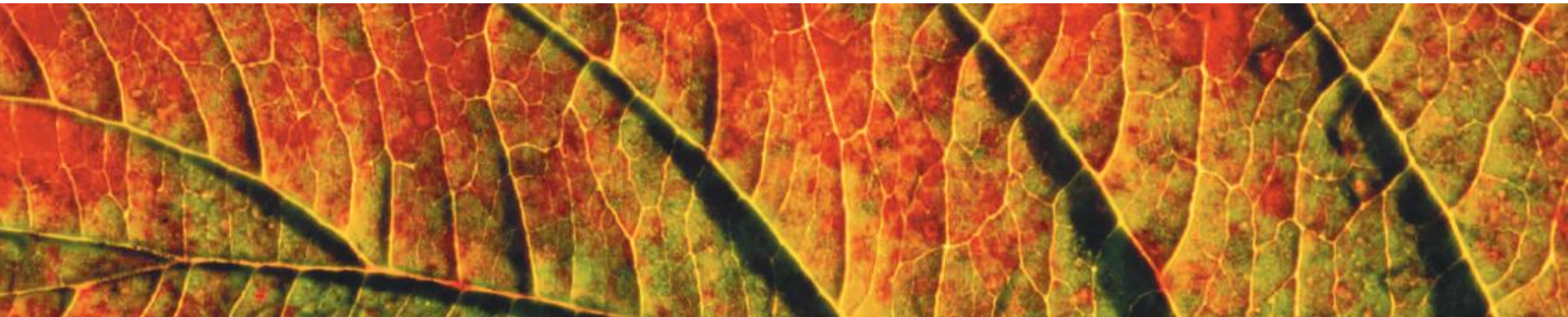# Excel Tutorial 2: Formatting a Workbook

Microsoft® Office 2010

Objectives

- Format text, numbers, and dates
- Change fonts and font colors
- Add fill colors and background images
- Create formulas to add, subtract, and divide values
- Apply number formats
- Align, indent, and rotate cell contents

Objectives

- Merge a range into a single cell
- Copy and paste formats
- Apply built-in cell styles
- Change the theme of a workbook
- Create formulas to add and subtract values
- Apply a built-in table style and select table style options

Objectives

- Highlight cells with conditional formats
- Hide worksheet rows
- Define the print area, insert page breaks, and add print titles
- Create headers and footers
- Select page margins

Visual Overview

The **Format Painter** copies and pastes formatting from one cell or range to another without duplicating any data.

You can format a text string within a cell in Edit mode.

The appearance of text is determined by its **typeface**, which is the specific design of a set of characters, including letters, numbers, punctuation marks, and symbols.

Every font can be formatted with a font style such as *italic*, **bold**, or ***bold italic*** and special effects such as underline, strikethrough, and color.

You can rotate content in the cell.

The Comma style adds a thousands separator and two decimal places to the right of the decimal point, and lines up values by their decimal points. You can change how many decimal places are displayed.

A **font** is a set of characters that employ the same typeface, such as Arial, Times New Roman, and Courier.

The Accounting style lines up currency values by their currency symbol and decimal point; negative numbers are enclosed in parentheses.

The Alignment group has buttons for setting the horizontal and vertical alignment, the orientation, indents, and text wrapping of text in a cell, as well as merging cells.

You can **merge**, or combine, several cells into one cell. This content is merged and centered across the range A4:F4.

You can set the **font size** to increase or decrease the size of the text. Font sizes are measured in **points**, where one point is approximately 1/72 of an inch.

Worksheet Formatting

You can use a picture or image as the background for a worksheet. The background image does not affect any cell's format or content.

A background color, also known as a **fill color**, can be added to cells to help differentiate parts of a worksheet or highlight data.

The Percentage style formats numbers with the % symbol after the number and two digits to the right of the decimal point. You can change the number of decimal places that are displayed.

A **border** is a line you add along an edge of a cell to improve readability of the data.

You can increase or decrease the number of decimal places that are displayed in a cell value.

