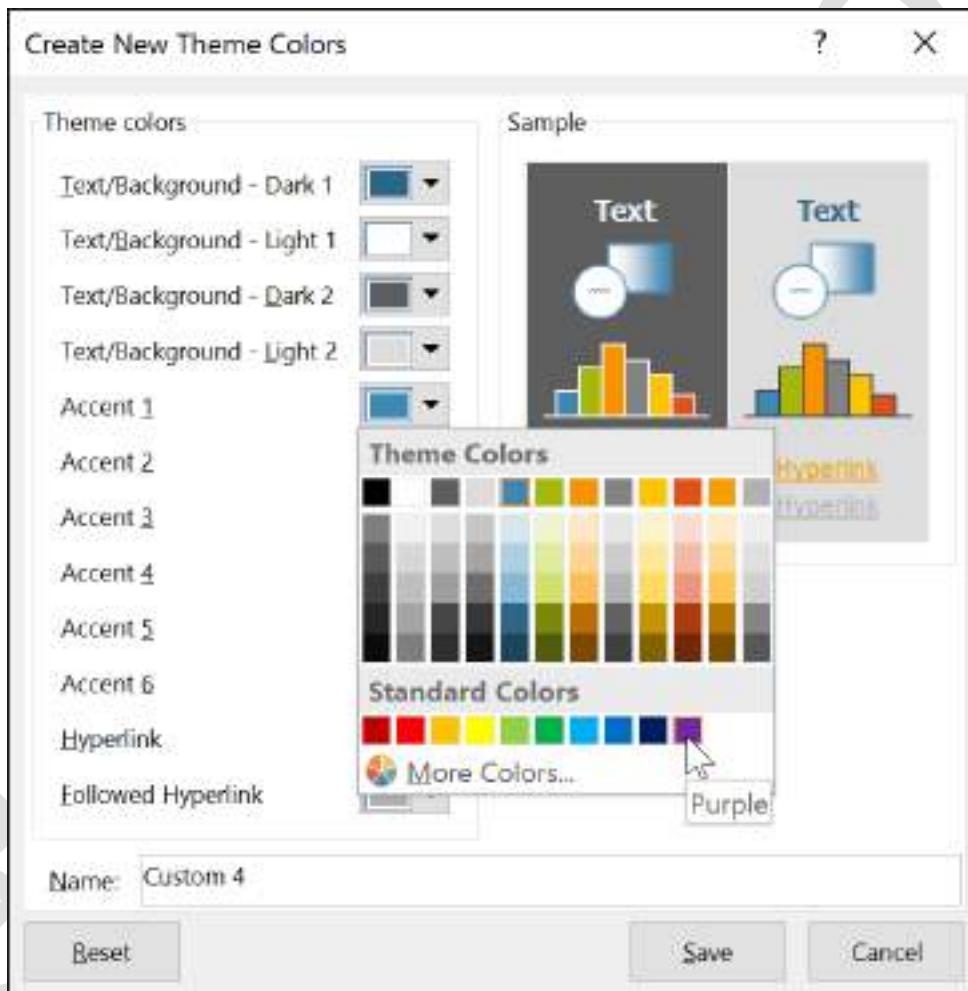
To customize colors:

Sometimes you might not like every color included in a set of theme colors. It's easy to change some or all of the colors to suit your needs.

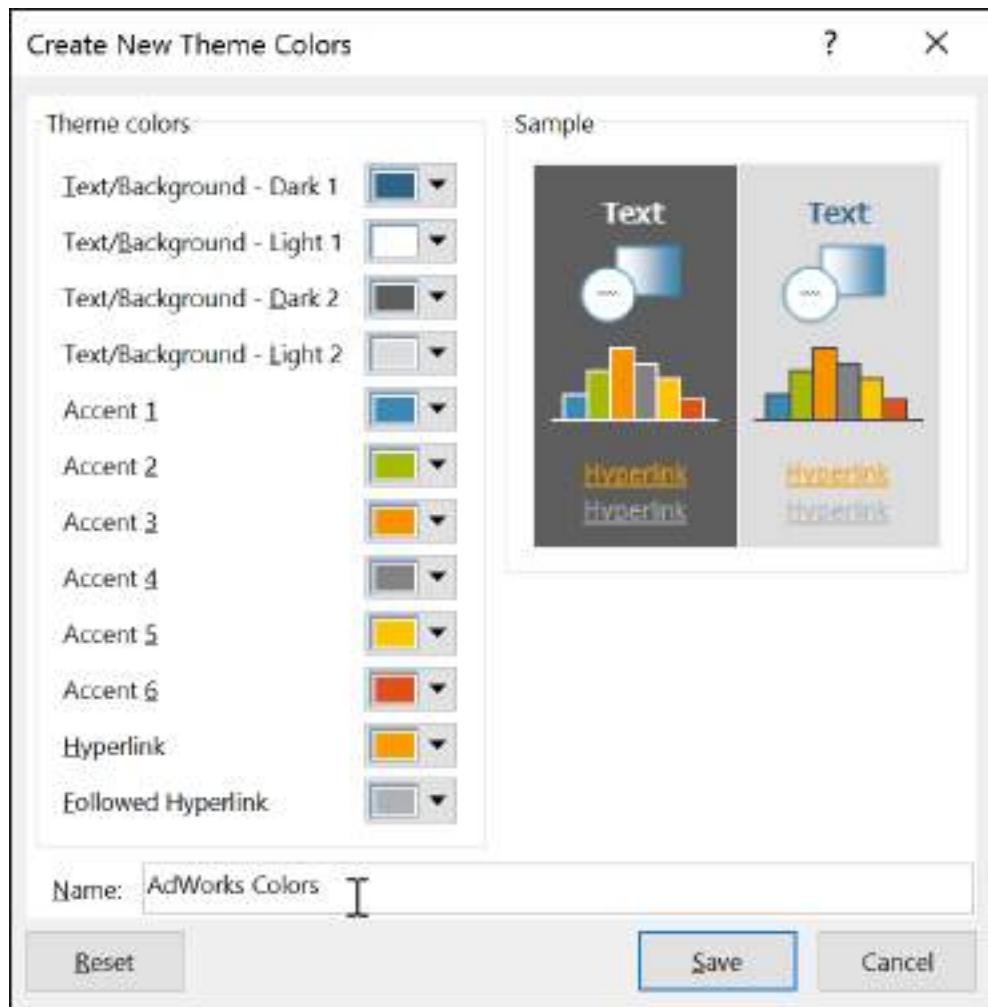
- 1. From the Design tab, click the drop-down arrow in the Variants group.**
- 2. Select Colors, then click Customize Colors.**



3. A dialog box will appear with the 12 current theme colors. To edit a color, click the drop-down arrow and select a different color. You may need to click More Colors to find the exact color you want.



4. In the Name: field, type the desired name for the theme colors, then click Save.



5. The presentation will update to show the new custom theme colors.

With some presentations, you may not notice a significant difference when changing the theme colors. For example, a textured background will not change when theme colors are changed. When trying different theme colors, it's best to select a slide that uses several colors to see how the new theme colors will affect your presentation.

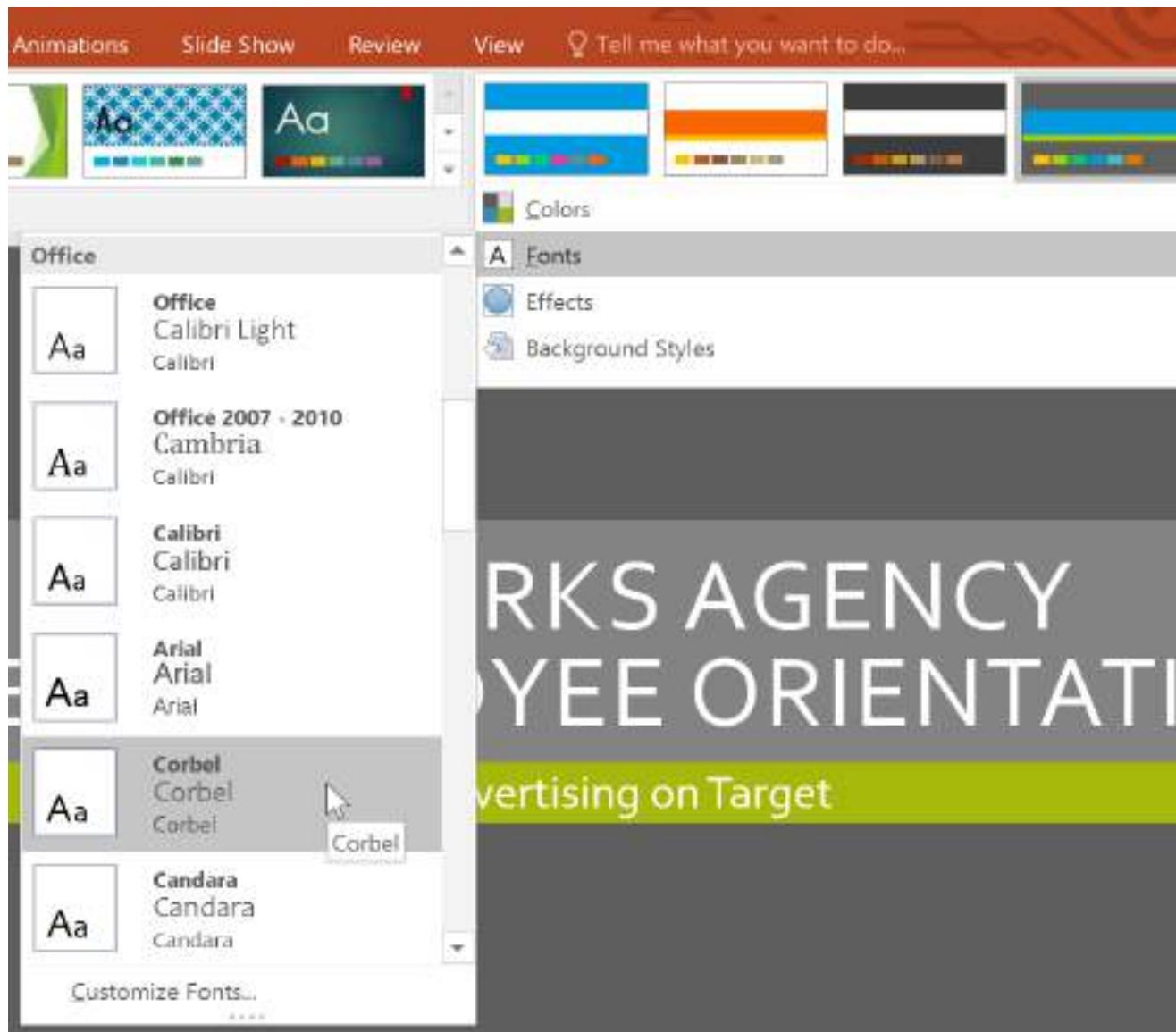
To select new theme fonts:

It's easy to apply a new set of theme fonts without changing a theme's overall look. The built-in theme fonts are designed to work well together, which can help to unify your presentation.

1. From the Design tab, click the drop-down arrow in the Variants group and select Fonts.



2. Select the desired theme fonts.

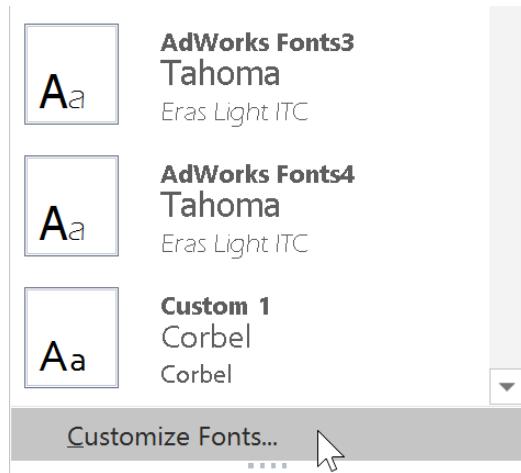


3. The presentation will update to show the new theme fonts.

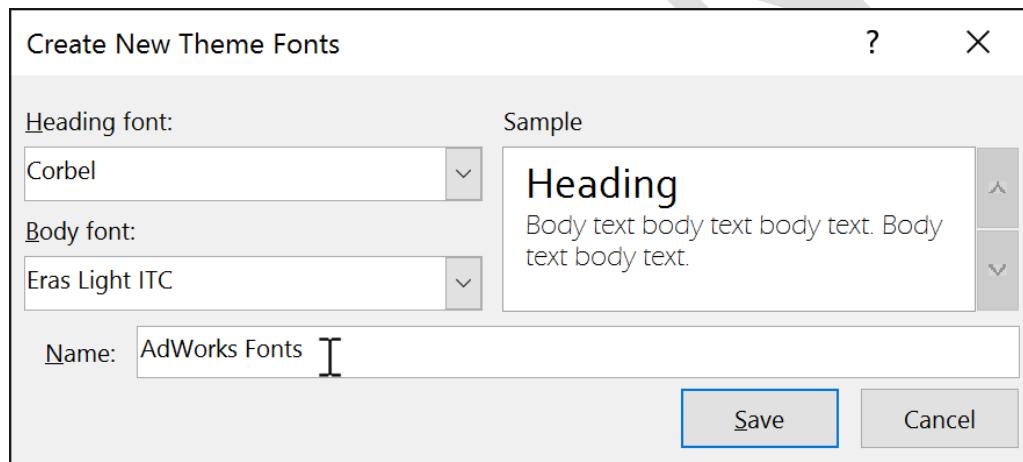
To customize theme fonts:

If you have specific fonts in mind for a presentation, it's easy to choose your own theme fonts.

- 1. From the Design tab, click the drop-down arrow in the Variants group.**
- 2. Select Fonts, then click Customize Fonts.**



3. A dialog box will appear with the two current theme fonts. To change the fonts, click the drop-down arrows and select the desired fonts.
4. In the Name: field, type the desired name for the theme fonts, then click Save.



5. The presentation will update to show the new custom theme fonts.

Changing the theme fonts will not necessarily update all text in your presentation. Only text using the current theme fonts will update when you change the theme fonts.



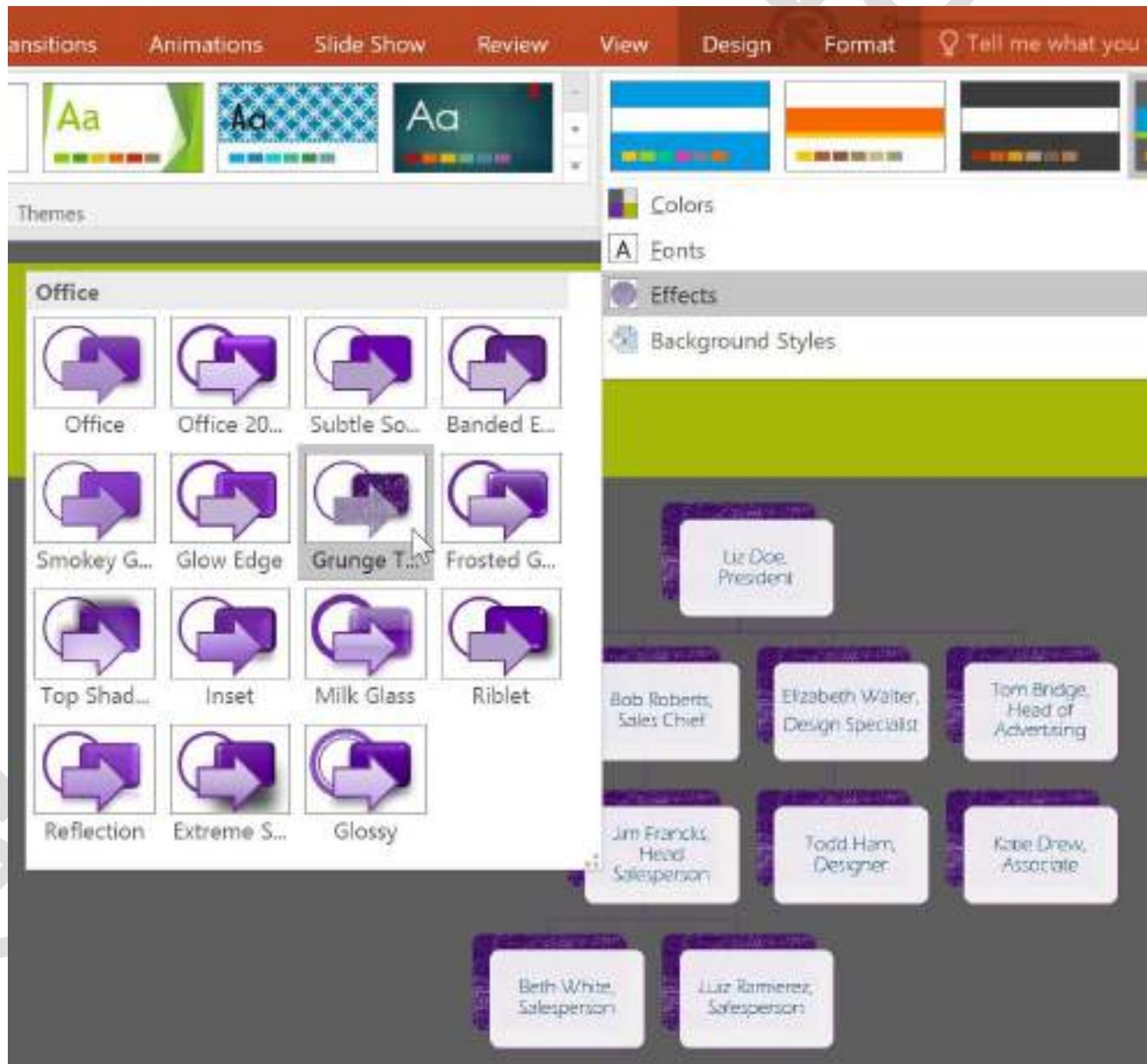
To select new theme effects:

PowerPoint makes it easy to apply new theme effects, which can quickly change the appearance of shapes in your presentation.

1. From the Design tab, click the drop-down arrow in the Variants group and select Effects.



2. Select the desired theme effects.



3. The presentation will update to show the new theme effects.

Applying new theme effects will change different shape styles from the Format tab when editing a shape or SmartArt graphic. It's important to note that this change will only

apply to shapes using the Subtle Effect, Moderate Effect, and Intense Effect.



Background styles

To further customize your slides, you can change the background color by choosing a different background style. The available background styles will vary depending on the current theme.

To apply a background style:

1. From the Design tab, click the drop-down arrow in the Variants group.



2. Select Background Styles.



3. Select the desired style. The available styles will change depending on the current theme colors.



4. The new background will appear in each slide of your presentation.

If you want even more control over the background, click the Format Background command on the Design tab.



Different themes also include different slide layouts and background graphics. We'll talk about how to customize these in our [Slide Master View](#) lesson.

Saving custom themes

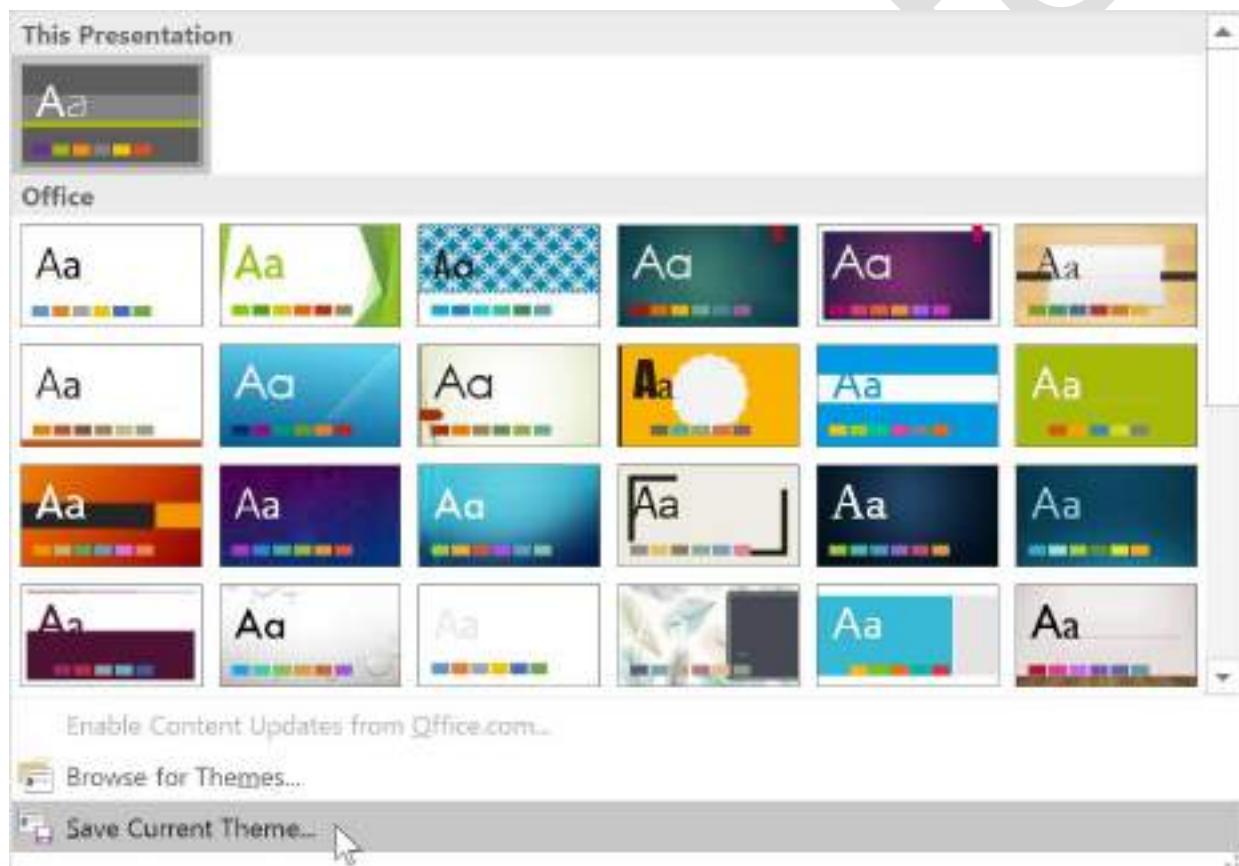
Once you've found settings you like, you may want to save the theme so you can use it in other presentations. If you only want to use the theme in the current presentation, you won't need to save it.

To save a theme:

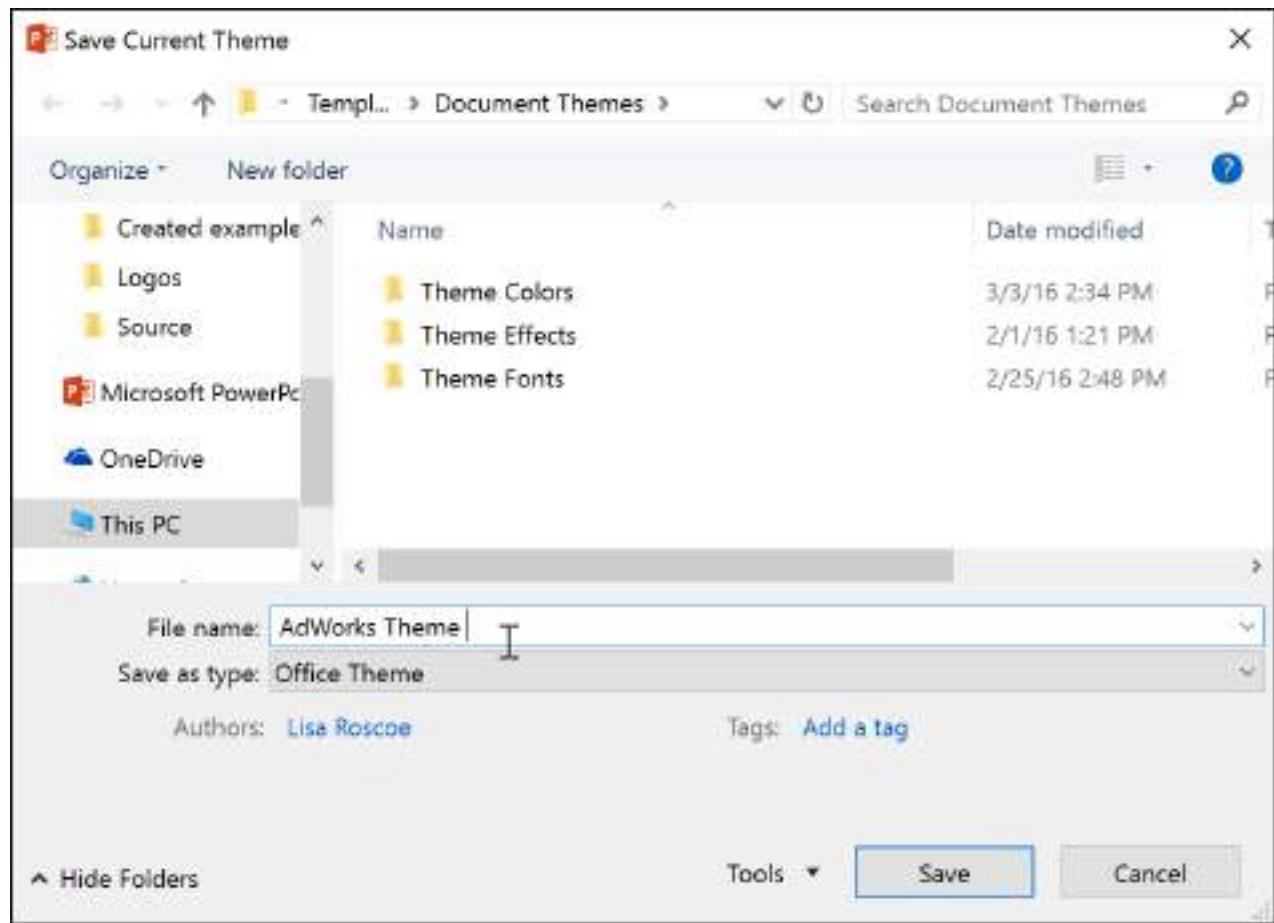
1. From the Design tab, click the drop-down arrow in the Themes group.



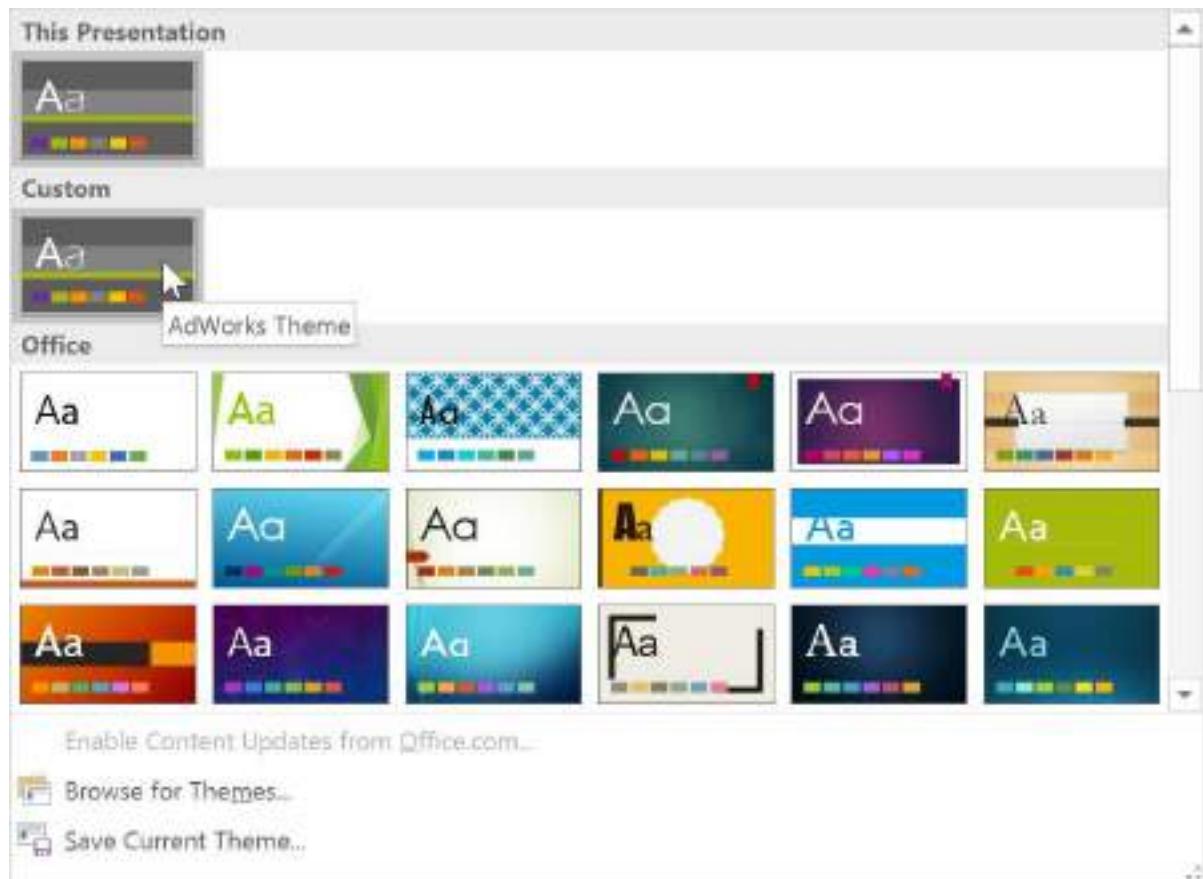
2. Click Save Current Theme.



3. A dialog box will appear. Type a file name, then click Save.



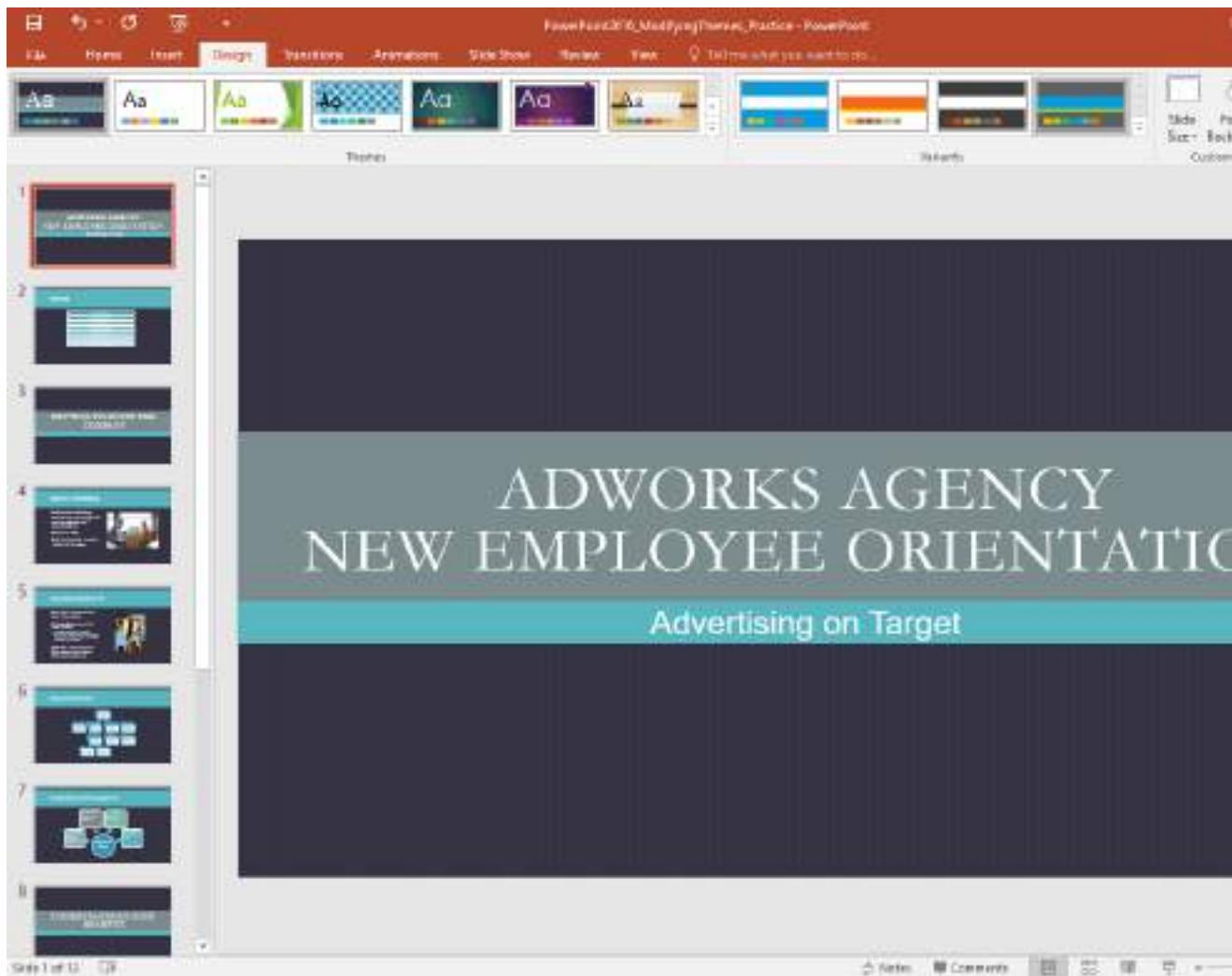
4. When you click the drop-down arrow in the Themes group, you'll see the custom theme under Custom.



Custom themes have another unique and powerful feature. Any custom theme you save in PowerPoint can actually be used in other Microsoft Office applications, including Word and Excel.

Challenge!

1. Open our [practice presentation](#).
2. Change the theme colors.
3. Use the Customize Fonts command to change the theme's heading font to Garamond and the body font to Arial.
4. Change the theme's background style.
5. Optional: Save your customized theme.
6. When you're finished, your first slide should look something like this (your colors and background style may vary):



Lesson 29: Slide Master View

Introduction

You may have noticed that when you select a different theme in PowerPoint, it rearranges the text on your slides and adds shapes to the background. This is because each theme has built-in slide layouts and background graphics. You can edit these layouts with a feature called Slide Master view. Once you learn how to use Slide Master view, you'll be able to customize your entire slide show with just a few clicks.

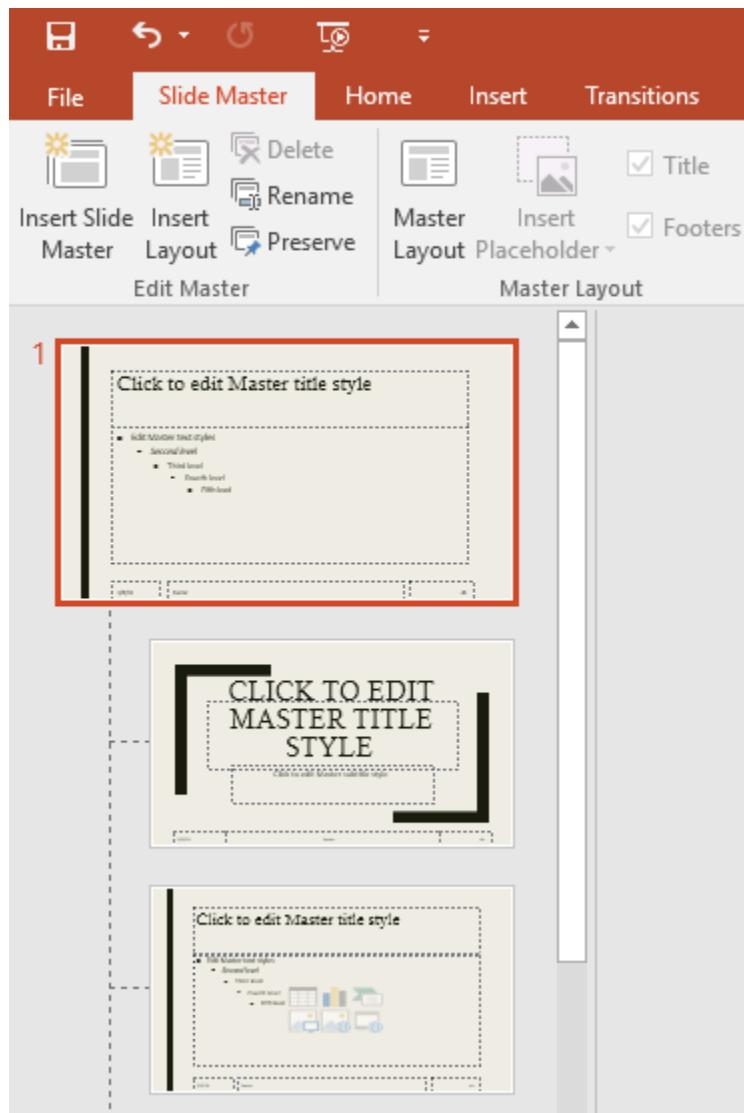
Optional: Download our [practice presentation](#).

Watch the video below to learn more about using Slide Master view.

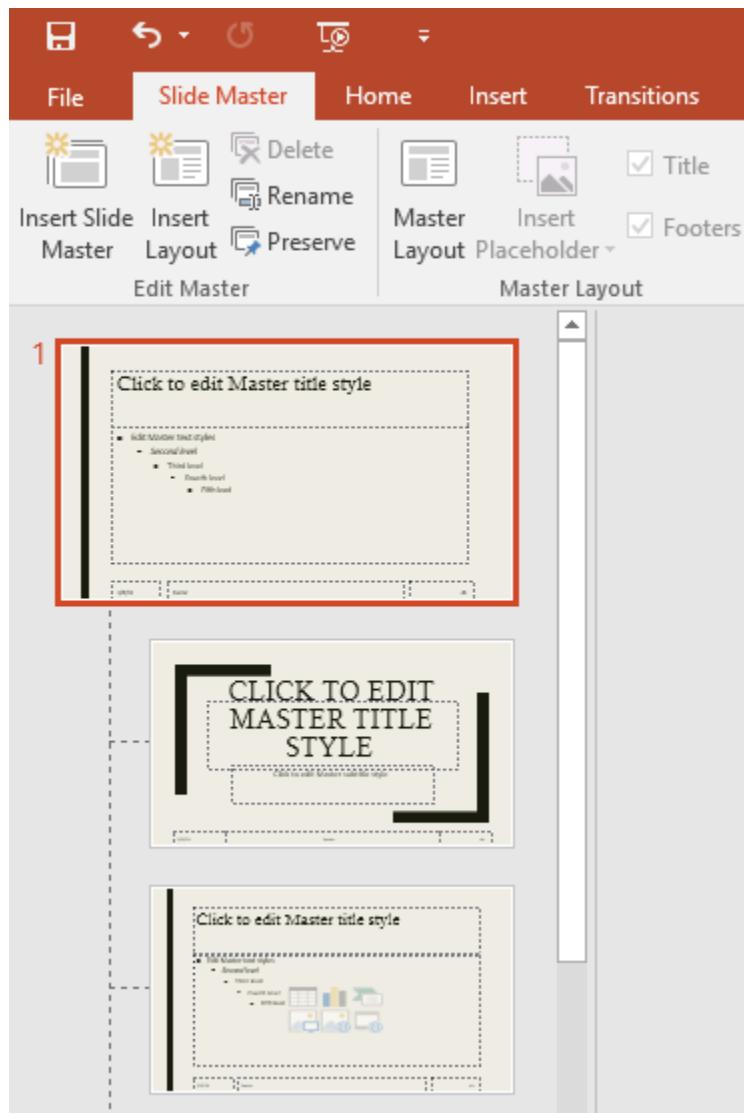
What is Slide Master view?

Slide Master view is a special feature in PowerPoint that allows you to quickly modify the slides and slide layouts in your presentation. From here, you can edit the slide master, which will affect every slide in the presentation. You can also modify individual slide layouts, which will change any slides using those layouts.

For example, let's say you find a theme you like but you don't like a few of the slide layouts. You could use Slide Master view to customize the layouts to look exactly the way you want.



In Slide Master view, the Slide Master tab will appear first on the Ribbon, but you'll still be able to access commands on different tabs as you normally would.



Using Slide Master view

Whether you're making significant changes to your slides or just a few small tweaks, Slide Master view can help you create a consistent, professional presentation without a lot of effort. You could use Slide Master view to change just about anything in your presentation, but here are some of its most common uses.

- **Modify backgrounds:** Slide Master view makes it easy to customize the background for all of your slides at the same time. For example, you could add a watermark or logo to each slide in your presentation, or you could modify the background graphics of an existing PowerPoint theme.
- **Rearrange placeholders:** If you find that you often rearrange the placeholders on each slide, you can save time by rearranging them in Slide Master view instead. When you adjust one of the layouts in Slide Master view, all of the slides with that layout will change.
- **Customize text formatting:** Instead of changing the text color on each slide individually, you could use the Slide Master to change the text color on all slides at once.
- **Create unique slide layouts:** If you want to create a presentation that looks different from regular PowerPoint themes, you could use Slide Master view to create your own layouts. Custom layouts can include your own background graphics and placeholders.

Some overall presentation changes—like customizing the theme fonts and theme colors—can be made quickly from the Design tab. Review our lesson on [Modifying Themes](#) to learn more.

To make changes to all slides:

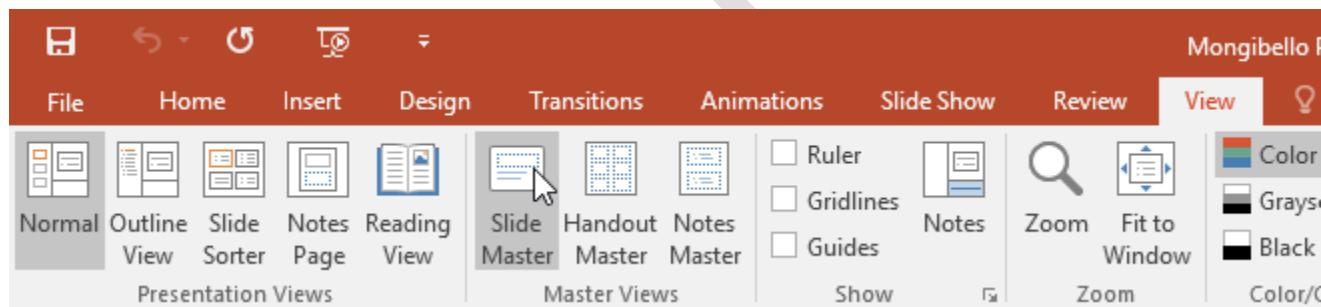
If you want to change something on all slides of your presentation, you can edit the Slide Master. In our example, we'll add a logo to every slide. If you'd like to work along with our example, right-click the image below and save it to your computer.



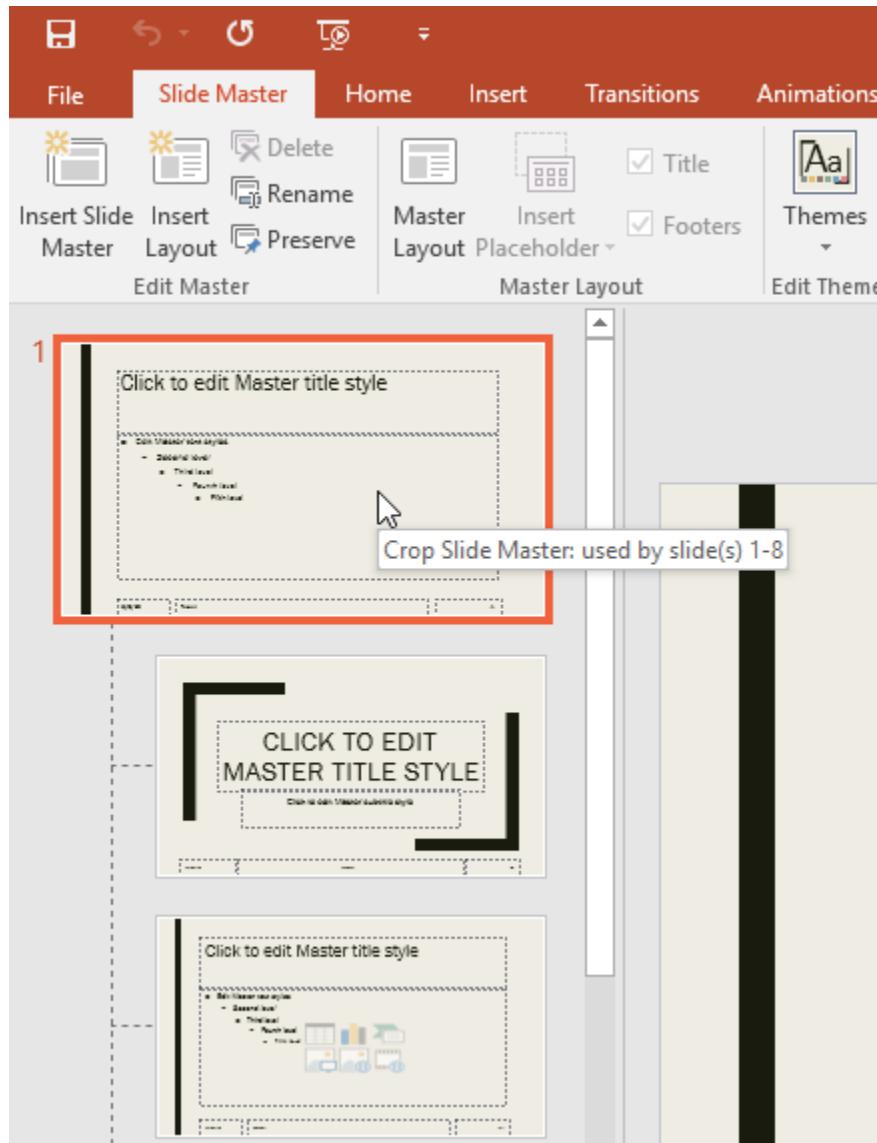
Mongibello

ARTISAN PASTA

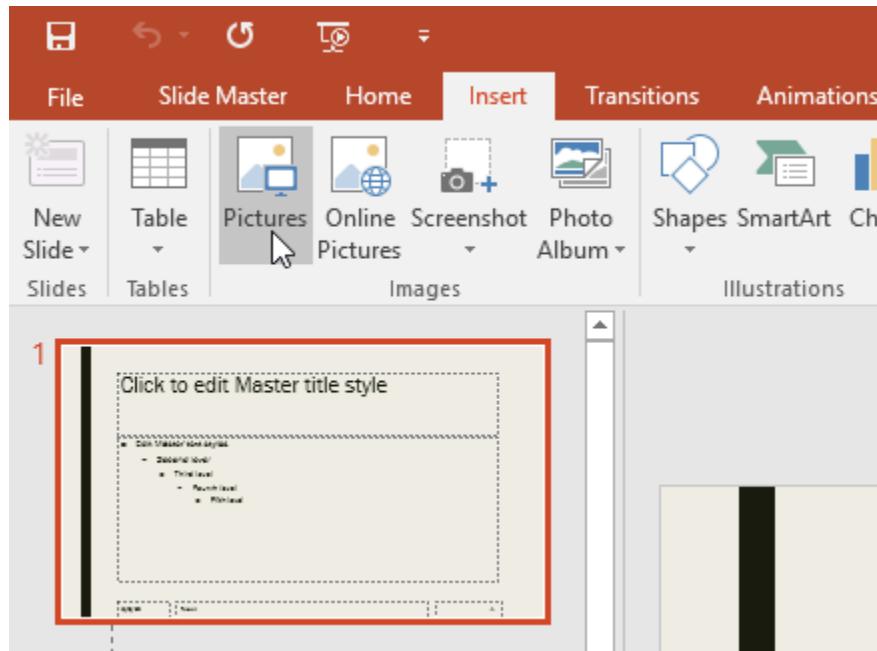
1. Select the View tab, then click the Slide Master command.



2. The presentation will switch to Slide Master view, and the Slide Master tab will be selected on the Ribbon.
3. In the left navigation pane, scroll up and select the first slide. This is the slide master.

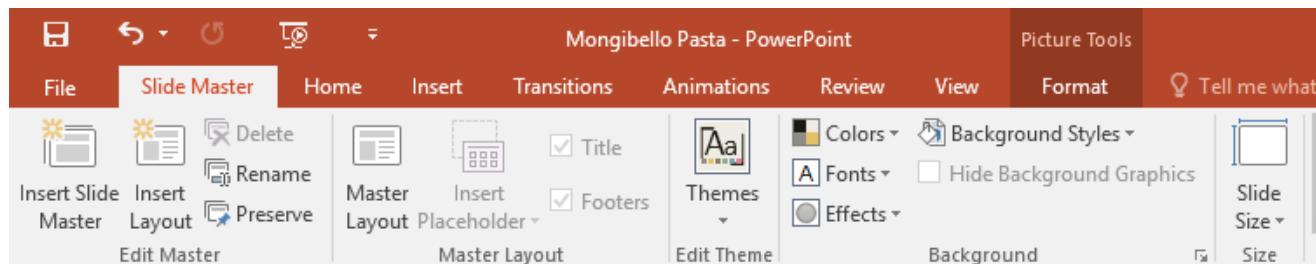


4. Make the desired changes to the slide master. In our example, we'll insert a picture of the Mongibello logo.



5. Move, resize, or delete slide objects as needed. In our example, we'll resize the logo and move it to the bottom-right corner.

6. When you're finished, click the Close Master View command on the Slide Master tab.



7. The change will appear on all slides of the presentation.

6

Homemade Gnocchi

Mongibello ARTISAN PASTA

7

Fresh Tortellini

Mongibello ARTISAN PASTA

8

Shop or Visit Our Kitchen

1009 Craftman Drive
Portland, Maine

9:00-6:00 Tues-Sun

207-655-1145
ghe@bellepasta.com

Mongibello ARTISAN PASTA

When you make a change to the slide master, it's a good idea to review your presentation to see how it affects each slide. You may find that some of your slides don't

look exactly right. We'll show you how to fix this by customizing individual slide layouts.

