

Navigate the Excel User Interface



Excel 2021

Microsoft Office Excel 2021

Microsoft Office Excel 2021 is an application that is part of the Microsoft Office 2021 suite of user productivity software. Excel is a powerful spreadsheet program that allows you to store, present, manipulate, and analyse various types of data. Excel's functionality enables you to work with and analyse massive amounts of raw data in order to obtain actionable organisational intelligence. This intelligence will help you make sound decisions to improve any number of business and organisational operations.

Spreadsheets, Worksheets, and Workbooks

- A **spreadsheet** is simply a paper or an electronic document, arranged in tabular form, that is used to store, manipulate, and analyze data.
- A **worksheet** is an electronic spreadsheet that is used for entering, storing, and analyzing data in Excel. Think of worksheets as individual pages within Excel that display and allow you to work with your data.
- A **workbook** is an Excel file that serves as a container to store related Excel worksheets. Applying the individual page analogy: if the worksheets are the individual pages, the workbook is the binding that holds the pages together.

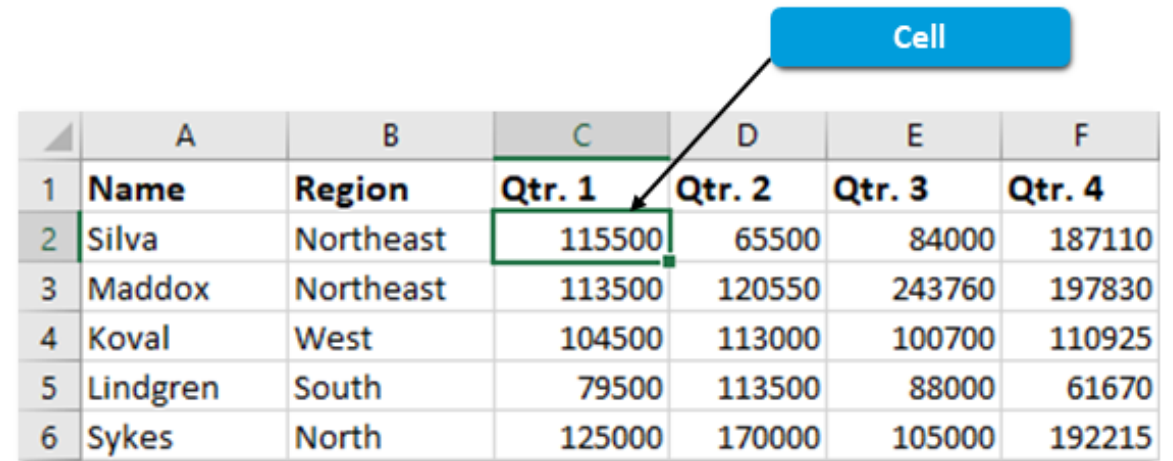
Excel workbooks act like binders for related worksheets

The image shows a screenshot of the Microsoft Excel interface. At the top, a blue box labeled "Workbook" has an arrow pointing to the title bar of the application window, which reads "My Sales Contest.xlsx - Excel Preview". Below the title bar is the ribbon with various tabs like File, Home, Insert, etc. The main area displays a worksheet named "Sales Ledger" with a grid of data. At the bottom of the grid, there are sheet tabs labeled "Sheet1", "Sheet2", and "Sheet3". A blue box labeled "Worksheets in the workbook" has a bracket pointing to these tabs. Another blue box labeled "Worksheet" has an arrow pointing to a specific cell in the grid.