Formatting Cell Text

- **Formatting**
  - Process of changing workbook's appearance by defining fonts, styles, colors, and graphical effects
    - Only the *appearance* of data changes, not data itself
  - Enhances readability and appeal
  - Live Preview shows the effects of formatting options before you apply them
- **Themes**
  - Named collections of formatting effects

Applying Fonts and Font Styles

- **Theme fonts** and **non-theme fonts**

- Character styles (**serif fonts** and **sans serif fonts**)

- Font styles, special effects, font size
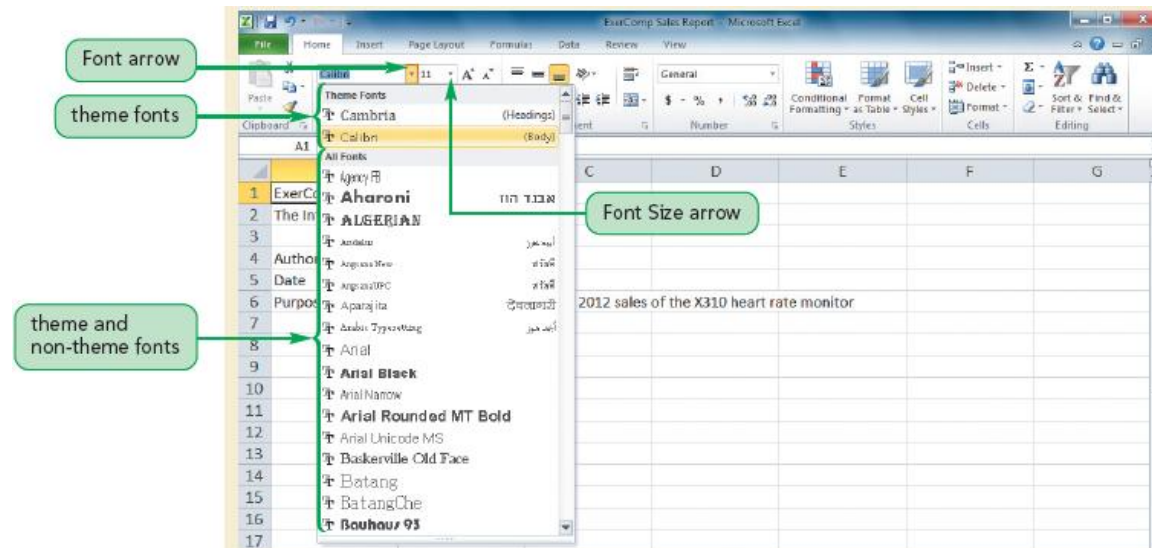
Applying a Font Color

- Themes have 12 colors: 4 for text and backgrounds, 6 for accents and highlights, and 2 for hyperlinks

- Standard colors (always available)

- Custom colors

- Automatic colors
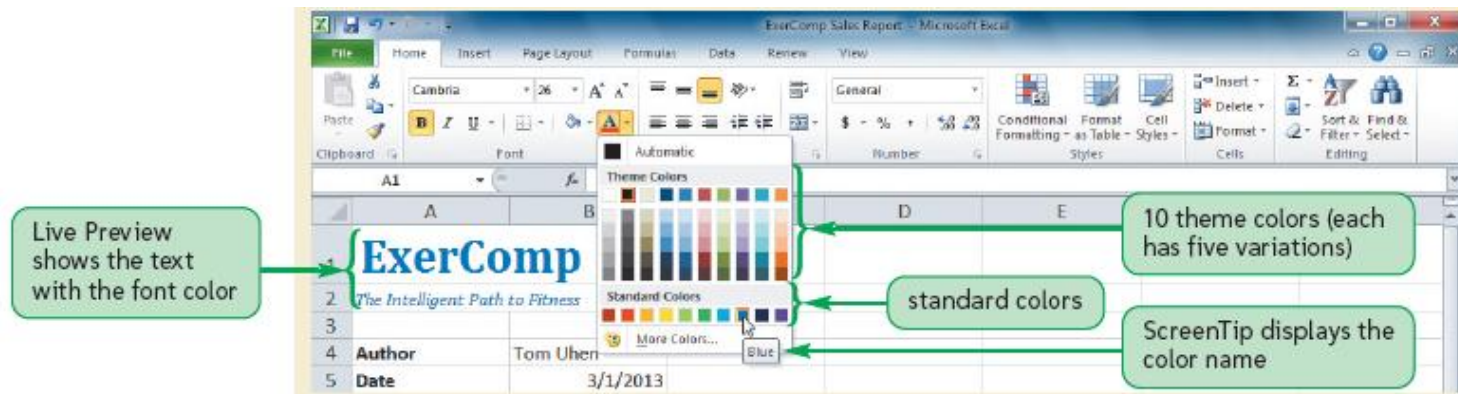
Working with Colors and Backgrounds