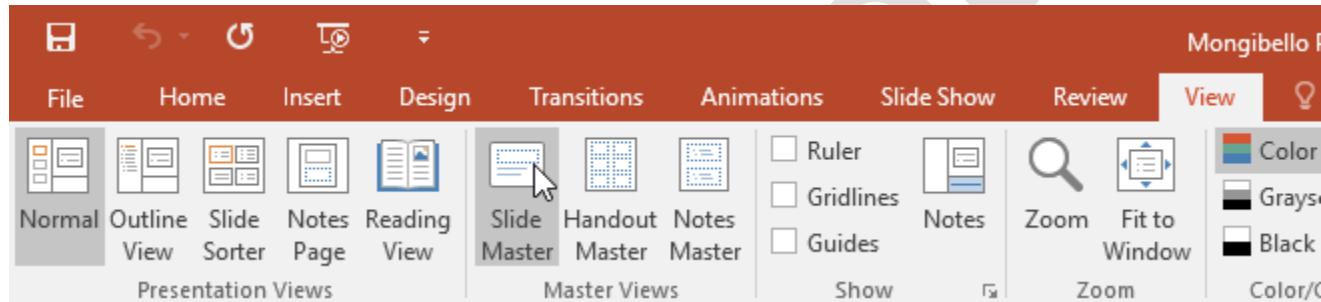
Customizing slide layouts

You can use Slide Master view to modify any slide layout in your presentation. It's easy to make small tweaks like adjusting background graphics and more significant changes like rearranging or deleting placeholders. Unlike the slide master, changes to a slide layout will only be applied to slides using that layout in your presentation.

To customize an existing slide layout:

In our example, our newly added logo is hidden behind the photo in the Picture with Caption Layout. We'll customize this layout to make room for the logo.

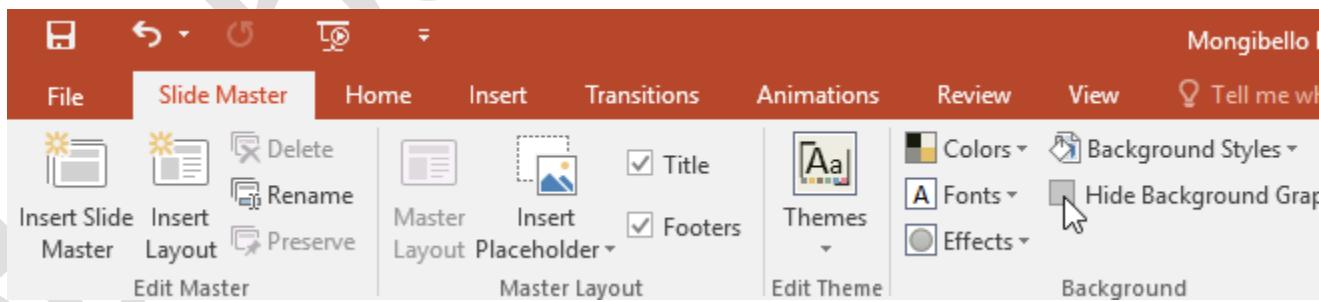
1. Navigate to Slide Master view.



2. Locate and select the desired layout in the left navigation pane. You can hover the mouse over each layout to see which slides are currently using that layout in the presentation.



3. In some layouts, the background graphics may be hidden. To show the graphics, uncheck the box next to Hide Background Graphics.

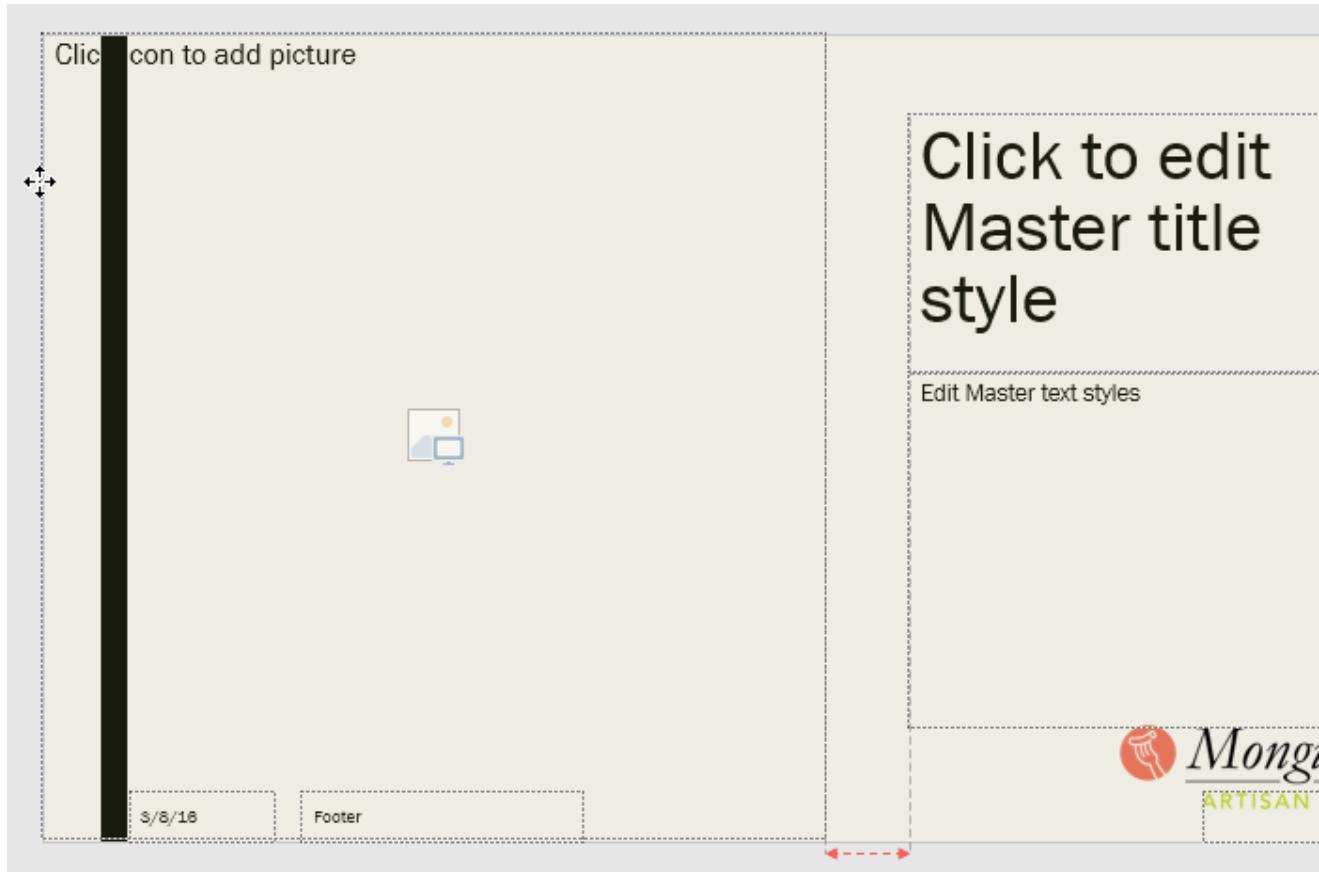


4. Add, move, or delete any objects as desired. In our example, we'll delete the gray background shape.

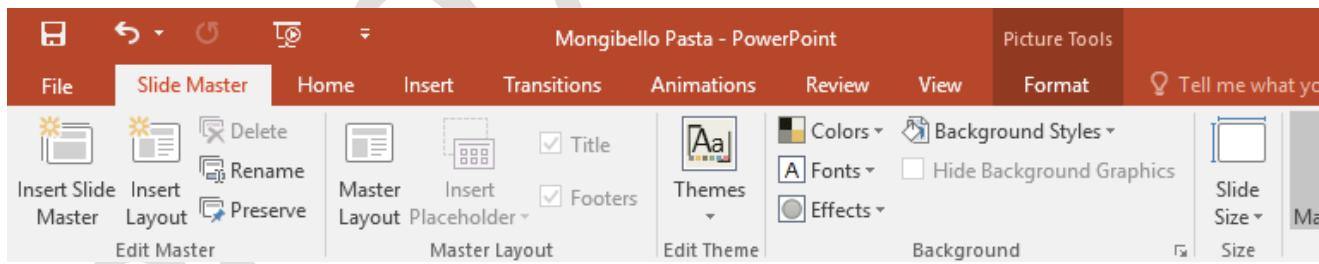


5. If you want to change the arrangement of the placeholders, you can move, resize, or delete any of them. In our example, we'll move our text placeholders and the black bar to the right side, and the photo placeholder to the left side.

Peterboer



6. When you're finished, click the Close Master View command on the Slide Master tab.



7. All slides using the layout will be updated.



Our Team

Owner Shel Rheingold (with Manager Stacey Linn) leads a talented team with over 30 years of experience making pasta by hand, crafting unique flavors that tantalize the palate, and pushing the boundaries of traditional artisan pasta making.



You can also move placeholders on the slide master, which will move the placeholders on multiple slide layouts at the same time. However, some slide layouts may still need to be adjusted manually.

Customizing text formatting

You can also customize the text formatting from Slide Master view, including the font, text size, color, and alignment. For example, if you wanted to change the font for every title placeholder in your presentation, you could modify the master title style on the slide master.

A screenshot of Microsoft Word's Slide Master view. A slide titled "Click to edit Master title style" is displayed. On the right, a font dropdown menu is open, showing a list of available fonts: "Book" (selected), 44pt, A⁺, A⁻, etc. The list includes: Californian FB, Calisto MT (selected), Cambria, Cambria Math, Candara, CASTELLAR, Centaur, Century, Century Gothic, and Century Schoolbook.

- Edit Master text styles
 - Second level
 - Third level
 - Fourth level
 - Fifth level

Each title placeholder is connected to the master title style on the slide master. For example, take a look at the slides before changing the title font.

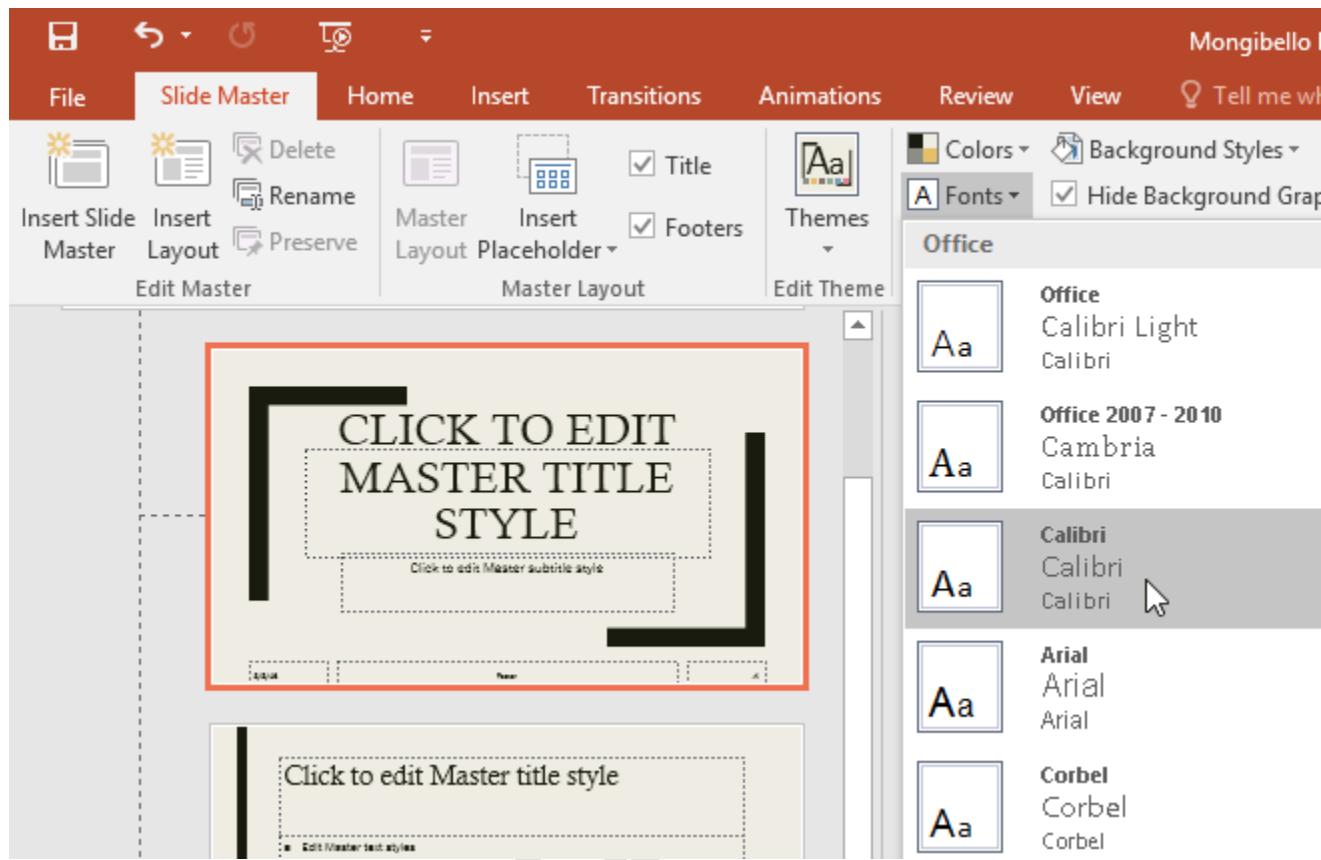
The image shows three slides from a presentation:

- Slide 1:** Title "MONGIBELLO ARTISAN PASTA" in a large, bold, black sans-serif font. Below the title is a small, faint link "About Our Business".
- Slide 2:** Title "Our Mission" in a smaller, bold, black sans-serif font. Below the title is a photograph of hands rolling pasta dough. To the right of the photo is a text block: "Our mission is to create unique, high-quality pasta made by hand using old-world techniques. Our pasta is made with 100% flour, eggs, and salt." At the bottom right is the "Mongibello" logo.
- Slide 3:** Title "Our Team" in a smaller, bold, black sans-serif font. Below the title is a photograph of three people working in a kitchen. To the right of the photo is a text block: "Our team consists of three people who have been working together for many years, creating unique flavors and delicious pasta, one pasta at a time. Our goal is to bring traditional Italian pasta making back to life." At the bottom right is the "Mongibello" logo.

Now look at the same slides after changing the title font.

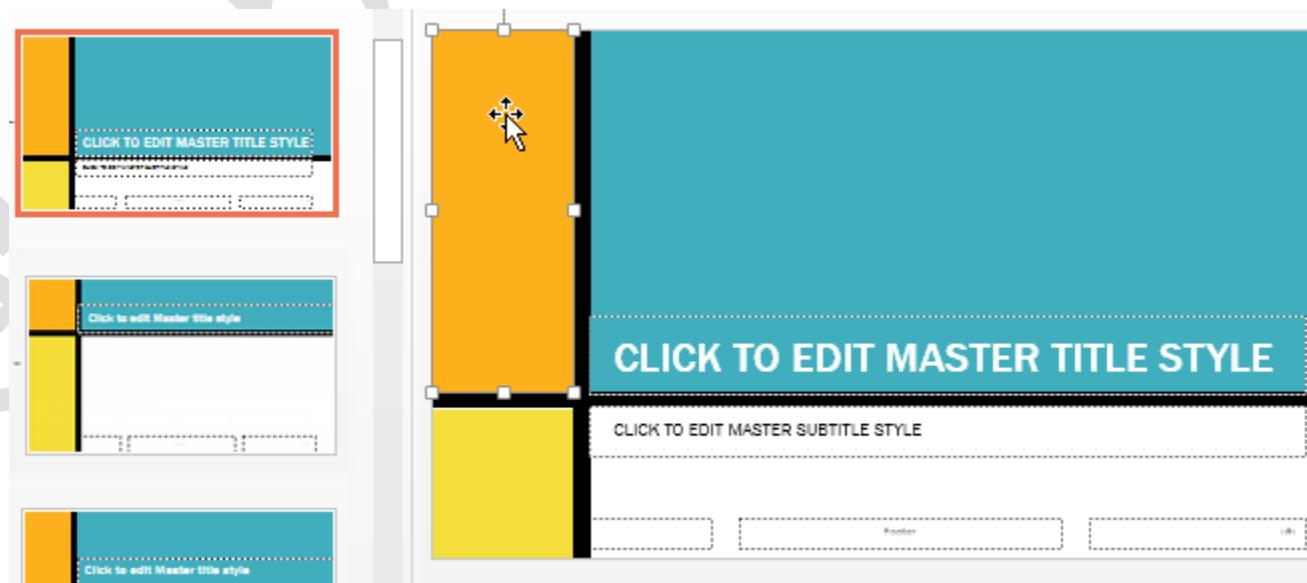


Instead of customizing individual placeholders, you can change the theme fonts for a presentation. From the Slide Master tab, click the Fonts command in the Background group, then select the desired fonts.



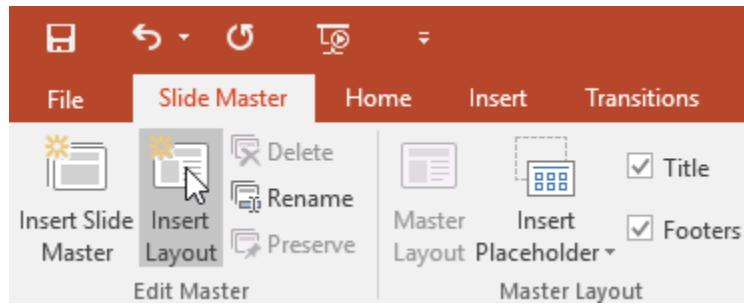
Creating new slide layouts

One of the most powerful features of Slide Master view is the option to create new slide layouts. This is an easy way to add interesting and unique slide layouts to an existing theme. You could even use this feature to design an entirely new theme, as in the example below.

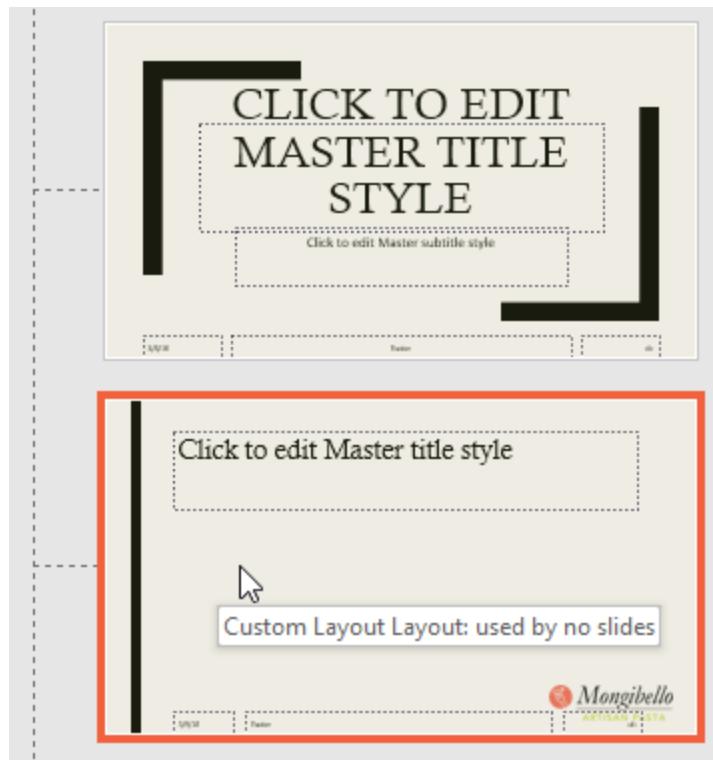


To insert a new slide layout:

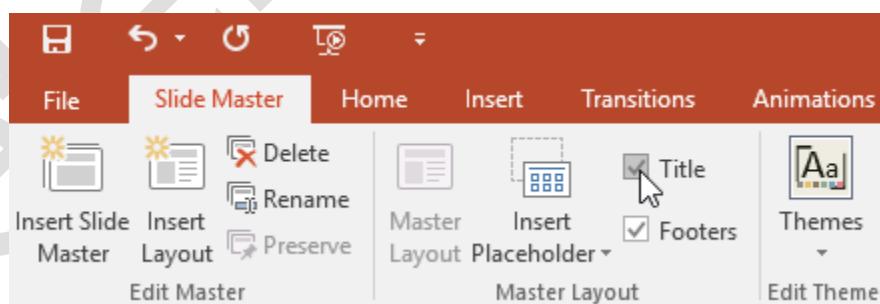
1. Navigate to Slide Master view. From the Slide Master tab, click the Insert Layout command.



2. The new slide layout will appear.



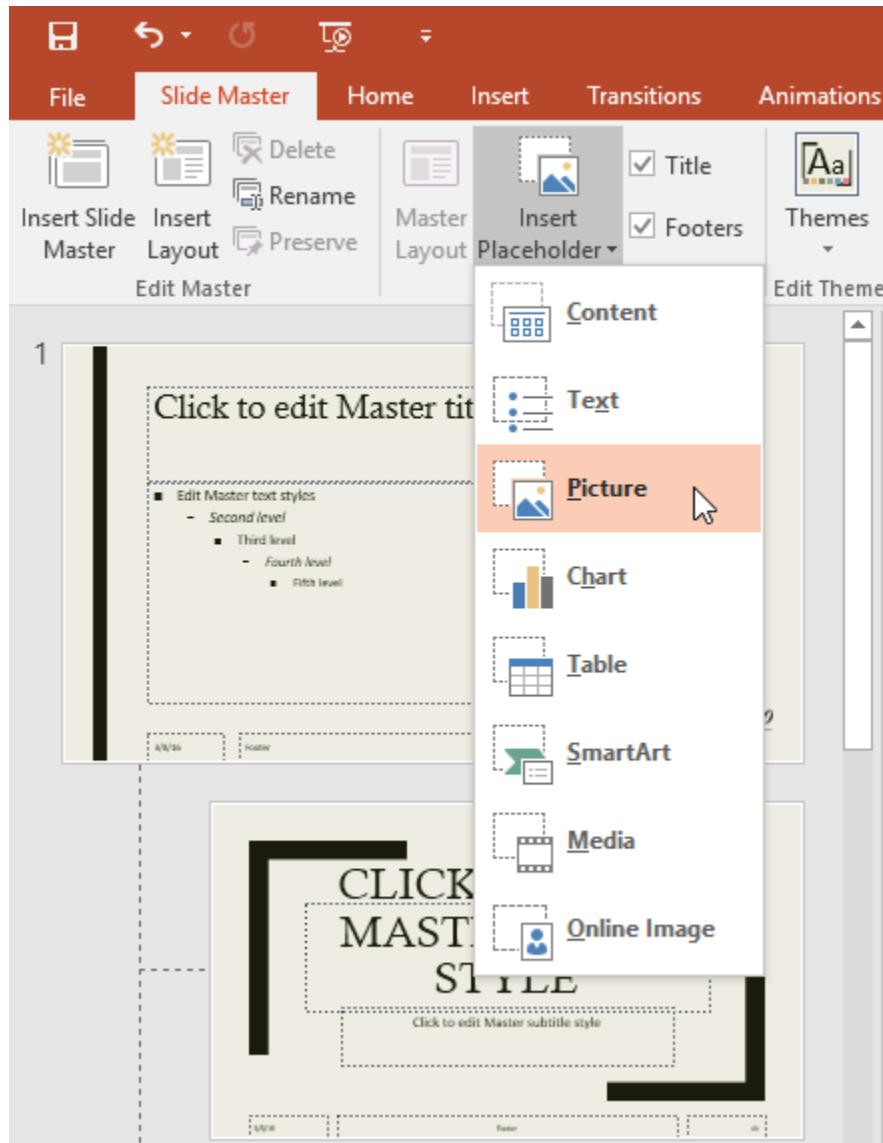
3. The layout will include title and footer placeholders by default. Click the Title and Footers boxes in the Master Layout group to toggle these placeholders on and off.



4. You can now add background graphics, shapes, and pictures to the slide layout. You can also move, adjust, and delete the existing placeholders. In our example, we'll move the title placeholder to the bottom-right corner. We've also changed the text alignment to align right instead of align left.



5. To add new placeholders, click the bottom half of the Insert Placeholder command, then select the desired placeholder type. In this example, we'll use the Picture placeholder.



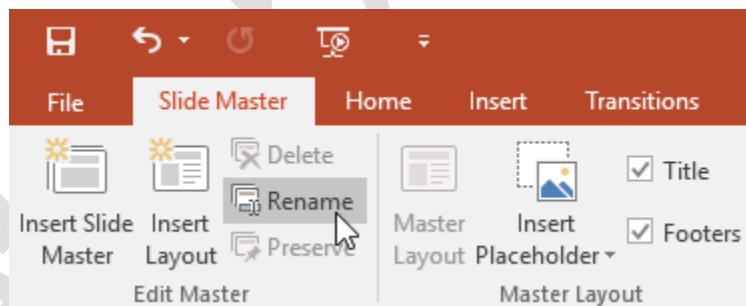
6. Click and drag to draw the placeholder on the slide.



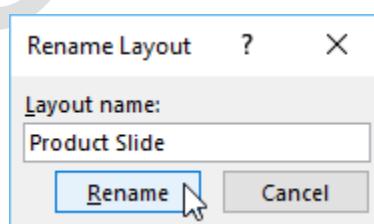
To rename a custom layout:

When you're done designing your custom layout, you'll want to give it a unique name so it will be easy to find.

- 1. From Slide Master view, select the desired layout, then click the Rename command.**



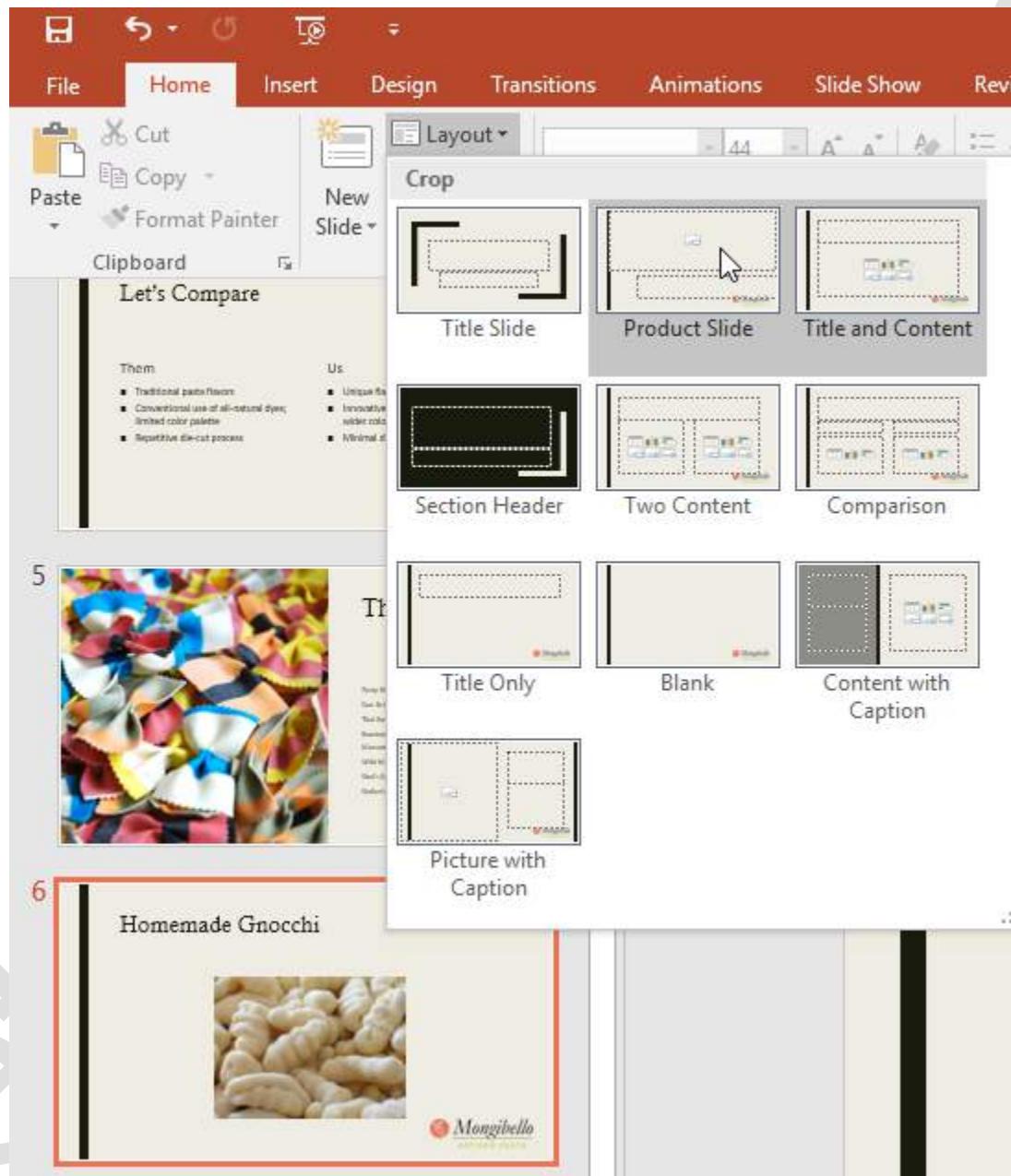
- 2. A dialog box will appear. Type the desired name, then click Rename.**



To use a custom layout:

Once you've created a custom slide layout, it's easy to add a new slide with that layout or apply it to an existing slide.

- 1. If you're currently in Slide Master view, click the Close Master View command on the Slide Master tab.**
- 2. From the Home tab, you can insert a new slide with the custom layout or apply it to an existing slide. In our example, we'll select the Layout command and apply the new style to slide 6.**



- 3. The custom slide layout will be applied.**



Homemade Gnocchi



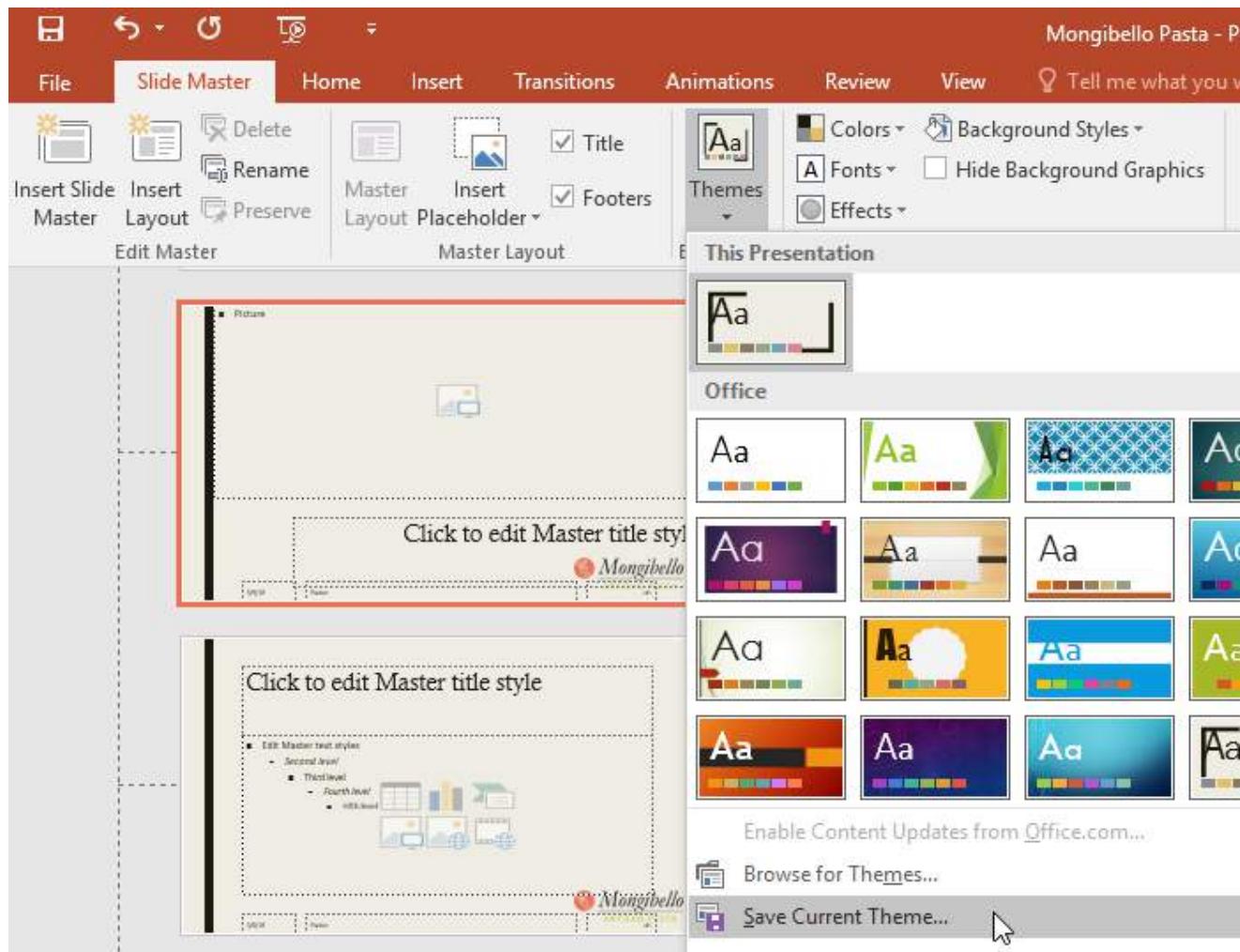
PowerPoint also allows you to add new placeholders to existing slide layouts.

Using custom layouts in other presentations

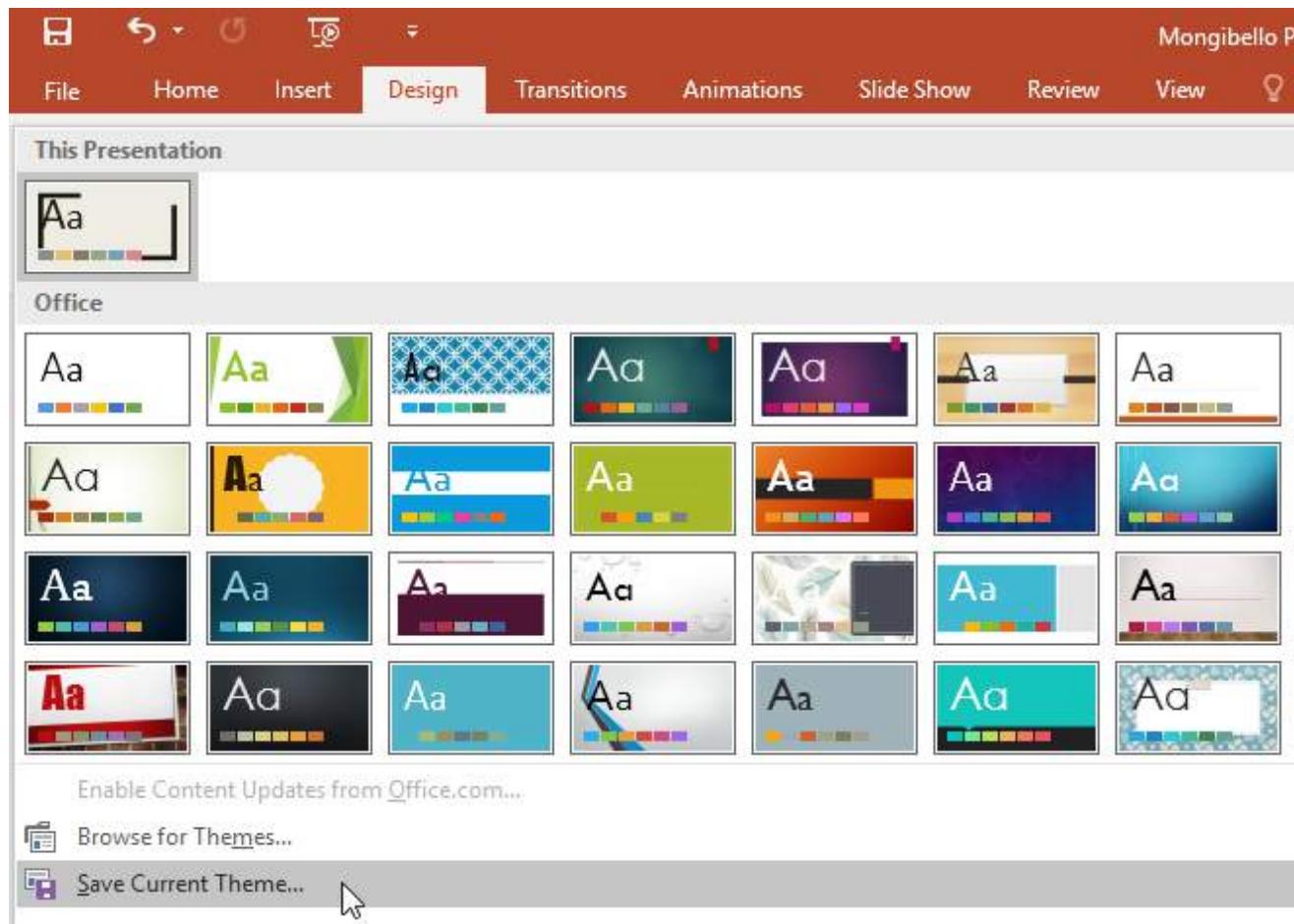
When you modify the slide master or slide layouts in Slide Master view, you're actually creating a custom version of the current theme. If you want to apply the theme to other presentations, you'll need to save it.

To save a theme:

From the the Slide Master tab, click the Themes command, then select Save Current Theme from the drop-down menu.



If you're not in Slide Master view, you can save the theme from the Design tab. Just click the drop-down arrow in the Themes group, then select Save Current Theme.



Challenge!

1. Open our [practice presentation](#). If you already downloaded our presentation to follow along with the lesson, be sure to download a fresh copy.
2. On the slide master, change the Background Style to Style 7.
3. Delete the tall rectangular shape near the left of the slide master.
4. Close Slide Master view and select slide 4. Your slide should look like this:

Let's Compare

Them

- Traditional pasta flavors
- Conventional use of all-natural dyes; limited color palette
- Repetitive die-cut process

Us

- Unique flavors built on tradition
- Innovative use of all-natural dyes; wider color palette
- Minimal die-cut process

5. Reopen Slide Master view. In the Picture with Caption layout, select the background shape on the left side of the slide behind the text, and change the color to Dark Aqua.

6. When you're finished, slide 2 should look like this:

Our Mission

To create unique, high-quality pastas—made by hand without additives or preservatives—for individuals who seek fresh, one-of-a-kind ingredients



7. Optional: Save your theme to your computer.

Lesson 30: Links

Introduction

Whenever you use the Internet, you use hyperlinks (also known as links) to navigate from one webpage to another. If you want to include a web address or email address in your PowerPoint presentation, you can choose to format it as a link so a person can easily click it. It's also possible to link to files and other slides within a presentation.

Optional: Download our [practice presentation](#).

Watch the video below to learn more about inserting links in PowerPoint.

About links

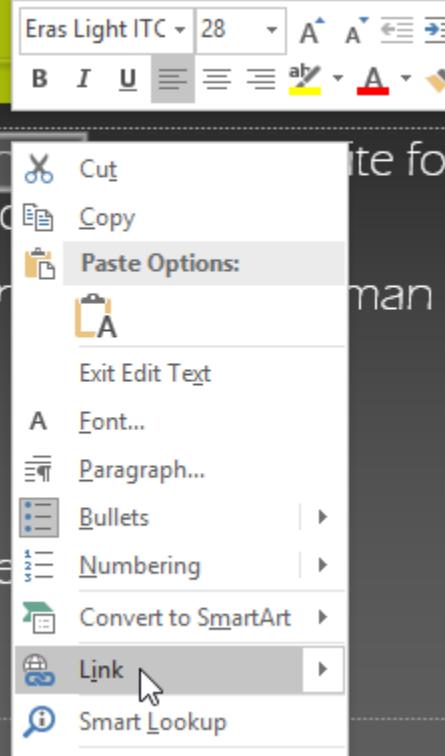
Links have two basic parts: the address of the webpage, email address, or other location they are linking to; and the display text, which can also be a picture or shape. For example, the address could be <https://www.youtube.com>, and YouTube could be the display text. In some cases, the display text might be the same as the address. When you're creating a link in PowerPoint, you'll be able to choose both the address and the display text or image.

To insert a link:

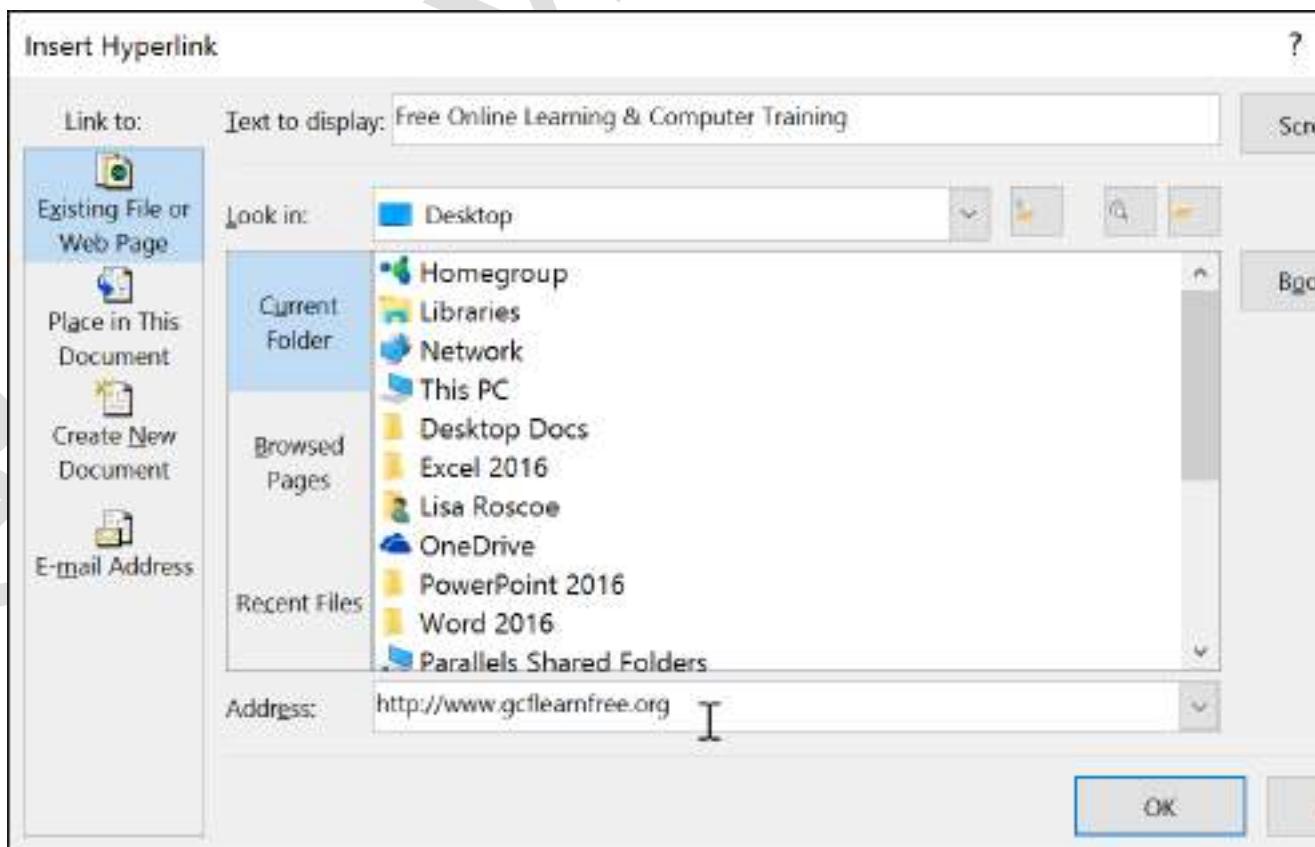
1. Select the image or text you want to make a link.
2. Right-click the selected text or image, then click Link. You can also go to the Insert tab and click the Link command.

RESOURCES

- Free Online Learning & Computer Training
Microsoft Office classes, computer basics
- Offline Resources: Contact Weylon Glen
Resources
- Financial and Retirement Planning
 - [USA.gov Retirement Resources](#)
- The most recent copy of our financial re
 - AdWorks Employee Benefits Guide



3. The Insert Hyperlink dialog box will open.



4. If you selected text, the words will appear in the Text to display field at the top. You can change this

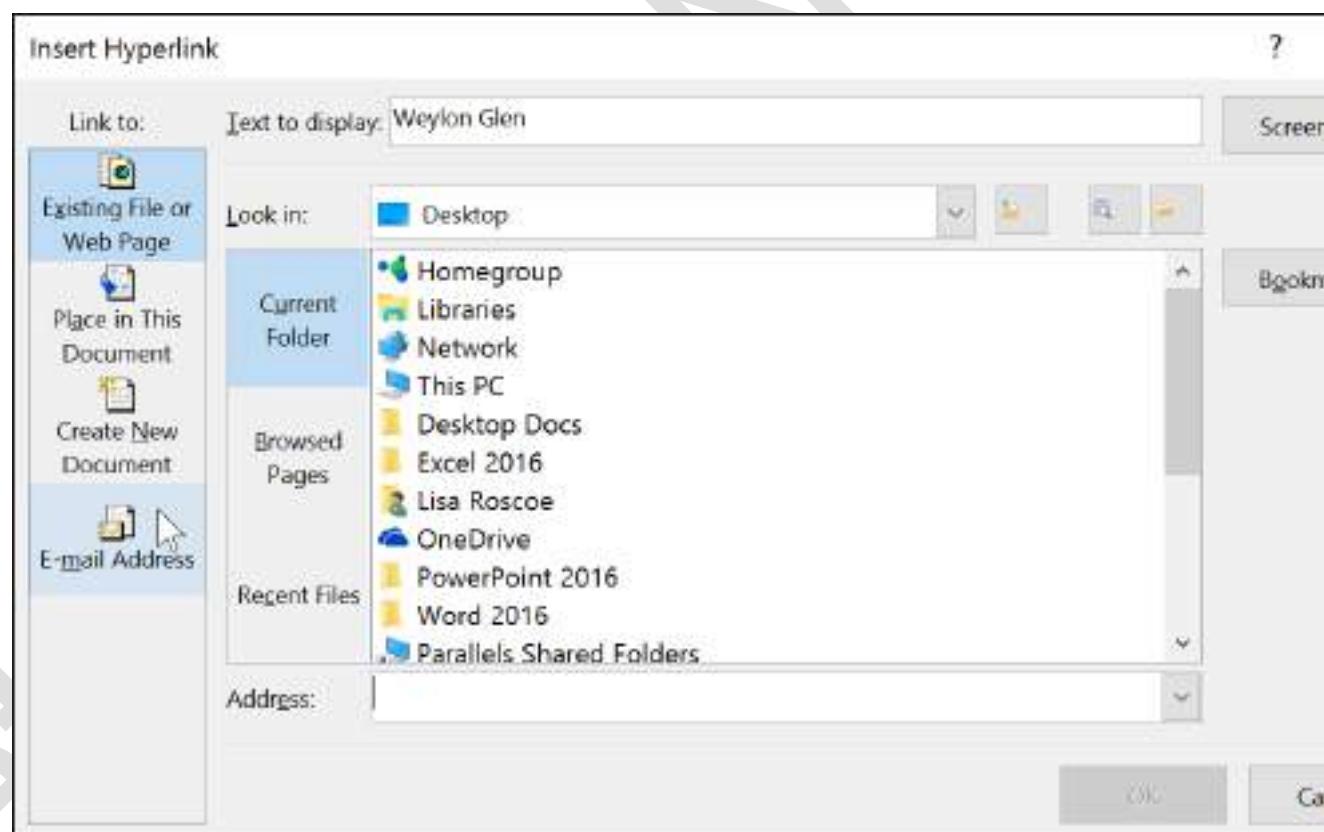
text if you want.

5. Type the address you want to link to in the Address field.
6. Click OK. The text or image you selected will now be a link to the web address.