| Name | Qtr. 1 | Qtr. 2 | Qtr. 3 | Qtr. 4 | Total | Average | Highest | Lowest | Commission | Commission | 4% |
|----------|--------|--------|--------|--------|--------|----------|---------|--------|------------|------------|----|
| Silva | 115500 | 65500 | 84000 | 187110 | 452110 | 113027.5 | 187110 | 65500 | 18084.4 | | |
| Maddox | 113500 | 120550 | 243760 | 197830 | 675640 | 168910 | 243760 | 113500 | 27025.6 | | |
| Koval | 104500 | 113000 | 100700 | 110925 | 429125 | 107281.3 | 113000 | 100700 | 17165 | | |
| Lindgren | 79500 | 113500 | 88000 | 61670 | 342670 | 85667.5 | 113500 | 61670 | 13706.8 | | |
| Sykes | 125000 | 170000 | 105000 | 192215 | 592215 | 148053.8 | 192215 | 105000 | 23688.6 | | |
| Lee | 120550 | 274060 | 76000 | 142320 | 612930 | 153232.5 | 274060 | 76000 | 24517.2 | | |
| Gilgamos | 128000 | 243760 | 151500 | 92215 | 615475 | 153868.8 | 243760 | 92215 | 24619 | | |
| Matthews | 113000 | 292225 | 84000 | 102270 | 591495 | 147873.8 | 292225 | 84000 | 23659.8 | | |
| Anderson | 113500 | 243240 | 184275 | 147150 | 688165 | 172041.3 | 243240 | 113500 | 27526.6 | | |
| Pereira | 116500 | 123000 | 106900 | 211020 | 557420 | 139355 | 211020 | 106900 | 22296.8 | | |
| Wagner | 119000 | 138500 | 63000 | 88950 | 409450 | 102362.5 | 138500 | 63000 | 16378 | | |
| Roberts | 274130 | 296120 | 120500 | 118335 | 809085 | 202271.3 | 296120 | 118335 | 32363.4 | | |
| Avellone | 156000 | 115500 | 88500 | 171050 | 531050 | 132762.5 | 171050 | 88500 | 21242 | | |
| Clarke | 251120 | 86500 | 76000 | 136650 | 550270 | 137567.5 | 251120 | 76000 | 22010.8 | | |
| Chen | 77500 | 95000 | 151500 | 172410 | 496410 | 124102.5 | 172410 | 77500 | 19856.4 | | |
| Nguyen | 154500 | 122000 | 84000 | 149215 | 509715 | 127428.8 | 154500 | 84000 | 20388.6 | | |
| Basara | 74075 | 65500 | 57900 | 77950 | 275425 | 68856.25 | 77950 | 57900 | 11017 | | |
| Bryant | 122500 | 128000 | 110000 | 194215 | 554715 | 138678.8 | 194215 | 110000 | 22188.6 | | |
| Antonov | 104500 | 113000 | 100700 | 147330 | 465530 | 116382.5 | 147330 | 100700 | 18621.2 | | |
| Kinn | 79500 | 113500 | 88000 | 195015 | 476015 | 119003.8 | 195015 | 79500 | 19000.6 | | |