- Changing a fill color
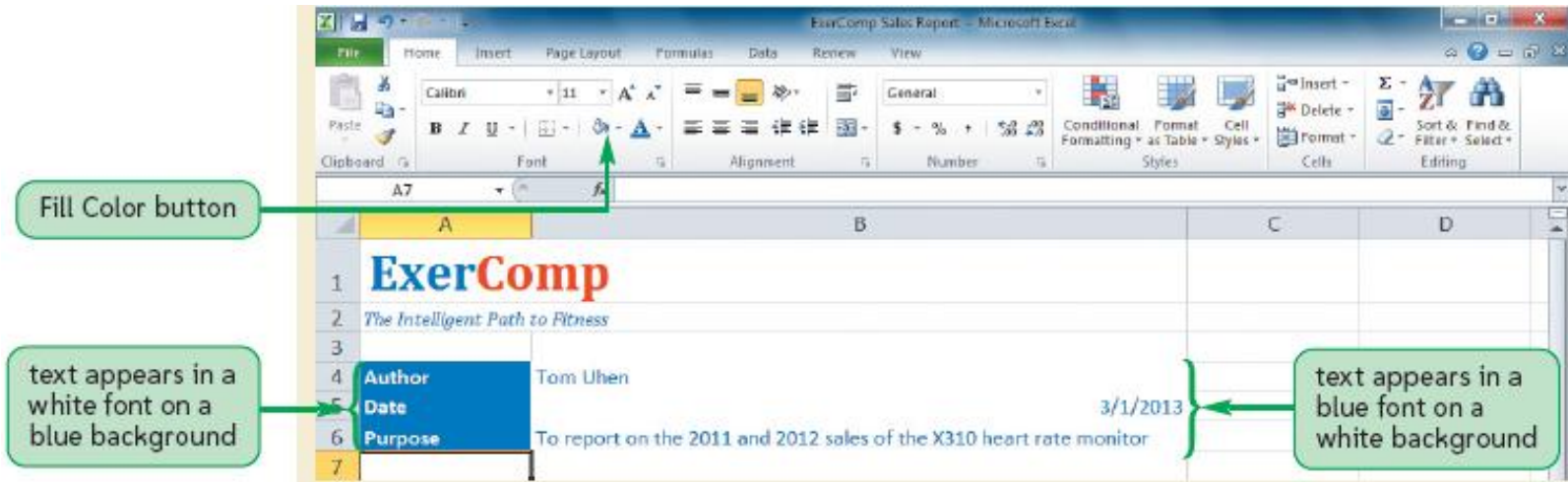
Working with Colors and Backgrounds