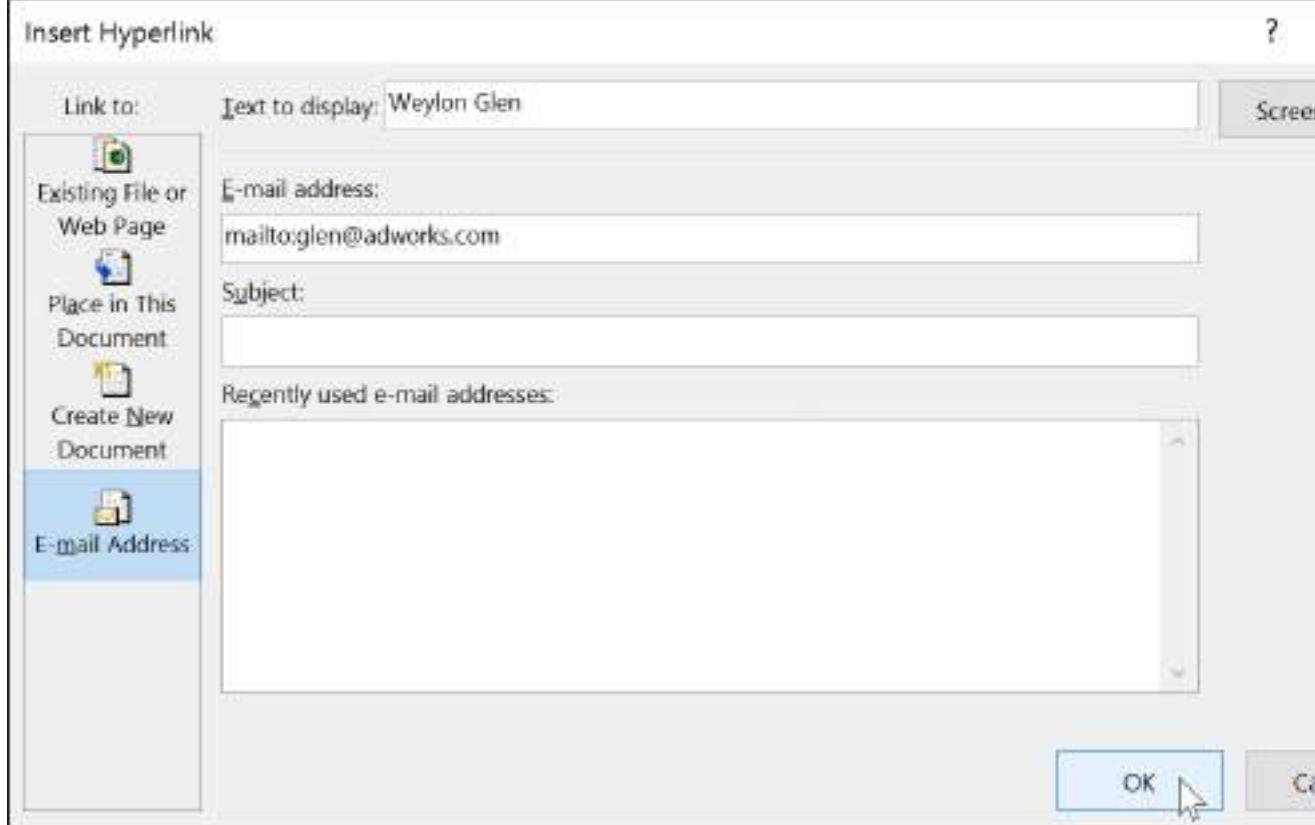


To insert a link to an email address:

1. Right-click the selected text or image, then click Link.
2. The Insert Hyperlink dialog box will open.
3. On the left side of the dialog box, click Email Address.



4. Type the email address you want to connect to in the Email Address box, then click OK.

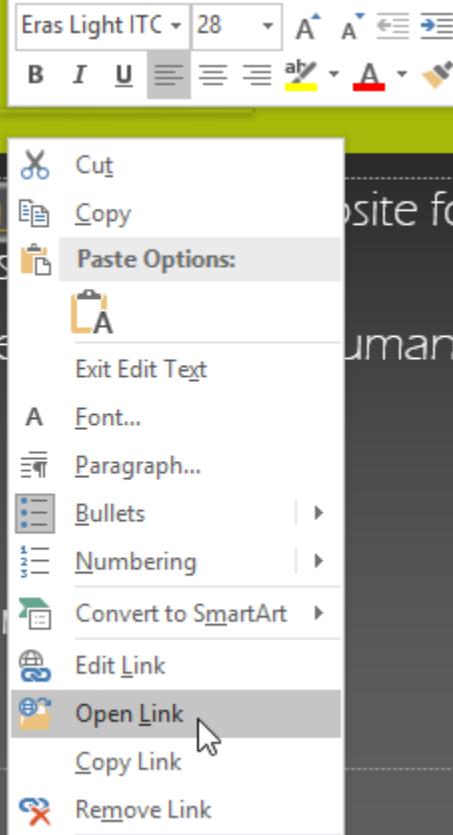


PowerPoint often recognizes email and web addresses as you type and will format them as links automatically after you press the Enter key or spacebar.

To open and test a link:

- 1. After you create a link, you should test it. Right-click the link, then click Open Link.**

RESOURCES



2. Your web browser should open and then navigate to the linked page. If it doesn't work, check the link address for any misspellings.

To open a link while viewing your slide show, click the link.

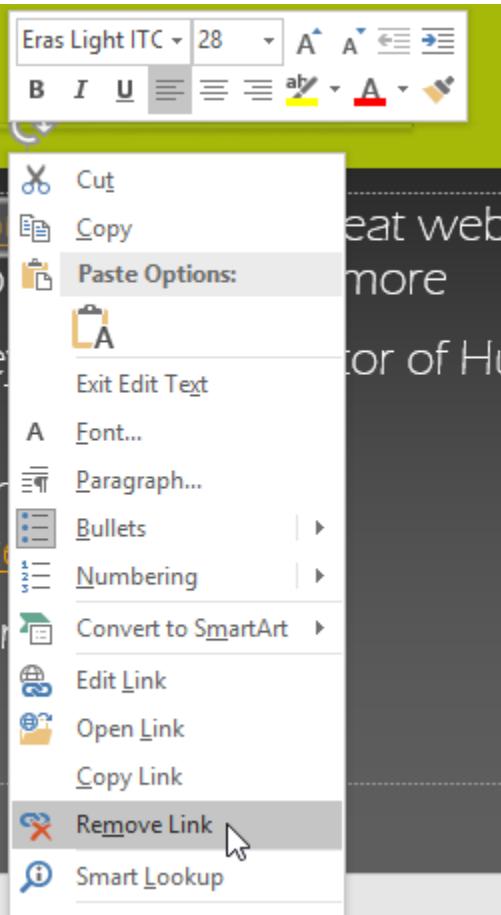
- [Free Online Learning & Computer Training](http://www.gclearningcenter.com)
Microsoft Office classes, computer based training

To remove a link:

1. Right-click the link.
2. Click Remove Link.

RESOURCES

- [Free Online Learning & Comp](#)
Microsoft Office classes, comp
- Offline Resources: Contact We
Resources
- Financial and Retirement Plan
 - [USA.gov Retirement Resource](#)
- The most recent copy of our fir
 - AdWorks Employee Benefits

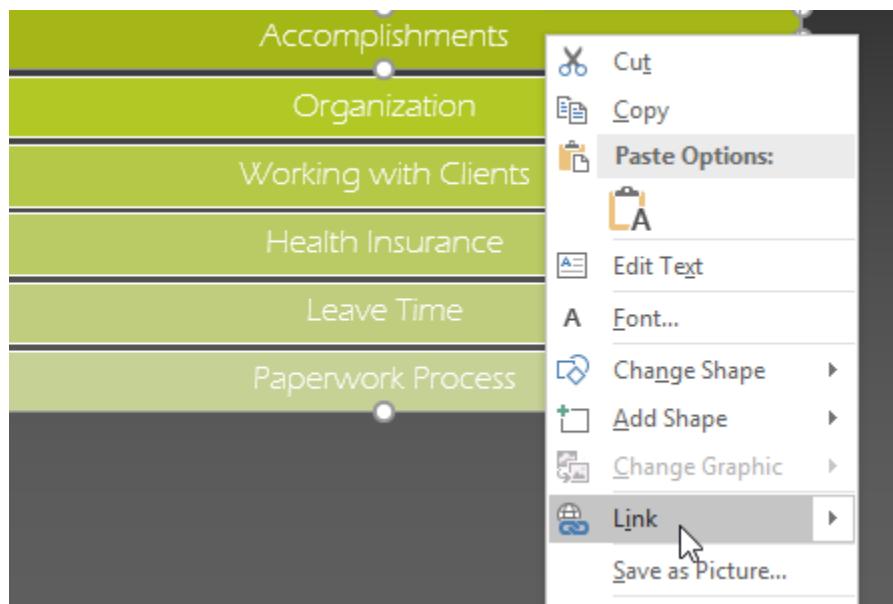


More links

In PowerPoint, you can use links to link to resources that are not online. To create a quick way to refer to another slide in your presentation, you can create a link to that slide. If you need to access a file stored on your computer, you can create a link to it. Additionally, PowerPoint allows you to format pictures and shapes as links.

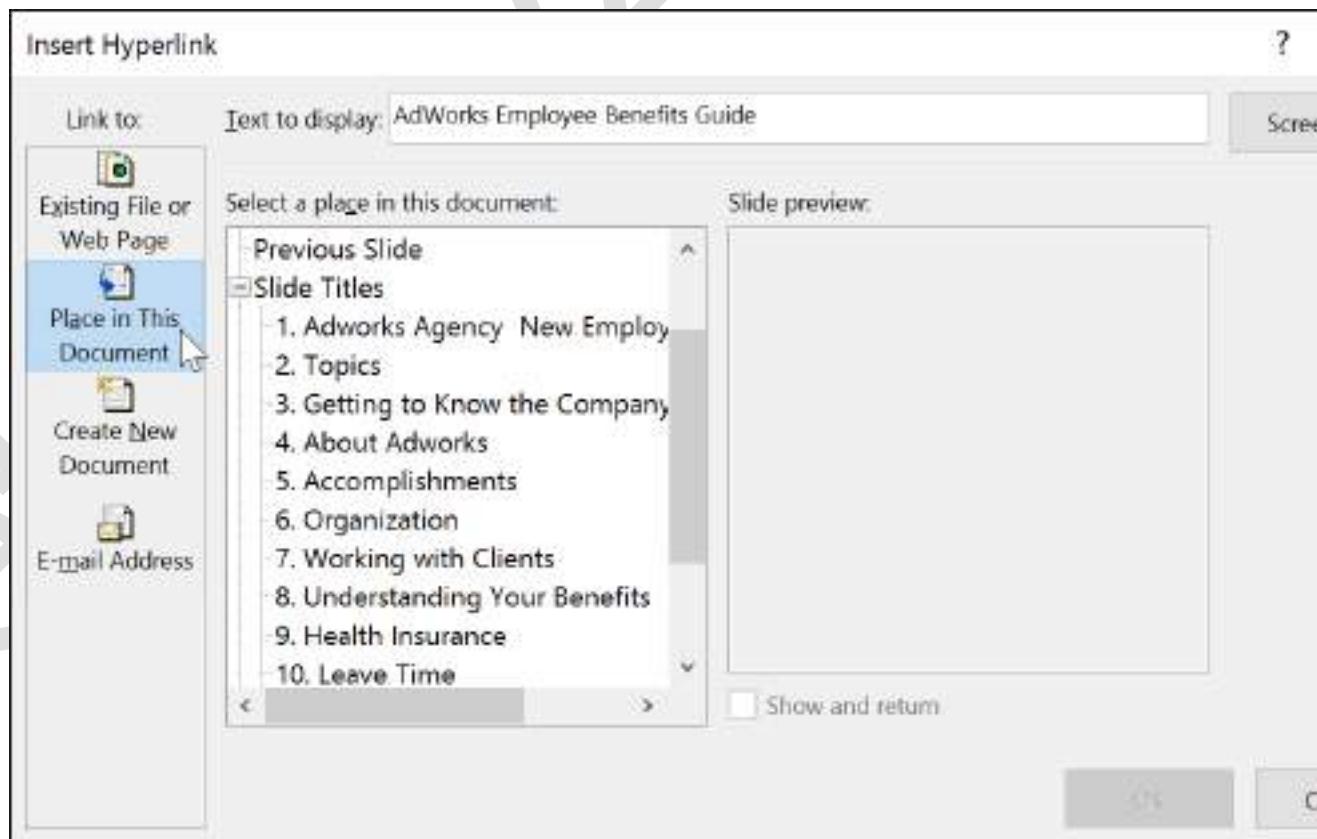
Using shapes and pictures as links

Sometimes you might want to format objects—including shapes, text boxes, and pictures—as links. This is especially helpful if you want the object to act like a button. To do this, right-click the desired object and select Link from the menu that appears. Click the object during the presentation to open the link.

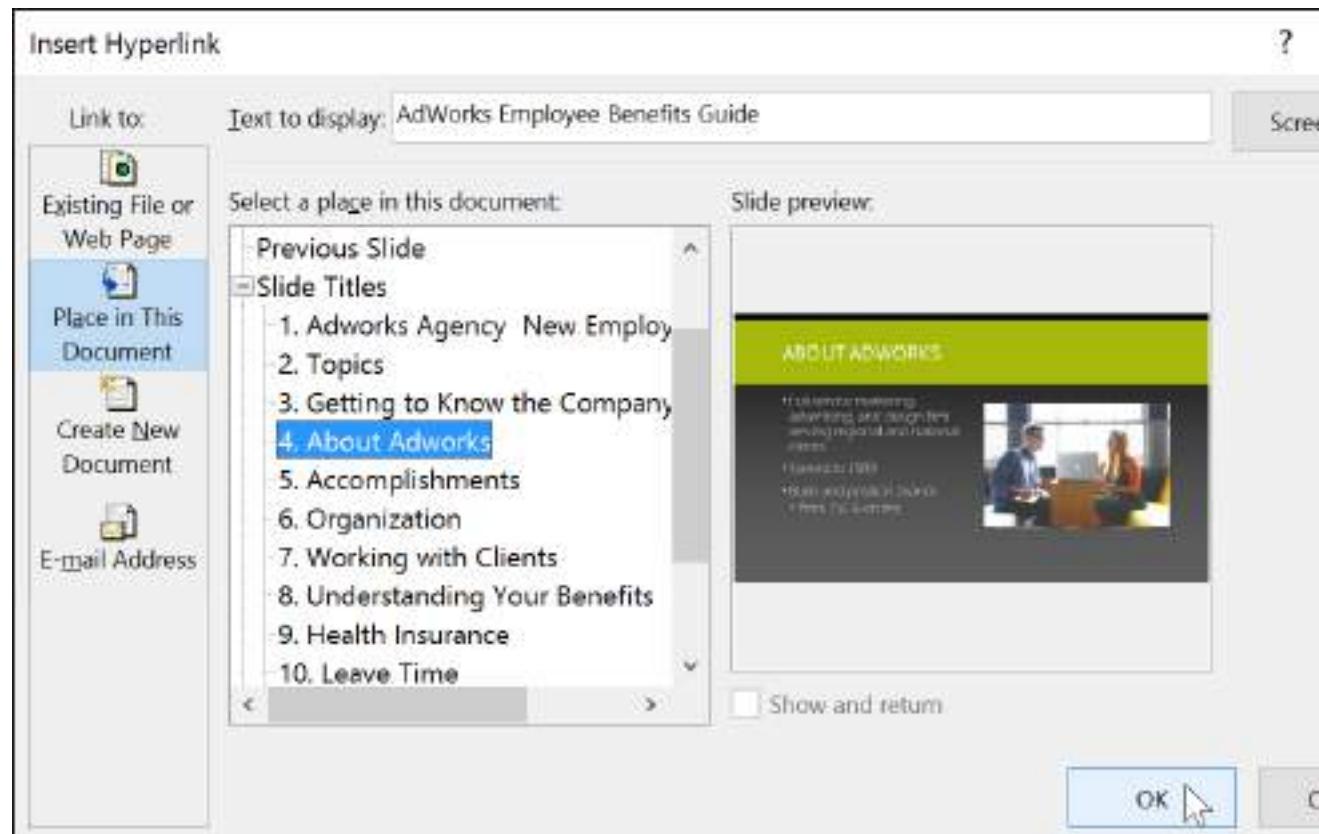


To insert a link to another slide:

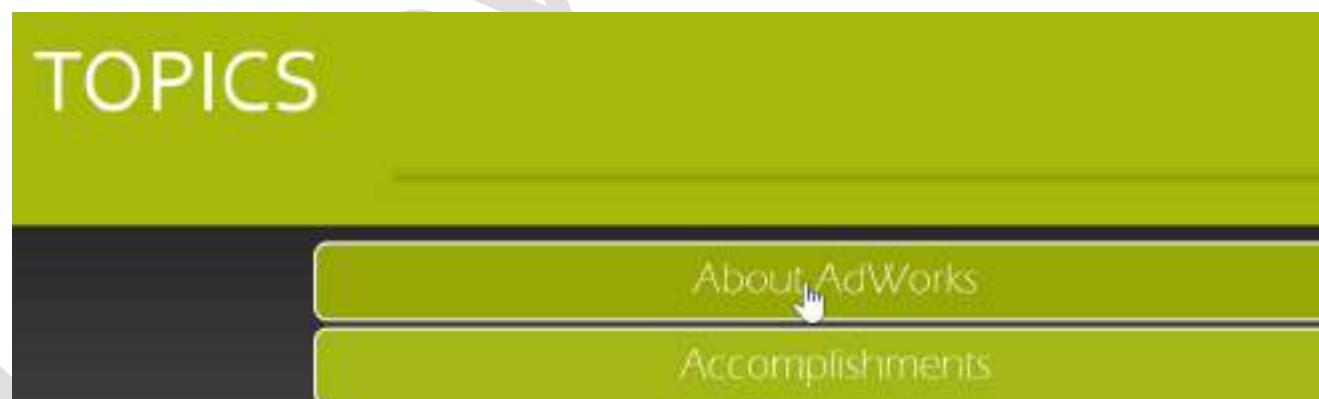
1. Right-click the selected text or image, then click **Link**.
2. The **Insert Hyperlink** dialog box will appear.
3. On the left side of the dialog box, click **Place in this Document**.



4. A list of other slides in your presentation will appear. Click the name of the slide you want to link to.



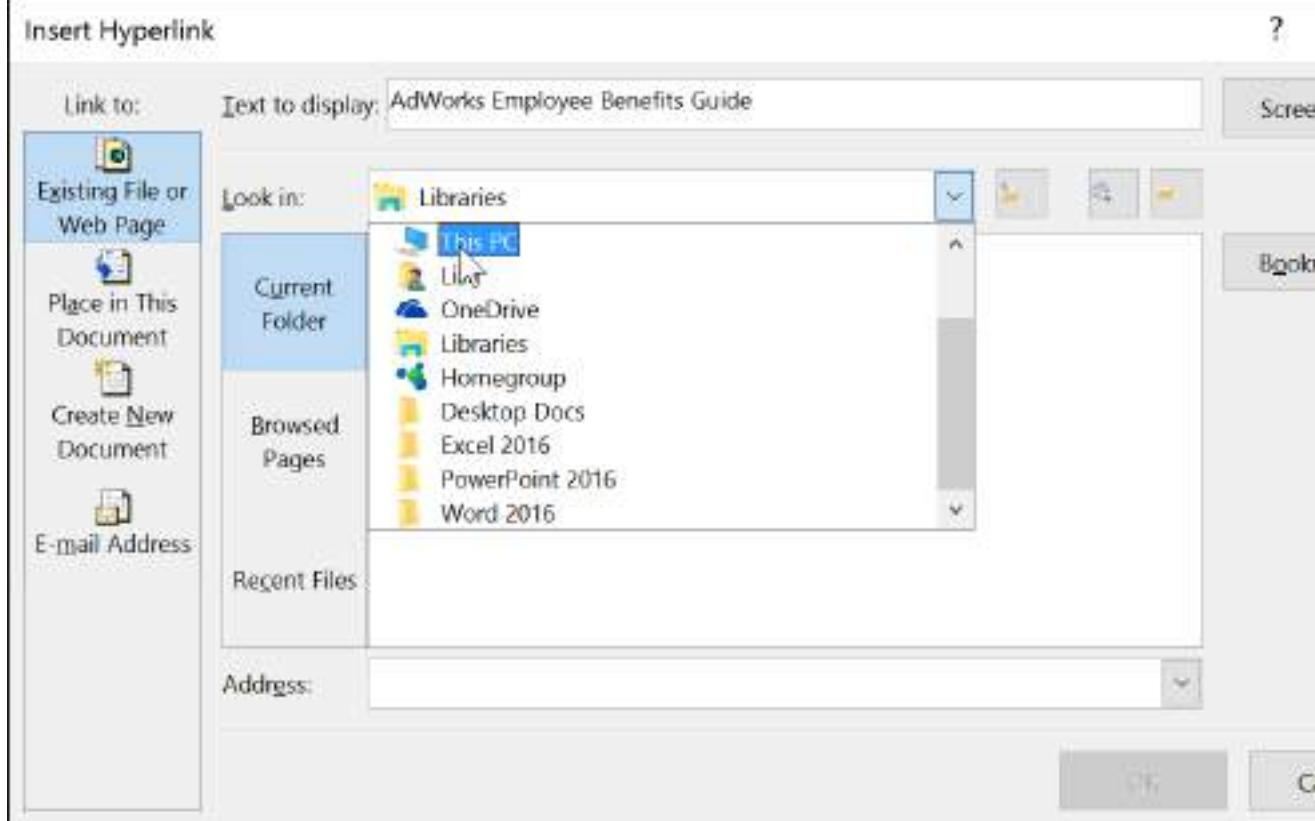
5. Click OK. The text or image will now be a link to the slide you selected.



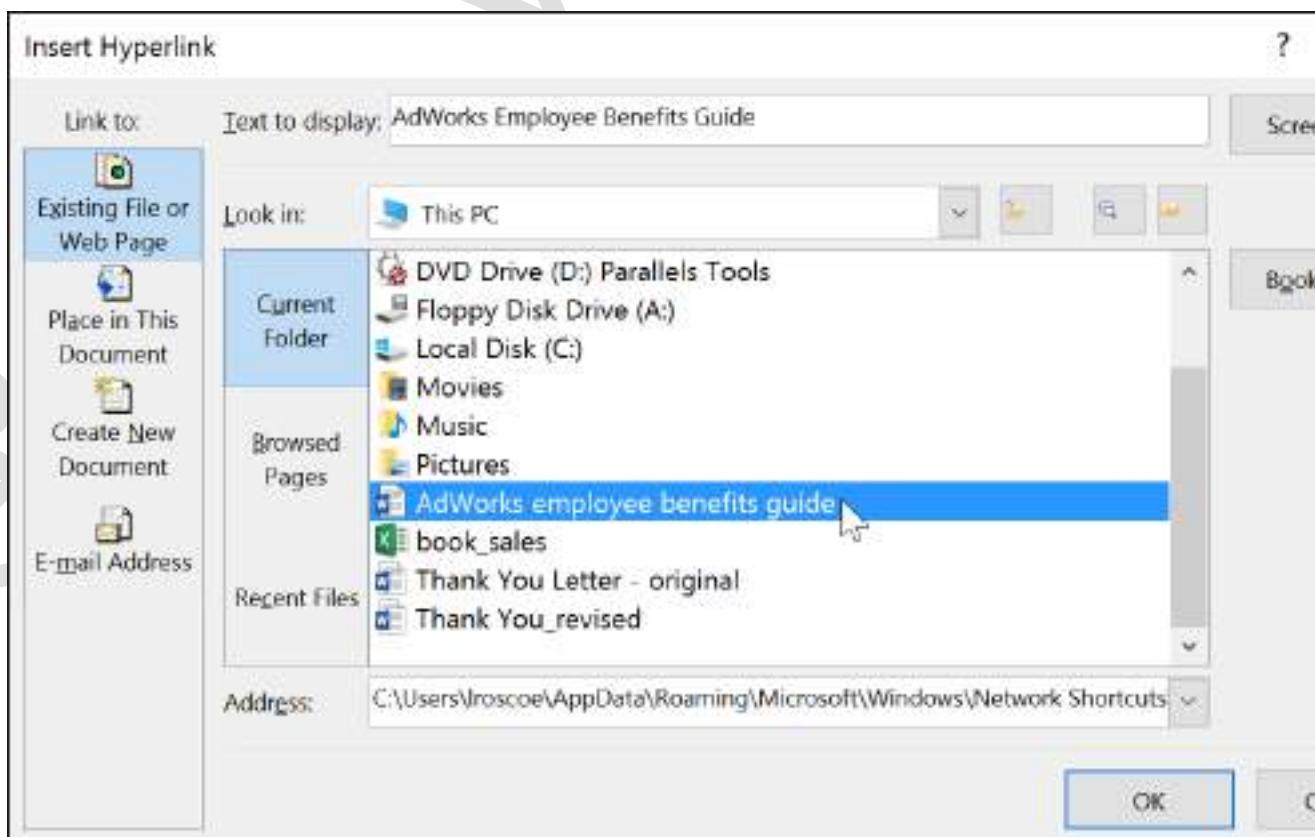
Adding a link to a shape is similar to creating an action button. We'll talk more about how to turn a shape into a button in our [Action Buttons](#) lesson.

To insert a link to another file:

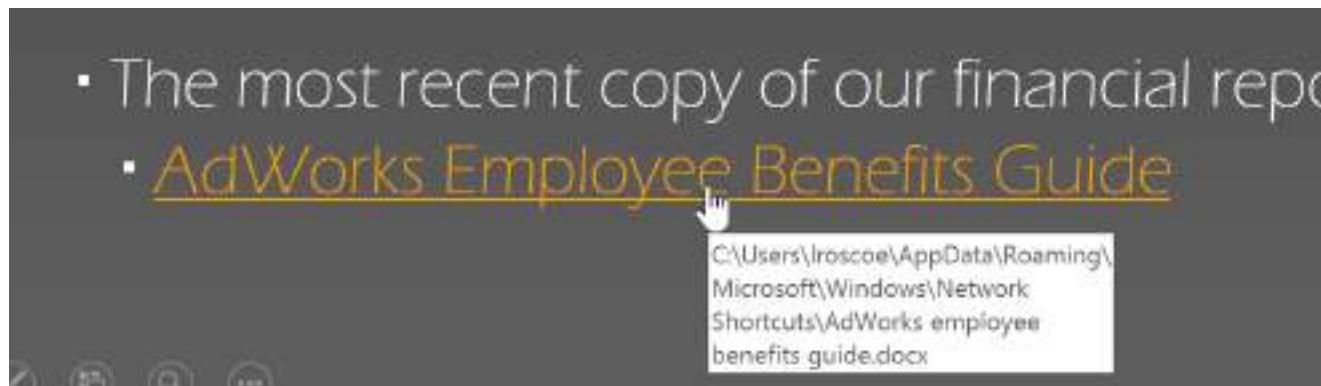
1. Right-click the selected text or image, then click Link. The Insert Hyperlink dialog box will appear.
2. On the left side of the dialog box, click Existing File or Webpage.
3. Click the drop-down arrow to browse for your file.



4. Select the desired file.



5. Click OK. The text or image will now be a link to the file you selected.



If you want to display your presentation on a different computer than you used to create it, your link to another file may not work. Make sure you have a copy of the linked file on the computer you are using to present, and always test links before giving a presentation.

Challenge!

1. Open our [practice presentation](#).
2. On slide 2, select the Accomplishments shape and create a link to slide 5.
3. On slide 11, select the text Tax forms and create a link to <http://irs.gov>.
4. On slide 12, remove the link from the text USA.gov Retirement Resources.
5. When you're finished, test the links you created.

Lesson 31: Action Buttons

Introduction

Another tool you can use to connect to a webpage, file, email address, or slide is called an action button. Action buttons are built-in shapes you can add to a presentation and set to link to another slide, play a sound, or perform a similar action. When someone clicks or hovers over the button, the selected action will occur. Action buttons can do many of the same things as [links](#). Their easy-to-understand style makes them especially useful for self-running presentations at booths and kiosks.

Optional: Download our [practice presentation](#).

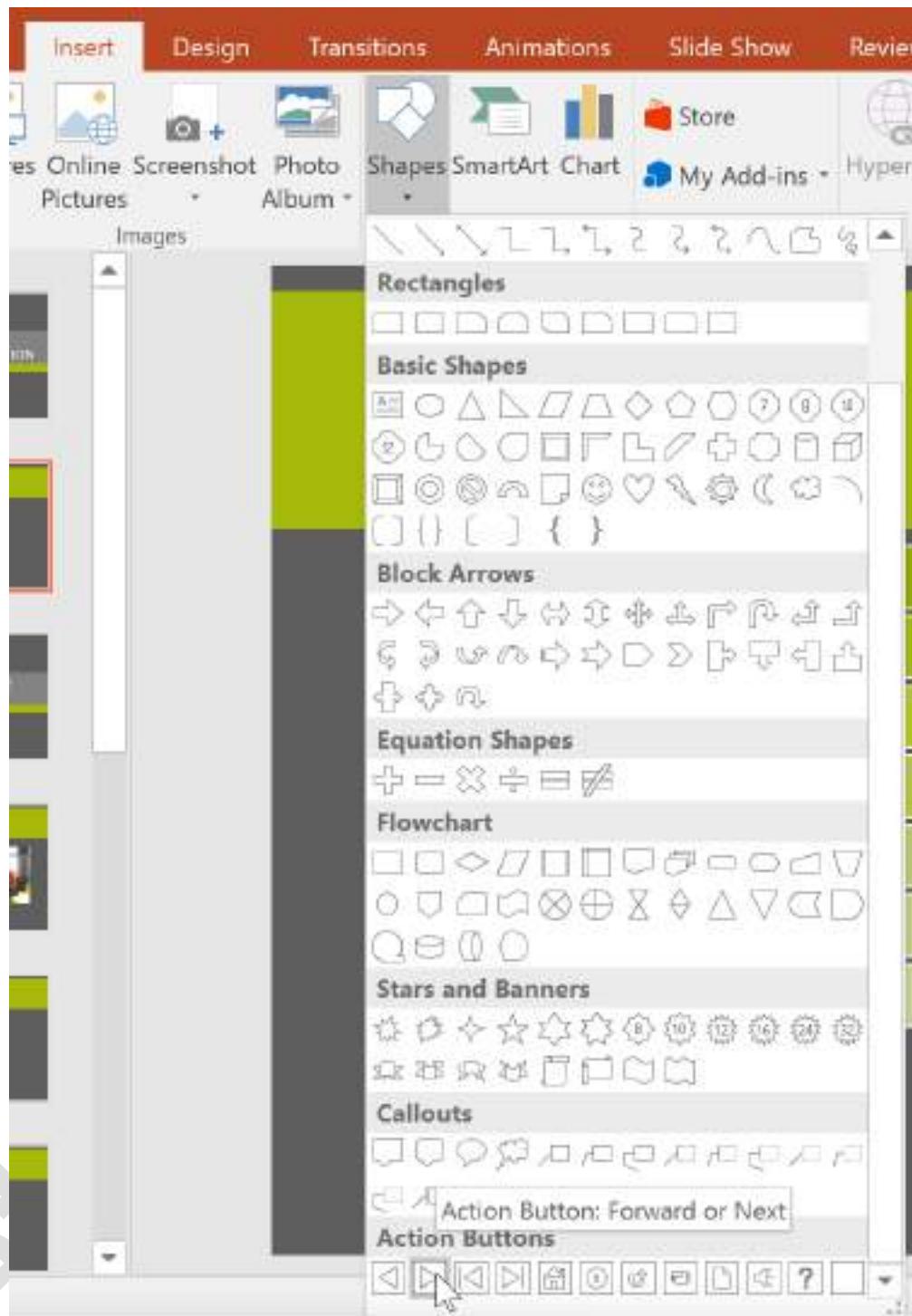
Watch the video below to learn more about using action buttons in your presentations.

Inserting action buttons

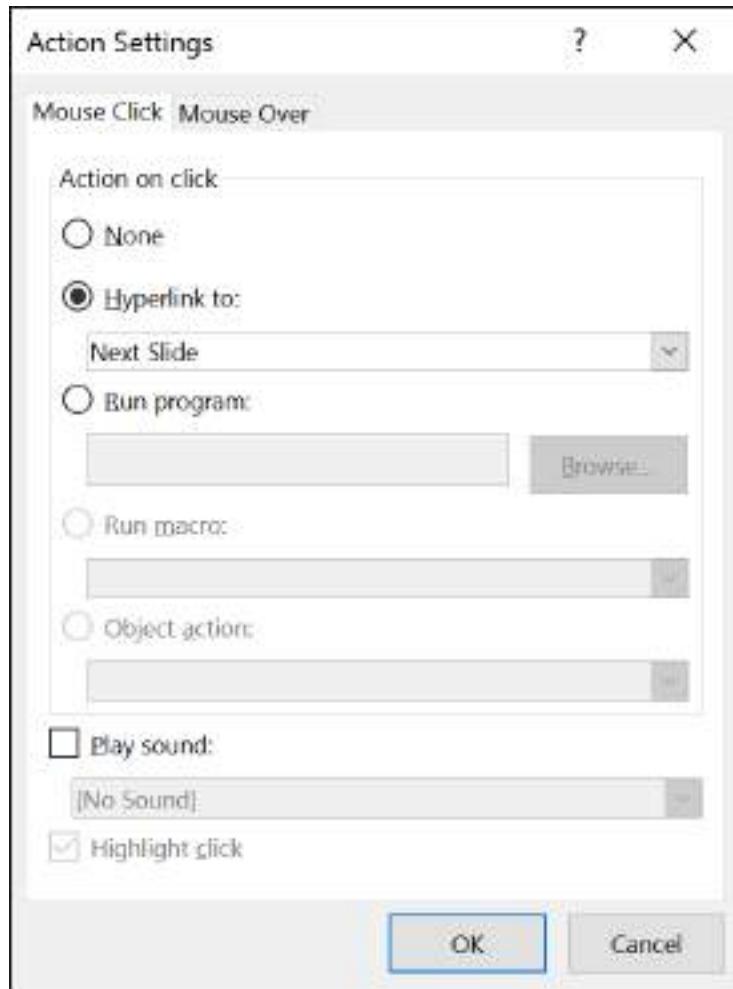
You can insert action buttons on one slide at a time, or you can insert an action button that will show up on every slide. The second option can be useful if you want every slide to link back to a specific slide, like the title page or table of contents.

To insert an action button on one slide:

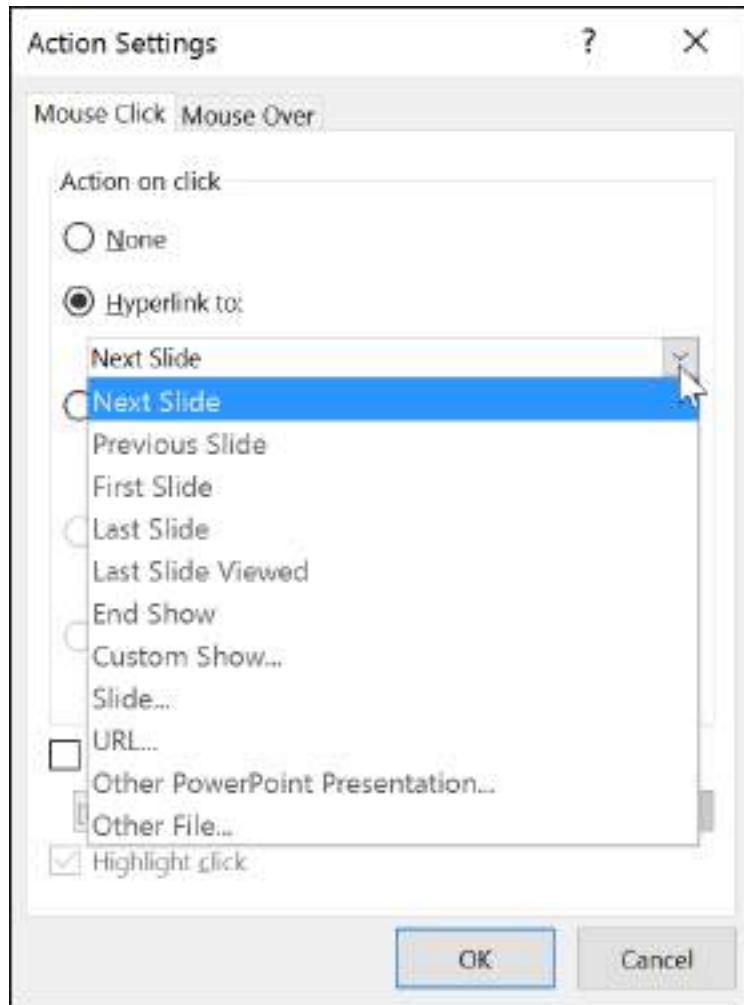
1. Click the Insert tab.
2. Click the Shapes command in the Illustrations group. A drop-down menu will appear with the action buttons located at the very bottom.



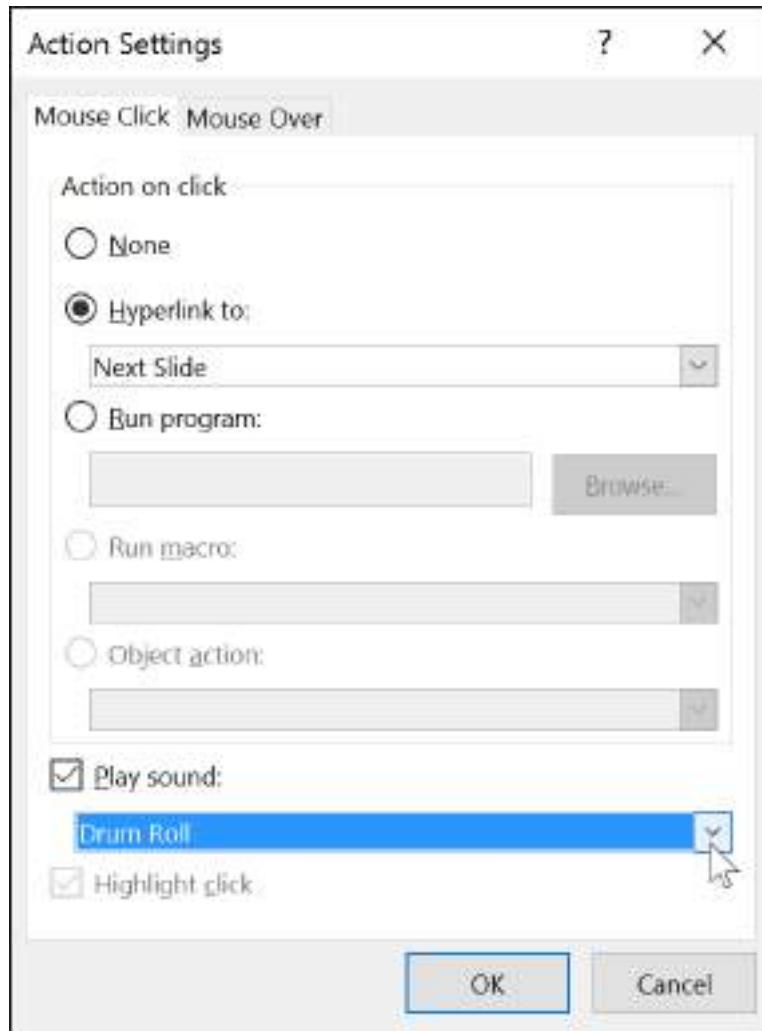
- 3. Select the desired action button.**
- 4. Insert the button into the slide by clicking the desired location. The Action Settings dialog box will appear.**
- 5. Select the Mouse Click or Mouse Over tab. Selecting the Mouse Click tab means the action button will perform its action only when clicked. Selecting the Mouse Over tab will make the action button perform its action when you move the mouse over it.**



6. In the Action on click section, select Hyperlink to:, then click the drop-down arrow and choose an option from the menu.



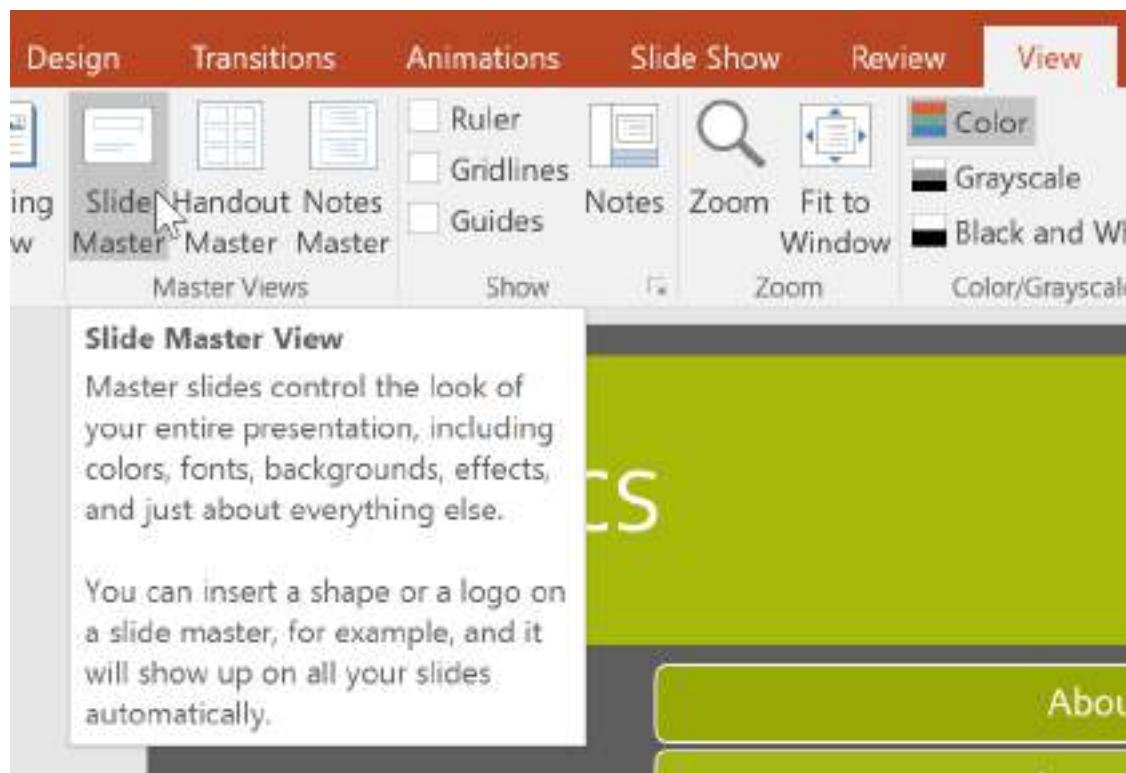
7. Check the Play Sound box if you want a sound to play when the action button is clicked. Select a sound from the drop-down menu, or select Other sound to use a sound file on your computer. When you're done, click OK.



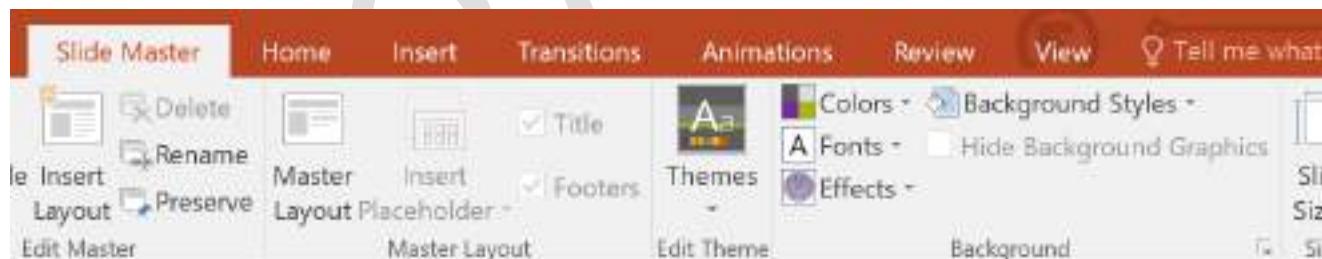
To insert an action button on all slides:

If you'd like to add an action button to every slide, you can do this with a feature called Slide Master view. However, using Slide Master view can be tricky if you've never used it. If you're going to edit your slides this way, you may want to review our [Slide Master View](#) lesson first.

1. Click the View tab.
2. In the Master Views group, click the Slide Master command. In the left navigation pane, scroll up and select the first slide.

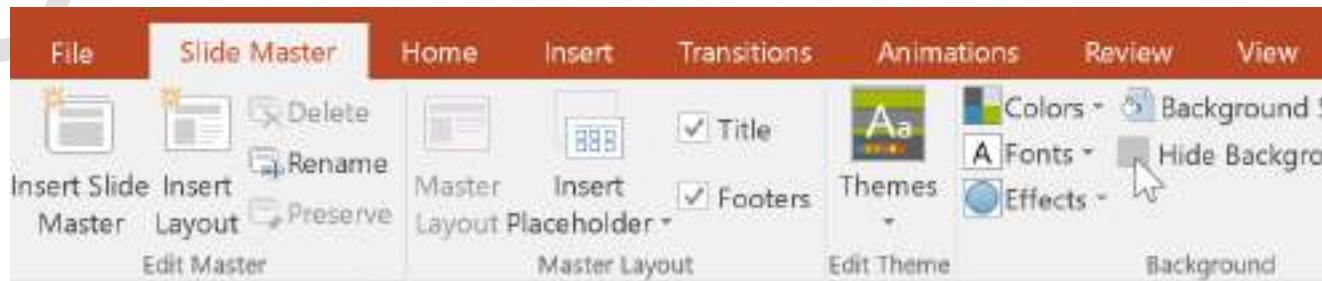


3. Go to the Insert tab and select an action button from the bottom of the Shapes menu. Click the slide to add the action button, and choose the desired options from the dialog box that appears.
4. Return to the Slide Master tab and click Close Master View. The new action button will now be on every slide.



To edit, move, or delete an action button inserted this way, click the View tab, then click Slide Master. Click Close Master View after making any desired changes.

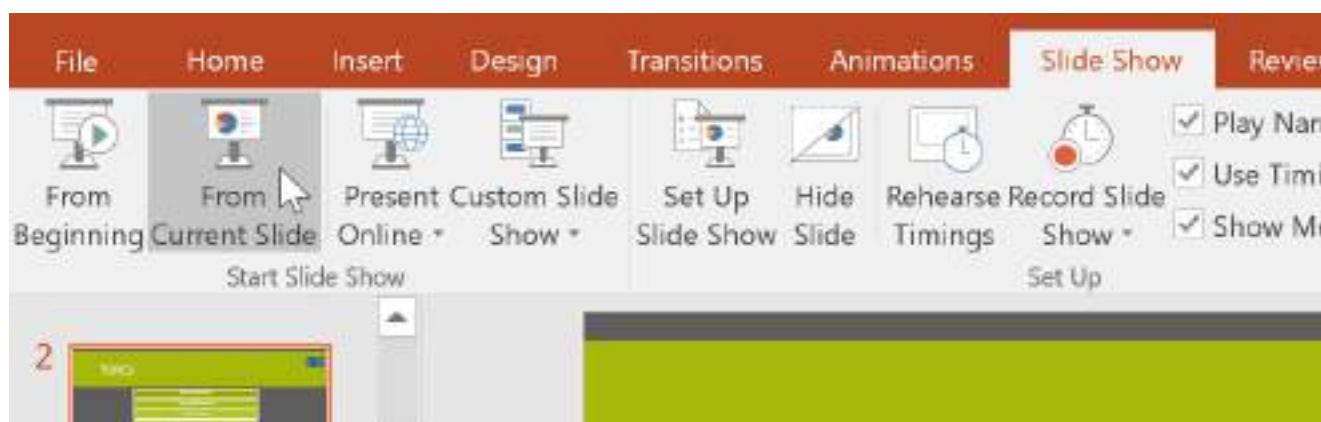
If you notice that an action button isn't appearing on certain slides, you may need to uncheck the Hide Background Graphics box.



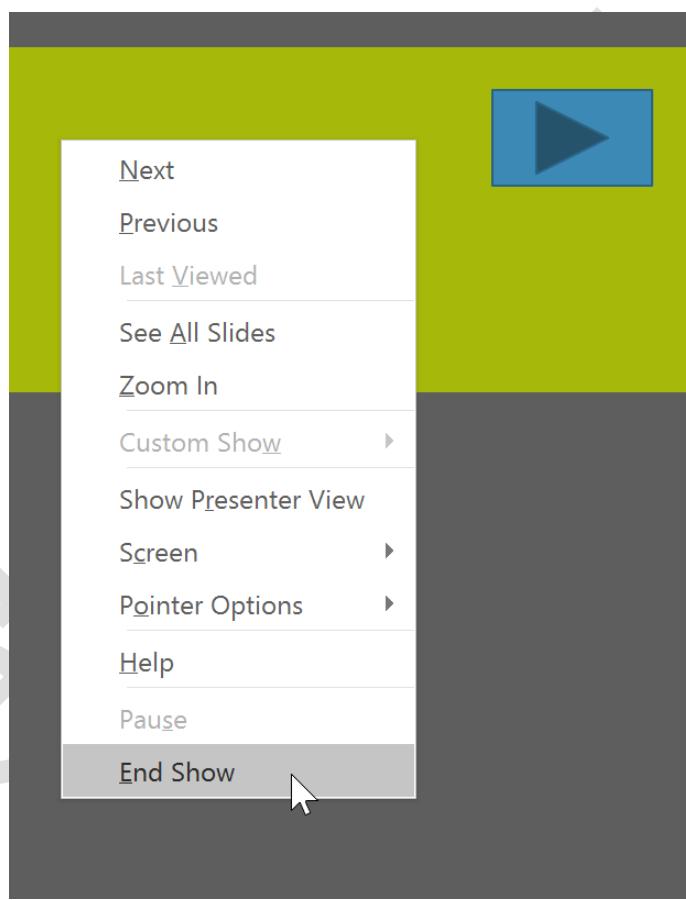
To test an action button:

After you create an action button, you should test it.

