

MS Word Basics

- **Formatting Text:** Select text and use the **Home** tab to change font face, size, color, style (bold/italic/underline) and alignment (left, center, right, justify) ¹ ². Use **Ctrl+C/V/X** to copy, paste, or cut; **Ctrl+Z** to undo.
- **Page Layout:** On the **Layout** tab, adjust page settings. For margins, click **Layout** → **Margins** and choose a preset or **Custom Margins** ³. To switch orientation, click **Layout** → **Orientation** and pick Portrait or Landscape ⁴.
- **Headers and Footers:** Go to **Insert** → **Header (or Footer)**, then pick a style. Type your header/footer text or use **Quick Parts**. Double-click the header area or click **Close Header and Footer** to return to body. To remove a header/footer, go back to **Insert** → **Header/Footer** and choose **Remove Header/Footer** ⁵.
- **Inserting Tables:** Place the cursor where needed. On the **Insert** tab, click **Table** and drag over the grid to select the number of rows and columns, or choose **Insert Table** to specify dimensions ⁶. The table is inserted, and the **Table Tools** appear for styling or resizing.
- **Inserting Images:** On the **Insert** tab, click **Pictures**. Choose **This Device** to insert from your computer. Select the image file and click **Insert** ⁷. Once inserted, use the **Picture Format** tab to resize, crop, or apply effects. You can also insert online or stock images via **Insert** → **Online Pictures** ⁷.
- **Mail Merge:** Switch to the **Mailings** tab. Click **Start Mail Merge** to choose Letters, Email, Labels, etc. Then click **Select Recipients** to use an existing list (e.g., an Excel file or Contacts) or **Type a New List** to create one ⁸. Place merge fields by clicking **Insert Merge Field**, then finalize with **Finish & Merge** to generate individual documents or emails. Typical workflow: **Mailings** → **Select Recipients** → **Insert Merge Field** → **Finish & Merge**.
- **Additional Formatting:** Use **Styles** (Home tab) to apply consistent headings or text styles. Adjust line spacing via **Home** → **Line and Paragraph Spacing**. Insert page breaks via **Layout** → **Breaks**. Save often with **Ctrl+S**.

MS Excel Basics

- **Formulas & Functions:** Click a cell and type `=` to start a formula. Common functions include `=SUM(A1:A10)` to add values ⁹, `=AVERAGE(A1:A10)` to compute the mean ¹⁰, and `=IF(condition, value_if_true, value_if_false)` for logical tests ¹¹ (e.g. `=IF(C2="Yes", 1, 2)` returns 1 if C2 is Yes, else 2). Press **Enter** to apply. AutoSum (Σ icon) quickly inserts SUM for a row/column.
- **Cell Formatting:** Select cells and use the **Home** tab to change number format. Choose from the **Number** dropdown or press **Ctrl+1** to open *Format Cells*. You can set formats like General, Number, Currency, Date, Percentage, etc. ². For text formatting (bold, italics, font), also use the Home tab or right-click for font options. Adjust column width by dragging borders or double-clicking the divider.
- **Sorting Data:** Click anywhere in the data, then on the **Data** tab use **A→Z** (ascending) or **Z→A** (descending) to sort by the selected column ¹². For custom sorts, click **Data** → **Sort**, choose the column, sort on Values/Cell Color/etc., and set order (A→Z or Z→A) ¹³.

- **Filtering Data:** On the **Data** tab, click **Filter** to add dropdown filters to headers. Click a column's filter arrow, uncheck (Select All), and check the items you want to view ¹⁴ ¹⁵ . Use Text Filters/Number Filters in the menu for conditions (e.g., "Greater Than 100"). Filtered rows hide others but keep the data intact ¹⁴ ¹⁶ .
- **Charts:** Select the range of data (including headers). Go to **Insert** and choose a chart type (e.g., Column, Line, Pie). You can use **Recommended Charts** to let Excel suggest a suitable chart ¹⁷ . Once inserted, the **Chart Tools** tabs appear. Use **Chart Design** → **Chart Elements** to add titles or labels, and **Chart Styles** to format the look ¹⁸ .
- **Additional Features:** Use **Conditional Formatting** on the Home tab to highlight values. Create tables by pressing **Ctrl+T** or using **Insert** → **Table** for structured filtering/sorting. Keyboard shortcuts: **Ctrl+Shift+N** for new folder (in Windows Explorer), **F2** to edit a cell ¹⁹ ²⁰ .