- Background images do not print
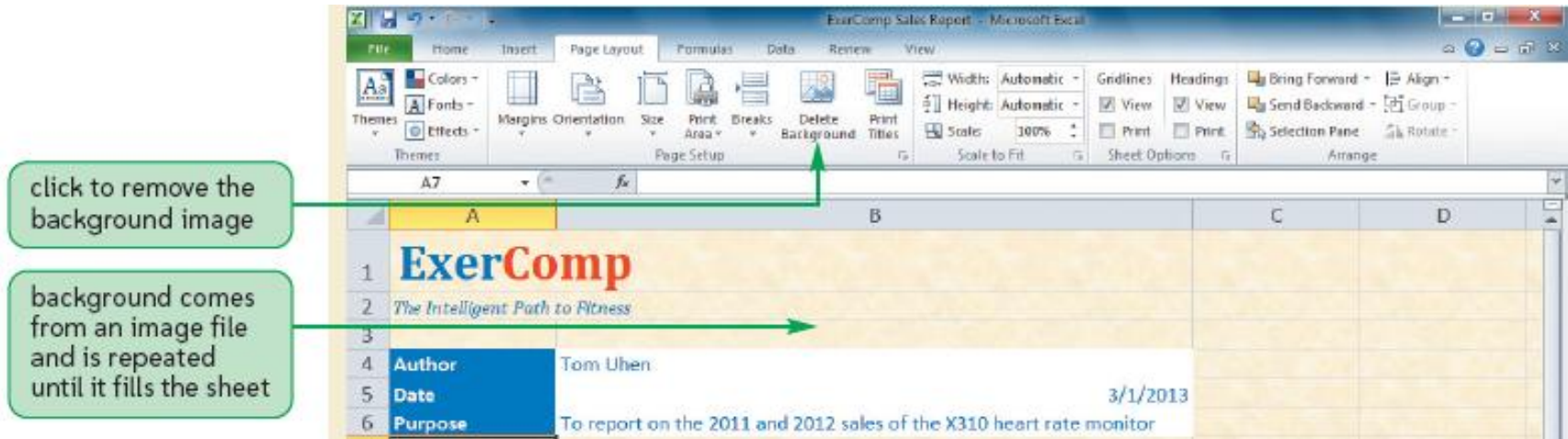
Formatting Calculated Values

- Goal: Make workbook easier to interpret
  - Add a comma as a thousands separator
  - Control number of decimal places
  - Use percentage and currency symbols

Formatting Calculated Values

- Create formulas to add, subtract, and divide values

Formatting Calculated Values

- Applying number formats
  - Use **General number format** for simple calculations
  - Apply Excel's additional formatting to make numbers easier to interpret
    - Accounting style
      - Lines up currency values within a column by currency symbol and decimal point
      - Encloses negative numbers within parentheses

Applying Number Formats

Applying Number Formats

Accounting Number Format button

$ symbols added to the revenue values in the first and last rows

$ symbols and decimal points are lined up within each column

Formatting Calculated Values

- Formatting dates and times
  - Dates/times are stored as numbers, not as text
    - Applying different formats does not affect values
    - Makes it easier to calculate time intervals
  - Short Date format or Long Date format
  - 12- or 24-hour time
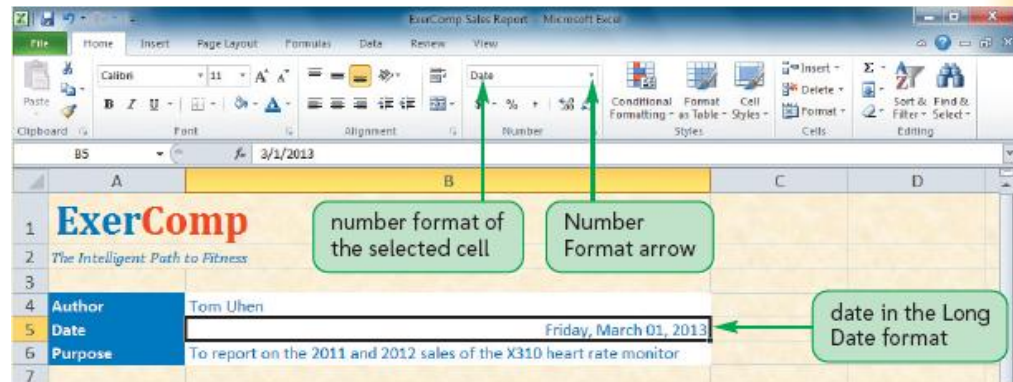
Formatting Worksheet Cells

- Format appearance of individual cells by:
  - Modifying alignment of text within the cell
  - Indenting cell text
  - Adding borders of different styles and colors to individual cells or ranges

Formatting Worksheet Cells

- Aligning cell content
  - Default:
    - Cell text aligned with left bottom borders
    - Cell values aligned with right bottom borders
  - Buttons to set alignment options are in Alignment group on Home tab