- 1. Click the Slide Show tab.**
- 2. In the Start Slide Show group, click From Current Slide.**



- 3. Click your action button.**
- 4. After you have tested it, right-click anywhere on the screen and select End Show.**



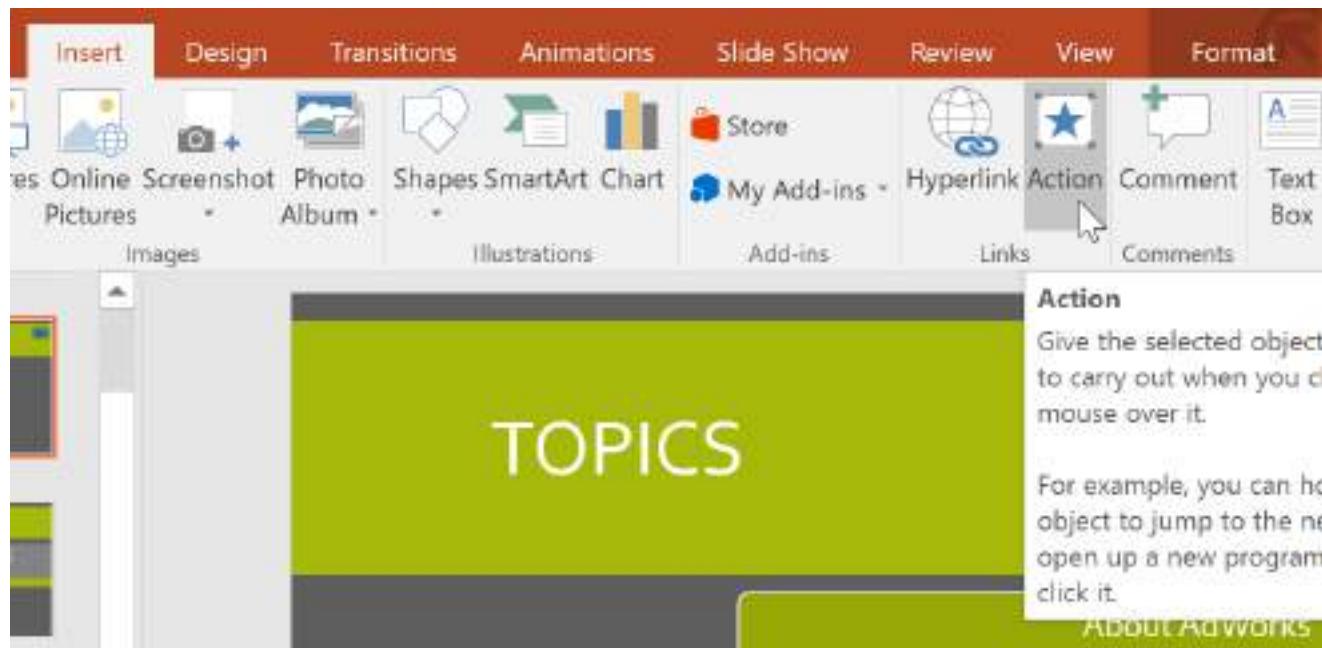
- 5. If your action button did not work as you intended, follow the instructions below to edit it.**

To edit an action button:

- 1. Select the action button.**

2. Click the Insert tab.

3. In the Links group, click the Action command. The Actions Settings dialog box will appear.

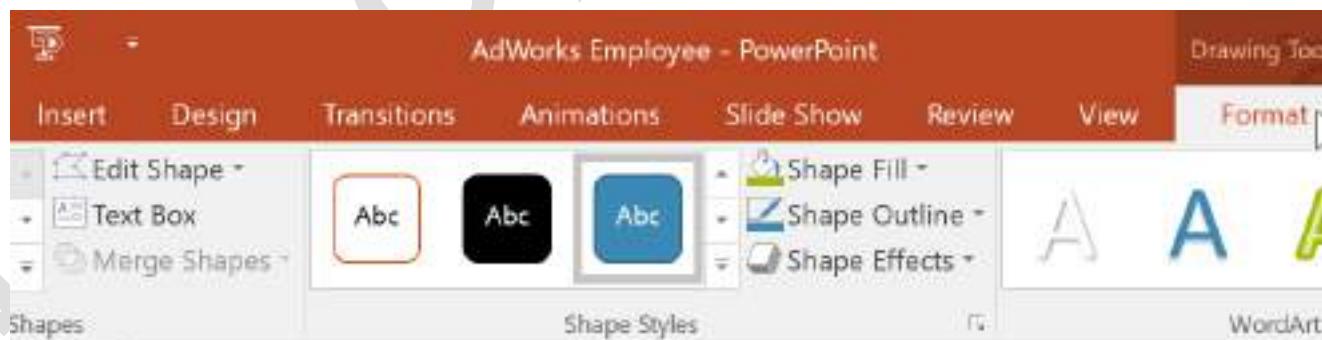


4. Edit the action or hyperlink, then click OK.

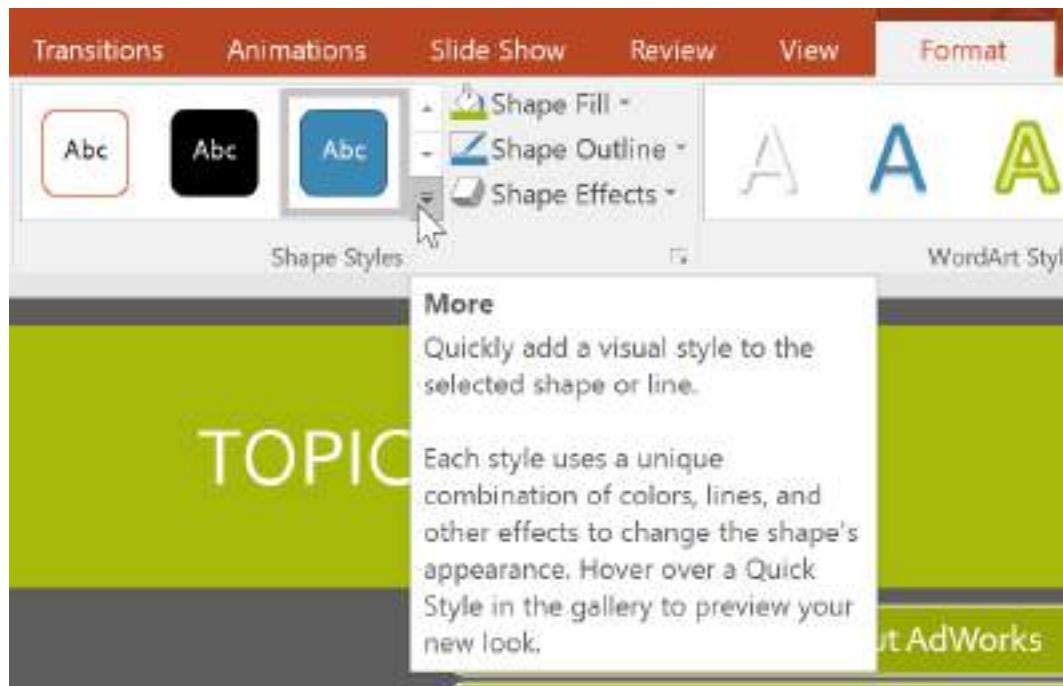
To change the appearance of an action button:

1. Select the action button.

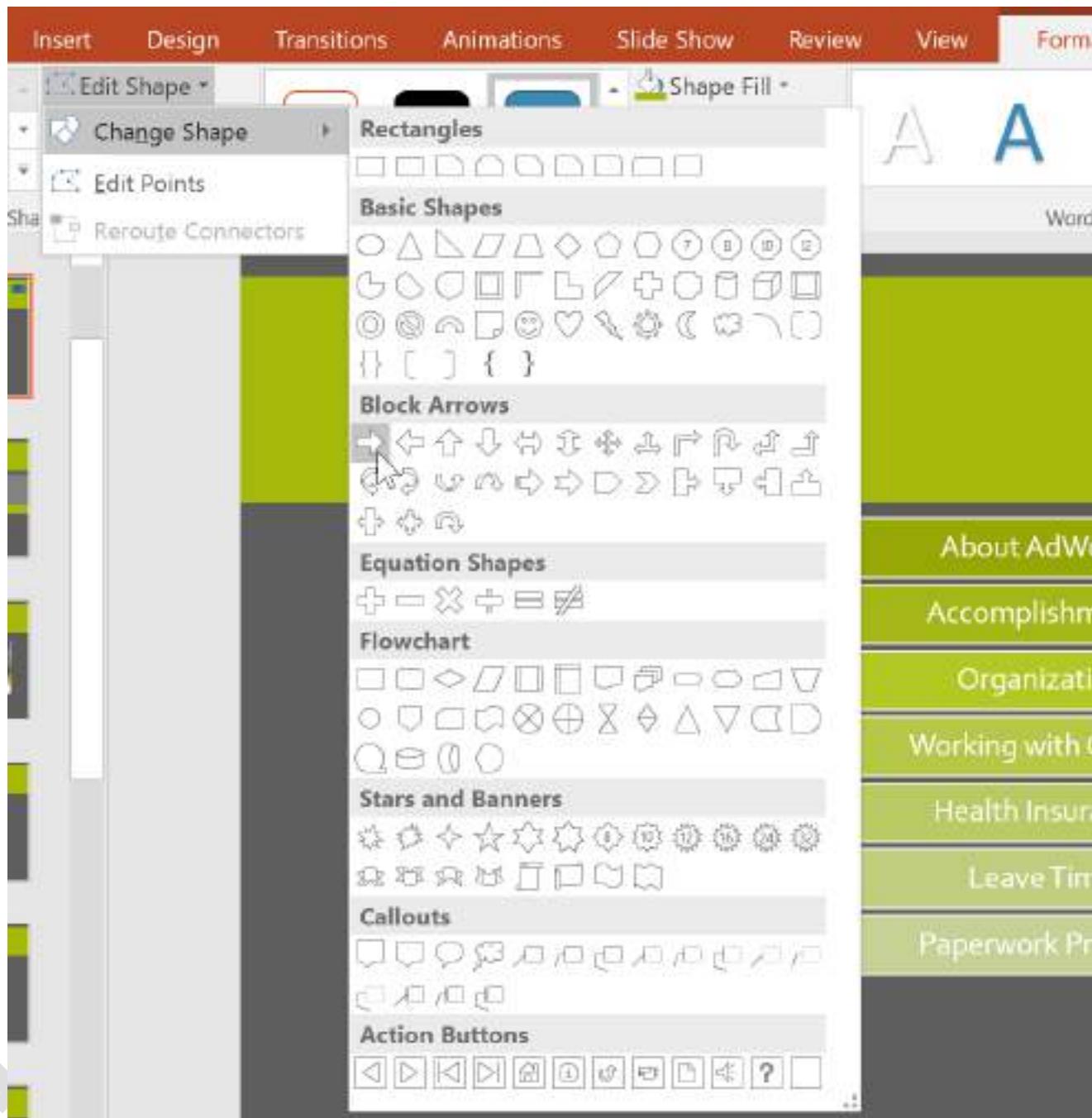
2. Click the Format tab.



3. To change the button style or color, use the tools in the Shape Styles group.



4. To change the shape of the action button, click **Edit Shape** in the **Insert Shapes** group. Select a new shape from the drop-down menu.



Challenge!

1. Open our [practice presentation](#).
2. Open Slide Master view. In the left navigation pane, scroll up and select the first slide.
3. In the bottom-right corner of the slide, insert the Action Button: Information.
4. Link the action button to the last slide.
5. Change the shape style of your action button to one of the green styles.
6. When you're finished, your slide master should look like this:

CLICK TO EDIT MASTER TITLE STYLE

- Edit Master text styles
 - Second level
 - Third level
 - Fourth level
 - Fifth level

3437005

Footer

7. Close Master View, play your slide show, and test your action button.

Lesson 32: Rehearsing and Recording Your Presentation

Introduction

There are many things to keep in mind when preparing to give a presentation. How long will it last? What will you say? Fortunately, PowerPoint offers several tools that can help you rehearse your slide show. You can even record a copy with voiceover narration, allowing viewers to watch the presentation on their own.

Optional: Download our [practice presentation](#).

Watch the video below to learn how to rehearse and record your presentation.

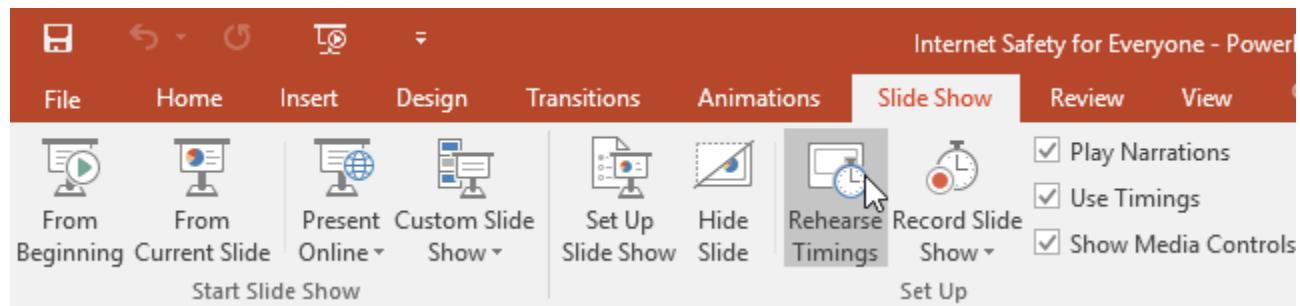
Rehearsing slide show timings

Rehearsing timings can be useful if you want to set up a presentation to play at a certain speed without having to click through the slides yourself. It also gives you the opportunity to practice your talking points. Using this feature, you can save timings for each slide and animation. PowerPoint will then play the presentation automatically using these timings.

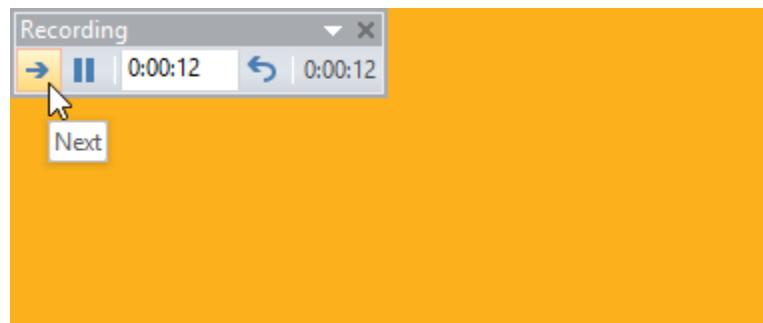
Rehearsing is often one of the last steps in creating a polished presentation. If you've never presented a slide show, you may want to review our lesson on [Presenting Your Slide Show](#) to become familiar with the basics.

To rehearse timings:

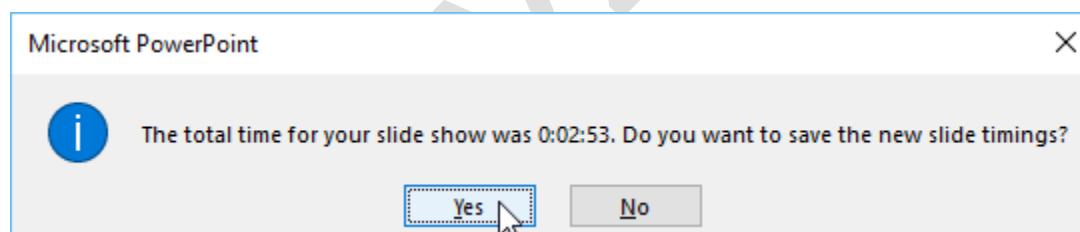
1. Go to the Slide Show tab, then click the Rehearse Timings command.



2. You'll be taken to a full-screen view of your presentation. Practice presenting your slide show. When you're ready to move to the next slide, click the Next button on the Recording toolbar in the upper-left corner. You also can also use the right arrow key on your keyboard.

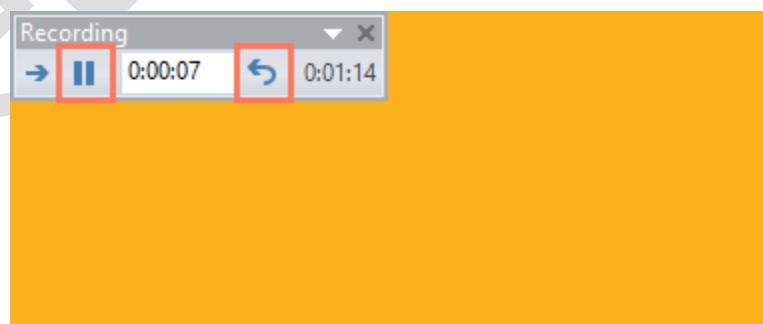


3. When you reach the end of the show, a dialog box will appear with the total time of your presentation. If you're satisfied with your timings, click Yes.



4. The timings will be saved. The next time you present, PowerPoint will use these timings to advance the slides automatically.

If you need more than one try to get the timings just right, the Recording toolbar can be used to take a break or start over on a slide. To pause the timer, click the Pause button. No actions taken while the timer is paused will be included in the timings. To re-record the timings on the current slide, click the Repeat button.

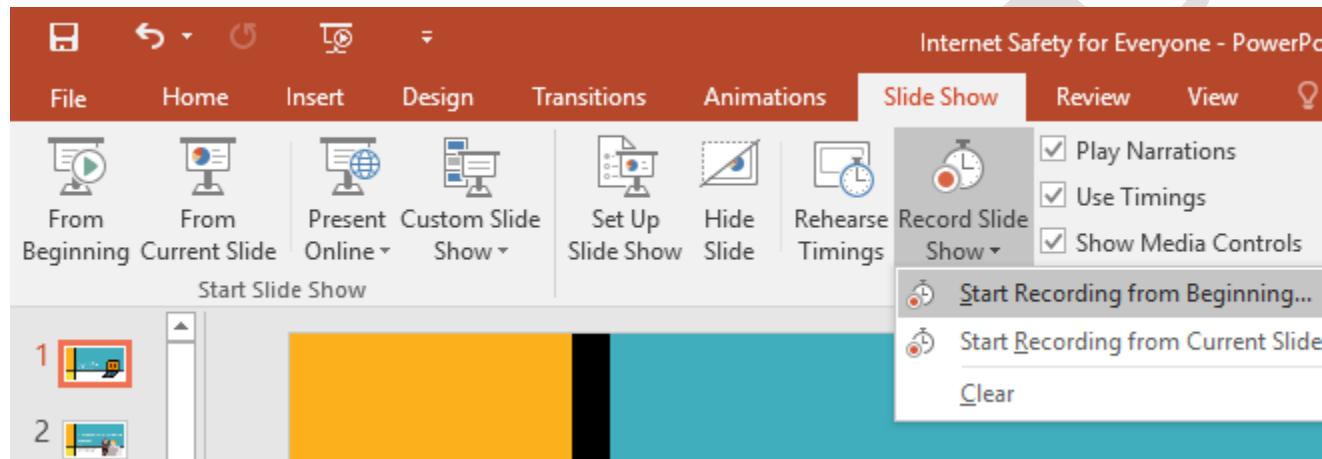


Recording your slide show

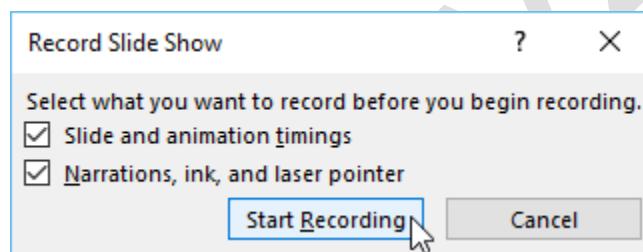
The Record Slide Show feature is similar to the Rehearse Timings feature, but it's a bit more comprehensive. If you have a microphone for your computer, you can record voiceover narration for the entire presentation. This is useful if you plan to use your slide show as a self-running presentation or video.

To record a slide show:

1. From the Slide Show tab, select the Record Slide Show drop-down arrow, then choose either Start Recording from Beginning or Start Recording from Current Slide.



2. A dialog box will appear. Select the desired options, then click Start Recording. Remember, you can only record narration if you have a microphone attached to your computer.



3. Your presentation will appear in full-screen view. Perform your slide show. Make sure to speak clearly into the microphone if you're recording narration.
4. When you're ready to move to the next slide, click the Next button on the Recording toolbar or use the right arrow key.



5. When you reach the end of the show, PowerPoint will close the full-screen view.
6. Your slide timings and narration are now part of your presentation. The slides with narration will be marked with a speaker icon in the bottom-right corner.

1 00:07 2

In recorded slide shows, the mouse pointer isn't visible in the finished product; therefore, if you want to point something out, you'll need to use the laser pointer feature. Simply hold Ctrl on your keyboard while you click and hold your mouse. The cursor will appear as a small red dot.

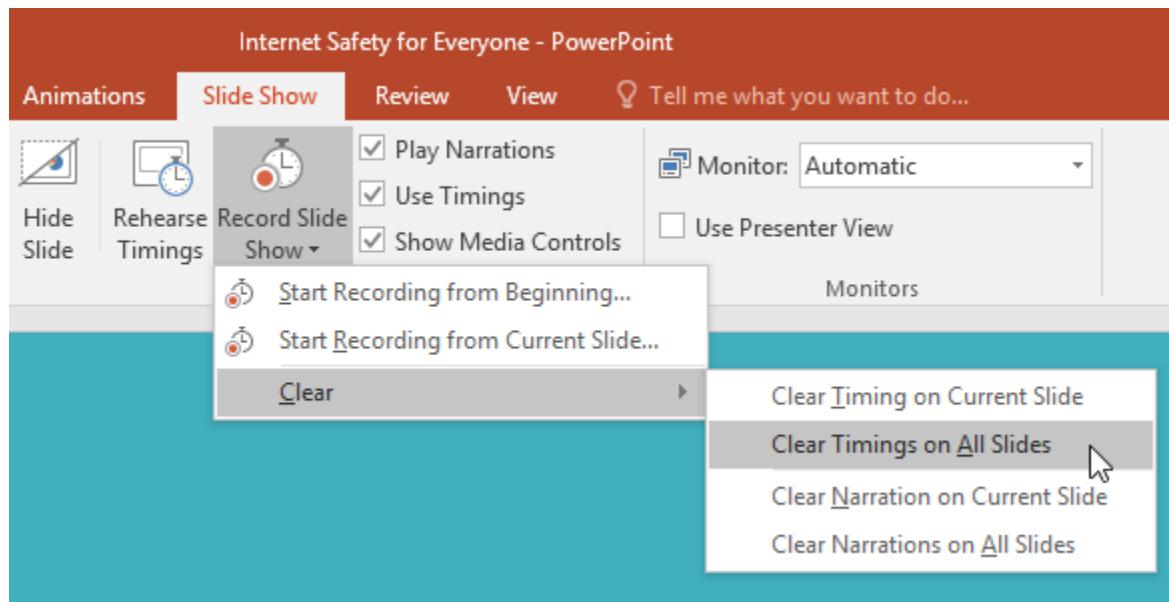
What to look for in an antivirus program:

Antivirus Specifically protects against viruses	Anti-spyware Protects against malicious software that may be gathering your information without your knowledge	Firewall Screens out threats that try to reach your computer over the Internet
----------------------------------------------------	-------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------

To remove slide timings or narration:

If you change your mind about including slide timings or narration, you can easily remove one or both. You can clear them from the entire presentation or just the current slide.

To do this, simply go to the Slide Show tab, click the Record Slide Show drop-down arrow, hover over Clear, then choose the desired option from the menu.



Challenge!

1. Open our [practice presentation](#). If you already downloaded our practice presentation to follow along with the lesson, be sure to download a fresh copy.
2. Record the slide show. If you have a microphone and want to practice recording narration, you can read the slides.
3. When you're finished, play your slideshow. The slides should advance automatically at the pace you recorded them.

Lesson 33: Sharing Your Presentation Online

Introduction

PowerPoint offers several options to enhance or even totally change the way you deliver presentations. Instead of presenting your slide show normally, you can choose to present it as a video, or you can even present it live online so others can view it remotely. No matter how you choose to give your presentation, you can enhance it by customizing your slide show to remove or reorder slides. All of these options can help you give a polished and professional presentation.

Optional: Download our [practice presentation](#) for this lesson.

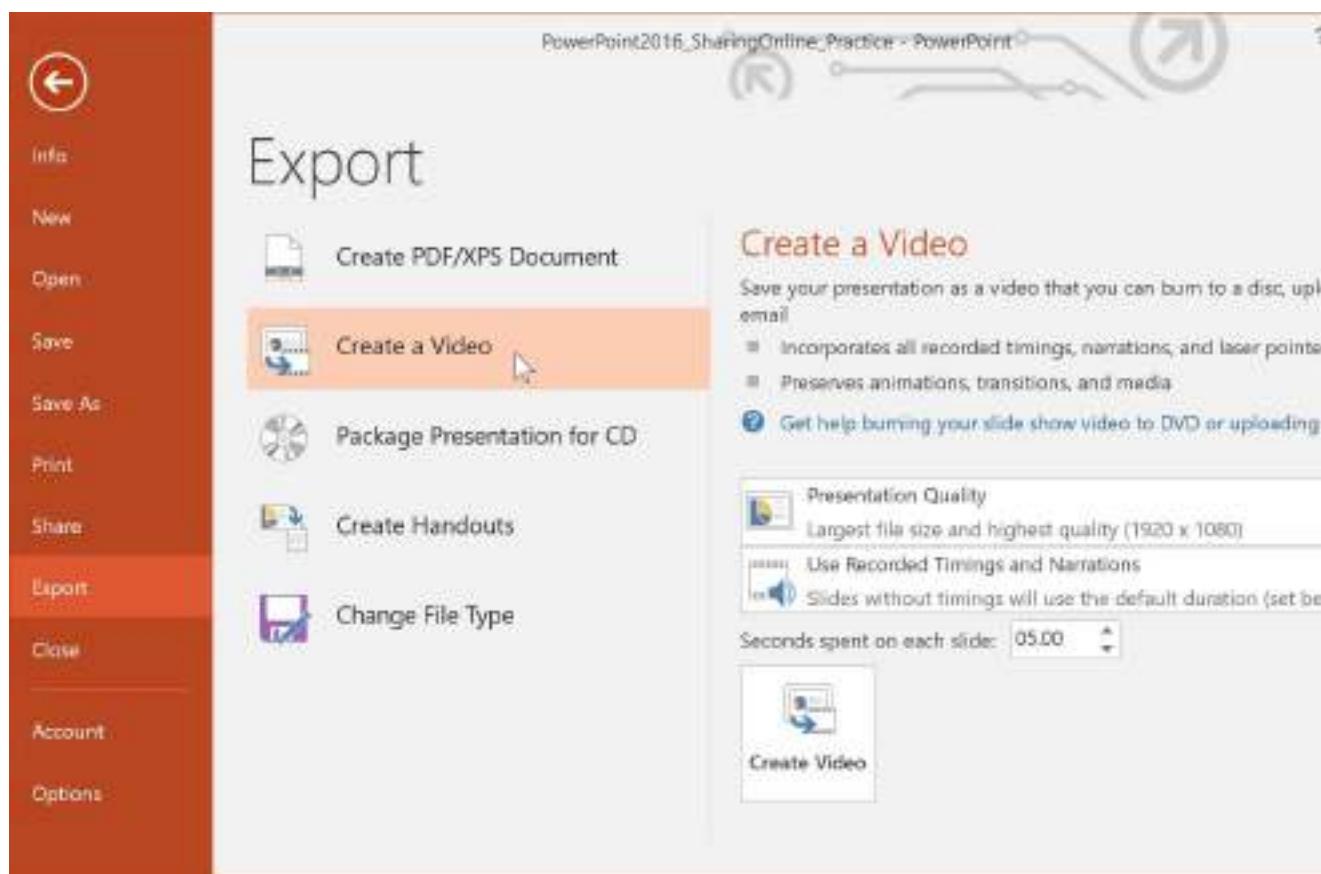
Watch the video below to learn more about the different ways you can share your presentation.

Exporting a presentation as a video

The Create a Video feature allows you to save your presentation as a video. This can be useful because it lets your viewers watch the presentation whenever they want. To make sure your viewers have enough time to view each slide, you might want to rehearse the timings or record your slide show before using this feature.

To create a video:

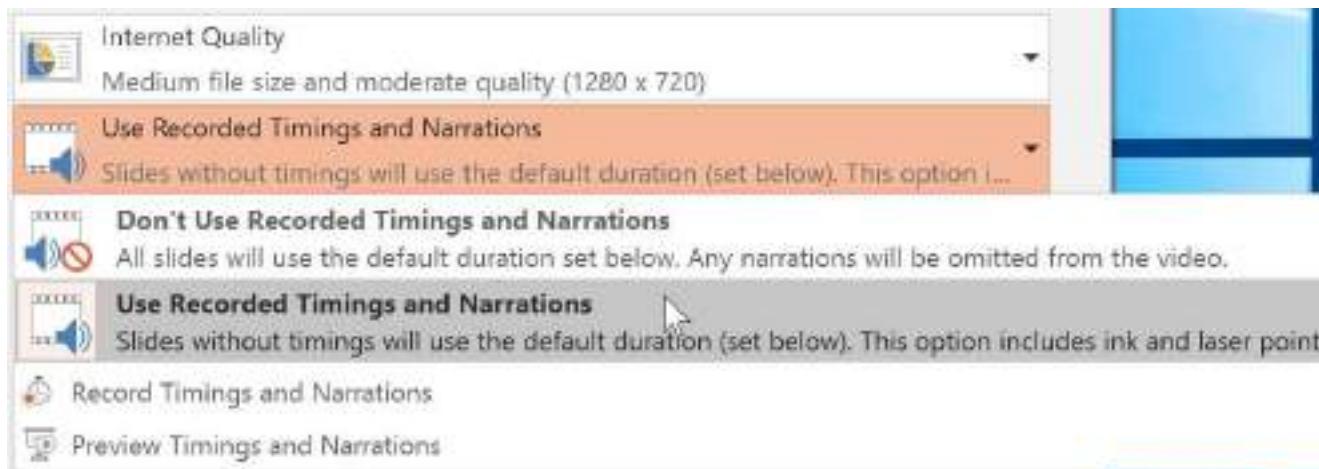
1. Click the File tab to access Backstage view.
2. Select Export, then click Create a Video. Video export options will appear on the right.



3. Click the drop-down arrow next to Presentation Quality to select the size and quality of your video.

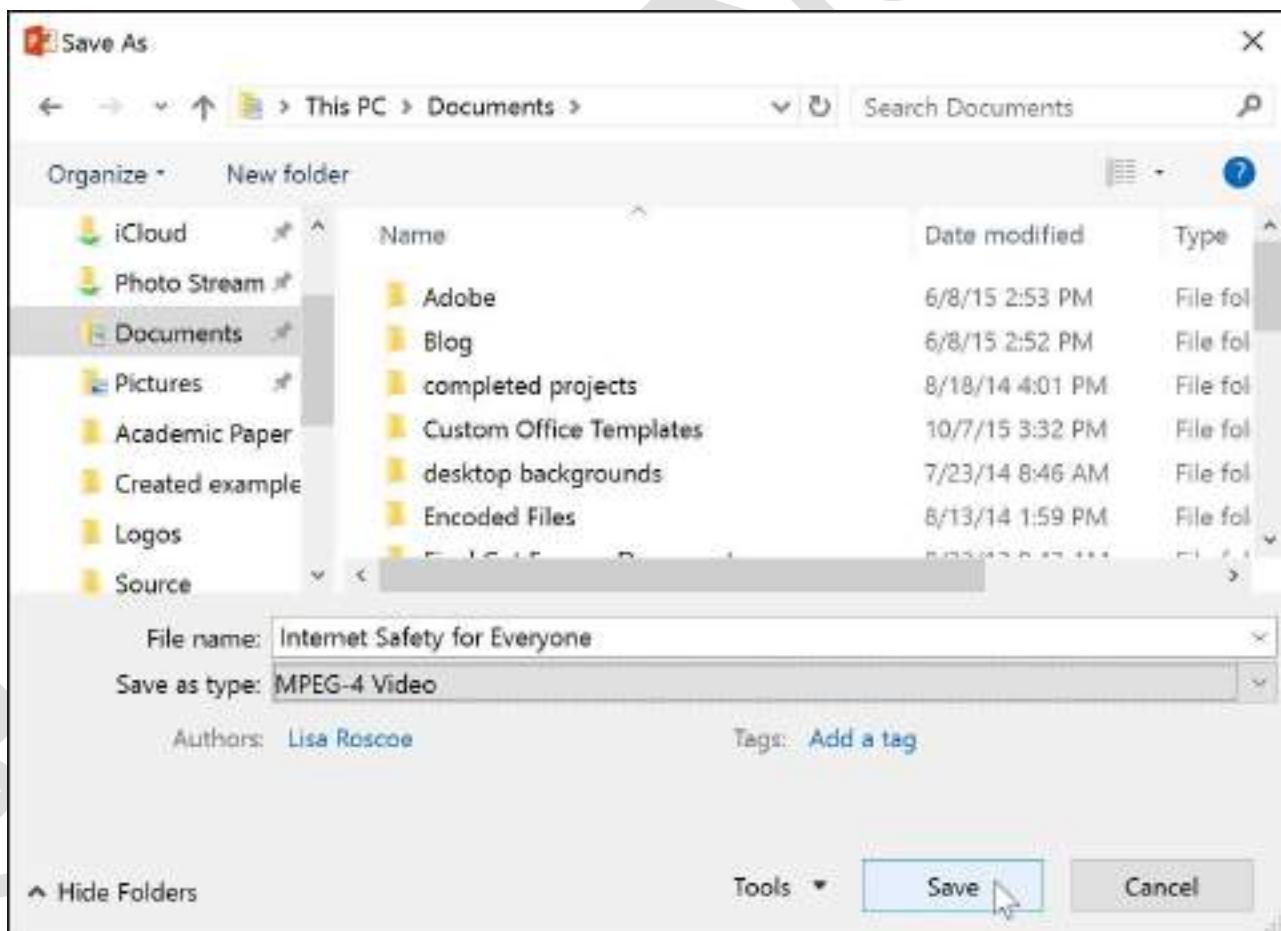


4. Select the drop-down arrow next to Use Recorded Timings and Narrations. Choose Don't Use Recorded Timings and Narrations if you don't have or don't want to use recorded timings. You can also choose Use Recorded Timings and Narrations if you have already recorded timings and narrations and want to use them in your video.



5. Click Create Video. The Save As dialog box will appear.

6. Select the location where you want to save the presentation, then enter a name for the presentation.



7. Click Save. As PowerPoint creates your video, a status bar will appear at the bottom of the PowerPoint window. When the bar is complete, your video is ready to view, send, or upload.

In addition to emailing your video, you can upload your video to free video-sharing sites like [YouTube](#). Once your video is uploaded, you can give the link to anyone you want to see it. To learn more about using YouTube to share videos online, review our [YouTube](#) tutorial.



Internet Safety for Everyone

A screenshot of a YouTube channel page. The channel name is "Internet Safety for Everyone". It shows a profile picture, channel settings, and statistics: "No views". There are buttons for "Add to" and "More". Below the channel info, it says "Uploaded on Mar 14, 2016". Under "Category" and "License", it lists "People & Blogs" and "Standard YouTube License".

Presenting your slide show online

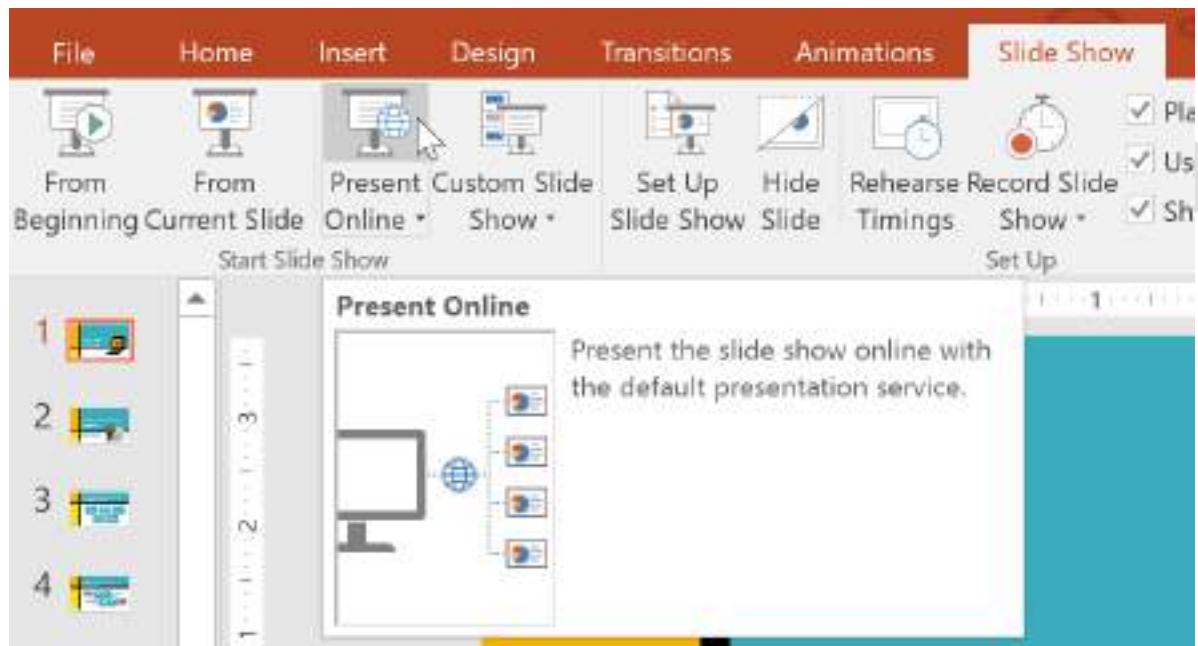
Presenting a slide show online is surprisingly easy. All you and your viewers need is an Internet connection—they don't even need PowerPoint. Once your viewers are connected, you can start the presentation as you normally would.

Please note that you cannot edit your presentation or mark it with a highlighter or pen while you are presenting a slide show online. You also cannot use PowerPoint to speak to your audience. Plan to communicate with your viewers through teleconferencing, or pre-record your narration.

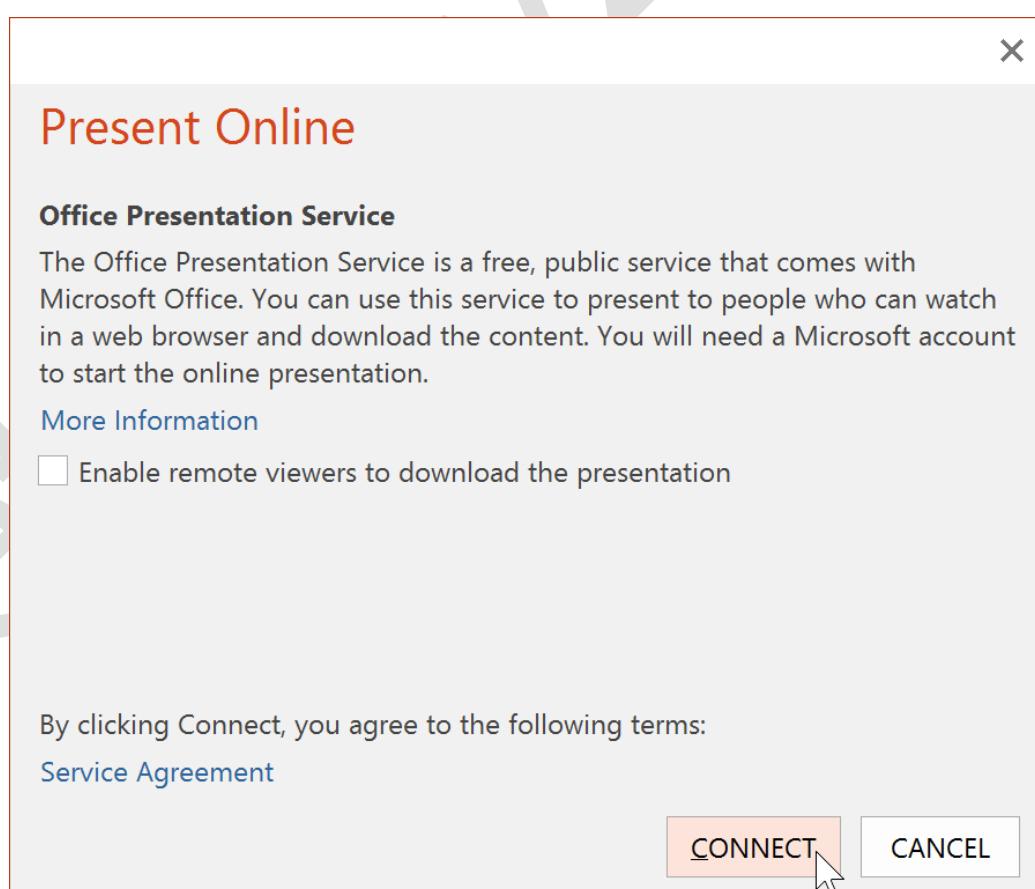
To present online:

1. Select the Slide Show tab, then locate the Start Slide Show group.

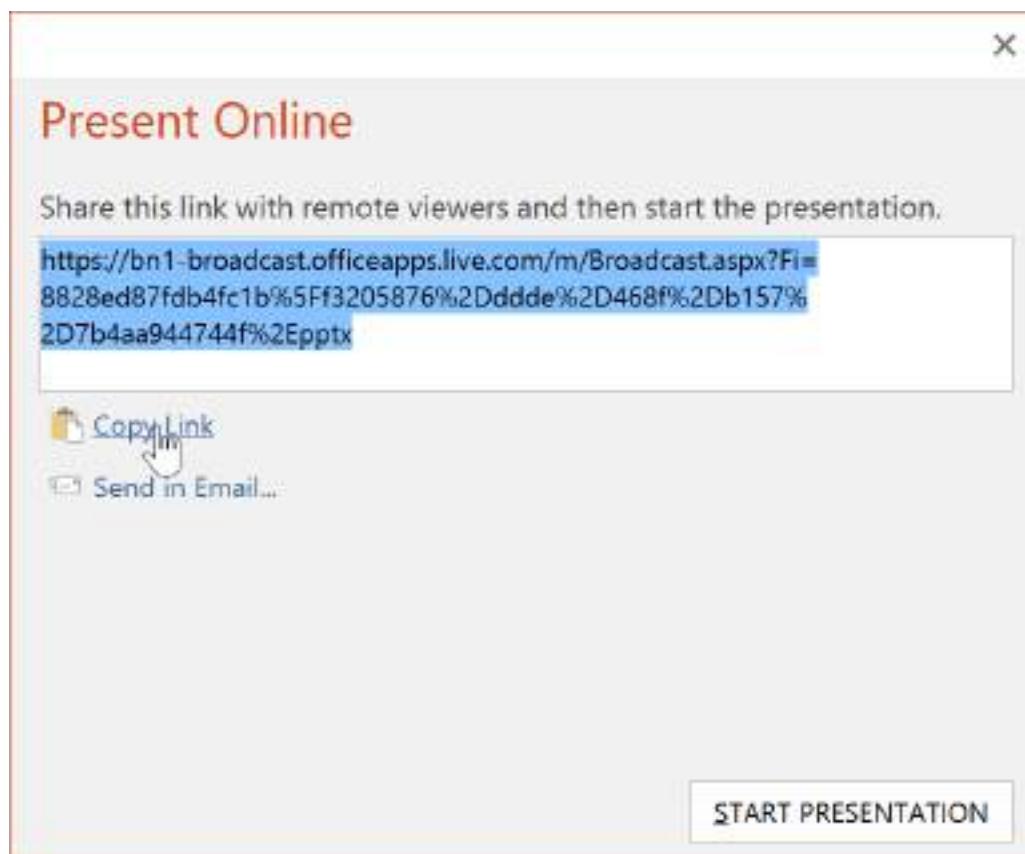
2. Click the Present Online command.



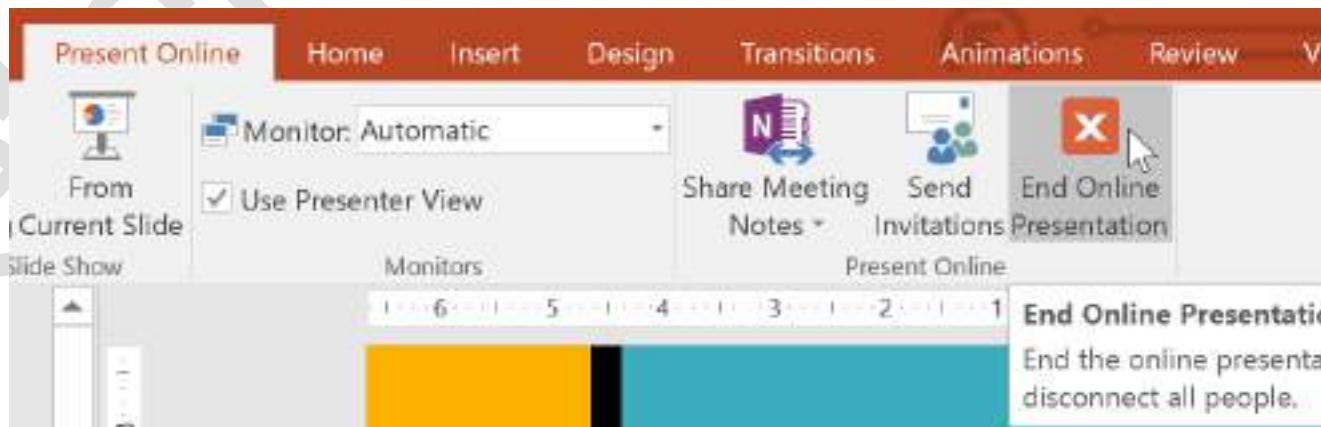
3. A dialog box will appear. Click Connect. A status message will appear as PowerPoint prepares your online presentation.



4. A link will appear. If it's not already selected, select the link.
5. Click Copy Link to make a copy of the link, which you can paste just about anywhere—including Facebook, a blog, or an email. You'll just want to make sure each of your viewers receives a copy of the link before beginning your presentation.



6. Click Start Presentation.
7. Present the slide show as you normally would, using the mouse or keyboard to advance the slides.
8. When you are finished, click End Online Presentation.



9. A dialog box will appear to confirm that you want to end the presentation. Click End Online Presentation.



Everyone viewing this online presentation will be disconnected if you continue. Do you want to end this online pre

End Online Presentation

Cancel

Lesson 34: What is Office 365?

What is Office 365?

Office 365 is a subscription-based version of the Microsoft Office Suite, and you have a few options when purchasing an account. One is Office 365 Personal, which gives a single user full access to every Office application. Another is Office 365 Home, which is designed for families where multiple people will be using Office.

Watch the video below to see more of what Office 365 has to offer.

Exclusive features

There are a lot of similarities between Office 365 programs and the traditional Microsoft Office Suite, so the overall experience should feel familiar if you've used Office before.

However, Office 365 offers several advantages that aren't available with the Microsoft Office Suite. For instance, a subscription to Office 365 grants you access to more features, including the Translator, a Resume Assistant, and Smart Lookup. You can also collaborate with others in Excel via the co-authoring feature, which lets others edit your workbook in real time.

Office mobile apps also come with more features when you subscribe. For example, you can do things like insert page breaks, use more colors, or make PivotTables with the Excel mobile app. Free editions of the mobile apps, however, only let you perform basic tasks, like creating a file and entering text.



You're All Set

You're now ready to use all of the benefits included with your Office 365 subscription.



Create and Edit Documents

Office 365 includes other benefits as well, like more file storage in OneDrive and technical support.

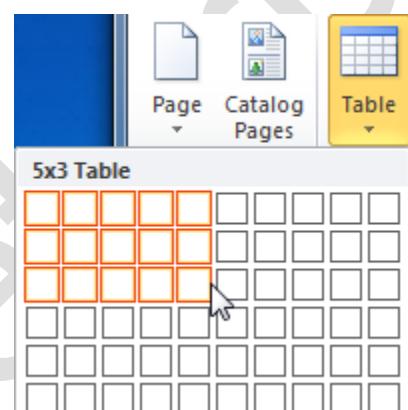
SharePoint and software updates

Another distinct advantage to using Office 365, especially for businesses, is access to SharePoint Online. This is a service included in some versions of Office 365 that allows you to share and collaborate with others, whether they're colleagues or customers. Because the documents live in the cloud, security permissions can be set up to allow anyone in the organization, regardless of their location, to view a document.

The screenshot shows the homepage of a SharePoint Team Site. At the top, there's a navigation bar with 'SharePoint' and 'BROWSE PAGE'. Below it is a blue header bar with the SharePoint logo and 'Team Site'. On the left, a vertical navigation menu includes 'Home', 'Notebook', 'Documents', 'Recent', 'Pages', 'Site Contents', and 'Recycle Bin'. To the right, there's a 'Get started with your site' section with two cards: 'Share your site.' (with a circular icon) and 'Add lists, libraries, and other apps.' (with a hexagonal icon). Further down, there's a 'Newsfeed' section with a 'Start a conversation' button and a message: 'It's pretty quiet here. [Invite](#) more people to the site, or [start](#) a conversation.' On the far right, there's a 'Documents' section with 'New' and 'Upload' buttons, a search bar, and a list of files: 'Name' (Document, test).

Office 365 subscribers also get more frequent software updates than those who have purchased Office without a subscription. This means Office 365 subscribers have access to the latest features, security updates, and bug

Introduction



A table is a grid of cells arranged in rows and columns. Tables are useful for organizing information in a concise and easily readable way. Text contained in tables is easy to space and align, which make them ideal for presenting lists of related information in Publisher, like store hours or products and their prices.

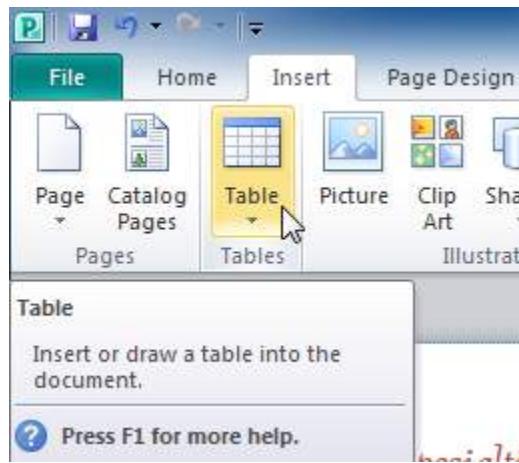
In this lesson, you will learn how to insert, modify, and change the appearance of tables.