MS PowerPoint Basics

- **Creating a Presentation:** Open PowerPoint and choose a blank or themed template. On the **Home** tab, click **New Slide** to add slides. Use Slide Layouts (Home → Layout) to pick formats (Title slide, Title & Content, etc). Click in text boxes to add titles or bullet points. Save with **Ctrl+S**.
- **Design and Content:** To add content, use **Insert** tab. You can insert **Text Box** for custom text, **Table** for data tables, **Pictures/Icons** for images/graphics ⁷ , or **SmartArt/Shapes** for diagrams. Adjust slide design via **Design** tab (themes, colors, fonts).
- **Multimedia (Images, Audio, Video):** For images, go to **Insert** → **Pictures** as in Word. To add audio, click **Insert** → **Audio** → **Audio on My PC** and choose a file ²¹ . A speaker icon appears; use the **Playback** tab to choose start (On Click or Automatically) and volume ²² . For video, use **Insert** → **Video** → **This Device**, pick the file, and click **Insert** ²³ . Use the **Playback** tab to set it to play automatically or on click, and trim or add fade as needed ²⁴ ²⁵ .
- **Slide Transitions:** Select a slide thumbnail. On the **Transitions** tab, pick a transition effect (e.g. Fade, Wipe) to see a preview ²⁶ . Use **Effect Options** to change direction. Set **Duration** and choose whether to apply **On Click** or **After X seconds**. Click **Apply To All** to use the same transition on all slides ²⁶ .
- **Animations:** To animate text or objects, first select the item on a slide. Then go to the **Animations** tab and choose an animation (Entrance, Emphasis, Exit, or Motion Paths) from the gallery ²⁷ . For text, you can animate by paragraph. Each effect is numbered on the slide, indicating play order. Use the **Animation Pane** to reorder or set multiple effects ²⁸ ²⁷ . Under **Animations**, the **Start** option lets you play on click, with previous, or after previous. You can change **Duration** and **Delay** to fine-tune timing ²⁹ .

Windows OS Basics

- **File/Folder Operations:** Open File Explorer (press **Win + E**) ³⁰ . To create a new folder, click **Home** → **New Folder** or use **Ctrl+Shift+N** ³¹ ¹⁹ . Rename a file or folder by selecting it and pressing **F2** ³² ²⁰ . To move or copy, drag and drop the item into the target folder (hold **Ctrl** while dragging to copy). You can also right-click a file and choose **Copy** or **Cut**, then right-click inside a folder and **Paste**.
- **Control Panel & Settings:** Open the Settings app via **Start** → **Settings** or press **Win + I**. In Settings, adjust system options (Network, Personalization, Updates, etc). For classic Control Panel, search

“Control Panel” in the Start menu. Inside Control Panel, manage hardware (Printers, Devices) and software (Uninstall programs). In File Explorer, access folder options via **View → Options**.

- **Taskbar and System Tray:** Right-click the taskbar to open **Taskbar settings**. Pin apps by right-clicking an app icon and selecting **Pin to taskbar**. Use **Win + (number)** to launch or switch to a program pinned at that position on the taskbar ³³. Press **Win + T** to cycle through taskbar icons ³⁴. Shift+Right-click a grouped taskbar button to see its jump menu ³⁵. The system tray (bottom right) shows notifications and allows quick access to settings like volume and network.
- **Shortcuts:** Common Windows shortcuts include **Ctrl+C/X/V** (copy/cut/paste) ³⁶, **Ctrl+S** to save, **Ctrl+P** to print, **Alt+Tab** to switch windows, and **Win + L** to lock. Use **Alt+F4** to close a window. Right-click menus are powerful (right-click a desktop icon for options). Learning a few keys (e.g. **Win+E**, **F2**, **Ctrl+Shift+N**) speeds up file management ¹⁹ ²⁰.