Button	Description
	Aligns the cell content with the cell's top edge
	Vertically centers the cell content within the cell
	Aligns the cell content with the cell's bottom edge
	Aligns the cell content with the cell's left edge
	Horizontally centers the cell content within the cell
	Aligns the cell content with the cell's right edge
	Decreases the size of the indentation used in the cell
	Increases the size of the indentation used in the cell
	Rotates the cell content to any angle within the cell
	Forces the cell text to wrap within the cell borders
	Merges the selected cells into a single cell

Formatting Worksheet Cells

- Indenting cell content
  - Useful for entries considered subsections of a wc

Formatting Worksheet Cells

- Merging cells

  – Retains only content (and cell reference) from upper-left cell in the range

  – Merge options: **Merge & Center, Merge Across, Merge Cell,** and **Unmerge Cells**

Formatting Worksheet Cells

- Rotating cell contents saves space and provides visual interest

Formatting Worksheet Cells

- Adding cell borders enhances readability of rows and columns or data

  – Add borders to left, top, right, or bottom of cell or range; around an entire cell; or around outside edges of a range

  – Specify thickness and number of lines in border
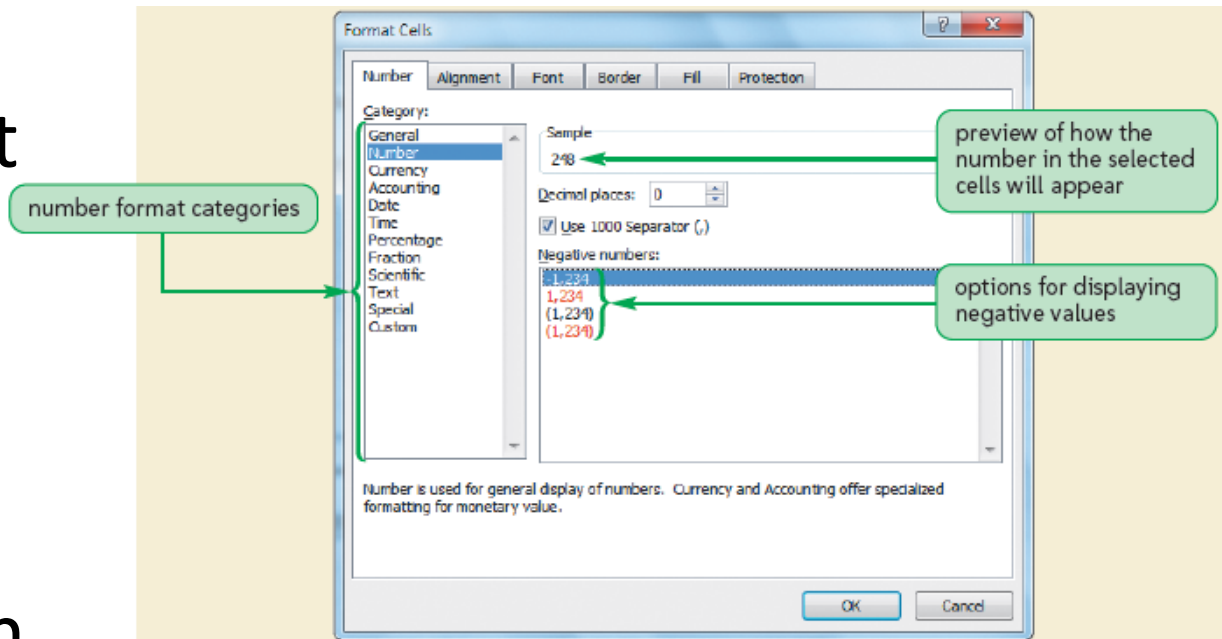