Using tables in your publications

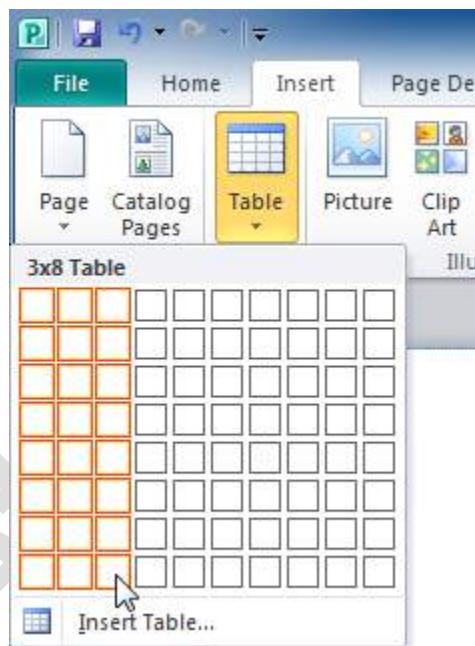
In Publisher, tables are useful for organizing and presenting data. Publisher allows you to customize tables to match the look and feel of your publication.

To insert a table:

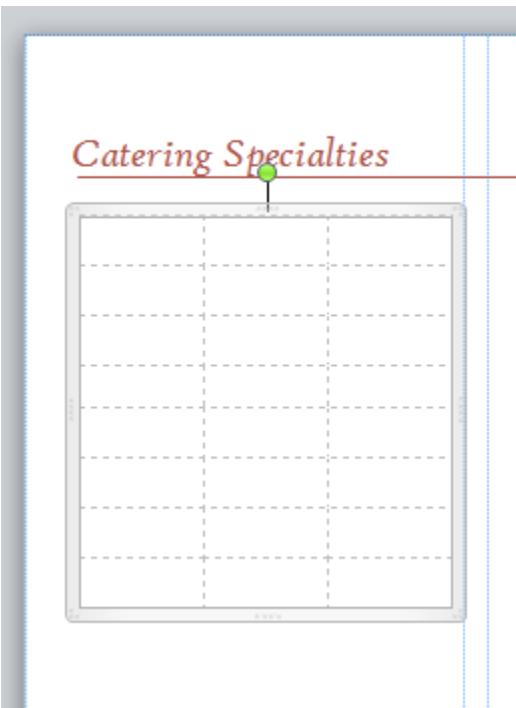
- 1. Click the Insert tab, then locate the Tables group.**
- 2. Click the Table drop-down command.**



- 3. Hover your mouse over the diagram squares to select the number of columns and rows in the table, then click your mouse.**



- 4. The table will be inserted.**



Resizing and arranging tables

Depending on the size of the page you're working with or the other objects you choose to add, you may have to resize or rearrange your table. Tables can be modified like any other objects. Review the [Working with Shapes and Objects](#) lesson for more information.

Catering Specialties

S	
Pumpkin Spice	\$24
Apple Spice	\$24
Fudge Chocolate	\$22
Fudge Marble	\$22
French Vanilla	\$22
Strawberry Swirl	\$22
Lemon	\$22



Modifying table layout

To add a row or column:

1. Place the insertion point in a cell adjacent to the location where you wish to add a row or column.

Cakes		
	Pumpkin Spice	\$24
	Apple Spice	\$24
	Fudge Chocolate	\$22
	Fudge Marble	\$22
	French Vanilla	\$22
	Strawberry Swirl	\$22
	Lemon	\$22

2. Select the Table Tools Layout tab, then locate the Rows & Columns group.
3. Insert your new row or column.
 - o If you would like to insert a new row, select either Insert Above or Insert Below.
 - o If you would like to insert a new column, select either Insert Left or Insert Right.

Peter

Insert Rows Below
Add a new row directly below the selected row.

Specialties		
Cakes		
Pumpkin Spice		\$24
Apple Spice		\$24
Fudge Chocolate		\$22
Fudge Marble		\$22
French Vanilla		\$22
Strawberry Swirl		\$22
Lemon		\$22

4. The new row or column will appear.

Cakes		
Pumpkin Spice		\$24
Apple Spice		\$24
Fudge Chocolate		\$22
Fudge Marble		\$22
French Vanilla		\$22
Strawberry Swirl		\$22
Lemon		\$22

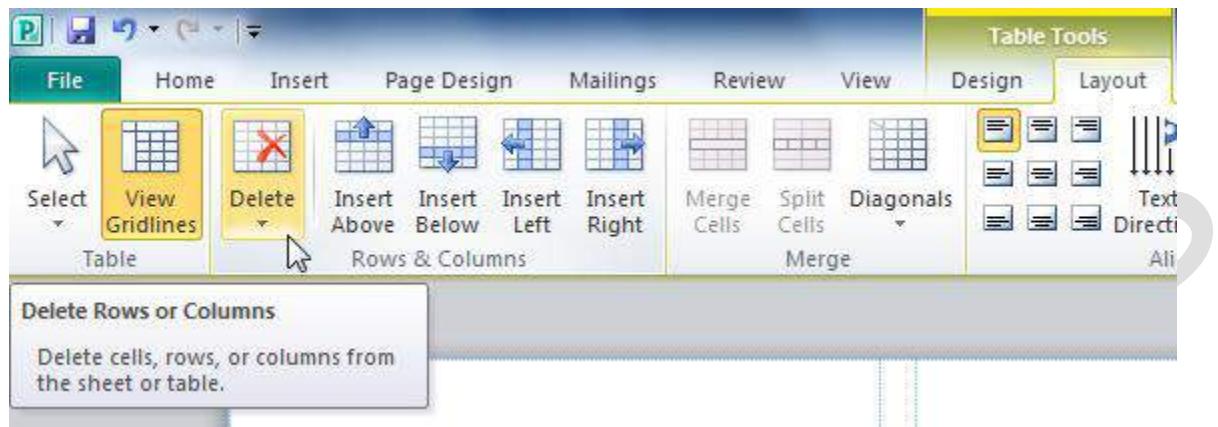
To delete a row or column:

1. Select the row or column you wish to delete by placing the insertion point in any cell in that row or column.

Cakes		
Pumpkin Spice		\$24
Apple Spice		\$24
Fudge Chocolate		\$22
Fudge Marble		\$22
French Vanilla		\$22
Strawberry Swirl		\$22
Lemon		\$22

2. Select the Table Tools Layout tab, then locate the Rows & Columns group.

3. Click the Delete drop-down command.



4. A drop-down menu will appear. Select Delete Rows or Delete Columns.

Catering Special

Cakes
Pumpkin Spice
Apple Spice
Fudge Chocolate
Fudge Marble

5. The row or column will be deleted.

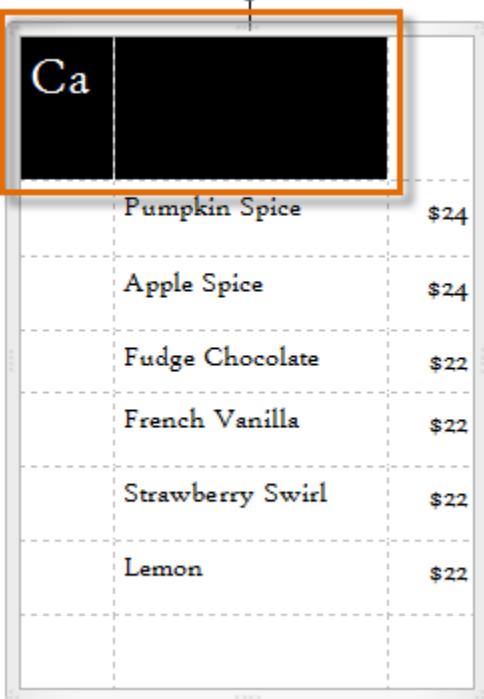
Cakes		
Pumpkin Spice		\$24
Apple Spice		\$24
Fudge Chocolate		\$22
French Vanilla		\$22
Strawberry Swirl		\$22
Lemon		\$22

Merging and splitting cells

If you want to create a cell that is wider or taller than the other cells in your table, you can use the Merge command to combine two or more cells into one large cell.

To merge cells:

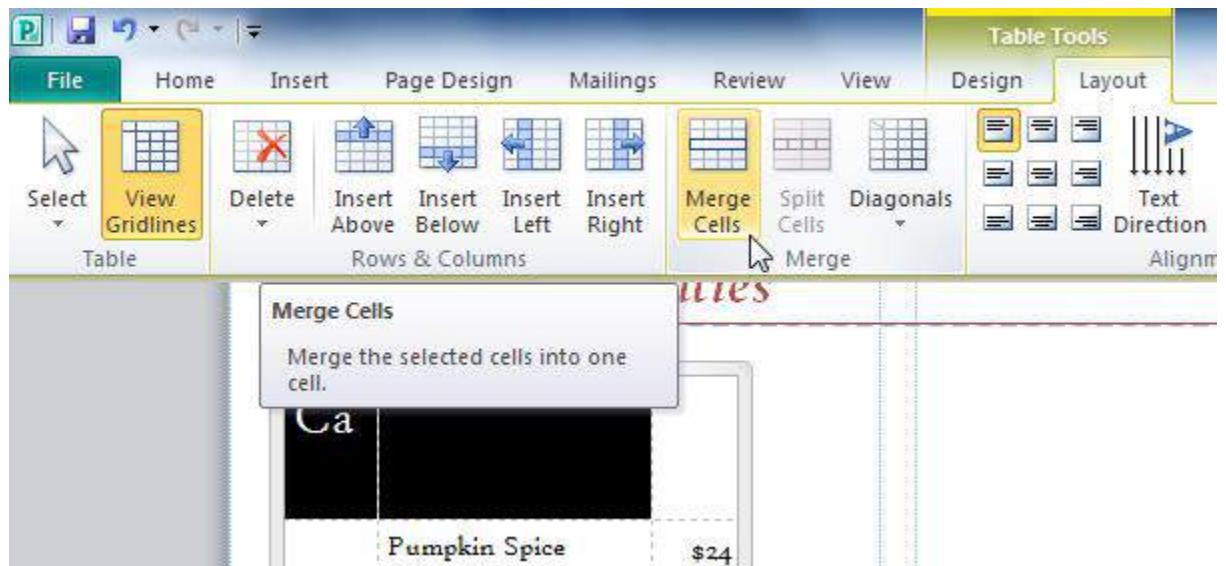
1. Select the cells you would like to merge.



Ca		
Pumpkin Spice		\$24
Apple Spice		\$24
Fudge Chocolate		\$22
French Vanilla		\$22
Strawberry Swirl		\$22
Lemon		\$22

2. Click the Table Tools Layout tab, then locate the Merge group.

3. Click the Merge Cells command.

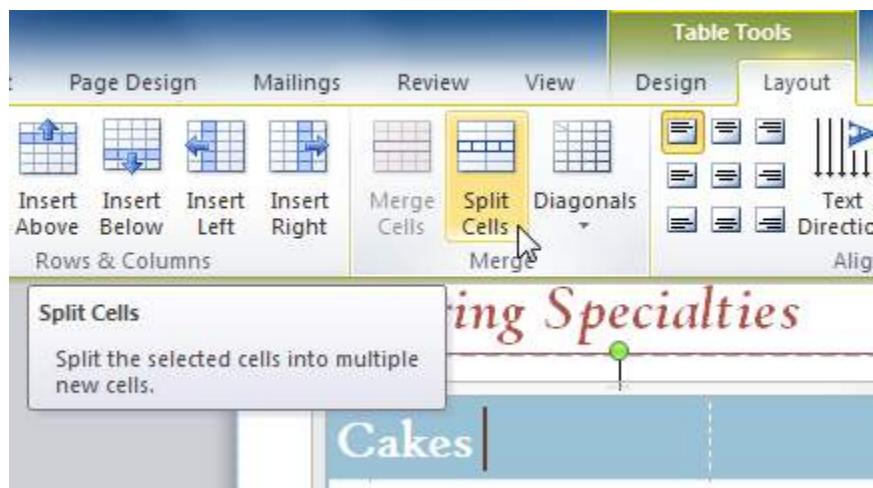


4. The cells will be merged.

A screenshot of the Microsoft Word document showing the result of merging the cells. The first cell now spans both columns and contains the text 'Cakes'. The table structure has been simplified from two columns to one column with six rows, each containing a cake name and its price.

Cakes	
Pumpkin Spice	\$24
Apple Spice	\$24
Fudge Chocolate	\$22
French Vanilla	\$22
Strawberry Swirl	\$22
Lemon	\$22

You can separate merged cells by selecting them and clicking the Split Cells command.



Modifying cell layout

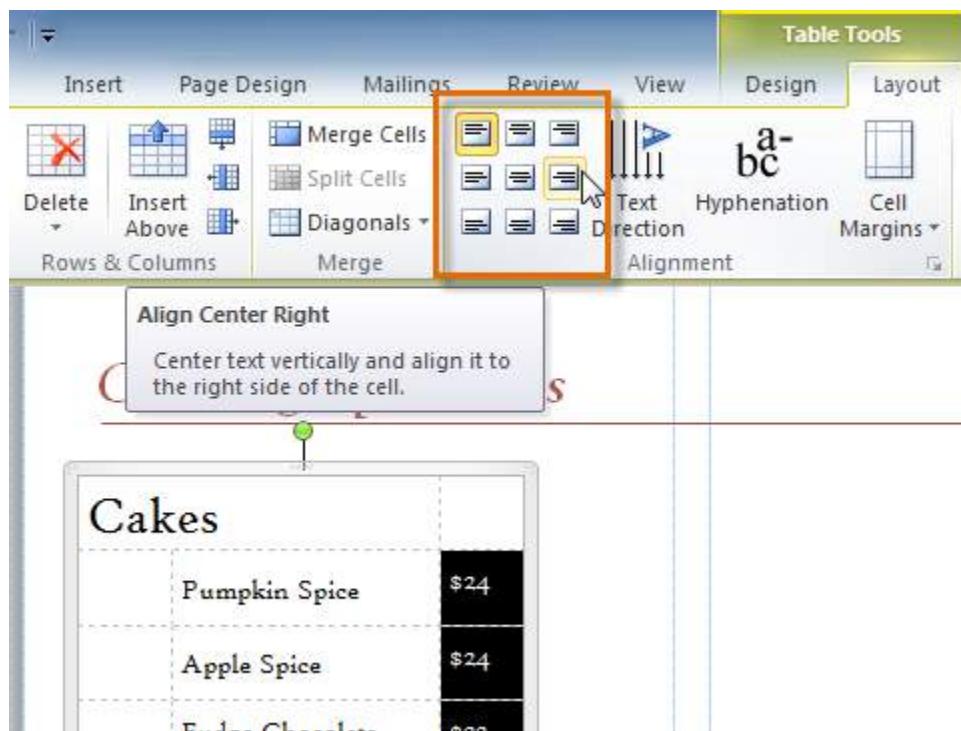
You can modify the way text fits in your table's cells by changing the cell margins and text alignment settings. You can apply these settings to individual cells, entire rows and columns, or the entire table.

To modify text alignment:

1. Select the cells whose text you want to align. To select the entire table, click the gray box surrounding the outer edge of the table.

Cakes	
Pumpkin Spice	\$24
Apple Spice	\$24
Fudge Chocolate	\$22
French Vanilla	\$22
Strawberry Swirl	\$22
Lemon	\$22

2. Click the Table Tools Layout tab, then locate the Alignment group.
3. Select one of the nine alignment options.



4. Your table text will be aligned.

Cakes	
Pumpkin Spice	\$24
Apple Spice	\$24
Fudge Chocolate	\$22
French Vanilla	\$22
Strawberry Swirl	\$22
Lemon	\$22

Cell margins

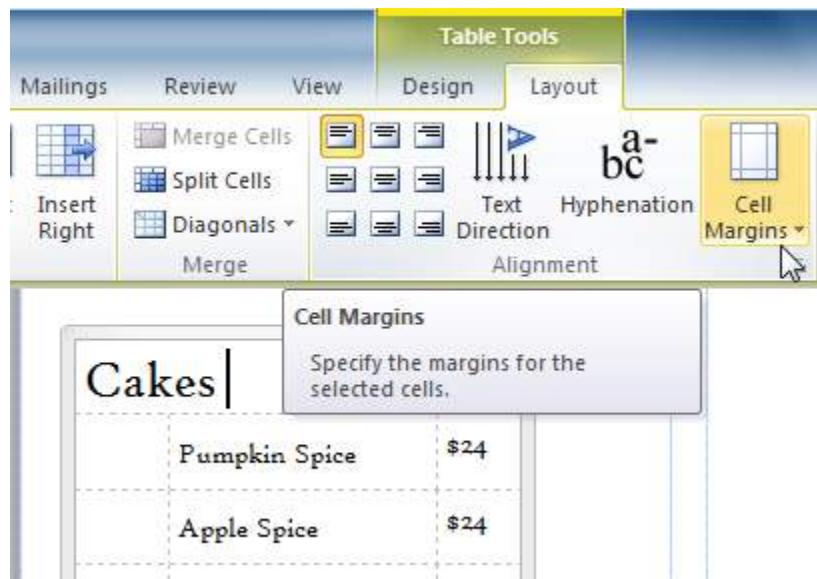
Just like your pages, the cells in your tables have margins. By default, these are very thin. If you wish to add extra space between text and the cells surrounding it, you can make the cell margins thicker.

To modify cell margins:

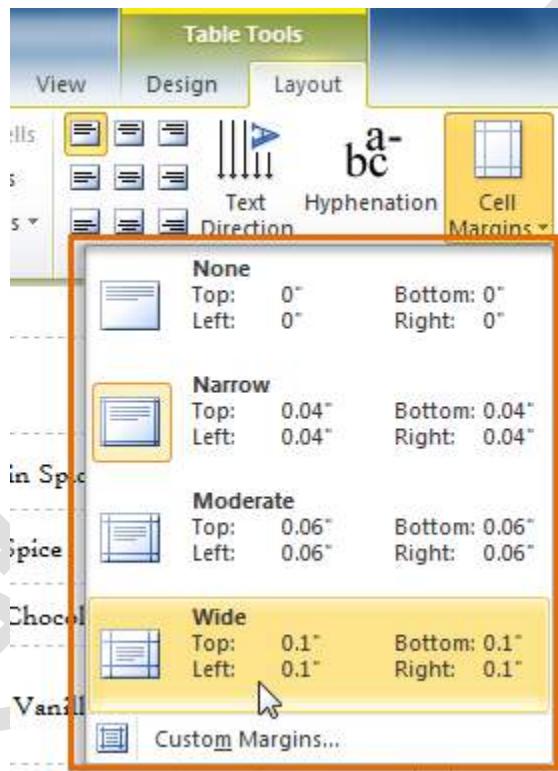
1. Select the cells you wish to set margins for. To select the entire table, click the gray box surrounding the outer edge of the table.

2. Click the Table Tools Layout tab, then locate the Alignment group.

3. Click the Cell Margins drop-down command.



4. A drop-down list will appear. Select the desired margins.



5. The new margins will be applied.

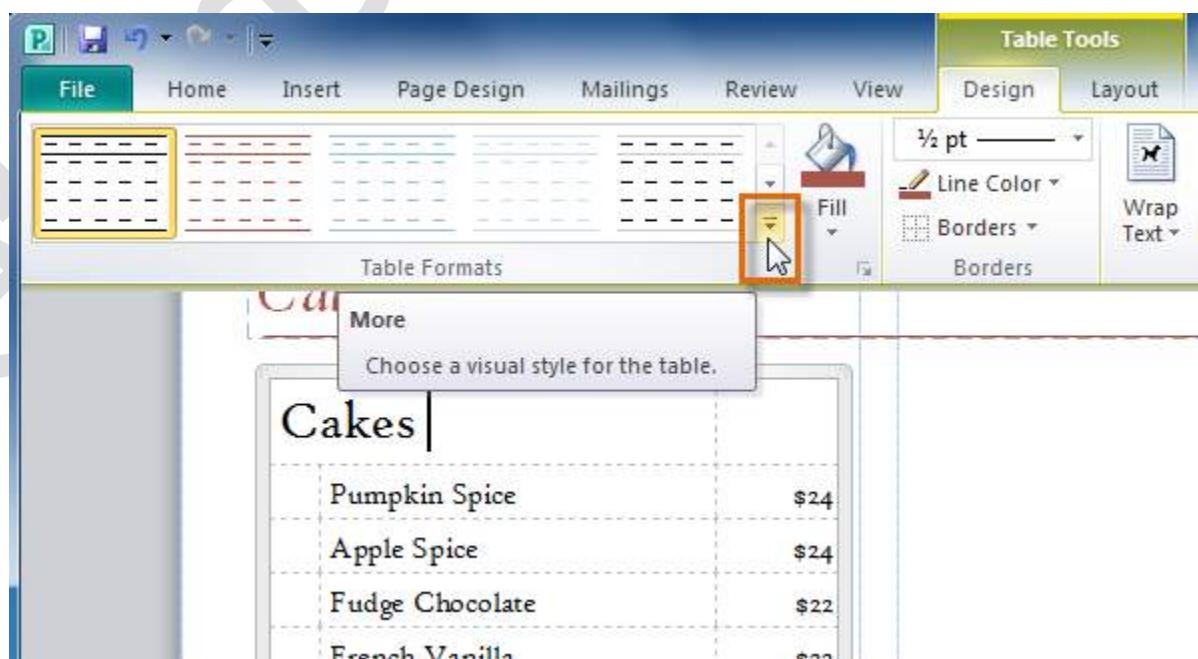
Cakes		
Pumpkin Spice		\$24
Apple Spice		\$24
Fudge Chocolate		\$22
French Vanilla		\$22
Strawberry Swirl		\$22
Lemon		\$22

Formatting tables

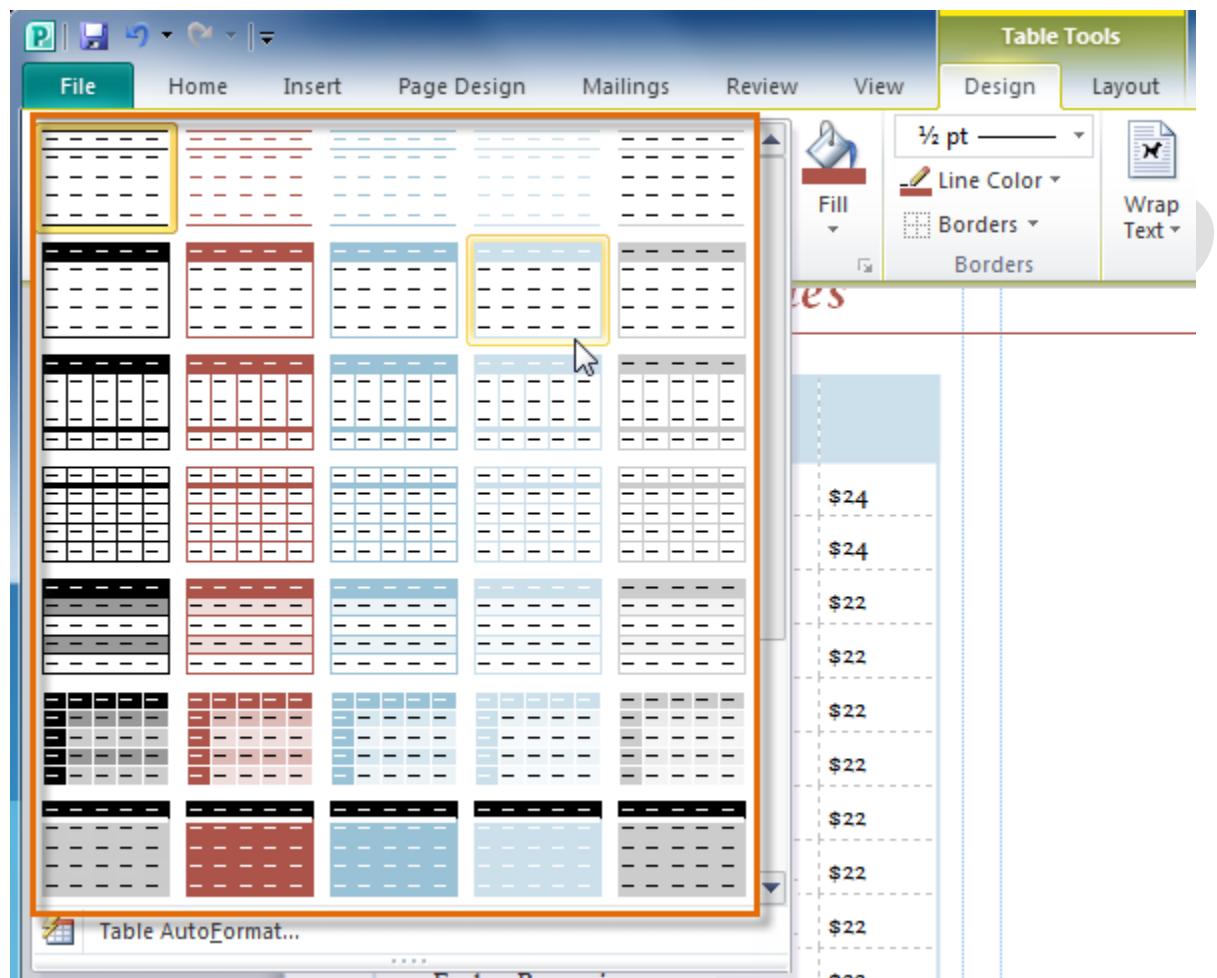
The quickest way to format your table is to apply a table style, which modifies your table's borders, fill, alignment, and margins in a visually appealing way. You can further customize your table's appearance by making your own changes to aspects like border appearance and cell fill color.

To apply a table style:

1. Click anywhere on the table, then select the Table Tools Design tab and locate the Table Formats group.
2. Click the More Table Styles drop-down arrow to see all available table styles.



3. Hover the mouse over the various styles to see a live preview.



4. Select the desired style. The table style will appear in the document.

Cakes

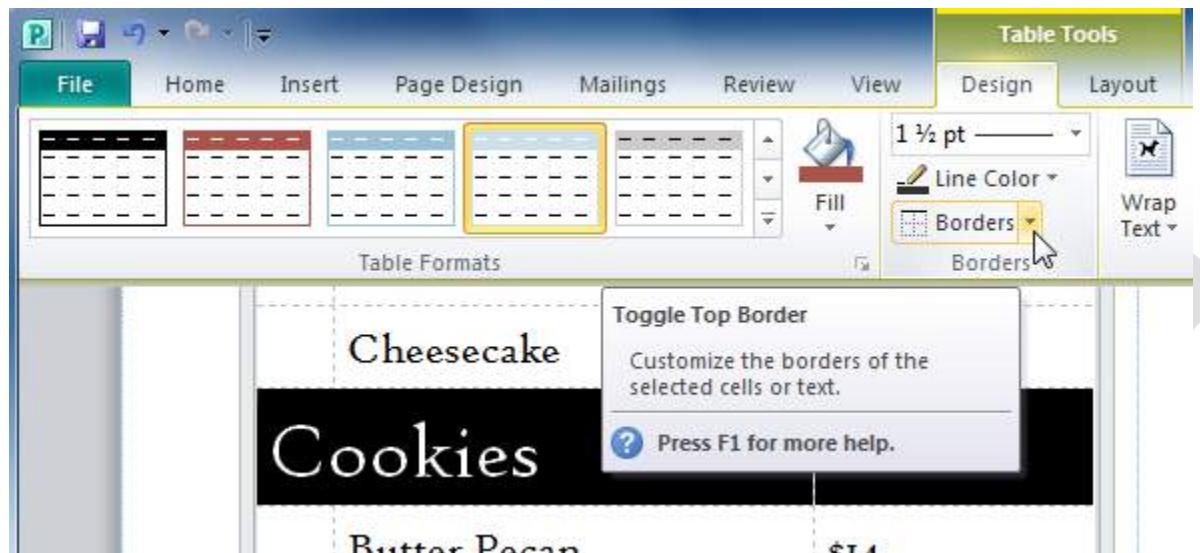
Pumpkin Spice	\$24
Apple Spice	\$24
Fudge Chocolate	\$22
French Vanilla	\$22
Strawberry Swirl	\$22
Lemon	\$22
German Chocolate	\$22
Red Velvet	\$22
Carrot	\$22
Coconut	\$22
Black Forest	\$22
Italian Rum	\$22
Cheesecake	\$26

Cookies

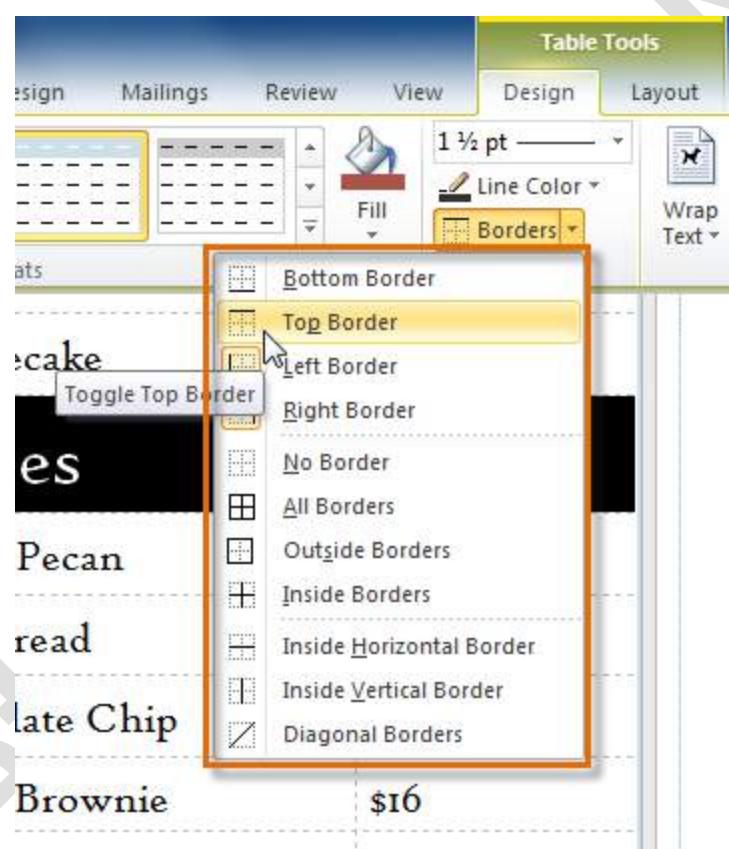
(per dozen)	
Butter Pecan	\$14
Shortbread	\$14
Chocolate Chip	\$16
Fudge Brownie	\$16
Gingersnap	\$16
Cranberry Orange	\$16
Macadamia	\$18

To add borders to a table:

1. Select the cells you wish to add a border to. If you wish to add a border to the entire table, click the gray box surrounding the outer edge of the table.
2. Click the Table Tools Design tab, then locate the Borders group.
3. Click the Borders drop-down command.



4. From the drop-down menu, select the desired border.



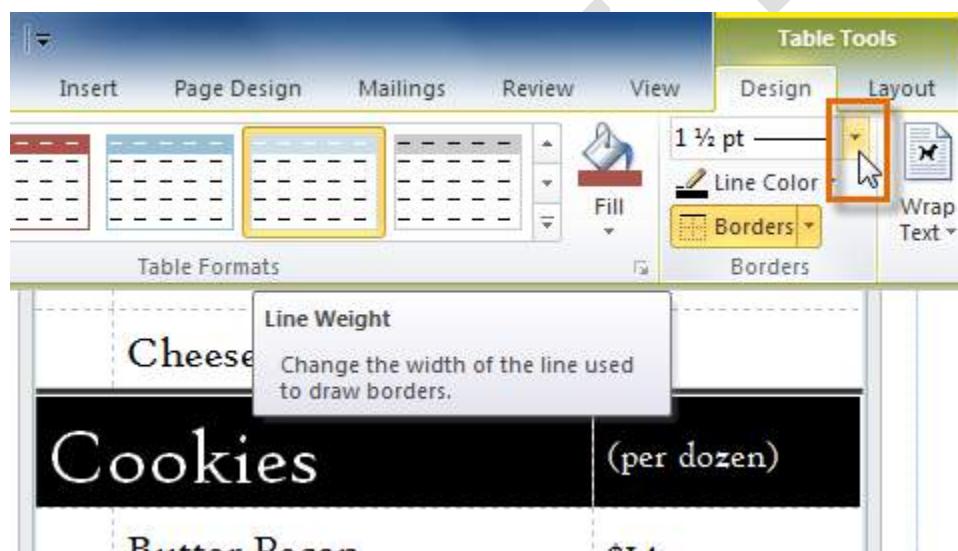
5. The border will be applied.

The screenshot shows a Microsoft Word table with a decorative border. The table has a header row with two columns: "Dessert" and "Price". Below the header, there are five data rows. The first data row contains the word "Cookies" in a large, bold, serif font, and "(per dozen)" in a smaller, italicized font to its right. A red arrow points from a callout bubble labeled "The added border" to the right edge of the table's border.

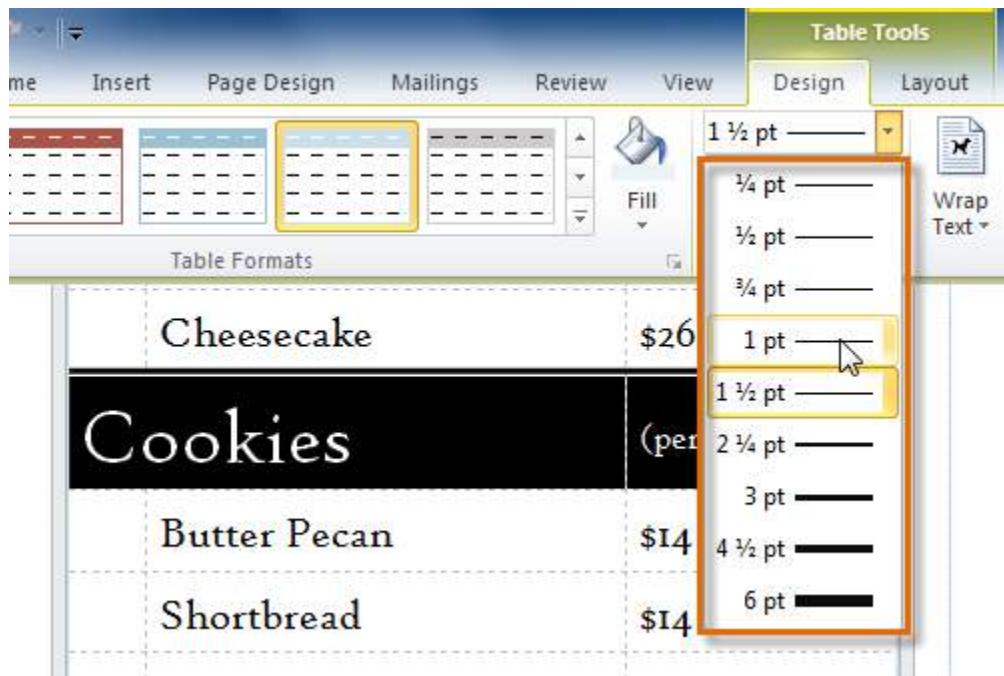
Dessert	Price
Italian Rum	\$22
Cheesecake	\$26
Cookies	(per dozen)
Butter Pecan	\$14
Shortbread	\$14
Chocolate Chip	\$16
Fudgy Brownie	\$16

To change the appearance of borders:

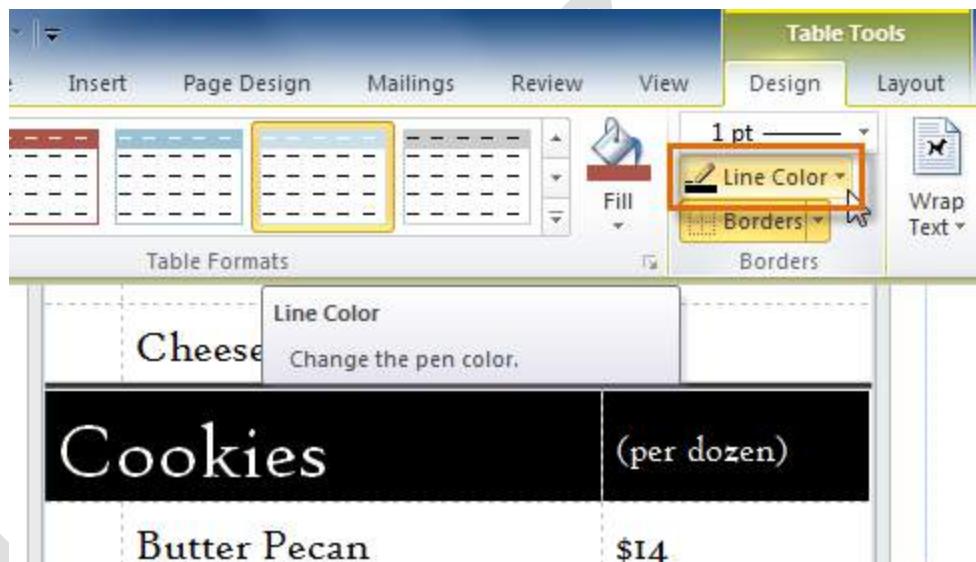
1. Select the cells whose borders you wish to modify, then click the Table Tools Design tab and locate the Borders group.
2. Click the Line Weight drop-down arrow.



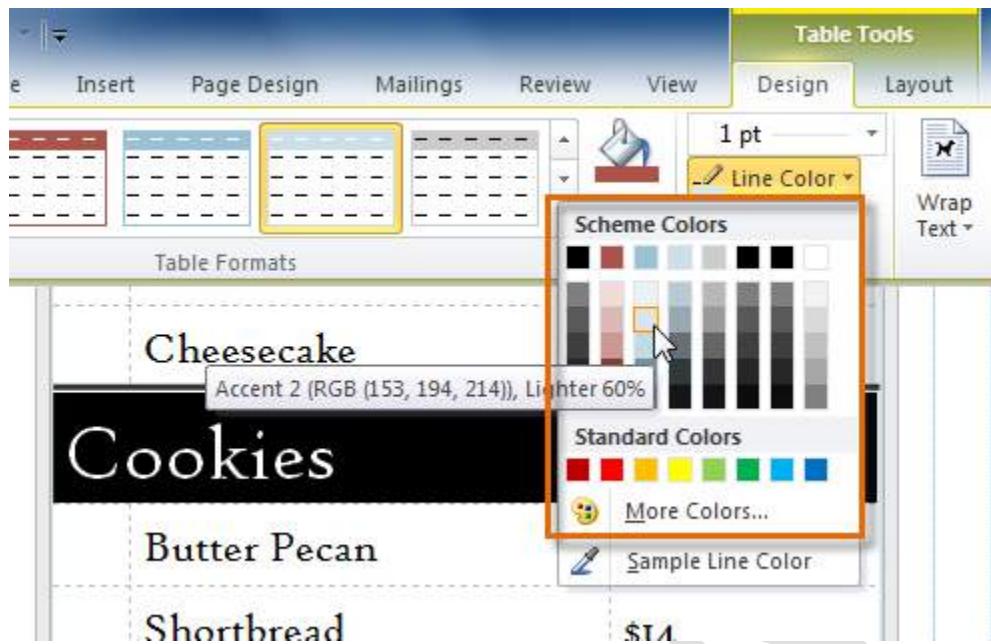
3. Select a new line weight from the drop-down list.



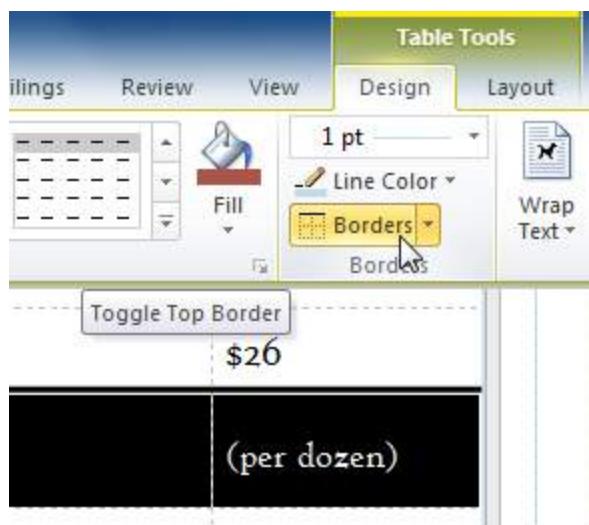
4. Click the Line Color drop-down command.



5. Select a new line color.



6. Double-click the Borders command.



7. Changes to the border will be applied.

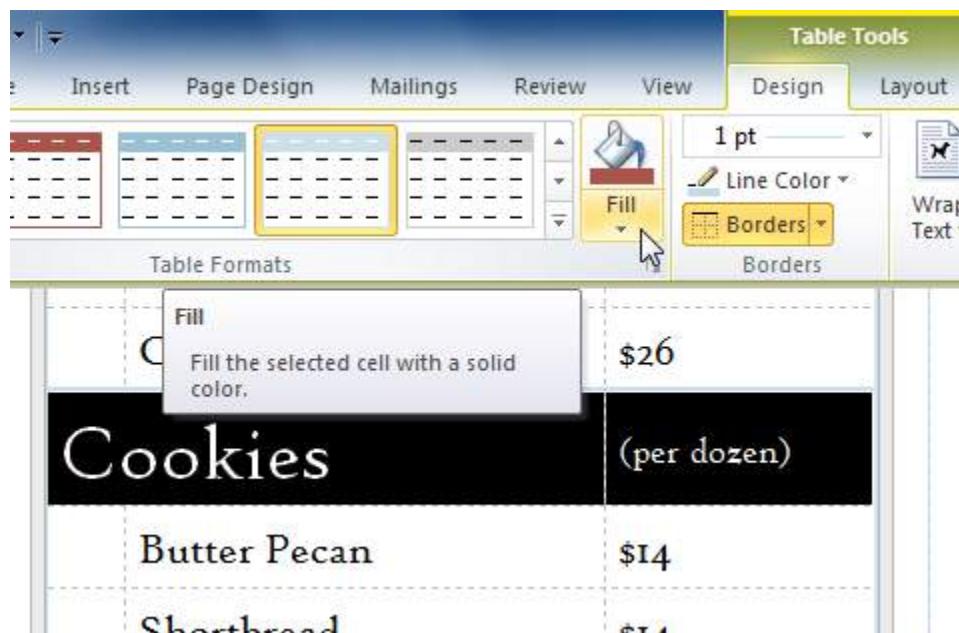
Italian Rum	\$22
Cheesecake	\$26
Cookies	(per dozen)
Butter Pecan	\$14
Shortbread	\$14
Chocolate Chip	\$16

The border has been recolored and made thinner.

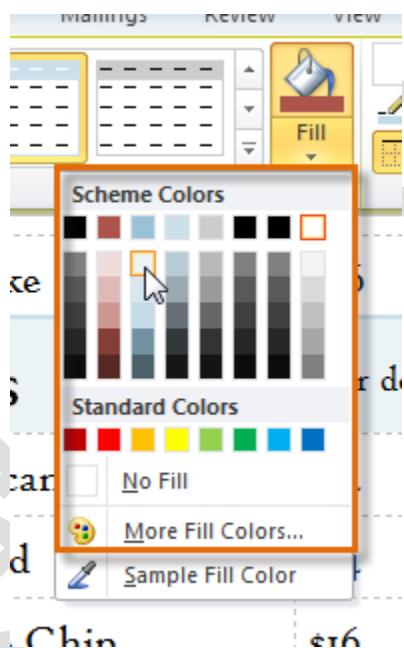
To add a cell fill color:

1. Select the cell or cells you wish to add a fill color to, then click the Table Tools Design tab and locate the Table Formats group.

2. Click the Fill drop-down command.



3. Select the desired cell fill color.



4. The fill color will be applied.

Cheesecake	\$26
Cookies	(per dozen)
Butter Pecan	\$14
Shortbread	\$14

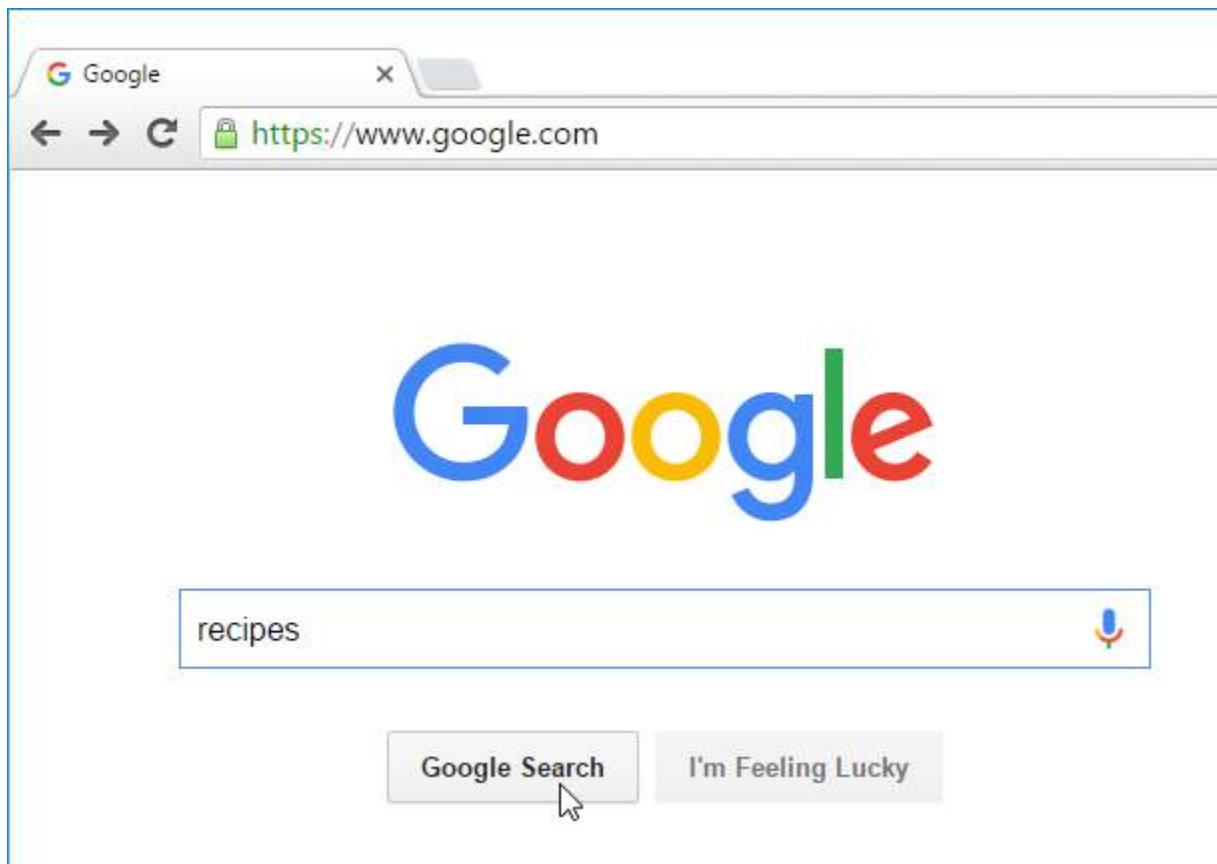
Using search engines

With billions of websites online today, there is a lot of information on the Internet. Search engines make this information easier to find. Let's look at the basics of using a search engine, as well as some techniques you can use to get better search results.

Watch the video below to learn more about searching the Web.

How to search the Web

There are many different search engines you can use, but some of the most popular include [Google](#), [Yahoo!](#), and [Bing](#). To perform a search, you'll need to navigate to a search engine in your web browser, type one or more keywords—also known as search terms—then press Enter on your keyboard. In this example, we'll search for recipes.



After you run a search, you'll see a list of relevant websites that match your search terms. These are commonly known as search results. If you see a site that looks interesting, you can click a link to open it. If the site doesn't have what you need, you can simply return to the results page to look for more options.

Peterberry

A screenshot of a web browser window displaying search results for "recipes" on Google. The address bar shows the URL <https://www.google.com/#q=recipes>. The search bar contains the query "recipes". Below the search bar are navigation links: All, News, Apps, Images, Books, More, and Search tools. A status message indicates "About 333,000,000 results (0.57 seconds)". The first result is a sponsored link from Kahiki.com titled "Quick, Easy Asian Meals - Kahiki.com". The second result is an ad from VillaBertolli.com titled "Bertolli® Recipes - VillaBertolli.com". The third result is a link to Allrecipes.com with the title "Allrecipes | Food, friends, and recipe inspiration". The fourth result is another link to Allrecipes.com with the title "Recipes - Allrecipes.com". Each result includes a snippet of text describing the content.

recipes - Google Search

https://www.google.com/#q=recipes

Google recipes

All News Apps Images Books More Search tools

About 333,000,000 results (0.57 seconds)

[Quick, Easy Asian Meals - Kahiki.com](#)
Ad www.kahiki.com/ ▾
Take your dinner to the next level with these easy-to-prepare meals

[Bertolli® Recipes - VillaBertolli.com](#)
Ad www.villabertolli.com/ ▾
Bertolli® Has a Variety of Recipes To Choose From. Start Cooking Today
Dinner Recipes - Stuffed Shells Florentine - Shrimp Primavera

[Allrecipes | Food, friends, and recipe inspiration](#)
allrecipes.com/ ▾ Allrecipes.com ▾
Find and share everyday cooking inspiration on Allrecipes. Discover recipes, cooks, videos, and how-tos based on the food you love and the friends you follow.
Recipes - Desserts - Main Dish - Chicken

[Recipes - Allrecipes.com](#)
allrecipes.com/recipes/ ▾ Allrecipes.com ▾
Find and share everyday cooking inspiration on Allrecipes. Discover recipes, cooks, videos, and how-tos based on the food you love and the friends you follow.

Most browsers also allow you to perform a web search directly from your address bar, although some have a separate search bar next to the address bar. Simply type your search terms and press Enter to run the search.