Internet Basics

- **Using a Web Browser:** Open a browser (e.g. Edge, Chrome). In the address bar, type a website URL (like `www.example.com`) or enter keywords and press **Enter** to search ³⁷. The browser will display the site or search results. Use the **Back/Forward** buttons to navigate pages, and **Refresh** (F5) to reload. Bookmarks (Favorites) save important URLs for quick access.
- **Search Engines:** Navigate to a search engine (e.g. Google, Bing). Type keywords in the search box and press **Enter** ³⁷. The results page lists links to websites matching those terms. Click a link to open the site, or refine your query. You can search directly from the address bar in most browsers (type keywords and press Enter) ³⁸. Use quotation marks for exact phrases (e.g. `"sugar cookies"`) or minus sign to exclude words (e.g. `cookies -chocolate`) to refine results ³⁹.
- **Email and Attachments:** Open your email service (webmail like Gmail or an email app). Click **Compose** or **New Email** to create a message. Enter recipient address, subject, and body text. To attach a file or image, click the **Attach** (paperclip) icon and select files from your computer ⁴⁰ ⁴¹. In Gmail, after composing click **Attach**, browse to the file, and click **Open** ⁴⁰. In Outlook, click **Home → Attach File**, then choose **Browse This PC** and pick the file ⁴¹. Once attached, send the email. Remember that there may be file size limits (e.g. 25 MB for Gmail ⁴²).

Other Common Practical Topics

- **Basic Linux Commands (if included):** For labs covering Linux, common commands include `ls` (list directory), `cp` (copy files), `mv` (move/rename), `mkdir` (create folder), `rm` (remove file), and `grep` (search text in files). Use `chmod` to change permissions. These are run in a terminal. (E.g. `ls -l` lists files with details.)
- **Printing Documents:** In any application, use **Ctrl+P** to open the Print dialog. Choose printer and options, then click Print.
- **Shortcuts in Office Apps:** Use **Ctrl+F** to find text, **Ctrl+B/I/U** for bold/italic/underline in Word. **F7** runs spell-check. **Ctrl+N** creates a new document or workbook. Memorize key shortcuts relevant to each program for faster workflow.
- **Troubleshooting:** If a program freezes, use **Ctrl+Alt+Delete** to open Task Manager and end the task. For connectivity issues, check Wi-Fi in system tray or reboot the PC. Always save your work frequently to avoid data loss.

Sources: Authoritative guides from Microsoft and educational tutorials were used for these notes (see citations above) 1 8 9 11 17 12 2 26 27 31 30 37 40 41 .

1 5 **Insert a header or footer - Microsoft Support**

<https://support.microsoft.com/en-us/office/insert-a-header-or-footer-b87ee4df-abc1-41f8-995b-b39f6d99c7ed>

2 **Available number formats in Excel - Microsoft Support**

<https://support.microsoft.com/en-us/office/available-number-formats-in-excel-0afe8f52-97db-41f1-b972-4b46e9f1e8d2>

3 **Change margins - Microsoft Support**

<https://support.microsoft.com/en-us/office/change-margins-da21a474-99d8-4e54-b12d-a8a14ea7ce02>

4 **Change page orientation to landscape or portrait - Microsoft Support**

<https://support.microsoft.com/en-us/office/change-page-orientation-to-landscape-or-portrait-9b5ac1af-9998-4a37-962b-a82b689572a9>

6 **Insert a table - Microsoft Support**

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7 **Insert pictures - Microsoft Support**

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8 **Set up a new mail merge list with Word - Microsoft Support**

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9 **SUM function - Microsoft Support**

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10 **AVERAGE function - Microsoft Support**

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11 **IF function - Microsoft Support**

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12 13 **Quick start: Sort data in an Excel worksheet - Microsoft Support**

<https://support.microsoft.com/en-us/office/quick-start-sort-data-in-an-excel-worksheet-60153f94-d782-47e2-96a8-15cbb7712539>

14 15 16 **Filter data in a range or table - Microsoft Support**

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<https://support.microsoft.com/en-us/windows/keyboard-shortcuts-in-windows-dcc61a57-8ff0-cffe-9796-cb9706c75eec>

21 22 **Adding Audio in PowerPoint | Computer Applications for Managers**

<https://courses.lumenlearning.com/wm-computerapplicationsmgrs-2/chapter/adding-audio-in-powerpoint-2/>

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32 Rename a file - Microsoft Support

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