Border button

column titles have a single bottom border

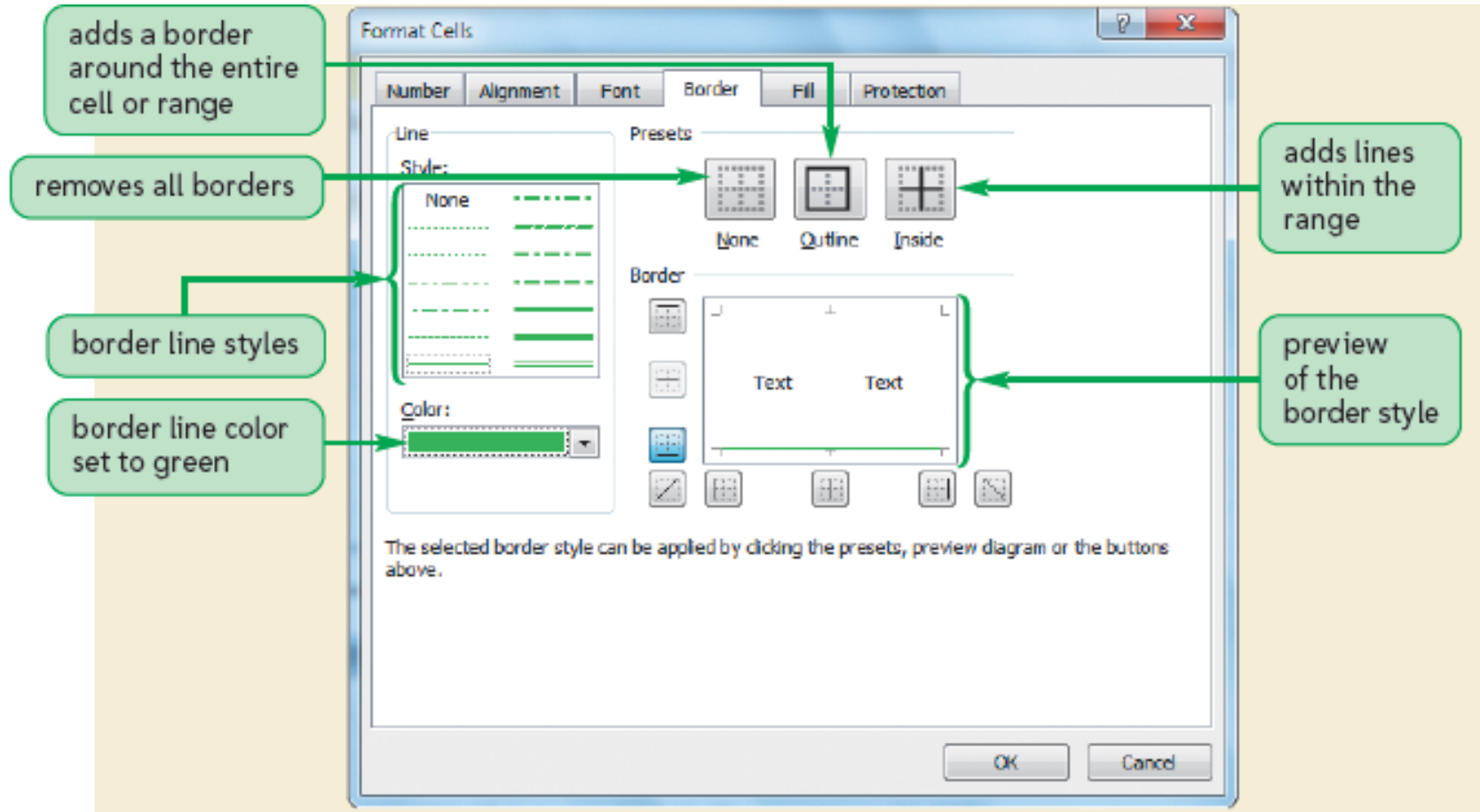Total row has a single top border and a double bottom border

Options in the Format Cells Dialog Box

- Presents formats available from Home tab in a different way and provides more choices

- Six tabs, each focusing on different options:
  - Number
  - Alignment
  - Font
  - Border
  - Fill
  - Protection

Options in the Format Cells Dialog Box

- Border tab

Copying and Pasting Formats

- Copying formats with Format Painter
  - Fast and efficient way of maintaining a consistent look and feel throughout a workbook
  - Copies formatting without duplicating data