A screenshot of a web browser window showing search suggestions for "recipes" in the address bar. The address bar displays "recipes" with a magnifying glass icon. Below the address bar, a blue bar highlights the first suggestion: "recipes - Google Search". Other suggestions include "recipes for ground beef", "recipes for cinco de mayo", and "recipes with ground turkey".

New Tab

recipes

recipes - Google Search

recipes for ground beef

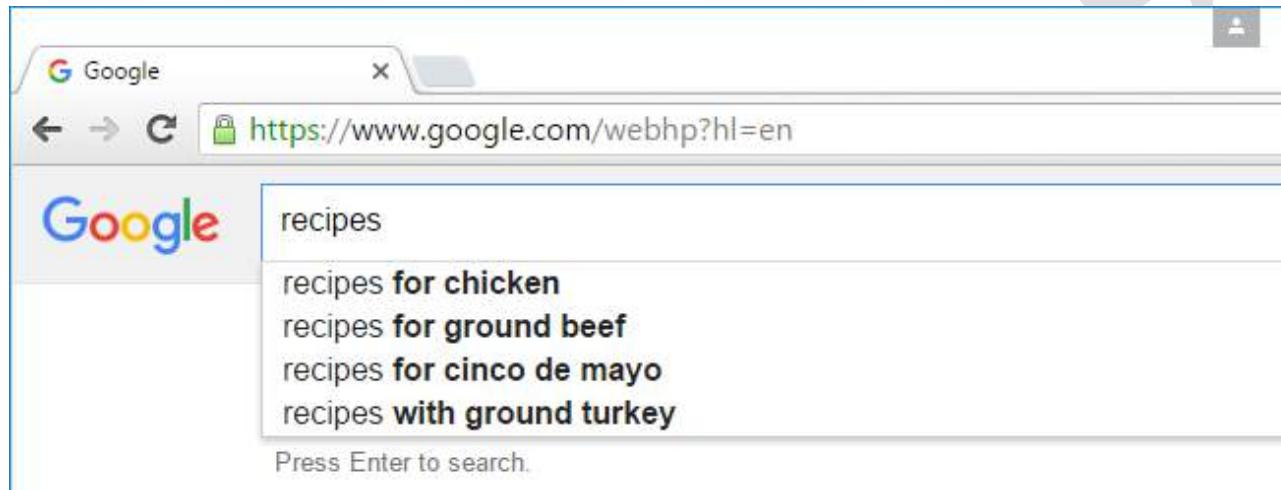
recipes for cinco de mayo

recipes with ground turkey

Search suggestions

If you don't find what you're looking for on the first try, don't worry! Search engines are good at finding things online, but they're not perfect. You'll often need to try different search terms to find what you're looking for.

If you're having trouble thinking of new search terms, you can use search suggestions instead. These will usually appear as you're typing, and they're a great way to find new keywords you might not have tried otherwise. To use a search suggestion, you can click it with your mouse, or select it with the arrow keys on your keyboard.



Refining your search

If you're still having trouble finding exactly what you need, you can use some special characters to help refine your search. For example, if you want to exclude a word from a search, you can type a hyphen (-) at the beginning of a word. So if you wanted to find cookie recipes that don't include chocolate, you could search for recipes cookies - chocolate.

recipes cookies -chocolate

https://www.google.com/webhp?hl=en#hl=en&q=recipes+cookies+-chocola

Google recipes cookies -chocolate

All Videos Shopping Images News More ▾ Search tools

About 20,900,000 results (0.61 seconds)

Easy Sugar Cookies Video - Allrecipes.com
[allrecipes.com/video/2652/easy-sugar-cookies/](https://www.allrecipes.com/video/2652/easy-sugar-cookies/) ▾ Allrecipes.com ▾
Nov 8, 2012 - Watch the video, then get Stephanie's top-rated recipe for Easy Sugar Cookies. Excellent plain, they're also yummy topped with frosting or ...

Cracked Sugar Cookies | Recipe - Allrecipes.com
 [allrecipes.com/recipe/11100/cracked-sugar-cookies/](https://www.allrecipes.com/recipe/11100/cracked-sugar-cookies/) ▾ Allrecipes.com ▾
★★★★★ Rating: 4.7 - 1,267 reviews - 163 cal
Directions. Preheat oven to 350 degrees F (180 degrees C). Lightly grease 2 cookie sheets. Cream together sugar and butter. Beat in egg yolks and vanilla. Add flour, baking soda, and cream of tartar. Stir. Form dough into walnut size balls and place 2 inches apart on cookie sheet. Don't flatten.

Date Cookie Recipes - Allrecipes.com
 [allrecipes.com/recipes/11100/cookies/11100/date-cookies/d...](https://www.allrecipes.com/recipes/11100/cookies/11100/date-cookies/d...) ▾ Allrecipes.com ▾
Looking for date cookie recipes? Allrecipes has more than 110 trusted date cookie recipes complete with ratings, reviews and cooking tips.

You can also search for exact words or phrases to narrow down your results even more. All you need to do is place quotation marks (" ") around the desired search terms. For example, if you search for recipes "sugar cookies", your search results will only include recipes for sugar cookies, instead of any cookies that happen to use sugar as an ingredient.

recipes "sugar cookies" - X

https://www.google.com/webhp?hl=en#hl=en&q=recipes+%22sugar+cookies%

Google recipes "sugar cookies"

All Videos Shopping Images News More ▾ Search tools

About 3,750,000 results (0.52 seconds)

Easy Sugar Cookies Recipe - Allrecipes.com



[allrecipes.com/recipe/2300/easy-sugar-cookies/](https://www.allrecipes.com/recipe/2300/easy-sugar-cookies/) ▾ Allrecipes.com ▾
★★★★★ Rating: 4.5 - 4,505 reviews - 25 min - 86 cal
Roll rounded teaspoonfuls of dough into balls, and place onto ungreased cookie sheets. ... Make sugar cookies extra-festive with these easy decorating tips. ... These lemony cookies put a delicious twist on basic cake mix.

[Easy Sugar Cookies - Soft Sugar Cookies IV Recipe - Easy Sugar Cookies Recipe](#)

Chewy Sugar Cookies Recipe - Allrecipes.com



[allrecipes.com/recipe/2301/chewy-sugar-cookies/](https://www.allrecipes.com/recipe/2301/chewy-sugar-cookies/) ▾ Allrecipes.com ▾
★★★★★ Rating: 4.4 - 1,066 reviews - 25 min - 172 cal
I love sugar cookies that are crisp on the outside and very chewy on the inside. This recipe can easily be made into snickerdoodle cookies by rolling the dough ...

[Chewy Sugar Cookies - 70 Photos](#)

The Best Rolled Sugar Cookies Recipe - Allrecipes.com



[allrecipes.com/recipe/2302/the-best-rolled-sugar-cookies/](https://www.allrecipes.com/recipe/2302/the-best-rolled-sugar-cookies/) ▾ Allrecipes.com ▾
★★★★★ Rating: 4.4 - 7,141 reviews - 3 hr - 109 cal
Perfect for decorating! These classic sugar cookies are great for cookie-cutting and decorating during the holidays or anytime you feel festive.

[The Best Rolled Sugar Cookies - 1633 Photos](#)

These techniques may come in handy in certain cases, but you probably won't need to use them with most searches. Search engines can usually figure out what you're looking for without these extra characters. We recommend trying a few different search suggestions before using this method.

Content-specific searches

There may be times when you're looking for something more specific, like a news article, picture, or video. Most search engines have links at the top of the page that allow you to perform these unique searches.

recipes "sugar cookies" - X

https://www.google.com/webhp?hl=en#hl=en&q=recipes+%22sugar+cookies%

Google recipes "sugar cookies"

All Videos Shopping Images News More ▾ Search tools

In the example below, we've used the same search terms to look for images instead of websites. If you see an image you like, you can click to visit the website it originally came from.

recipes "sugar cookies" - X

https://www.google.com/search?q=recipes+"sugar+cookies"&hl=en&biw=770

Google recipes "sugar cookies"

All Videos Shopping **Images** News More ▾ Search tools

420 x 420 - myrecipes.com

You can use the extra search tools to narrow down your results even more. These tools will change based on the type of content you're looking for, but in this example we can filter our images by size, color, image type, and more. So if you wanted to find cookies

with pink frosting, you could search for images that are mostly pink.

The screenshot shows a Google Images search results page. The search query is "recipes "sugar cookies"" in the search bar. The "Images" tab is selected. A color filter menu is open over the first image, showing options like "Any color", "Full color", "Black and white", "Transparent", and a color palette with "Pink" highlighted. A red box highlights the "Search tools" button in the top right corner of the search bar area. Below the search bar, there are filters for "Size", "Type", "Time", "Usage rights", "More tools", and "Clear". The main content area displays several images of sugar cookies with pink frosting and sprinkles.

Advertisements

One final thing to note: Most search engines include advertisements with search results. For example, you can see advertisements at the top of the search results below.

A screenshot of a Google search results page. The search term 'recipes' is entered in the search bar. Below the search bar, the 'All' tab is selected, along with 'News', 'Apps', 'Images', 'Books', and 'More'. A red box highlights the first two search results:

- Quick, Easy Asian Meals - Kahiki.com**
Ad www.kahiki.com/ ▾
Take your dinner to the next level with these easy-to-prepare meals
- Bertolli® Recipes - VillaBertolli.com**
Ad www.villabertolli.com/ ▾
Bertolli® Has a Variety of Recipes To Choose From. Start Cooking Today
Dinner Recipes - Stuffed Shells Florentine - Shrimp Primavera

Below these ads, another result is shown:

- Allrecipes | Food, friends, and recipe inspiration**
allrecipes.com/ ▾ Allrecipes.com ▾
Find and share everyday cooking inspiration on Allrecipes. Discover recipes, cooks, videos, and how-tos based on the food you love and the friends you follow.
Recipes - Desserts - Main Dish - Chicken

These ads are based on your search terms, and they often look similar to other search results. While they may be useful in some cases, it's usually more helpful to focus on the actual search results.

For even more search tips, check out our [Search Better](#) tutorial.

Lesson 9: Understanding URLs

Understanding URLs

Every time you click a link on a website or type a web address into your browser, it's a URL. URL stands for Uniform Resource Locator. Think of it like a street address, with each portion of the URL as different parts of the address, and each giving you different information. Let's examine each component of a URL and what we can learn from it.

Watch the video below to learn the different parts of a URL.

Scheme

Every URL begins with the scheme. This tells your browser what type of address it is so the browser connects to it correctly. There are many types of schemes, but for typical web browsing you will mostly see http and https. Your browser usually won't show the scheme in the address bar, and usually you don't need to type the scheme when typing a web address; instead, you can just begin with the domain name. The scheme is still

always part of the URL; it just isn't being displayed.

http://www.gcflearnfree.org/reading/grammar/than-or-not.html


scheme

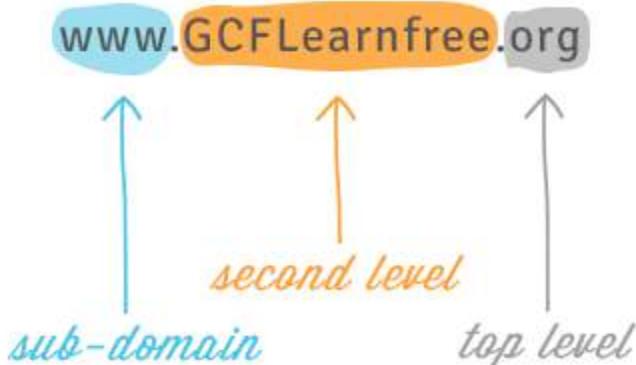
Domain name

The domain name is the most prominent part of a web address. Typically, different pages on the same site will continue to use the same domain name. For example, all pages on this site share the GCFLearnFree.org domain name.

http://www.gcflearnfree.org/reading/grammar/than-or-not.html


domain name

Each segment of the domain name separated by a period is called a domain. The domain on the right is called a top-level domain, with the domain to the left of it called the second-level domain, then third-level domain, and so on.


www.GCFLearnfree.org
sub-domain *second level* *top level*

You can often learn something about the site from the domains. One of the domains usually identifies the organization, while the top-level domain may give you more general information on what kind of site it is. For example, in the domain name [nc.gov](#), the .gov domain means it is a government website in the United States, the nc domain identifies it as the website of North Carolina.

In most URLs, the www domain can be omitted. [Google.com](#) and [www.google.com](#) lead to the same page. However, other subdomains cannot be omitted. For example, all pages under [news.google.com](#) require the news subdomain in the URL.

File path

The file path—often just called the path—tells your browser to load a specific page. If you don't specify a path and only enter a domain name, your browser is still loading a specific page; it's just loading a default page, which usually will help you navigate to other pages.

<http://www.gcflearnfree.org/reading/grammar/than-or>

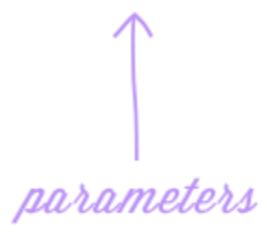


URLs that end with the domain name without a file path usually will load a homepage or an index page that's designed to help you navigate to specific pages on the site. Often, if you can't remember the file path for a specific page, you can go to the homepage and search for it.

Parameters

Some URLs include a string of characters after the path—beginning with a question mark—called the parameter string. You have probably noticed this part of a URL appear in your address bar after performing a search on Google or YouTube. The parameter string can be clear or confusing to a human user, but it is critical information for the server.

www.youtube.com/watch?v=dQw4w9WgXcQ



Anchor

Also appearing after the path, the anchor tells your browser to scroll to or load a specific part of the page. Usually the anchor begins with a hashtag and is used to direct your browser to a specific part of a very long page, much like a bookmark.

Different anchors don't load different pages; they simply tell the browser to display different parts of the page.

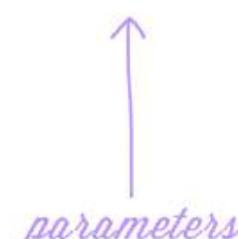
tolkiengateway.net/wiki/J.R.R._Tolkien#Writing



A whole URL

When combined, these elements make up a URL, although not all URLs will have all five parts.

http://en.wikipedia.org/w/index.php?title=Burrito#Breakfast



Using what we learned in this tutorial, we can tell from the domain name of this URL that it's on Wikipedia, from the parameters that the page is probably about burritos, and from the anchor that we'll be looking at the section on burritos for breakfast.

Keep in mind that these are the most common components of a URL. There are many other parts, but these are the five you will see most often and that can usually give you the most information.

Lesson 10: How to Set Up a Wi-Fi Network

How to set up a Wi-Fi network

The Internet is a really powerful tool. It gives us access to all kinds of information at a moment's notice—think email, Google search, and Wikipedia. So there's something a little counterintuitive about only being able to use the Internet when you sit down at a desktop computer. What if you could use the Internet from anywhere in your home or office?

If you already have high-speed (broadband) Internet service at your house, it's pretty easy to create your own home wireless network. Commonly known as Wi-Fi, a wireless network allows you to connect laptops, smartphones, and other mobile devices to your home Internet service without an Ethernet cable.

Purchase a wireless router

To create your own Wi-Fi network, you'll need a wireless router. This is the device that will broadcast the Wi-Fi signal from your Internet modem throughout your house. Your Internet service provider (ISP) may offer you a wireless router for a small monthly fee. If you've never set up a Wi-Fi network before, this may be the easiest option.



If you want to buy your own router, we'd recommend spending a little more time researching different options. CNET offers a comprehensive guide on [How to Buy a Router](#).

Some Internet modems may already have a built-in wireless router, which means you won't need to purchase a separate one.

Connect the cables

1. Once you've acquired a wireless router, you'll need to connect it to your existing Internet modem.
2. Connect an Ethernet cable from your modem to the wireless router (there is usually a short Ethernet cable included with your wireless router for this purpose).
3. Plug in the power cable for the wireless router.
4. Wait at least 30 to 60 seconds, and make sure the lights on your router are working correctly.



Configure your router

Next, you'll need to use your computer to configure your router's default settings. This includes setting a unique name and password for your wireless network.

1. Using your web browser, enter the router's default IP address into the address bar, then press Enter. Your router's instructions should include this information, but some of the most common addresses include 192.168.0.1, 192.168.1.1, and 192.168.2.1.
2. The router's sign-in page will appear. Again, the exact sign-in details should be included with your router's instructions, but most routers use a standard user name and password combination, such as admin and password.
3. Your router's settings page will appear. Locate and select the Network Name setting, then enter a unique network name.
4. Locate and select the Network Password setting, and choose an Encryption option. There are several types of encryption you can use, but we recommend WPA2, which is generally considered to be the most secure.
5. Enter your desired password. Make sure to use a [strong password](#) to help ensure no one else can access your network.
6. Locate and select the Save button to save your settings.

Connect!

That's it! Now you're ready to connect to your Wi-Fi network and make sure it's working. The process for connecting to a Wi-Fi network will vary slightly depending on what type of computer or device you're using, but any system will require these basic steps.

- 1. Locate your computer's network settings, and search for nearby Wi-Fi networks.**
- 2. Select your network, and enter your password.**
- 3. If the connection is successful, open your web browser and try navigating to a webpage like www.google.com. If the page loads, it means your Wi-Fi connection is working correctly.**

Congratulations!

You've just set up your own home wireless network. Way to go!



Lesson 11: Choosing a Web Browser

Choosing a web browser

A web browser is a type of software that allows you to find and view websites on the Internet. Even if you didn't know it, you're using a web browser right now to read this page!

For many years, especially in the early 2000s, there was one browser that almost everyone used: Microsoft's Internet Explorer. If you used the Internet at that time, you

probably clicked an icon like this to access the Web:



In the past, Internet Explorer was pre-installed on any PC you buy. Starting in the mid-2000s, other software companies introduced new browsers, including Mozilla Firefox and Google Chrome. At the time, these browsers allowed for more experimental features. Because of this, web developers began creating websites with browsers like Chrome and Firefox in mind, which meant they didn't always work as well in Internet Explorer. If you have a PC with Windows 10, you'll have Microsoft Edge as your web browser instead. Watch this video to learn more about browsing in Edge.

It's always a good idea to keep at least two web browsers on your computer or mobile device. This way, if a website isn't working correctly you can try opening the page in a different web browser. More often than not, this trick can solve a lot of problems you might encounter online.

[Choosing a Web Browser](#) [Infogram](#)

Using a PC or Android? Try Google Chrome.

[Google Chrome](#) is probably the best web browser right now for PCs. It's free to download, it's very fast, and it's secure. Chrome is also the default web browser for many Android devices. Watch this video to learn about browsing in Chrome.

If you have a Google account, you can even sync your saved passwords and browsing history across multiple devices. And because it downloads updates automatically, you'll always be protected from current security threats and viruses online. If you want to learn more, review our [Chrome tutorial](#).

Using an iPhone, iPad, or Mac? Try Safari.

[Safari](#) is the default web browser for Mac computers and iOS devices, including the iPhone and iPad. Aside from being fast and secure, Safari has a lot of unique features. For example, Reader view allows you to see a simplified version of a webpage that's optimized for reading. It's also easy to add articles you find to your Reading List so you can save them for later. Watch this video to learn more about browsing in Safari.

Again, we recommend keeping at least two web browsers on your device. Chrome is a good secondary browser to use on a Mac, iPhone, or iPad. It's also important to note that you cannot use Internet Explorer on a Mac or iOS device.

Other recommended web browsers

Firefox: This free web browser from Mozilla works on Windows, Mac, and Android. It's built by an open-source community of developers, so it will usually support even the most experimental web features. Like Chrome, it will be updated automatically, so you'll be protected from viruses and other threats online. Next, watch this video about browsing in Firefox.

If you want to learn more, review our [Firefox tutorial](#).

Opera: Originally released in 1994, the Opera web browser has been around much longer than Firefox and Chrome. You may find that some websites don't load perfectly on Opera, but it's still regarded as a fast and secure alternative to your default browser. It's also available for all major operating systems (Windows, Mac, Android, and iOS).

Lesson 12: Internet Basics Quiz

Quiz

Question 1 of 25

What is the Internet?

- a global collection of different websites
- a global network of computers and electronic devices
- a type of web browser
- a folder on your computer that stores important files

[Back to Tutorial](#)

keyboard_arrow_up

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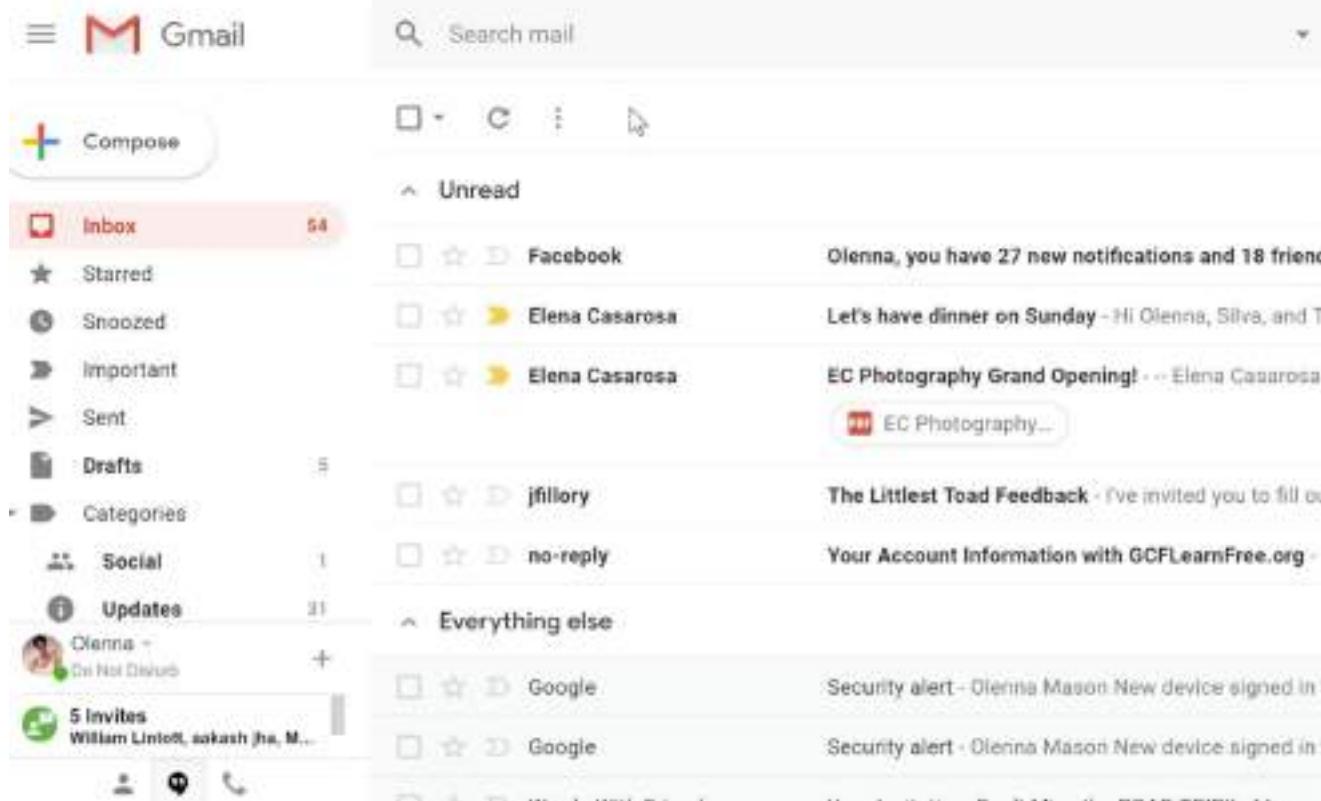
[Contact Us](#)

[My Account](#)

Introduction

Gmail is a free email service provided by Google. In many ways, Gmail is like any other email service: You can send and receive emails, block spam, create an address book, and perform other basic email tasks. But it also has some more unique features that help make it one of the most popular online email services.

In this lesson, we'll talk about some of the features and advantages of Gmail, and we'll give an overview of the Gmail window.



Google accounts

Creating a Google account is needed to access Gmail because it is just one of the many services offered by Google to registered users. Signing up for a Google account is free and easy, and naming your new Gmail address will be a part of the sign-up process. This means whenever you're signed in to Gmail, you are automatically signed in to your Google account. You'll be able to easily access other Google services like Google Docs, Calendar, and YouTube.

Of course, you don't have to use any of these features. You may just want to focus on email for now. However, if you'd like more information, you can review our [Google account](#) tutorial, where we talk about some of the different services Google offers and show you how to change your privacy settings.

Gmail features

Gmail offers several useful features to make your email experience as smooth as possible, including:

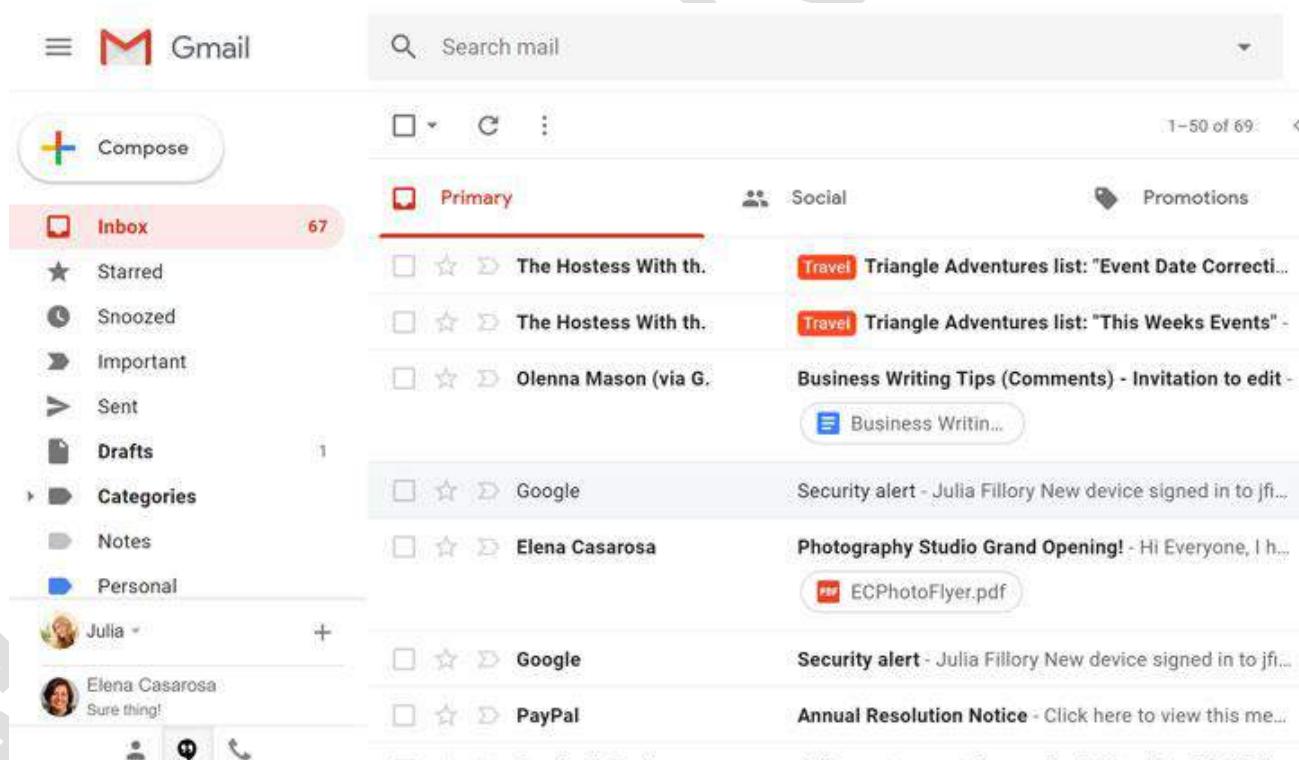
- Spam filtering.** Spam is another name for junk email. Gmail uses advanced technologies to keep spam out of your inbox. Most spam is automatically sent to a separate spam folder, and after 30 days it is deleted.

- Conversation View.** An email conversation occurs whenever you send emails back and forth with another person (or a group of people), often about a specific topic or event. Gmail groups these emails together by default, which keeps your inbox more organized.
- Built-in chat.** Instead of sending an email, you can send someone an instant message or use the voice and video chat feature if your computer has a microphone and/or webcam.
- Call Phone.** This feature is similar to voice chat, except that it allows you to dial an actual phone number to call any phone in the world. It's free to make a call to anywhere in the United States or Canada, and you can make calls to other countries at relatively low rates.

Get to know the Gmail interface

When you're working with Gmail, you'll primarily be using the main Gmail interface. This window contains your inbox, and it allows you to navigate to your contacts, mail settings, and more. Also, if you use other Google services like YouTube or Calendar, you'll be able to access them from the top of the Gmail window.

Click the buttons in the interactive below to learn about the different parts of the Gmail interface.



Challenge!

Answer the following questions. You can either write down your answers or just think about them.

- 1. What are the advantages of having a Gmail account?**
- 2. Are there any features on Gmail you would use aside from email?**
- 3. Optional: If you already have a Google account, sign in, then explore the Gmail interface.**

Lesson 2: Setting Up a Gmail Account

Introduction

Setting up a Gmail account is easy. You will begin by creating a Google account, and during the quick sign-up process you will choose your Gmail account name. In this lesson, we'll show you how to set up your Google account for Gmail, add and edit contacts, and edit your mail settings.

Setting up a Gmail account

To create a Gmail address, you'll first need to create a Google account. Gmail will redirect you to the Google account sign-up page. You'll need to provide some basic information like your name, birth date, gender, and location. You will also need to choose a name for your new Gmail address. Once you create an account, you'll be able to start adding contacts and adjusting your mail settings.

To create an account:

- 1. Go to www.gmail.com.**
- 2. Click Create account.**



Sign in

with your Google Account

Email or phone

[Forgot email?](#)

Not your computer? Use Guest mode to sign in privately.

[Learn more](#)

[Create account](#)



[Next](#)

3. The sign-up form will appear. Follow the directions by entering the required information.



Create your Google Account

First name:

Elena

Last name:

Casarosa

Username:

ecasarosa3

@gmail.com

You can use letters, numbers & periods

Available:

[casarosae6](#) [elenacasarosa895](#) [casarosaelena106](#)

[Use my current email address instead](#)

Password:

.....

Confirm password:

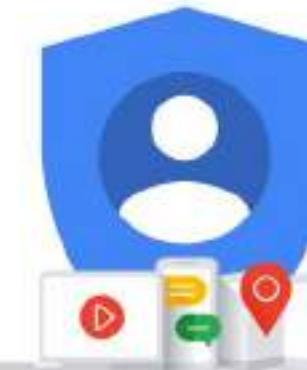
.....



Use 8 or more characters with a mix of letters, numbers & symbols

[Sign in instead](#)

[Next](#)



One account. All of Google working for you.

4. Next, enter your phone number to verify your account. Google uses a two-step verification process for your security.



Verify your phone number

For your security, Google wants to make sure it's really you. Google will send a text message with a 6-digit verification code. *Standard rates apply*

Phone number



9195559555

[Back](#)

[Next](#)



Your personal info is priva

5. You will receive a text message from Google with a verification code. Enter the code to complete the account verification.



Verify your phone number

For your security, Google wants to make sure it's really you. Google will send a text message with a 6-digit verification code. *Standard rates apply*

9195559555

Enter verification code

G- 346205

[Back](#)

[Call instead](#)

[Verify](#)

Your personal info is priva



6. Next, you will see a form to enter some of your personal information, like your name and birthday.

PeterB



Elena, welcome to Google



ecasarosa3@gmail.com

Phone number (optional)



9195559555

We'll use your number for account security. It won't be visible to others.

Recovery email address (optional)

We'll use it to keep your account secure

Month

Day

Year

March

02

1982

Your birthday

Gender

Female

Your personal info is p

Why we ask for [this information](#)

Back

Next



7. Review [Google's Terms of Service](#) and [Privacy Policy](#), then click I agree.



Privacy and Terms

We also combine this data among our services and across your devices for these purposes. For example, depending on your account settings, we show you ads based on information about your interests, which we can derive from your use of Search and YouTube, and we use data from trillions of search queries to build spell-correction models that we use across all of our services.

You're in control

Depending on your account settings, some of this data may be associated with your Google Account and we treat this data as personal information. You can control how we collect and use this data now by clicking "More Options" below. You can always adjust your controls later or withdraw your consent for the future by visiting My Account (myaccount.google.com).

MORE OPTIONS ▾

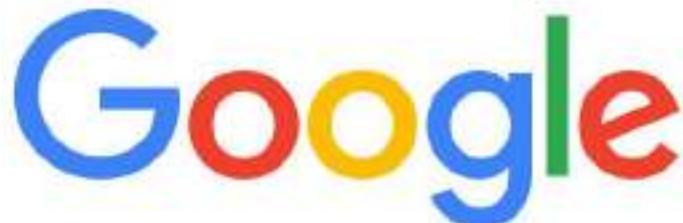
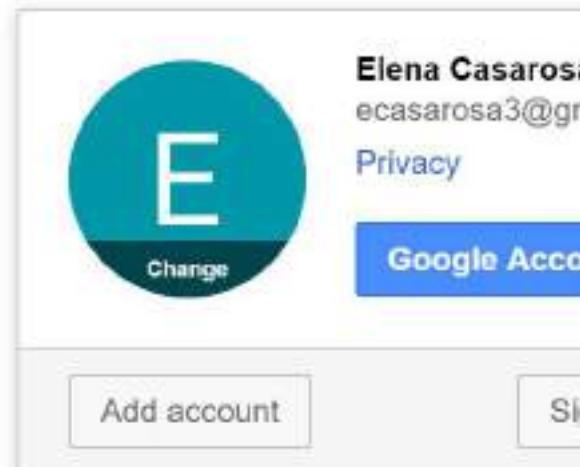
Cancel

I agree



You're in control of the data we collect & how it's used

8. Your account will be created.



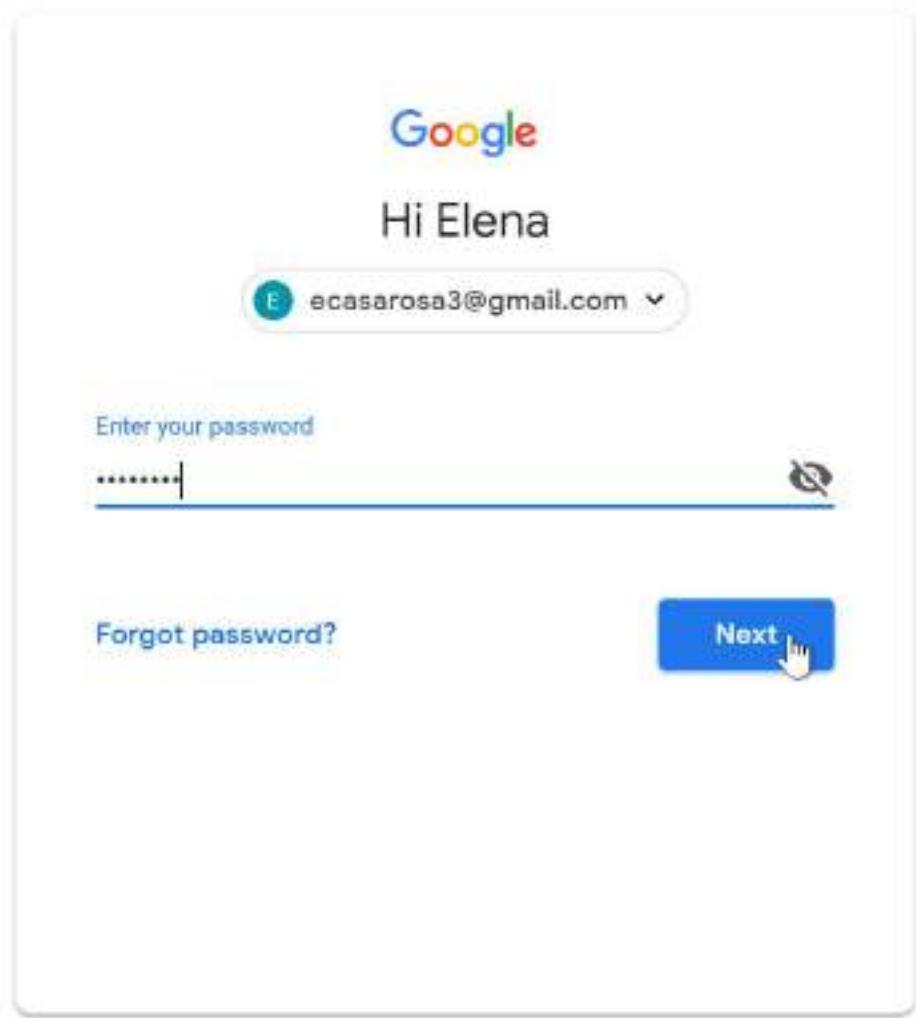
Just like with any online service, it's important to choose a strong password—in other words, one that is difficult for someone else to guess. For more information, review our lesson on [creating strong passwords](#).

Signing in to your account

When you first create your account, you will be automatically signed in. Most of the time, however, you'll need to sign in to your account and sign out when you're done with it. Signing out is especially important if you're using a shared computer (for example, at a library or office) because it prevents others from viewing your emails.

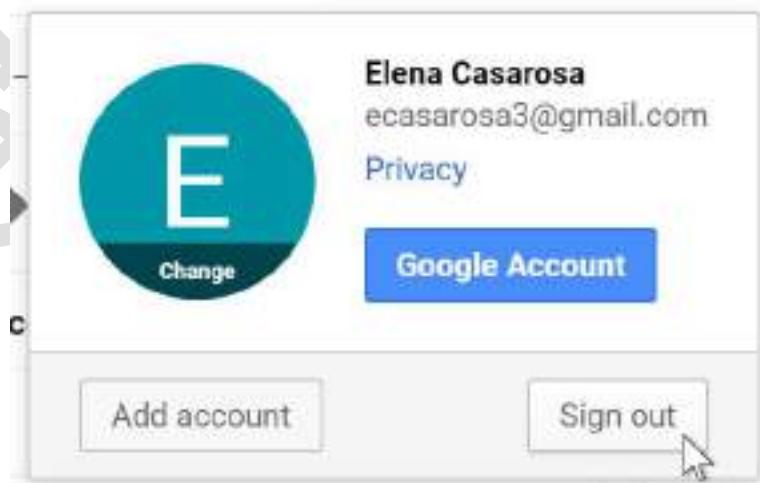
To sign in:

1. Go to www.gmail.com.
2. Type your user name (your email address) and password, then click Next.



To sign out:

In the top-right corner of the page, locate the circle that has your first initial (if you've already selected an avatar image, it will show the image instead). To sign out, click the circle and select Sign out.

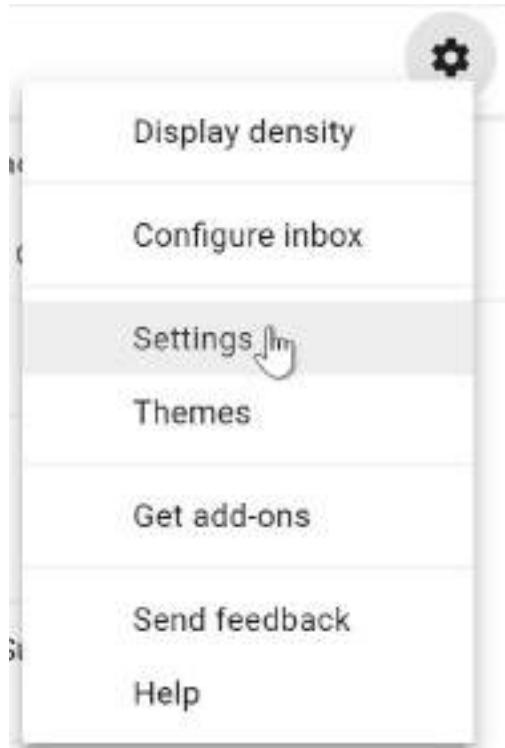


Mail settings

Occasionally, you may want to make adjustments to Gmail's appearance or behavior. For example, you could create a signature or vacation reply, edit your labels, or change the theme. These adjustments can be made from your mail settings.

To access your mail settings:

- 1. Click the gear icon in the top-right corner of the page, then select Settings.**



- 2. From here, you can click any of the categories at the top to edit the desired settings.**

Settings

General Labels Inbox Accounts and Import Filters and Blocked Addresses Forwarding and POP/IMAP Chat Labs

Setup progress:  10% Continue setting up account

Language: Gmail display language: English (US) Change language settings for other Google products Show all language options

Phone numbers: Default country code: United States

Maximum page size: Show 50 conversations per page Show 250 contacts per page

Images: Always display external images - Learn more Ask before displaying external images

Default reply behavior: Reply Reply all Learn more

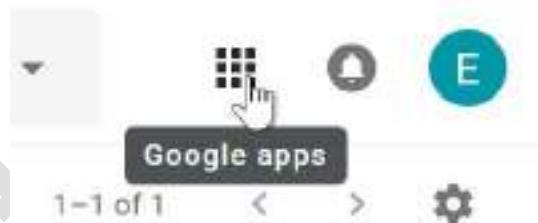
Default text style: (Use the Remove Formatting button on the toolbar to reset the default text style) Sans Serif -      This is what your body text will look like.

Adding contacts

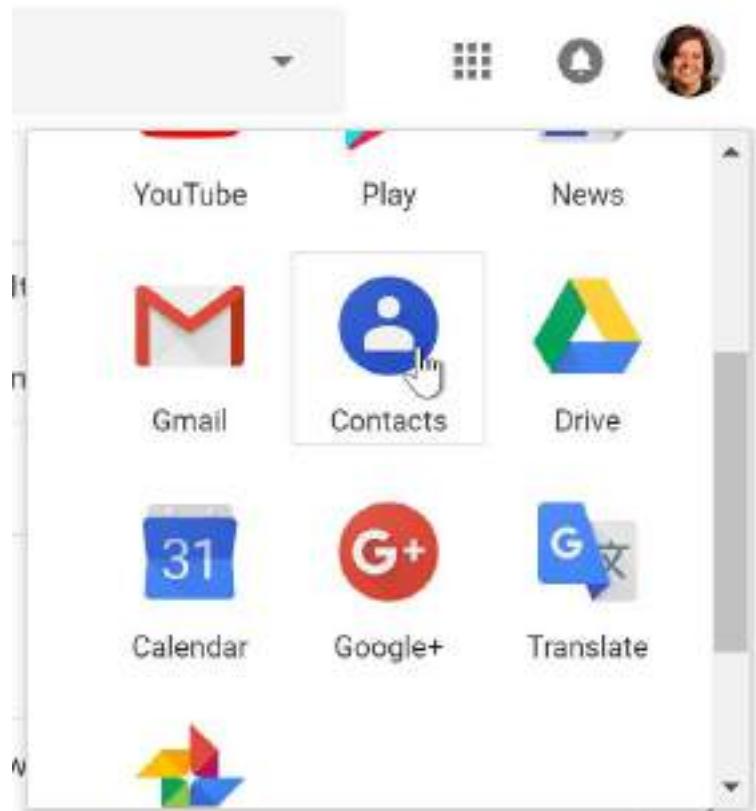
Like all major email providers, Gmail lets you keep an address book of contacts so you don't have to memorize everyone's email addresses. You can also add other contact information, like phone numbers, birthdays, and physical addresses.

To add a contact:

1. Click the Google apps button.



2. Click the Contacts button in the drop-down menu.



3. Your contacts screen will appear. Click the Add new contact button in the lower-right corner.



4. Enter the contact information, then click Save.

Create contact



First name

Olenna

Last name

Mason



Company

Job title



lakestone.omason@gmail.com

Label



Phone



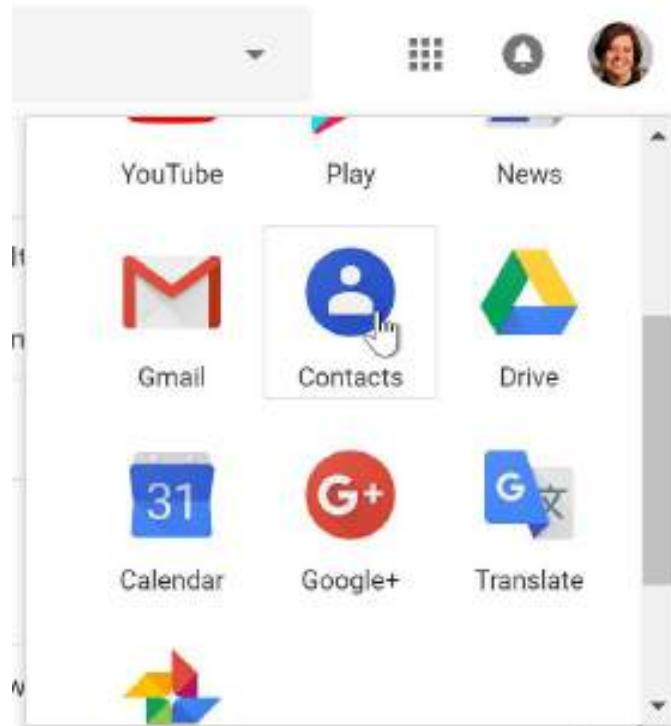
Notes

MORE

CANCEL

To edit a contact:

- 1. In the Google apps drop-down menu, select Contacts.**



2. Locate the contact you want to edit, then click Edit Contact.

A screenshot of the Contacts application. It shows a list of contacts: Olenna Mason (with a checkmark icon), Silva Casarosa (with a purple circle icon containing a white 'S'), and Tim Dragic (with a green circular profile picture). To the right of the contacts is a toolbar with icons for star, edit (highlighted with a cursor), and more options. A large red '+' button is located at the bottom right.

3. You can now make any changes you want to the contact.

Edit contact

First name: Olenna

Last name: Mason

Job title: Lake Stone Montessori School

Email: lakestone.omason@gmail.com

Phone: (US)

Notes:

MORE CANCEL

Google profile

By default, when you send an email to a new address, Gmail adds the address to your contacts. You can then go to your contacts to edit the person's information as needed.

Importing mail and contacts

You may already have a contact list from another email address, and it would be a lot of work to re-enter all of this information manually. Gmail allows you to import your contacts from another email account, and you can even import all of your email messages from that account. Several email providers are supported, including Yahoo!, Hotmail, and AOL.

To add other accounts:

1. Click the gear icon in the top-right corner of the page, then select Settings.
2. Go to Accounts and click Add a mail account. You can then follow the instructions on the screen to import your mail.

Settings

General Labels Inbox **Accounts and Import** Filters and Blocked Addresses

Forwarding and POP/IMAP Add-ons Chat Advanced Offline Themes

addresses)

[Learn more](#)

Check mail from other accounts:

[Add a mail account](#)



[Learn more](#)

Using Gmail for work?

Businesses can power their email with G Suite. [Learn more](#)

Challenge!

1. If you do not already have a Gmail account, create one.
2. Open Gmail.
3. Navigate to your Gmail settings.
4. Set your preferences in your Gmail settings.
5. Add a new contact. You can either add one you already know, or if you'd like you can create one with the following information:

Name: Julia Fillory

Email: jfillory@gmail.com

Lesson 3: Sending Email

Introduction

Now that you've created a Gmail account, you can start sending email messages. Writing an email can be as simple as typing a message, or you can use text formatting, attachments, and a signature to customize your message.

In this lesson, we'll show you how to compose an email, add an attachment, and create a signature that will appear on all of the messages you send.

[Watch the video below to learn more about sending email with Gmail.](#)

Sending email

When you write an email, you'll be using the compose window. This is where you'll add the email address of the recipient(s), the subject, and the body of the email, which is the message itself. You'll also be able to add various types of text formatting, as well as one

or more attachments. If you want, you can even create a signature that will be added to the end of every email you send.

The compose window

Click the buttons in the interactive below to learn about the different parts of the compose window.

Photography Studio Grand Opening!

To

Olenna Mason X

Julia Fillory X

Henri Rousseau X

Photography Studio Grand Opening!

Hi Everyone,

I have exciting news for you! This Saturday will be the grand opening of our new studio, EC Photography! It will be from 10:00 to 4:00. There will be entertainment and lots of food, so come out and enjoy the festivities!

Hope to see you there!

Elena

Sans Serif

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Smiley

Attachment

Image

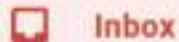
Clock

\$

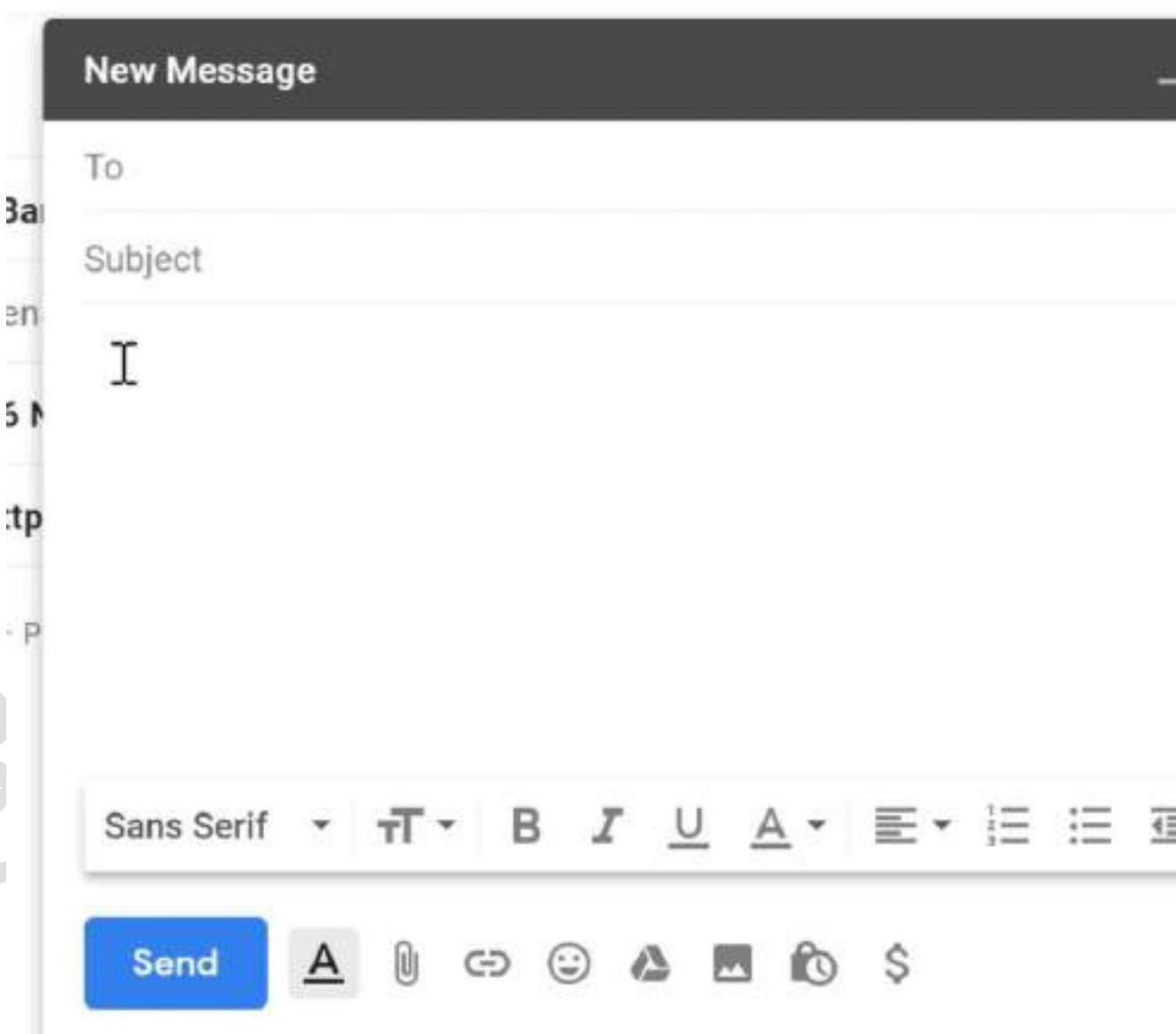
Save

To send an email:

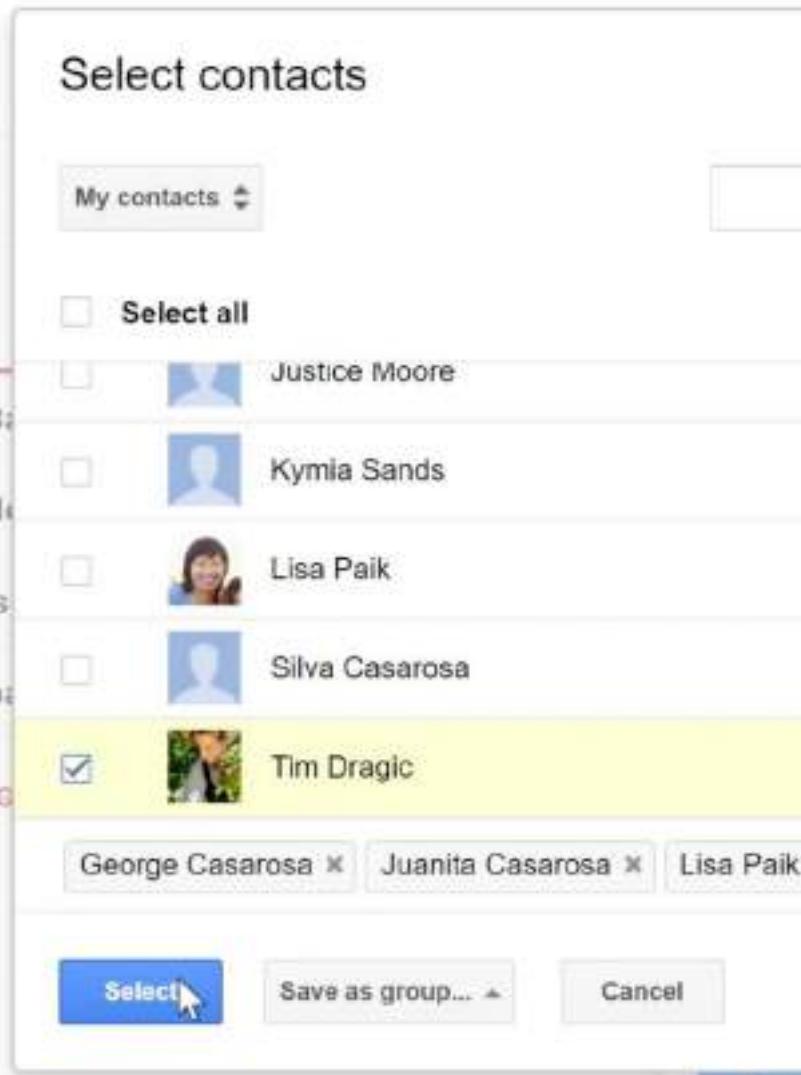
1. In the left menu pane, click the Compose button.



2. The compose window will appear in the lower-right corner of the page.



3. You'll need to add one or more recipients to the To: field. You can do this by typing one or more email addresses, separated by commas, or you can click To to select recipients from your contacts, then click select.



- 4. Type a subject for the message.**
- 5. In the body field, type your message. When you're done, click Send.**

Photography Studio Grand Opening!

Olenna Mason, Julia Fillory, Henri Rousseau

Photography Studio Grand Opening!

Hi Henri,

Thanks again for coming to the grand opening. It was very nice meeting you! I would like to confirm the appointment you made to come in Saturday at 12:00 for our sibling portrait session. I know your parents in Canada are going to love it!

See you Saturday,

Elena

Sans Serif

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Send

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SMILEY

ATTACHMENT

IMAGE

CLOCK

DOLLAR SIGN

Saved

If the person you are emailing is already one of your contacts, you can start typing that person's first name, last name, or email address, and Gmail will display the contact below the To: field. You can then press the Enter key to add the person to the To: field.

New Message

To Ju



Juanit
j.casars



Julia Fillory

jfillory@gmail.com

CC

Sut



Julia Fillory
jfillory@gmail.com



Justice Moore
justicemoore.techmanagement@gmail.com

Adding attachments

An attachment is simply a file (like an image or document) that is sent along with your email. For example, if you are applying for a job, you might send your resume as an attachment, with the body of the email being the cover letter. It's a good idea to include a message in the body of your email explaining what the attachment is, especially if the recipient isn't expecting an attachment.

Remember to attach your file before you click Send. Forgetting to attach a file is a surprisingly common mistake.

To add an attachment:

1. While composing an email, click the paper clip icon at the bottom of the compose window.

Photography Studio Grand Opening!

George Casarosa, Juanita Casarosa, Lisa Paik 2 more

Photography Studio Grand Opening!

there's going to be catering! Come on out and enjoy the photos, food, and festivities!

If you have time, get the word out and visit my website:

www.ecphotographystudio.com

Hope to see you there!

Elena

Sans Serif

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Attach files

Send

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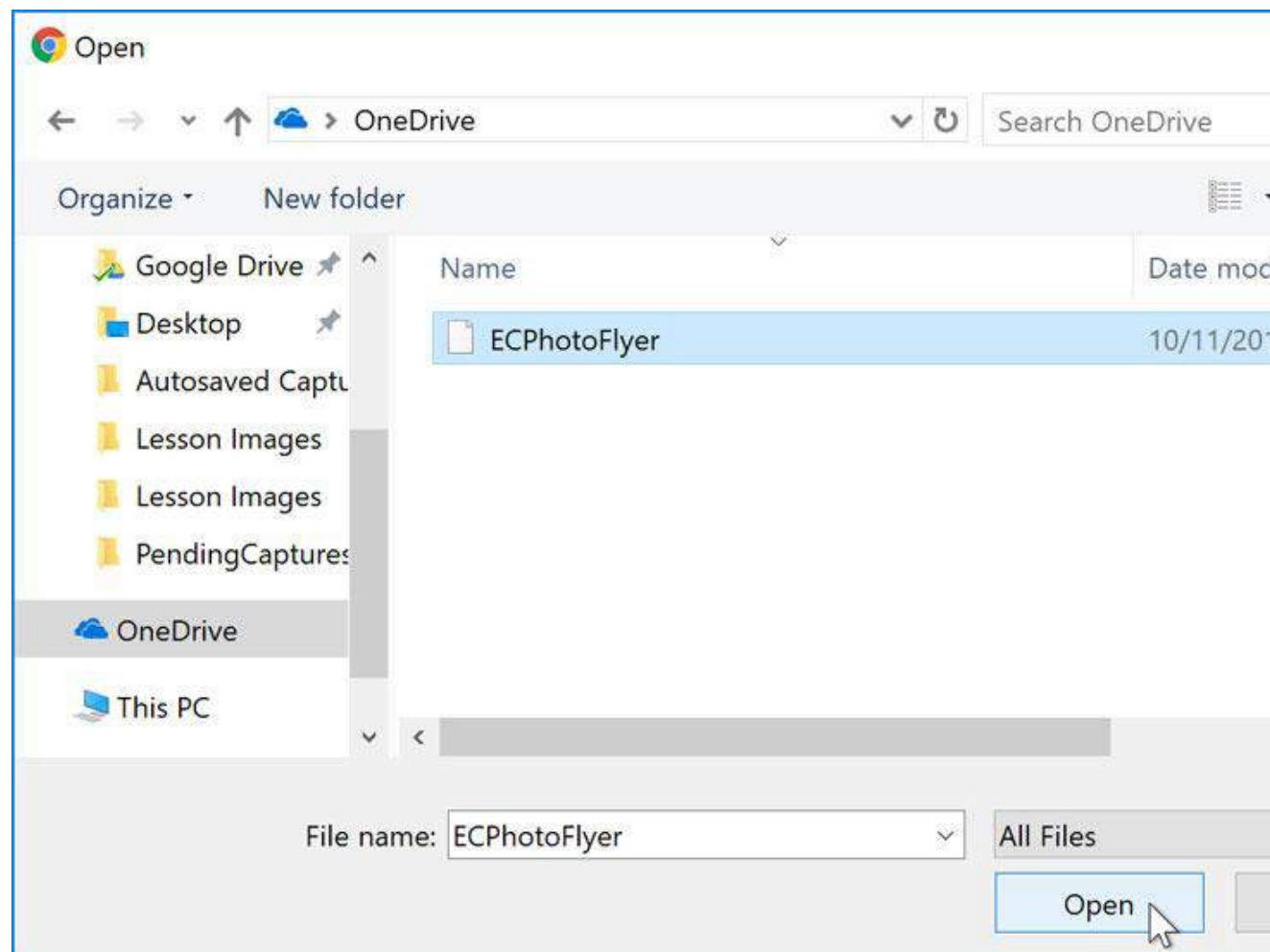
😊



\$

Saved

2. A file upload dialog box will appear. Choose the file you want to attach, then click Open.



3. The attachment will begin to upload. Most attachments will upload within a few seconds, but larger ones can take longer.

p Hope to see you there!
Elena

P

ECPhotoFlyer.pdf (393K)

Sans Serif ▼ ▼ B I U A ▼ ▼ ▼ ▼ ▼ ▼ ▼

Send A U C S A M T \$ Saving

4. When you're ready to send your email, click Send.

You can click Send before the attachment finishes uploading. It will continue to upload, and Gmail will automatically send the email once it's done.

Email formatting

Gmail allows you to add various types of formatting to your text.

Click the formatting button at the bottom of the compose window to see different formatting options.



Click the buttons in the interactive below to learn about different formatting options in Gmail.

New Discounted Photo Packages from EC Photography

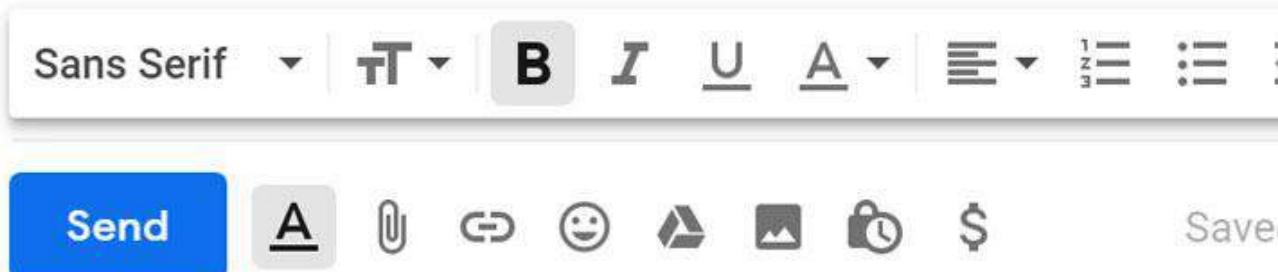
Tim Dragic, Barry T. Hubbard, Henri Rousseau

New Discounted Photo Packages from EC Photography

Hi Everyone!

[EC Photography](#) has been open for a month now, and I am so glad to have had all of your help support along the way. Business is booming, and I'm working on some new marketing ideas to the momentum. Newly discounted packages include:

- Baby Portraits
- Prom Portraits
- Family Portraits

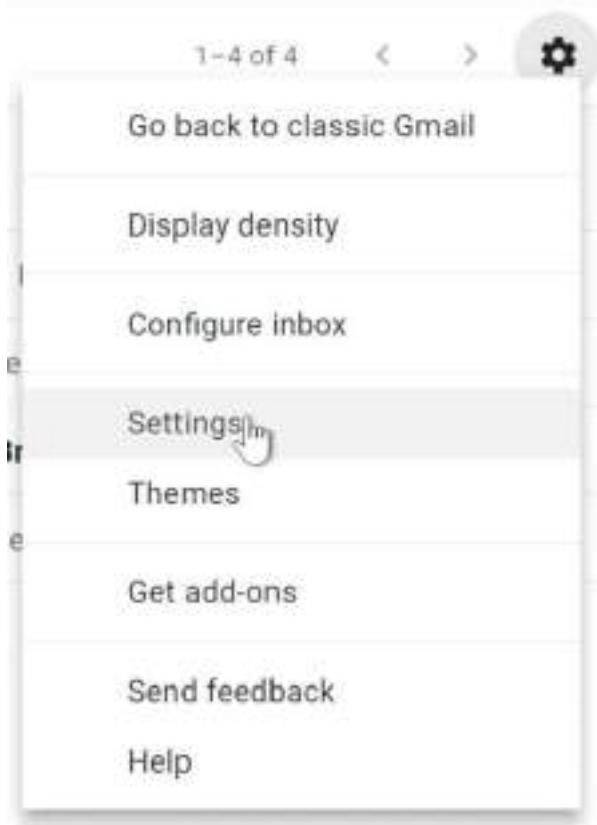


For more serious emails, like job applications, be careful not to add formatting that would seem too informal, such as bright colors or emoticons.

Adding a signature

A signature is an optional block of text that appears after every email you send. By default, Gmail does not include a signature, but it's easy to create one. It will typically include your name and some contact information, like your phone number or email address. If you're using Gmail at work, you may want to include your title and your company's address or website.

1. Click the gear icon in the top-right corner of the page, then select Settings.



Notes

2. Scroll down until you see the Signature section.
3. Type your desired signature in the box. You can also change the font, add other formatting, or insert an image if you want.



4. Scroll down to the bottom of the page, then click Save Changes.

You should keep your signature brief. Instead of listing all of the phone numbers, email addresses, and mailing addresses where you can be reached, just list the most important ones.

Keep in mind that your signature will be seen by many different people, so you may not want to include your home address or anything too personal. Even if you only email

people you know, someone can still forward your email to someone else, which can reveal your signature to even more people.

Challenge!

- 1. Open Gmail.**
- 2. Create a signature for your emails.**
- 3. Compose a new email.**
- 4. Address the email to yourself by putting your email address as the recipient.**
- 5. Type a subject and a message in the body of the email.**
- 6. Attach a file or picture to the email. If you don't have one, you can download and use the picture below by right-clicking and choosing Save Image As.**



- 7. When you're finished, your email should look something like this:**

Funny Dog Picture

Julia Fillory

Funny Dog Picture

Here is a hilarious picture of a dog in a blanket. Thought you might like it!

--

Julia Fillory

Author/Illustrator

(555) 628-1829

[Pug.png \(8,116K\)](#)

Sans Serif

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8. Optional: Select send to actually send the email to yourself.

Lesson 4: Responding to Email

Introduction

In addition to sending emails, you'll be receiving emails from others. After you read an email, there are a few actions you can take, including opening an attachment (if there is one), replying to the message, forwarding it to someone else, or—if you don't have time to deal with the email—adding a star to remind yourself to read it later. If you'll be out of town for several days or more, you can also create an automatic vacation reply so people know you're unable to check your email.

Watch the video below to learn more about reading emails, replying, forwarding, and creating a vacation reply.

Reading email

By default, any email you receive will go to your inbox. You'll be able to tell which emails are unread because they'll be bold. You can also see the name of the sender, the subject of the email, and the first few words of the email body. This means even before you select an email, you can tell quite a few things about it.

The screenshot shows an email inbox with the following messages:

- Unread**
 - Facebook Olenna, you have 27 new notifications and 18 friend ...
 - Elena Casarosa Let's have dinner on Sunday - Hi Olenna, Silva, and Ti...
 - Elena Casarosa EC Photography Grand Opening! -- Elena Casarosa E...
PDF EC Photography...
 - jfillory The Littlest Toad Feedback - I've invited you to fill out...
 - no-reply Your Account Information with GCFLearnFree.org - H...
- Everything else**
 - Google Security alert - Olenna Mason New device signed in t...
 - Google Security alert - Olenna Mason New device signed in t...

To read an email:

1. From your inbox, click the email you want to read.

□ ⌂ ⌂ :

□ ★ ➤ Elena Casarosa	Let's have dinner on Sunday - Hi Olenna, Sil... 
□ ★ ➤ Elena Casarosa	EC Photography Grand Opening! - -- Elena Casarosa E...
	 EC Photography...
□ ★ ➤ jfillory	The Littlest Toad Feedback - I've invited you to fill out...
□ ★ ➤ no-reply	Your Account Information with GCFLearnFree.org - H...
^ Everything else	
□ ★ ➤ Google	Security alert - Olenna Mason New device signed in t...
□ ★ ➤ Google	Security alert - Olenna Mason New device signed in t...
□ ★ ➤ Words With Friends	Your Invitation: Don't Miss the ROAD TRIP!! - Mmmm...

2. The email will open in the same window.

Let's have dinner on Sunday ➤  

Elena Casarosa

to me, Silva, Tim ▾

Thu, Sep 27, 12:31 PM (1 day ago)

Hi Olenna, Silva, and Tim!

I'm going to be making pot roast and would love to have you guys come over. Let me know if you can r...

Reading options

In addition to reading the email, you have several reading options.

- You can click show details to see the email addresses of the sender and any other recipients, as well as the date the email was sent.

Let's have dinner on Sunday ➔ Inbox



Elena Casarosa

to me, Silva, Tim

Thu, Sep 27, 12:31 PM (1 day ago)

Hi Olenna, Silva,

from: **Elena Casarosa**
<elena.casarosa@gmail.com>

I'm going to be m

to: **Olenna Mason**
<lakestone.omason@gmail.com>,
Silva Casarosa
<Silva.Casarosa@hotmail.com>,
Tim Dragic <lakestone.tdragic@gmail.com>

...

date: Sep 27, 2018, 12:31 PM

We'll be the

subject: Let's have dinner on Sunday

me know if you can r

- You can click the Star next to the name of the sender to remind yourself to read the email later.

on Sunday ➔ Inbox

Thu, Sep 27, 12:31 PM (1 day ago)



st and would love to have you guys come over. Let me know if you can make it!

- You can also click the More button and select Add star from the drop-down menu.

A screenshot of an email inbox interface. At the top, there's a toolbar with icons for back, forward, search, and other common functions. Below it, a sidebar shows categories like 'Unread' and 'Everything else'. The main area lists several emails. An email from 'Elena, Silva, me 4' is selected and highlighted with a blue bar. A context menu is open over this email, listing options: 'Mark as unread', 'Mark as not important', 'Add to Tasks', 'Add star' (with a cursor icon pointing at it), 'Filter messages like these', 'Mute', and 'EC Photography...'. The email content itself says 'Let's have dinner on Sunday - Great idea, Elena! I can ...'.

- You can Reply, Reply to all, or Forward the email to someone else.



- You can click Newer or Older on the right side of the window to view the next email (or previous one).



- You can go Back to Inbox.



Let's have d...

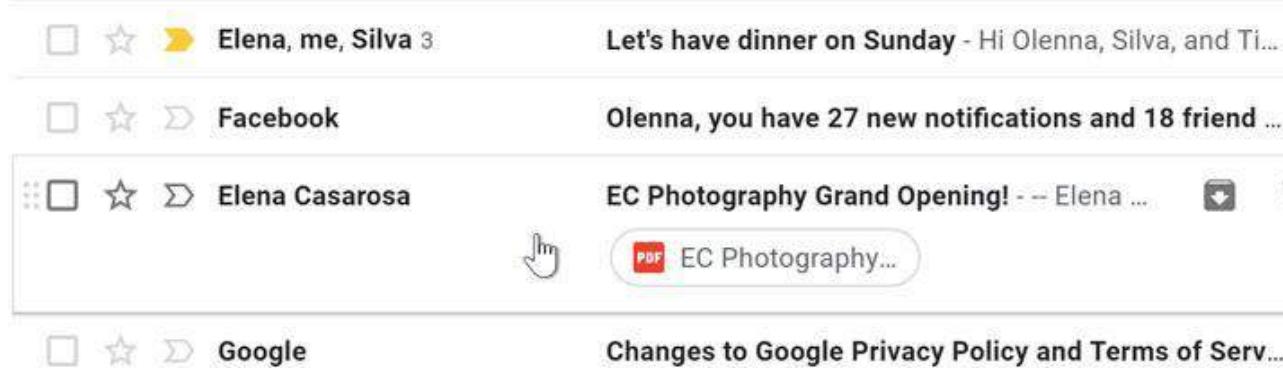
Opening attachments

Sometimes you'll receive emails that contain attachments. Generally, you will need to download an attachment to view it. However, many common file types, like Word documents and images, can be viewed within a browser window. If the attachment is an

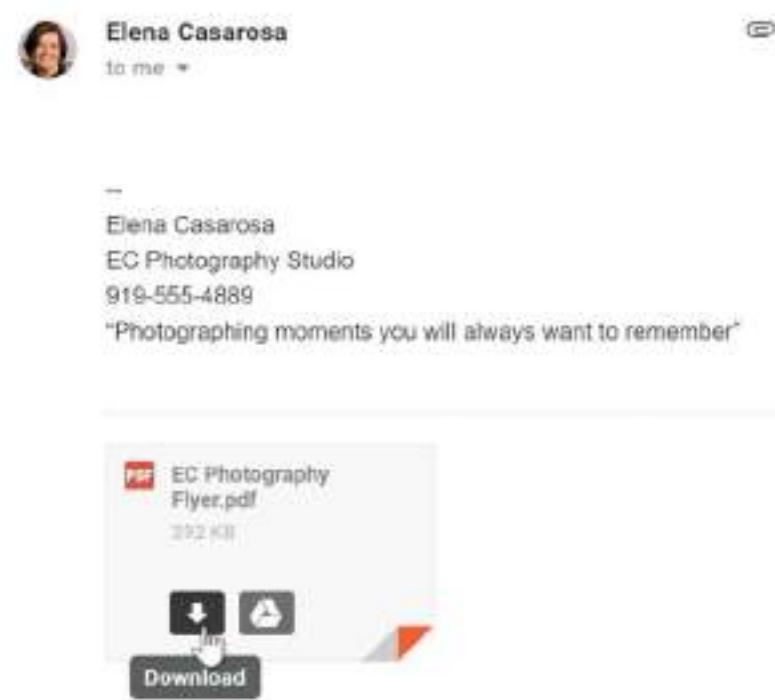
image, you'll also see a smaller copy of the image—called a thumbnail—inside the body of the email. You can tell which emails contain attachments because they will have a paper clip icon to the right of the subject.

To open an attachment:

- 1. Open the email message that contains the attachment.**



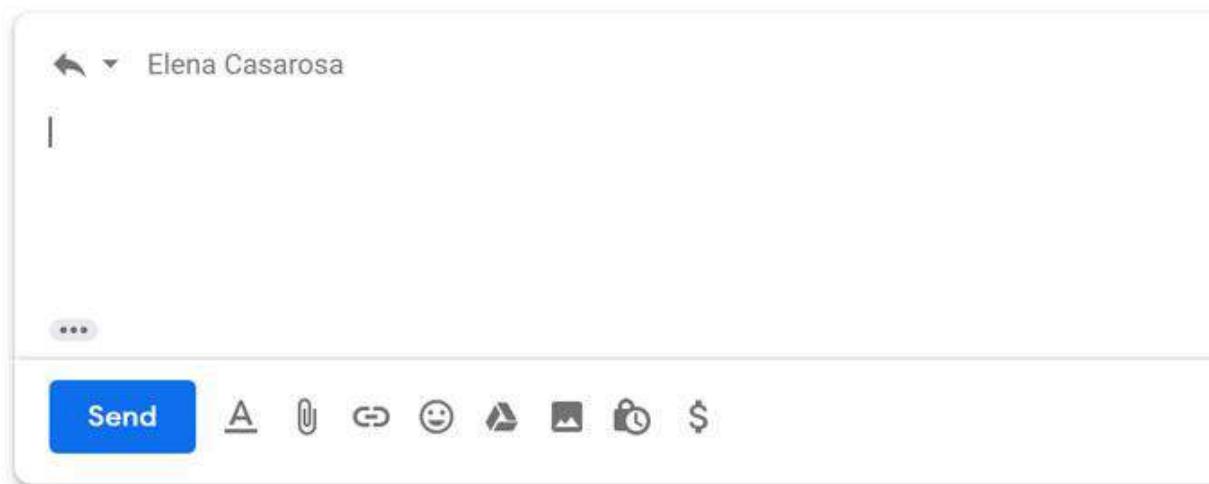
- 2. Click the Download icon to save the attachment to your computer. If your computer asks whether you want to Open or Save it, choose Save. You can then locate the file on your computer and double-click it to open it.**



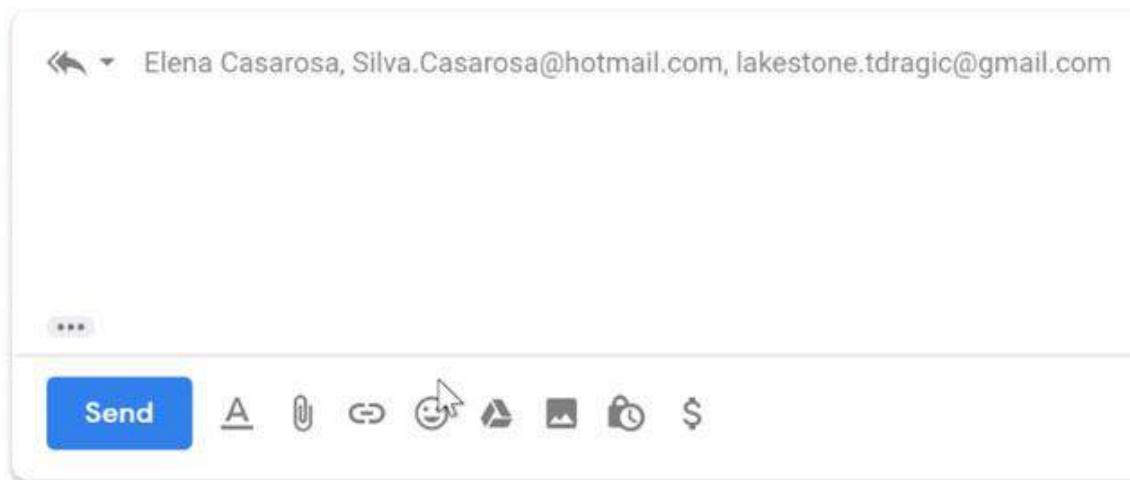
You should generally only open an attachment if it's from a trusted source. Some attachments can contain viruses, especially .exe files. If you don't recognize the sender—or if you don't know why someone is sending you the attachment—it's safest not to open it. For more information, read our lesson on [avoiding spam and phishing](#) from our [Internet Safety](#) tutorial.

Replying to emails

Most of the time, you will be replying to an email someone else sends you instead of composing a new message. When you reply, the recipient's email address will automatically appear in the To: field, so you won't need to worry about choosing the recipient.



Sometimes you'll receive emails where you're not the only recipient, and you'll need to decide whether you want to reply just to the person who sent the message or reply to all (the sender and all recipients). For example, if you're collaborating with a group of people via email, you'll probably want to use the Reply to all option so everyone gets the message. However, if you want to send a more private message to the sender, you'll need to select the Reply option so the message stays between the two of you.



To reply to an email message:

- 1. While viewing the message, click Reply at the bottom of the message. If the message was sent to multiple recipients, you will also have the option to Reply to all. You can also click the Reply arrow to respond to the message.**

Let's have dinner on Sunday ➔ Inbox



Elena Casarosa

to me, Silva, Tim ▾

Sep 27, 2018, 12:31 PM

Hi Olenna, Silva, and Tim!

I'm going to be making pot roast and would love to have you guys come over. Let me know if you can make it.

...

2. You may want to double-check the To: and Cc: fields to make sure you're sending your message to the correct people. If you are replying to all recipients, the additional recipients will appear in the Cc: field.
3. Type your message in the Body field, then click Send.

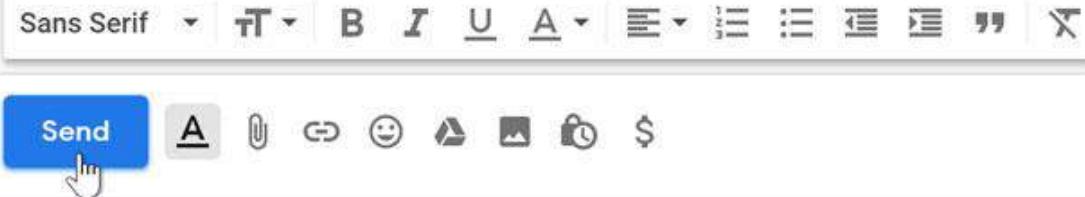


Elena Casarosa, Silva.Casarosa@hotmail.com, Tim Dragic

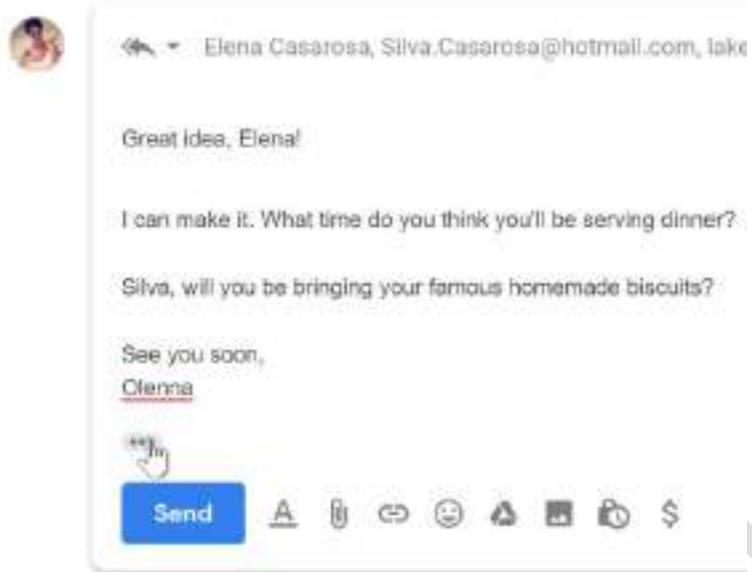
Great idea, Elena!

I can make it. What time do you think you'll be serving dinner?

Silva, will you be bringing your famous homemade biscuits?



To see the text of the original email while you're replying, click the gray button in the lower-left corner of the window, right above the Send button.



Forwarding emails

You can also choose to forward an email. This basically works the same as replying, but it's used to send the email to someone who wasn't one of the original recipients. Just like a reply, the original message will appear as a quote. It's usually a good idea to include a brief message of your own to explain why you're forwarding the email.

To forward an email message:

1. While viewing the message, click Forward at the bottom of the message. You can also select Forward from the More drop-down menu next to the Reply arrow.



6 of 9

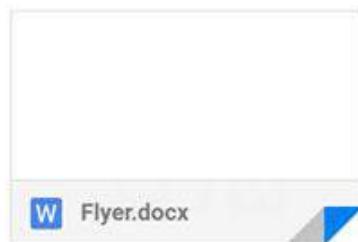
**Olenna Mason** <lakestone.omason@gmail.com>

to Julia ▾

...

Julia,

Saw this flyer and thought of you! Let me know if this is something you'd be in



W Flyer.docx

Wed, Jun 22, 2016, 9:17 AM

Reply

Forward

Filter messages

Print

Delete this mess

Report spam

Show original

Translate messa

Mark unread from

Reply

Forward

2. Type the recipient's email address in the To: field, or click To to choose a recipient from your contacts. If the person is in your contacts, you can start typing his or her name and that contact's email address should appear.

Peterboy

The screenshot shows an email interface with the following details:

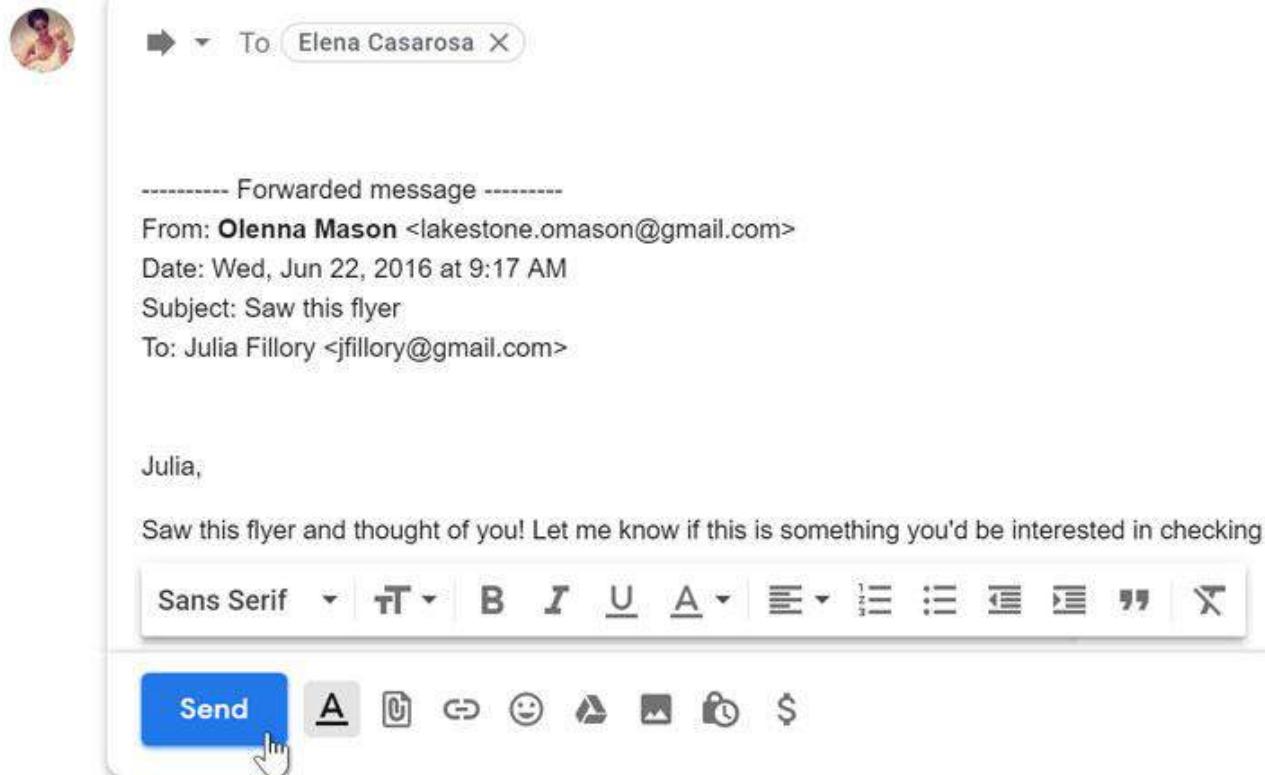
- To:** elena.casarosa@gmail.com
- From:** Olenna Mason <lakestone.omason@gmail.com>
- Date:** Wed, Jun 22, 2016 at 9:17 AM
- Subject:** Saw this flyer
- To:** Julia Fillory <jfillory@gmail.com>

The body of the email contains the text: "Julia,
Saw this flyer and thought of you! Let me know if this is something you'd be interested in checking out".

Below the message area are several toolbars:

- A top toolbar with icons for back, forward, search, and other file operations.
- A recipient selection dropdown for "To" with a placeholder "To elena.casarosa@gmail.com" and a "Send" button.
- A toolbar for font style, size, and alignment.
- A toolbar for rich text options including bold, italic, underline, and alignment.
- A bottom toolbar with a "Send" button and various media and link insertion icons.

3. Type your message in the Body field, then click Send.



Conversations

Sometimes when you view an email, you'll notice that it's grouped with several other related emails. This is called a conversation. Gmail groups related emails into conversations to help keep your inbox as neat and organized as possible. Instead of selecting a single email from your inbox, you're actually selecting the entire conversation, and you can then choose to view or minimize individual emails.

When you're viewing your inbox, you can tell how many messages there are in each conversation by finding the number next to the name of the sender.

<input type="checkbox"/>			jfillory	James' Birth
<input type="checkbox"/>			Silva Casarosa	Elena's birth
<input type="checkbox"/>			Elena, me, Silva 3	Let's have c
<input type="checkbox"/>			Elena Casarosa	EC Photogr

To view or minimize individual emails:

- 1. From your inbox, select a conversation.**
- 2. All of the messages in the conversation will appear to be stacked on top of one another. Click a message to expand it.**

Let's have dinner on Sunday ➜ Inbox X

 **Elena Casarosa** Sep 27, 2018, 12:15 PM
Hi Olenna, Silva, and Tim! I'm going to be making pot roast and would love to have you guys come over!

 **Olenna Mason** Sep 28, 2018, 2:15 PM
Great idea, Elena! I can make it. What time do you think you'll be serving dinner? Silva, will you be bringing anything?

 **Silva Casarosa** Sep 28, 2018, 2:04 PM ★
to me, Elena, Tim ▾

Hi Everyone,

I'll be able to make it. Of course I'll bring the biscuits! They are great with pot roast.

Elena, let me know if you need anything that day.

- 3. Click the top part of the message again to minimize the message.**

Let's have dinner on Sunday ➔ Inbox x

**Elena Casarosa**

Sep 27, 2018,

Hi Olenna, Silva, and Tim! I'm going to be making pot roast and would love to have you guys come over.

**Olenna Mason <lakestone.omason@gmail.com>**

Fri, Sep 28, 2:01 PM

to Elena, Silva.Casarosa, lakestone.tdragic ▾



Great idea, Elena!

I can make it. What time do you think you'll be serving dinner?

Silva, will you be bringing your famous homemade biscuits?

See you soon,
Olenna

...

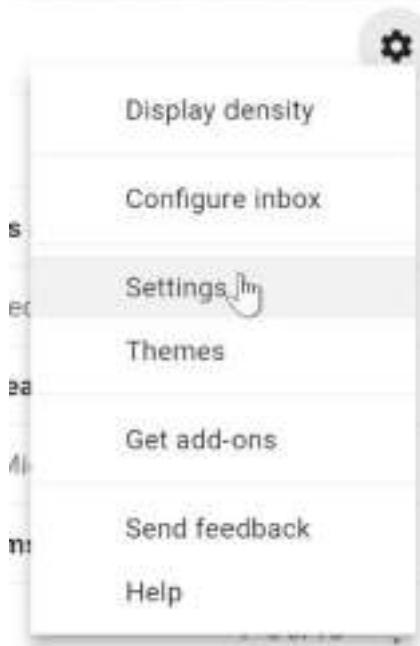
Adding a vacation reply

When you go on vacation, you may be unwilling or unable to check your email for several days or more. The email will still be in your inbox when you get back, so it may not be a problem. However, if someone sends you an urgent message that needs a response the same day, this person may not realize that you won't receive the message in time.

You can prevent this by creating a vacation reply, which will automatically send a reply to anyone who emails you. Your vacation reply can contain any message you want, but usually it will include the date you plan to return and your contact information while you are out of town (or possibly the contact information of a coworker who can handle questions while you're gone).

To add a vacation reply:

- 1. Click the gear icon in the top-right corner, then select Settings.**



Notes

2. Scroll down until you see the Vacation responder section. Click the First day field to choose the date you want the vacation reply to start. If you want, you can also choose a Last day, but it's not required.
3. Type the desired subject and message.

The screenshot shows the 'Vacation responder' settings page. On the left, there is a detailed description of what a vacation responder does. It says: 'responder: (sends an automated reply to incoming messages. If a contact sends you several messages, this automated reply will be sent at most once every 4 days)' followed by a 'Learn more' link. To the right, there are configuration options:

- A radio button labeled 'Vacation responder on' is selected.
- 'First day:' is set to 'September 28, 2018'.
- 'Last day:' is a field with '(optional)' and an unchecked checkbox.
- 'Subject:' contains the text 'I'm away from the studio until Saturday.'
- 'Message:' contains the text 'Thank you for contacting EC Photography. I am currently away from the studio until September 30, 2018. If you would like information about our current packages, please visit our website. If you have any other questions or need further assistance, please leave a voicemail at 919-555-4889.'
- A toolbar above the message area includes font styles (Sans Serif, serif, monospace) and various text format buttons (B, I, U, A).
- A link '« Plain Text' is visible above the message text area.
- A checkbox 'Only send a response to people in my Contacts' is checked.

4. You may want to select Only send a response to people in my Contacts to avoid giving your whereabouts and contact information to strangers. However, if you think you might receive an urgent message from someone who is not in your contacts, you can leave it unchecked. When you're finished, scroll down to the bottom of the page and click Save Changes.

messages. If a contact sends you several messages, this automated reply will be sent at most once every 4 days)

[Learn more](#)

Message:

Sans Serif

[« Plain Text](#)

Thank you for contacting EC Photography. I am currently away from the studio until you would like information about our current packages, please visit our website. If message, please leave a voicemail at 919-555-4889.]

Only send a response to people in my Contacts

When your vacation reply is active, there will be a bar at the top of the Gmail window showing your message. To end the vacation reply, click End now.

I'm away from the studio until Saturday. [End now](#) [Vacation Settings](#)

Challenge!

For this challenge, you can use an email in your inbox. If you don't have one, you can complete the challenge from [our previous lesson](#) and use it.

1. Open the email.
2. If your email has an attachment, try opening it.
3. Forward the email to yourself by using your email address as the recipient.
4. Star an email in your inbox.
5. Add a vacation reply, then send yourself an email. You can put anything in the subject and body of the email.
6. When you're finished, you should see both your email and your vacation reply in your inbox. Don't forget to turn off your vacation reply!

Lesson 5: Managing Email

Introduction

As you use email more and more, your inbox can become cluttered with old messages. It's important to keep your inbox organized so you can find messages when you need them. The simplest way to deal with email clutter is to delete unwanted messages. But you can also archive messages to move them out of your inbox, or you can apply labels to your messages based on the category they're in.

In this lesson, we'll talk about deleting unwanted messages, archiving, applying labels,

adding filters, and using Gmail's search feature.

Watch the video below to learn how to delete and archive messages, as well as how to manage your labels.

Deleting unwanted messages

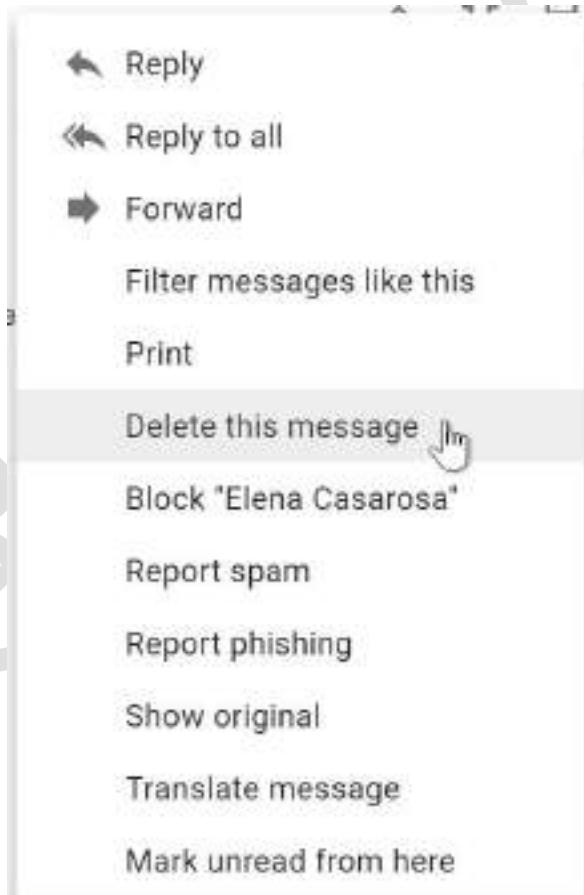
No matter how many emails you receive, you'll probably never run out of space. Gmail gives you enough space to hold countless emails and their attachments. However, it's a good idea to delete messages you don't want to make it easier to find the ones you do want.

To delete a message:

While viewing the message, click the Delete button.



If the message is a part of a conversation, the entire conversation will be deleted. If you just want to delete one message in a conversation, click the drop-down arrow in the top-right corner of the message and select Delete this message.



Dealing with spam

Usually, spam—or junk email—is automatically sent to your Spam folder, so it never gets to your inbox. However, some spam still gets past Gmail's spam filter. Instead of simply deleting these messages, it's best to Report them as spam so Gmail knows to filter them out in the future. The process is the same as deleting a message, except that you'll click the Report spam button instead.



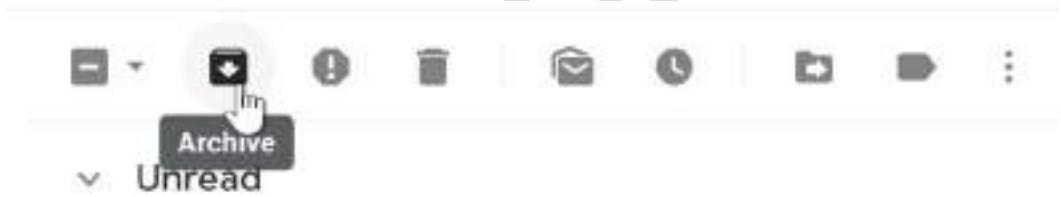
Messages in your Spam folder are automatically deleted after 30 days, so you'll never have to worry about deleting them manually.

Archiving messages

Sometimes you may want to remove emails from your inbox, but you don't want to delete them. Gmail allows you to archive messages so they will no longer appear in your inbox. Because you can still access archived messages, it's a safer alternative to deleting.

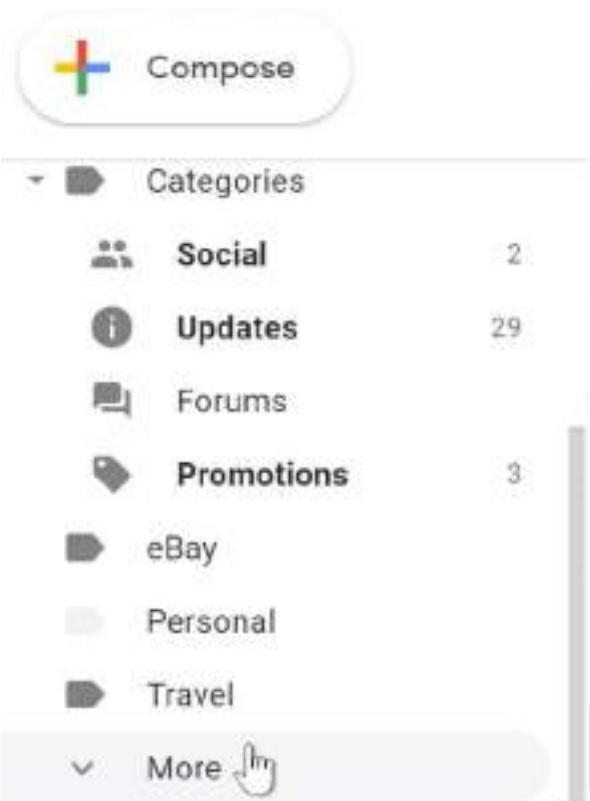
To archive a message:

While viewing the message, click the Archive button.