Copying and Pasting Formats

- Use Paste Options Button to paste formatting from a copied range along with its contents
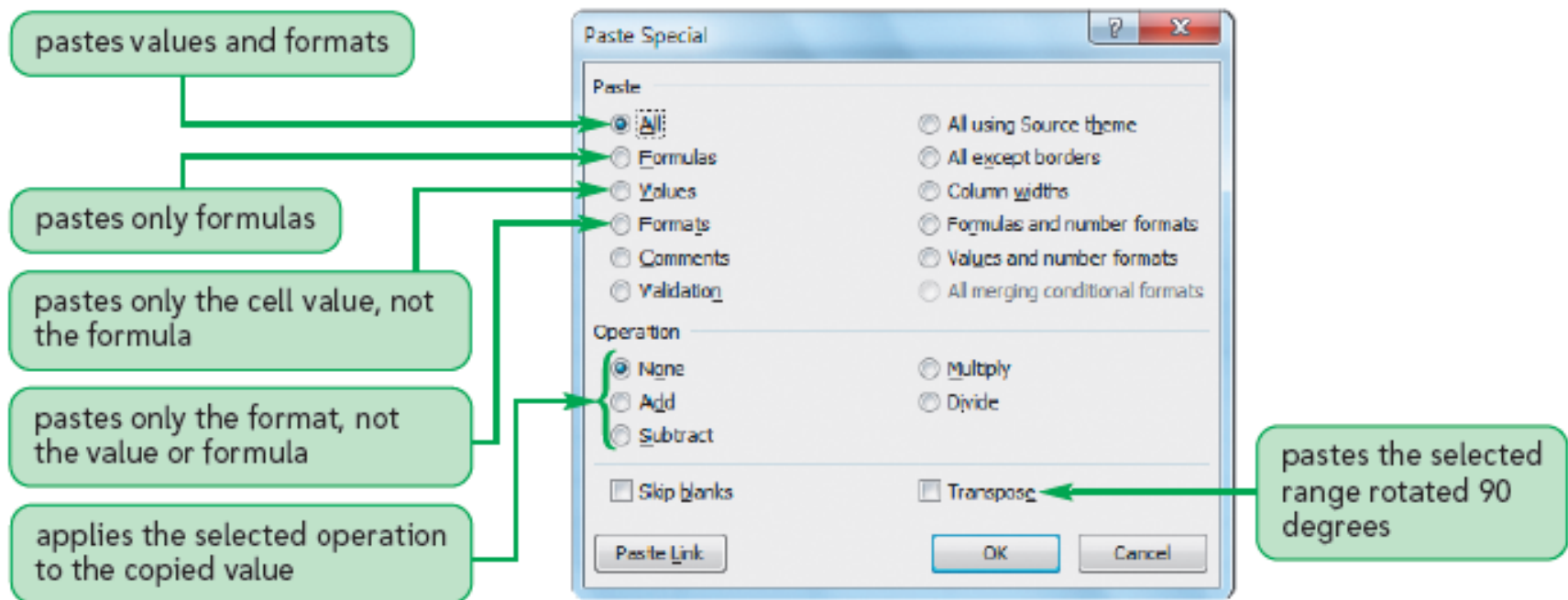
Copying and Pasting Formats

- Use Paste Special to control exactly how to paste the copied range

pastes values and formats

pastes only formulas

pastes only the cell value, not the formula

pastes only the format, not the value or formula

applies the selected operation to the copied value

pastes the selected range rotated 90 degrees

Visual Overview

The Page Layout tab has options you can use to define print formatting.

A **header** is information that appears in the top margin of each printed page. It often includes summary information such as the filename and the date.

You can set **print titles**, information that appears on every printed page, by specifying rows or columns to repeat on the top or left of each page; use the Print Titles button on the Page Layout tab to do this.

You can apply a collection of common formats, called a style, to different cells using the Cell Styles button.

Banded rows displays alternate rows in an Excel table with different fill colors. You can also create banded columns.

A **footer** is information that is printed in the bottom margin of each printed page. Like a header, it often includes summary information such as the current page number and the number of pages in the printout.