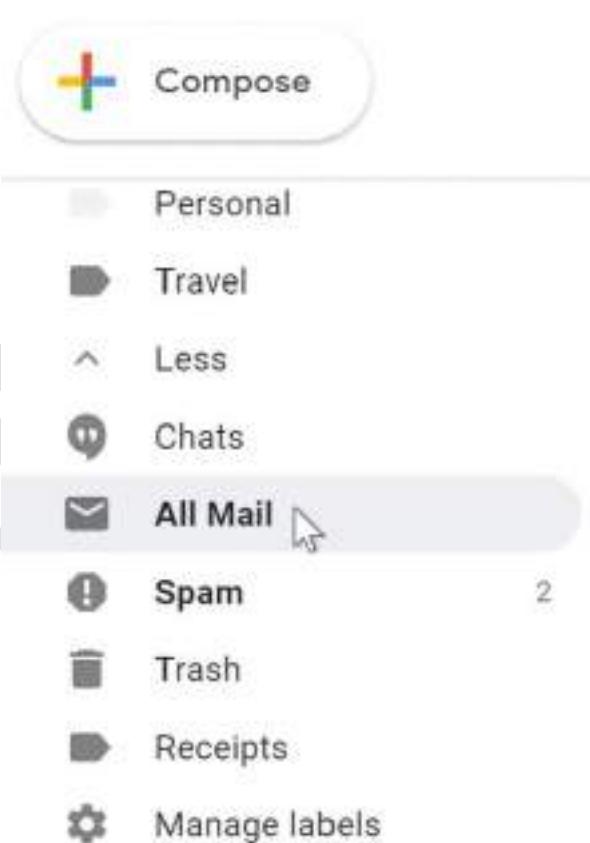


To view your archived messages:

In the left menu pane, click the more drop-down arrow and select All Mail.



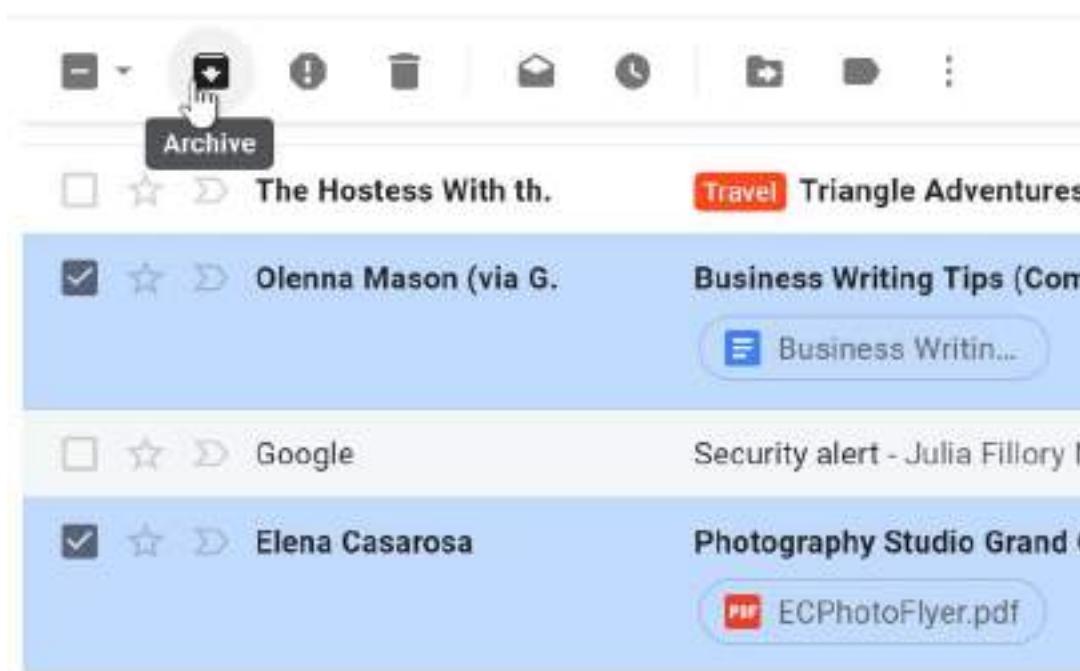
It will then display all of your messages, including archived messages and the messages in your inbox.



-
- The screenshot shows the main inbox page with a list of messages on the right. Each message has a checkbox, a star icon, and a reply arrow icon next to the sender's name or subject. The messages listed are:
- Julia Fillory
 - Silva Casarosa
 - AJokeADay.com
 - Elena, Silva, me 4
 - AJokeADay.com
 - AJokeADay.com
 - Facebook
 - AJokeADay.com

Managing multiple messages

If you're deleting, archiving, or reporting spam, you can take action on several messages at a time by selecting them in your inbox. Simply place a check mark next to each message you want to manage, then click the desired button. You can also click the top check mark to select all of the messages that are currently visible.

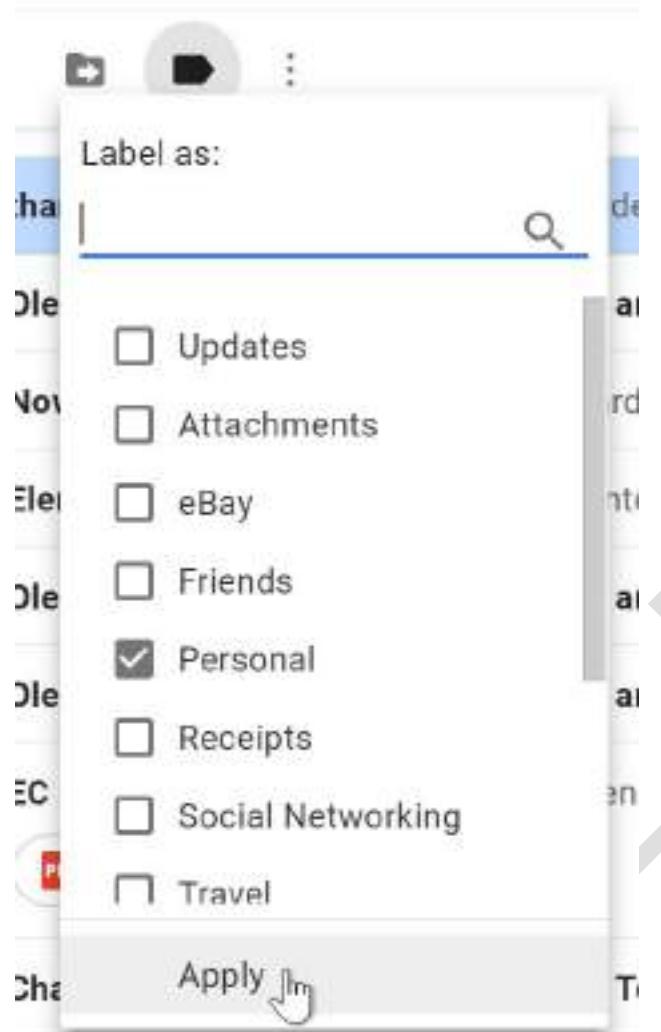


Working with labels

Labels allow you to organize your messages and make them easier to find. Applying a label to a message is like putting it into a folder, with one important difference: You can apply more than one label to a message. For example, if you received a message about a company trip, you could label it as Travel and Work. You can choose to label only the most important messages, or you can label every single one—it's up to you. You can create new labels whenever you need to, and you can also choose a color that will make the label stand out.

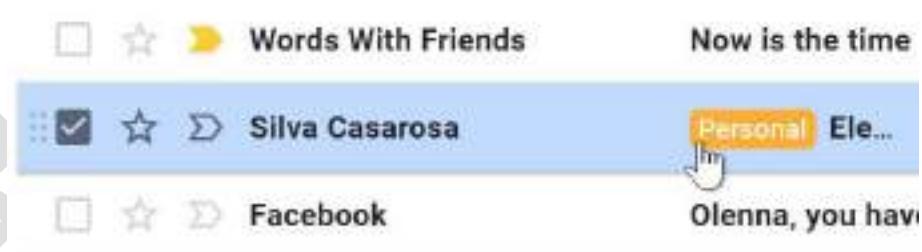
To apply a label to a message:

1. While viewing the message, click the Labels button. A drop-down menu will appear with a list of labels.
2. Place a check mark next to all of the labels you want, then click Apply.



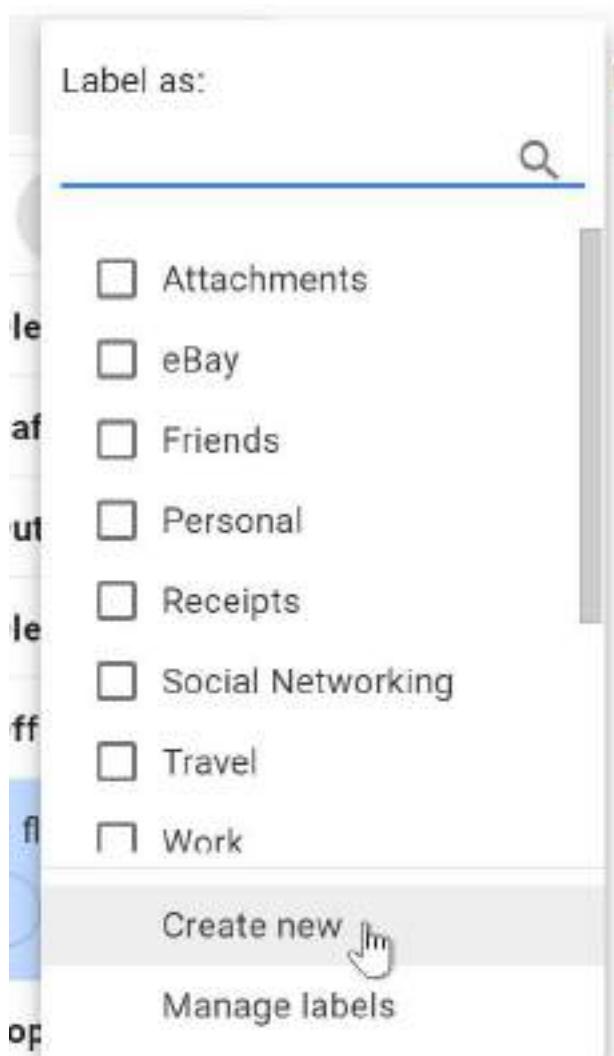
Notes

3. Now, when you view your inbox, you'll be able to see the label next to the message subject.



To create a new label:

1. While viewing the message, click the Labels button, then select Create new.



2. Type a new label name, then click Create. The new label will be applied to the message.

New Label

Please enter a new label name:

Friends

Nest label under:

Cancel

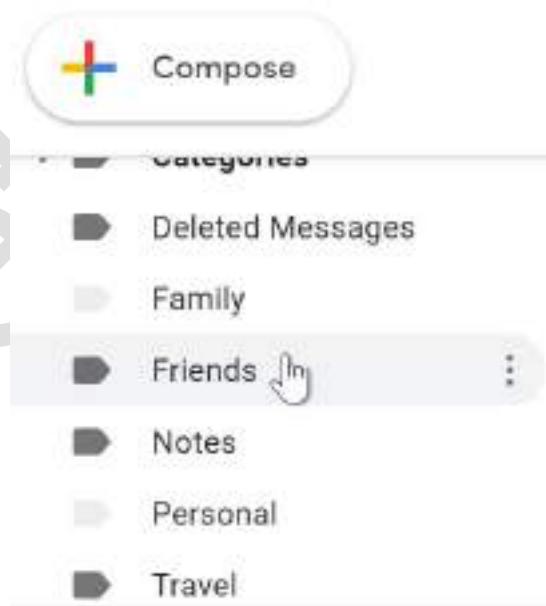
Cr

Viewing labeled messages

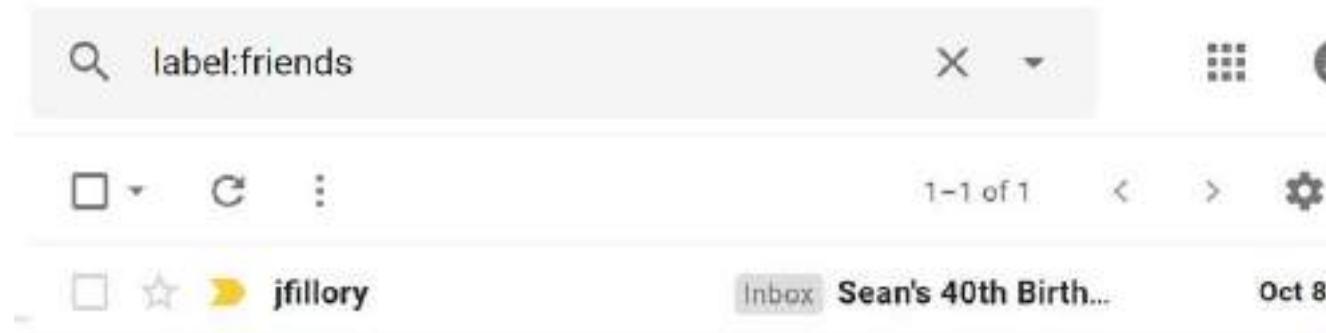
Once you've added labels to some of your messages, you can easily view all of the messages that contain a particular label. This is where all of the time spent labeling messages pays off. For example, you may want to view messages with the label Travel so you can see everything that pertains to an upcoming trip.

To view labeled messages:

1. In the left menu pane, click the name of the label you want to view.

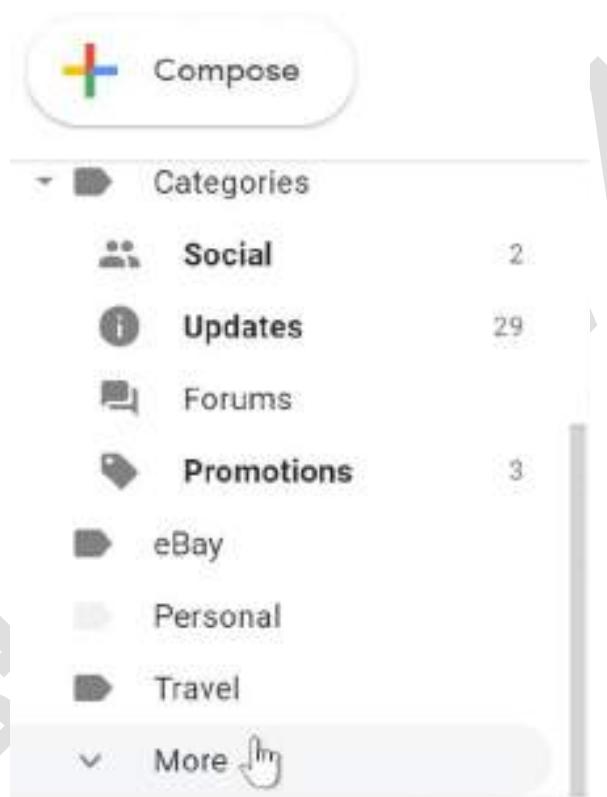


- 2. Gmail will now display only the messages containing the label you selected. The name of the label you chose will appear in the search bar.**



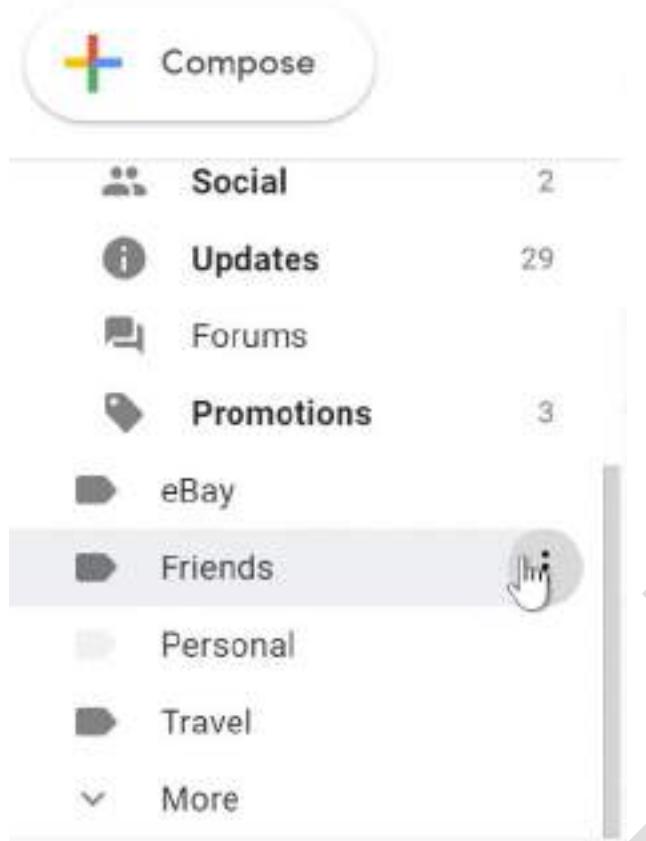
- 3. To view all of your messages again, click Inbox in the left menu pane.**

Some labels may be hidden. If you don't see the label you want, click the More drop-down arrow to view the hidden labels. From here, you can also click Manage labels to control which ones are hidden.

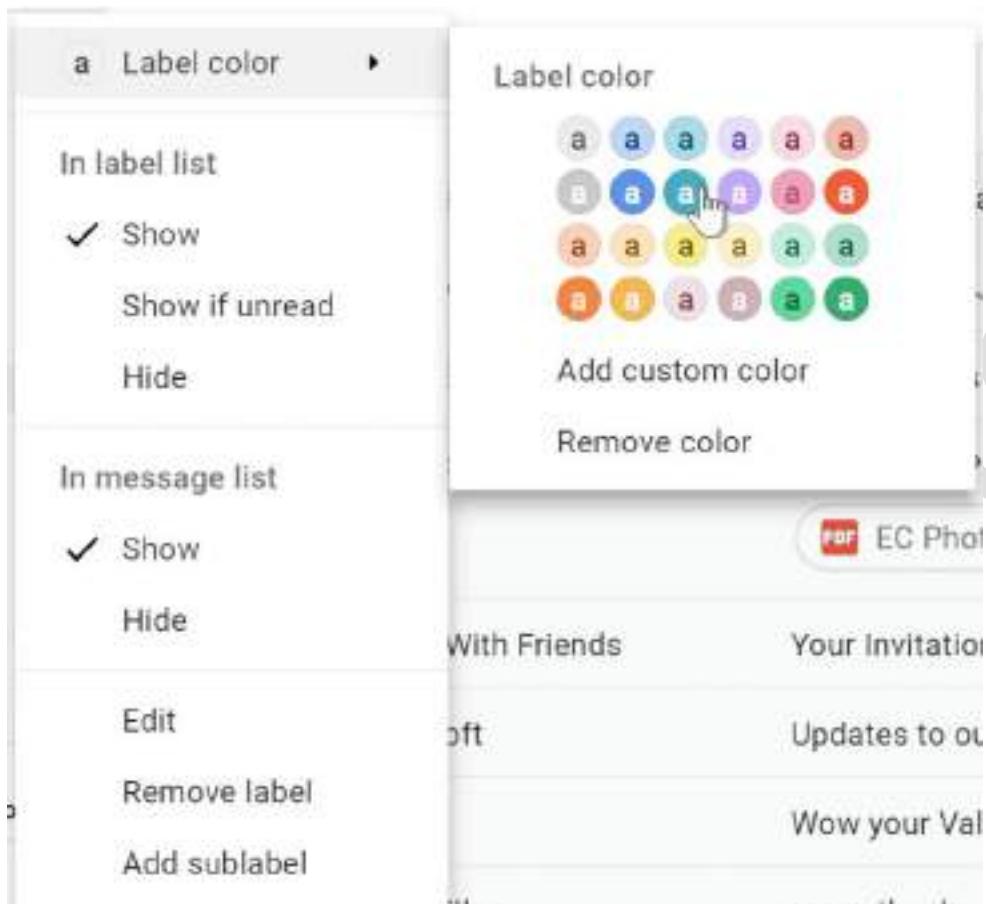


To choose a label color:

- 1. In the left menu pane, find the label you want to change.**
- 2. Click the more button to the right of the label name.**



3. From the menu, select the desired color.



4. The label will update to reflect the new color.

<input type="checkbox"/>			Silva Casarosa	Friends Elena's birthday - Hey Olenna! Ju
<input type="checkbox"/>			Elena, Silva, me 4	Friends Let's have dinner on Sunday - Gre
<input type="checkbox"/>			Elena Casarosa	Attachments Social Networking Work EC
<input type="checkbox"/>			Google Voice	Reminder: Verify your Google Voice forwa
<input type="checkbox"/>			Julia Fillory	Work Julia Fillory wants feedback on "Re

Creating filters

Filters can save you a lot of time by automatically performing actions like labeling or deleting messages as soon as they arrive in your inbox. You can create

filters that look for a specific sender, recipient, subject, or specific words that are contained in the body of the email.

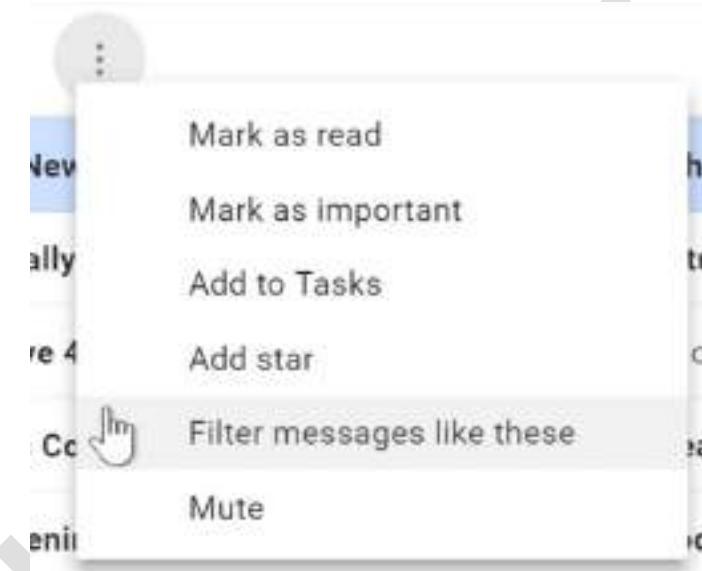
Watch the video below to learn how to create filters and search for an email message.

To create a filter:

- 1. Open an email message. Ideally, this message should be similar to the emails you want to filter.**



- 2. Click the More actions button, then select Filter messages like these.**



- 3. In the box that appears, type one or more search criteria. One or more fields may already be filled in based on the email you opened, but you can edit the criteria if necessary. In this example, we're only looking for messages that are from Twitter. Click Create filter with this search to select actions you want to apply to the filter.**

From Twitter

To _____

Subject _____

Has the words _____

Doesn't have _____

Size greater than _____ MB

Has attachment Don't include chats

Create filter

4. Place a check mark next to the desired action. If you want to apply a label, you'll need to choose the label from the drop-down menu.
5. If you want to apply the filter to existing messages that meet the criteria, place a check mark next to Also apply filter to matching conversations.
6. Click Create Filter. In this example, the Twitter label will be applied to any new messages you receive from Twitter, as well as all of the existing ones.

← When a message arrives that matches this search:

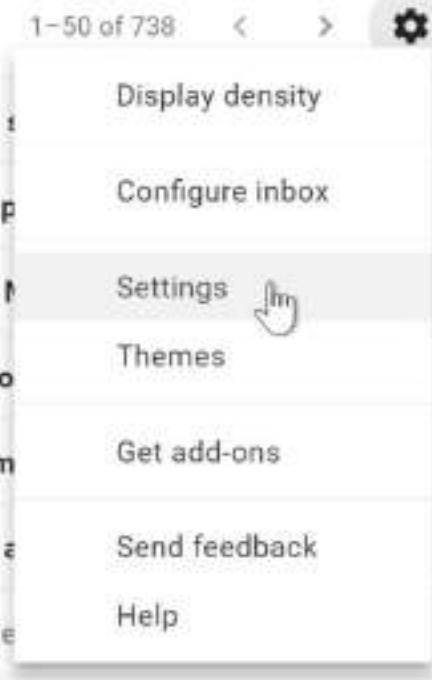
- Skip the Inbox (Archive it)
- Mark as read
- Star it
- Apply the label: Twitter ▼
- Forward it [add forwarding address](#)
- Delete it
- Never send it to Spam
- Always mark it as important
- Never mark it as important
- Categorize as: Choose category... ▼
- Also apply filter to matching conversations.

 Learn more



To edit or delete filters:

1. In the top-right corner of the page, click the gear icon, then select Settings.



2. Click Filters and Blocked Addresses at the top of the screen to view a list of filters that are currently active. You can then edit or delete the desired filters.

Settings

General Labels Inbox Accounts and Import **Filters and Blocked Addresses** Forwarding and POP/IMAP Advanced Chat Themes

The following filters are applied to all incoming mail:

- Matches: from:meetup
Do this: Apply label "Travel"
- Matches: from:Twitter
Do this: Skip Inbox, Apply label "Twitter"

Select: All, None

[Export](#)

[Delete](#)

[Create a new filter](#) [Import filters](#)

The following email addresses are blocked. Messages from these addresses will appear in Spam:

You currently have no blocked addresses.

Select: All, None

[Unblock selected addresses](#)

Search mail

The search mail feature allows you to perform a Google search in your email. This means

you can find any message, no matter how new or old. It searches every part of the message, so you can find a message even if you don't remember who sent it or if you never labeled it.

To search for a message:

- 1. At the top of the page, type some search terms in the Gmail search box.**

A screenshot of a Gmail inbox search results page. The search term 'ole' is typed into the search bar at the top. Below the search bar, there are two contact cards: 'Olenna Mason' with the email address 'lakestone.omason@gmail.com' and 'gcf.olenna@gmail.com'. Underneath these contacts are three search results: 'This Week's Events / Game Nights & Anime Trivia (80s/90s Edition)' by 'The Hostess With the Mostess', 'Lunch next Wednesday?' by 'me, Olenna Mason' (with a cursor arrow pointing to the right of the message title), and 'Search the web for "ole"'.

- 2. Your inbox will display your search results. You can click an email to read it, or you can try a different search.**



Lunch next Wednesday? ➔



Julia Fillory <jfillory@gmail.com>

to Olenna ▾

Tue, Oct 1

Hi, Olenna,

I know we've been trying to meet up for a long time, it's been such a bus

I'm free for lunch next Wednesday, though, if you're free.

Let me know!

...

◀ Reply

▶ Forward

If you're still not finding what you're looking for, you can click Show search options to perform an advanced search.

Search mail

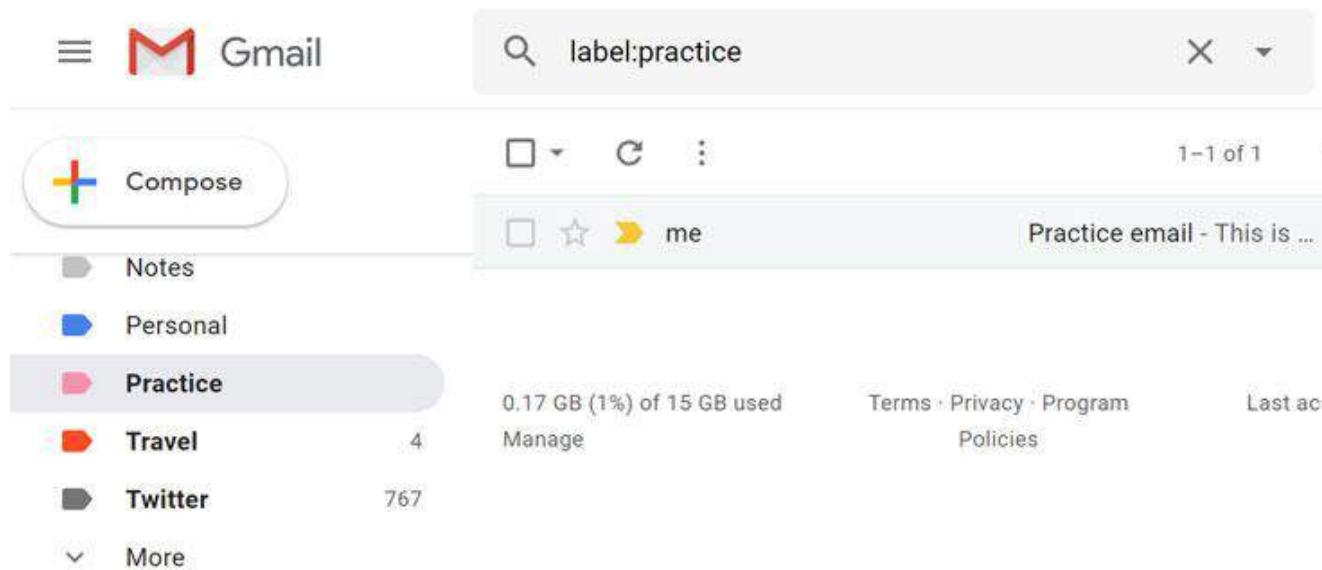


Show search options

Challenge!

For this challenge, you will need an email in your inbox. If you completed the previous lesson's challenges, you can use those emails. If not, send yourself an email by putting your email address as the recipient.

1. Open an email you sent to yourself, create a label, and name it Practice.
2. Change the label color to purple.
3. Create a filter to only show emails you have sent yourself.
4. When you're finished, your inbox should look something like this:



5. Optional: Archive one of your emails.

Lesson 6: Gmail for Mobile Devices

Introduction

No matter what type of mobile device you use, it's easy to send and receive Gmail messages on the go. In this lesson, we'll show you how to set up Gmail with the native email app on your device. We'll also talk about using the official Gmail app for iPhone and Android.

Gmail for mobile devices

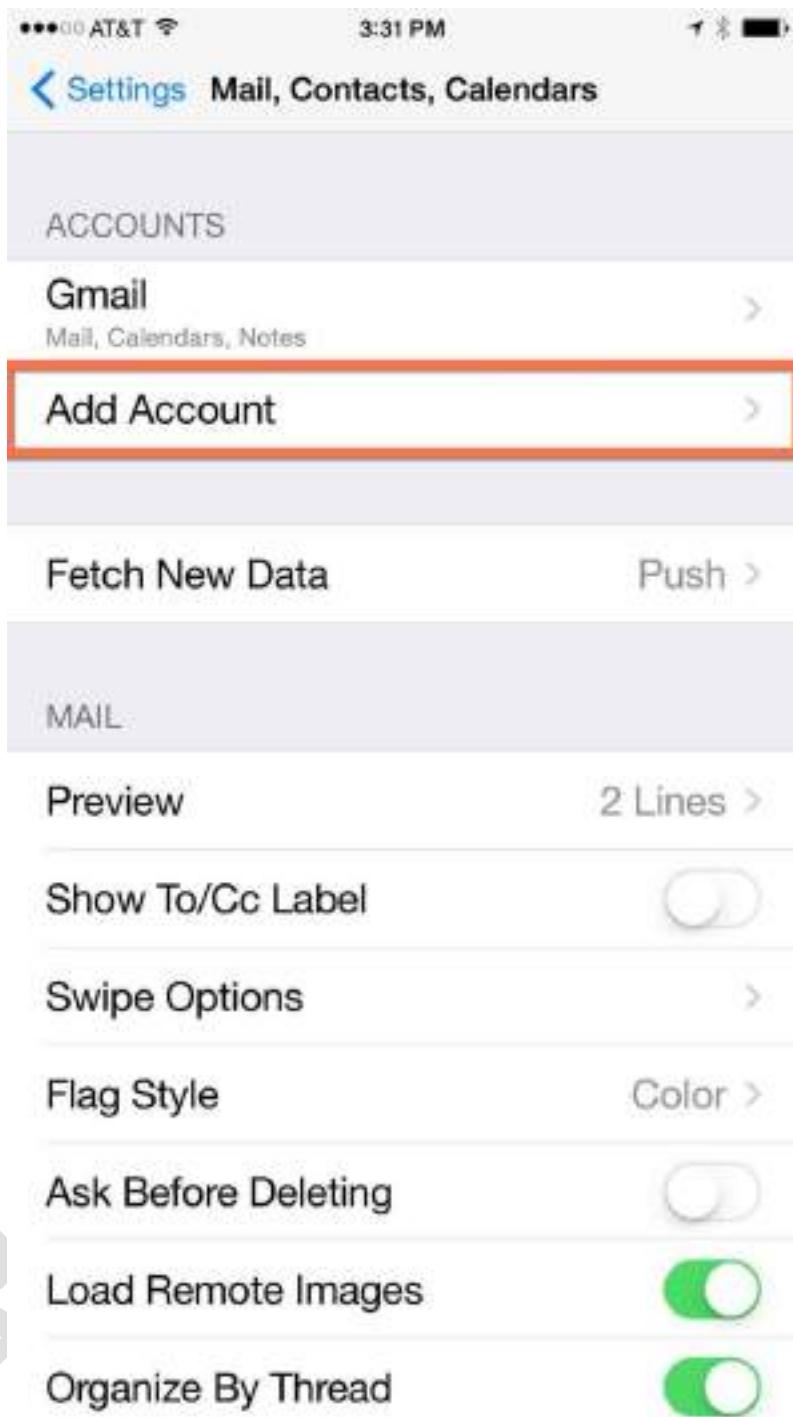
If you have a mobile device, there are two main ways to access your Gmail account:

- Option 1: The native email app on your device. If you have multiple email accounts through different email providers (such as a personal email and a work email), you may find the native email application to be more convenient because it allows you to view and manage all of your messages in one place.
- Option 2: The official Gmail mobile app, available for [iOS](#) and [Android](#). If you're already an experienced Gmail user, you may prefer using the official Gmail app. The app looks and feels similar to the desktop version, and it includes some custom Gmail features that may not be available in the native email app on your device.

To set up Gmail with the native email app:

In this example, we'll explain how to sync a Gmail account with the Mail app for iOS devices, including the iPhone and iPad. Keep in mind that this process may vary depending on your device.

1. Navigate to the email settings on your device, then select Add Account.



2. Select Google.

[Accounts](#)[Add Account](#)[Other](#)

3. Follow the instructions to connect your account.

4. When you're done, you'll be able to send and receive emails from your Gmail account in the Mail app.

[◀ Mailboxes](#)[Inbox](#)[Edit](#) Search**● Facebook**

Sunday >

Olenna, you have more friends on Facebook than y...

The fastest way to find all of your friends on
Facebook is importing your email contacts. Once y...**● no-reply@roblox.com**

Saturday >

Roblox Password Reset

We noticed that the password changed for your
Roblox account: TheCoolHackerLitter. If you didn't...**● Apple**

Wednesday >

Reset your password or unlock your Apple ID.

Dear Olenna Mason, You recently requested a
password reset or unlock your Apple iD. Click the li...**● Facebook**

Wednesday >

🔔 See Olenna Mason's photo tag and other notifi...

A lot has happened on Facebook since you last
logged in. Here are some notifications you've miss...**● Flipboard**

10/4/18 >

Four Must-Read Destinations to Inspire Your Work,...

Meet the new Vote 2018, The Daily Edition, The
Culturist and 10 for Today....**● Facebook**

10/3/18 >

🕒 Let Bryan Durand know you are thinking of him...

Wish Bryan Durand a happy birthday Wednesday,
October 3rd Bryan Durand Facebook Wish Bryan D...

Updated Just Now

1,691 Unread



Using the Gmail app

We'd like to give you a quick overview of Gmail for Android and Gmail for iPhone. While the interface for these apps is somewhat different, you'll notice that each app gives you access to the same basic features.

Gmail for Android

Click the buttons in the interactive below to learn more about using Gmail for Android.

72°

40% 3:37 PM



Primary



Google

3:35 PM

New sign-in from Samsung Galaxy S5

New sign-in from Samsung Galaxy S5...



Social

Deborah Montague

1 new



Olenna Mason

Jun 24

Hey girl!



Grace Ellington

Jun 21

Volunteer Opportunity

I would like to inform you of a volunteer...



Olenna Mason

Jun 21

Lakestone student art exhibition

You're invited to Lakestone's annual stu...



Merced Flores 2

Jun 21

Re: consultant for book

Hi Julia, I'm absolutely available as a sc...



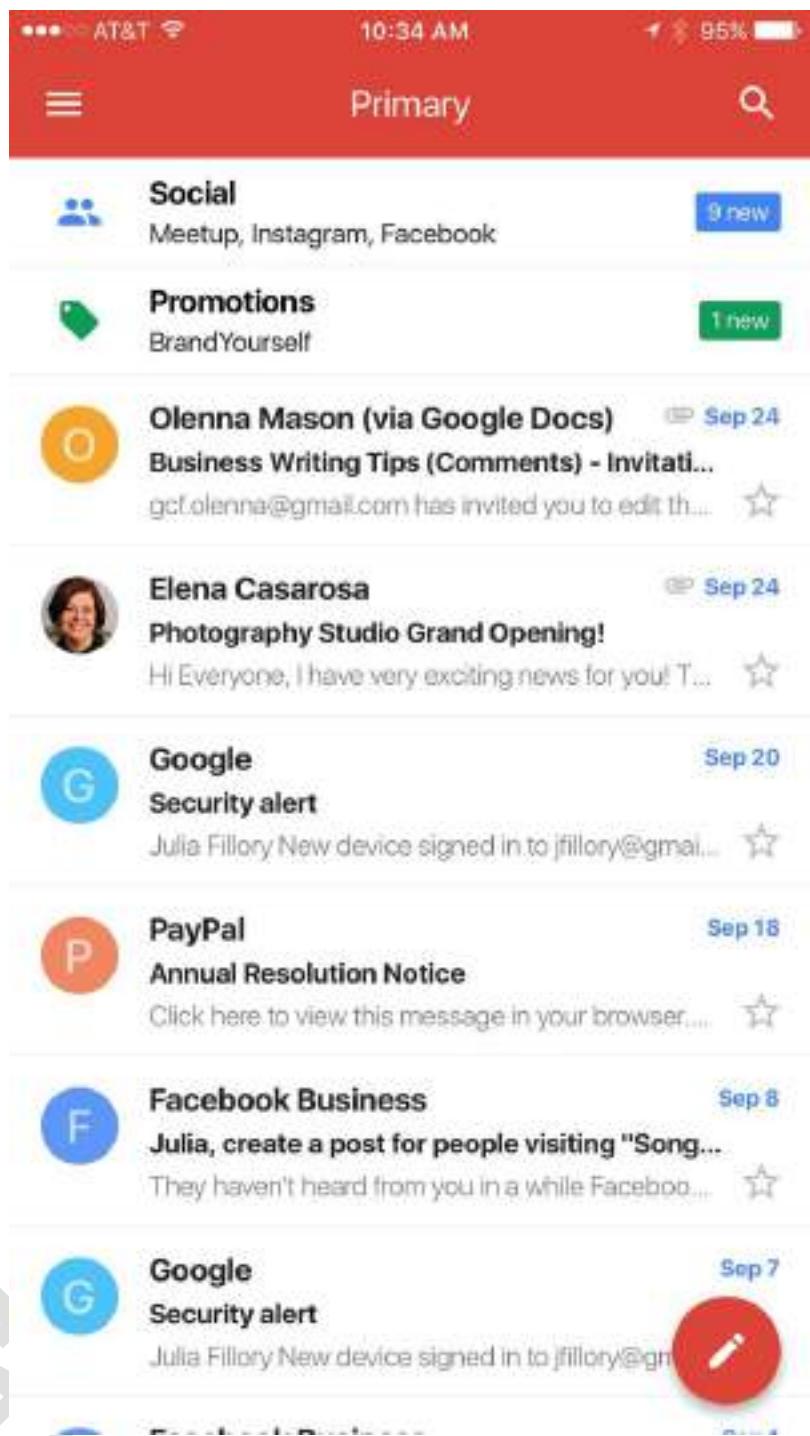
Elena Casarosa

Portrait special



Gmail for iPhone

Click the buttons in the interactive below to learn more about using Gmail for iPhone.



Remember, if you're using the native email app on your phone, it will look different from the official Gmail apps above. You can review our lessons on using the iOS Mail app in our [iPhone Basics](#) and [iPad Basics](#) tutorials to learn more.

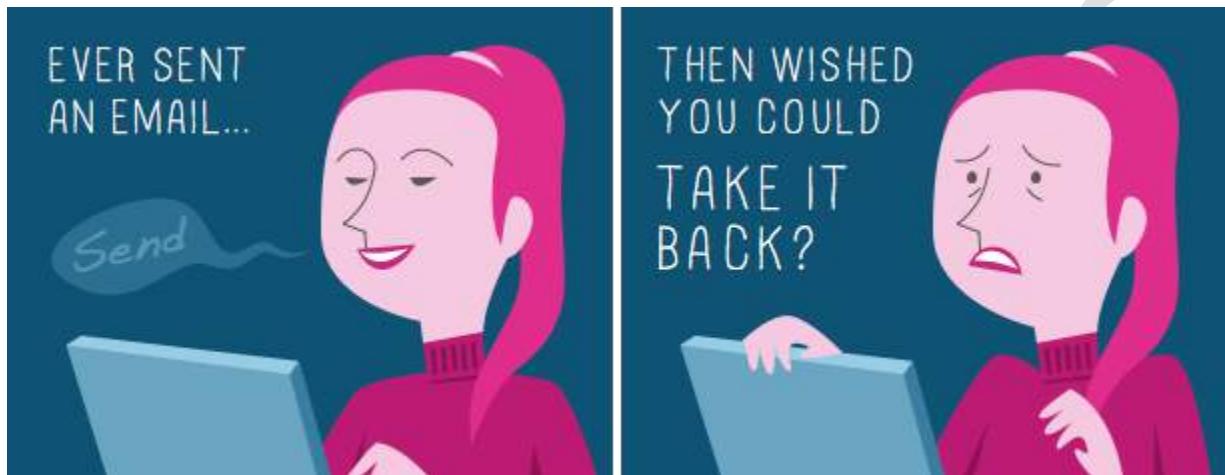
Challenge!

1. Open Gmail on your mobile device using either the native email app or the official Gmail app. If you're using the native email app, add your account if you haven't already.
2. Compose an email, and send it to yourself.

3. Open, then delete, the email you just sent.
4. Try switching between your inbox folder and your trash folder.

Lesson 7: How to Unsend an Email in Gmail

How to unsend an email in Gmail



It happens to all of us. You click Send, then realize you've made a mistake.

Maybe it was just a spelling error. Maybe you hit Reply all by accident. Or maybe you sent the email to the wrong person, and you definitely, *definitely* don't want that person reading it, because it kinda sorta might contain something super embarrassing.

If you use Gmail, you're in luck. Gmail has recently introduced a feature that lets you unsend any email up to 30 seconds after you've sent it.

This feature—called Undo Send—must be turned on before you can use it. Afterward, you'll be able to take back your most recent email in a single click.

To enable Undo Send:

1. Go to your Gmail account.
2. Click the Settings button in the upper-right corner, then choose Settings from the menu.

Display density:

- Comfortable (on larger displays)
- Cozy (on larger displays)
- Compact (current view)

More >

Primary Social

Mason, me, Mail (3) Work

Facebook

Elena, Julia (3) Persona

Elena Casarosa Persona

Facebook

Facebook

Facebook

Facebook Vienna, you have 1 new

Configure inbox

Settings Themes

Send feedback

Help

3. Make sure you're on the General tab, then scroll down to Undo Send.
4. Check the box that says Enable Undo Send. You can choose a cancellation period of up to 30 seconds.

Settings

General Labels Inbox Accounts and Import Filters and Blocked Addresses

Forwarding and POP/IMAP Chat Labs Offline Themes

Show "Send & Archive" button in reply

Archive: Hide "Send & Archive" button in reply

Learn more

Undo Send:

Enable Undo Send

Send cancellation period: seconds

Start

Drag the stars between the lists. The stars will rotate in the order shown.

To use Undo Send:

From now on, every time you send an email, a small pop-up will appear at the top of the page. To unsend the email, simply click Undo. The pop-up will disappear when the cancellation period is over, so don't hesitate!



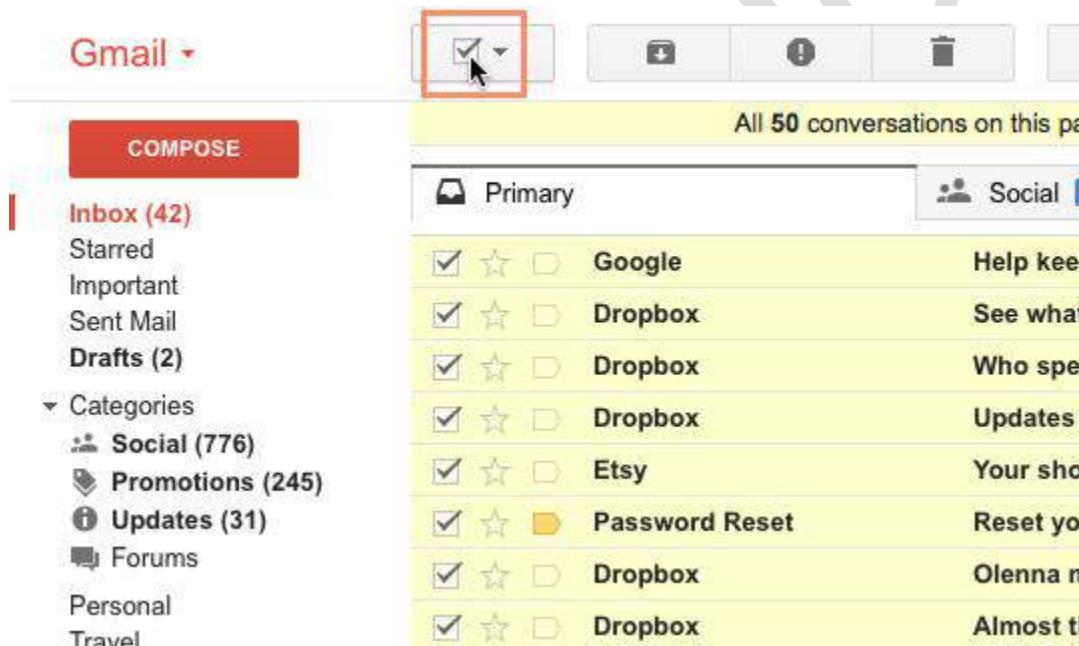
Lesson 8: Time-Saving Email Tips

Time-saving email tips

Many email clients have a variety of helpful features you might not know about. These features are pretty easy to use, and they can save you time and help you to better organize your emails. In this lesson, we'll go over some of these tips and tricks to help you optimize your email experience.

Selecting multiple emails

Let's say you have a large number of emails you'd like to delete. It would be fairly time consuming to go through and individually delete each email. Luckily, most clients have a feature that allows you to select multiple emails. These are usually in the form of check boxes next to each of your emails. Many clients also have a Select All button, which will select every email on the page, as seen below.



Once the emails are selected, you can then perform any action you want, including deleting, sorting, and archiving.

Keyboard shortcuts

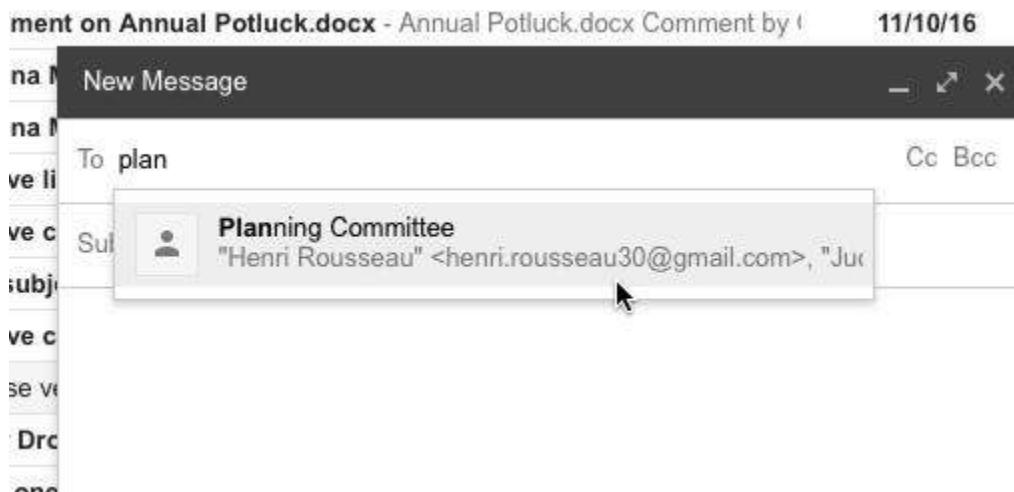
Most email clients have some set of keyboard shortcuts that can help you navigate your emails more quickly. An example that's fairly universal is using the arrow keys to scroll through email messages instead of having to click specific buttons. Other keyboard shortcuts (like replying and deleting) will vary from client to client. Below are a few support pages listing shortcuts for some popular clients:

- [Gmail](#)
- [Outlook](#)
- [Yahoo! Mail](#)

If you use an email service other than those listed above, you should be able to find its corresponding keyboard shortcuts via its help page or a quick Internet search.

Creating groups

If you find yourself sending emails to the same people on a regular basis, it might be a good idea to create a group. Many clients allow you to select various email addresses and save them as a single group. This way, you can simply select the group as the recipient instead of having to select each individual address. This feature can usually be accessed from the Contacts page of your email client.



Email filters

When you're receiving a lot of emails on a daily basis, it can be difficult to keep them organized. Luckily, various email clients offer a feature called filters, which basically sort your emails into folders as you receive them.

You can create filters that sort your email by various characteristics, including specific senders or recipients, keywords in the subject or body, and attachments. For example, let's say you want to make sure emails from Twitter don't get lost among the rest of your messages. You could create a filter that sorts every email received from Twitter, as shown below.

A screenshot of the Gmail 'Filters' settings page. On the left, there is a list of filter rules with checkboxes and star icons. The first rule is for 'Elena Casarosa' (checkbox checked). The second rule is for 'Twitter' (checkbox checked). The third rule is for 'Facebook' (checkbox checked), with a cursor icon pointing to its star icon. The fourth rule is for 'Twitter' (checkbox checked). On the right, the results of these filters are shown in a list. The first result is 'Thank you and appointment confirmation -' from 'Twitter Classical Music (@ClassicalMusic8)'. The second result is 'Welcome back to Facebook - facebook Hi He' from 'Twitter Marian Sawyer (@MarianSawyer) is'. Both results have a small blue 'Twitter' icon next to them.

For more information on filters and how to create them in Gmail, review our lesson on [Managing Email](#).