Table Styles and Page Formatting

The Table Tools tab appears when an Excel table is selected.

After you identify a range as an Excel table, you can apply a **table style** that formats the entire table as a single unit.

These optional elements can be added to or removed from a table style.

A **margin** is the space between the page content and the edges of the page.

A **conditional format** applies formatting only when a cell's value meets a specified condition. This is often used to help analyze data. Cell highlighting applies a different font color and fill color to data that matches specified criteria, such as the top 10.

You can treat a range of data as a distinct object in a worksheet known as an **Excel table**. The entire table is formatted using a single table style.

In Page Layout view, the worksheet is displayed as it will appear on the printed page.

Applying Cell Styles

- Use styles to ensure that cells displaying same type of data use the same format

- Style

  – Selection of formatting options using a specific font and color from the current theme

  – If style is later revised, appearance of any cell formatted with that style is updated automatically; saves time and effort

Applying Cell Styles

Working with Themes

- Appearance of fonts, colors, and cell styles depends on workbook's current theme

- If theme is changed, formatting of fonts, colors, and cell styles changes throughout entire workbook

- Only elements directly tied to a theme change when you select a different theme

Working with Themes

Creating Formulas to Add and Subtract Values

- Use this data to identify trends

Working with Table Styles

- Specifies formats (e.g., font color, fill color) for each element

- More efficient than formatting individual cells

- Ensures that table's formatting reflects any changes made to the table

original table with banded rows

after deleting a row from a table formatted manually, the banded effect is lost

after deleting a row from a table formatted with a table style, the table formatting adjusts to keep banded rows

Working with Table Styles

- Table style elements can be turned on or off
  - **Header Row**
  - **Total Row**
  - **First Column**
  - **Last Column**
  - **Banded Rows**
  - **Banded Columns**

Selecting Table Style Options

Highlighting Cells with Conditional Formats

- Goal of highlighting: Provide strong visual clue of important data or results

- Format applied to a cell depends upon value or content of the cell

- Dynamic: If cell's value changes, cell's format also changes as needed

- Excel has four conditional formats: data bars, highlighting, color scales, and icon sets

Highlighting Rules

- Each conditional format has a set of rules that define how formatting should be applied and under what conditions format will be changed

Rule	Highlights
Greater Than	Cells that are greater than a specified number
Less Than	Cells that are less than a specified number
Between	Cells that are between two specified numbers
Equal To	Cells that are equal to a specified number
Text That Contains	Cells that contain specified text
A Date Occurring	Cells that contain a specified date
Duplicate Values	Cells that contain duplicate or unique values

Highlighting Cells with Conditional Formats

cells highlighted in green rank in the top 10 percent in sales increases

Highlighting Cells with Conditional Formats

- Always include a **legend** – a key that shows each color used in the worksheet and what it means

Hiding Worksheet Data

- Manage contents of a large worksheet by selectively hiding rows and columns of extraneous data

- Allows you to focus attention on only a select few data points

- Does not affect other formulas in workbook

- Never hide data that is crucial to understanding a workbook

Formatting the Worksheet for Printing

- Print options can be applied to an entire workbook or to individual sheets

- Look at a worksheet in Page Layout view to see how it would print

page is too narrow to fit all of the table columns in portrait orientation

worksheet zoomed to 70%

Page Layout button

worksheet will print on four separate pages

Formatting the Worksheet for Printing

- Defining the **print area** allows you to override default settings and print part of a worksheet
  - Region sent to the printer from the active sheet
  - Can cover adjacent or nonadjacent range in current worksheet
  - Generally easiest to set in Page Break Preview
- Fit a large worksheet on a single page by reducing size of the page margin

Formatting the Worksheet for Printing

- Inserting page breaks
  - **Automatic page breaks**
  - **Manual page breaks**

Formatting the Worksheet for Printing

- Add print titles (descriptive information) on each page of a printout in case pages become separated

Formatting the Worksheet for Printing

- Create page headers and footers to include text not usually found within the worksheet (e.g., author, date, filename)

- Headers and footers have three sections: left, center, right

- Elements are dynamic