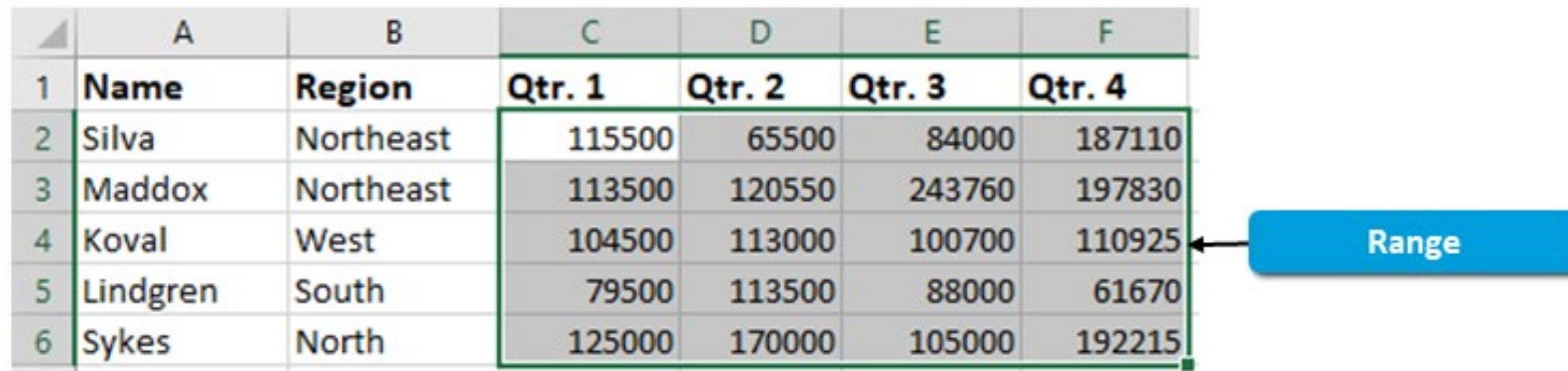
Cells and Ranges

An Excel worksheet is arranged in a tabular format, meaning it consists of a series of columns and rows that intersect to form cells. A **cell** is a singular container that you can use to input and store data. Each rectangle that you see on an Excel worksheet is a separate cell.



| | A | B | C | D | E | F |
|---|----------|-----------|--------|--------|--------|--------|
| 1 | Name | Region | Qtr. 1 | Qtr. 2 | Qtr. 3 | Qtr. 4 |
| 2 | Silva | Northeast | 115500 | 65500 | 84000 | 187110 |
| 3 | Maddox | Northeast | 113500 | 120550 | 243760 | 197830 |
| 4 | Koval | West | 104500 | 113000 | 100700 | 110925 |
| 5 | Lindgren | South | 79500 | 113500 | 88000 | 61670 |
| 6 | Sykes | North | 125000 | 170000 | 105000 | 192215 |

In Excel, a **range** is a contiguous group of cells that typically contains related data. A range can consist of an entire row or column, a group of cells in a row or column, or a group of cells that covers multiple rows and columns. You can use ranges to organize your worksheets by related sets of data.



| | A | B | C | D | E | F |
|---|----------|-----------|--------|--------|--------|--------|
| 1 | Name | Region | Qtr. 1 | Qtr. 2 | Qtr. 3 | Qtr. 4 |
| 2 | Silva | Northeast | 115500 | 65500 | 84000 | 187110 |
| 3 | Maddox | Northeast | 113500 | 120550 | 243760 | 197830 |
| 4 | Koval | West | 104500 | 113000 | 100700 | 110925 |
| 5 | Lindgren | South | 79500 | 113500 | 88000 | 61670 |
| 6 | Sykes | North | 125000 | 170000 | 105000 | 192215 |

Cell and Range References

- **Cell references:** Alphanumeric values used to identify particular cells on an Excel worksheet. Cell references consist of a row header and a column header, which identify the cell at the intersection of the row and the column.
- The letter refers to the column headers in Excel, whereas the number refers to the row headers.
- Use range references to identify particular ranges of data in your worksheets.

The diagram illustrates an Excel worksheet grid with the following structure:

| | A | B | C | D | E | F |
|---|-------------|---------------|---------------|---------------|---------------|---------------|
| 1 | Name | Region | Qtr. 1 | Qtr. 2 | Qtr. 3 | Qtr. 4 |
| 2 | Silva | Northeast | 115500 | 65500 | 84000 | 187110 |
| 3 | Maddox | Northeast | 113500 | 120550 | 243760 | 197830 |
| 4 | Koval | West | 104500 | 113000 | 100700 | 110925 |
| 5 | Lindgren | South | 79500 | 113500 | 88000 | 61670 |
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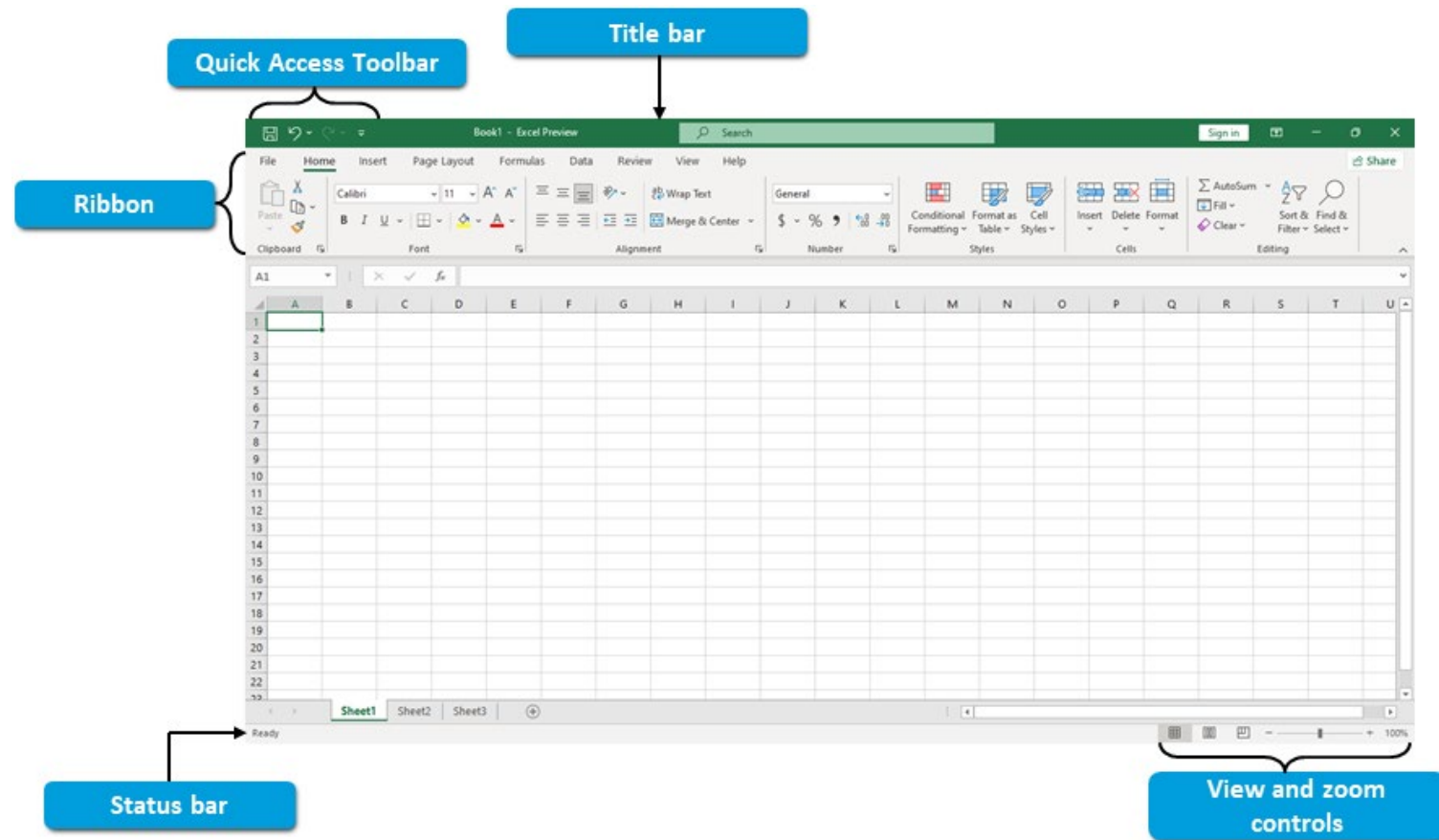
Annotations in the diagram:

- Column headers:** A bracket above columns A through F.
- Row headers:** A bracket to the left of rows 1 through 6.
- Cell B6:** A blue box with an arrow pointing to the cell containing 'North' in row 6, column B.
- Range D2:F6:** A blue box with an arrow pointing to the rectangular area covering rows 2-6 and columns D-F.

- In Excel 2021, a worksheet can contain up to 16,384 columns and 1,048,576 rows. The last possible cell reference in an Excel worksheet is XFD1048576.

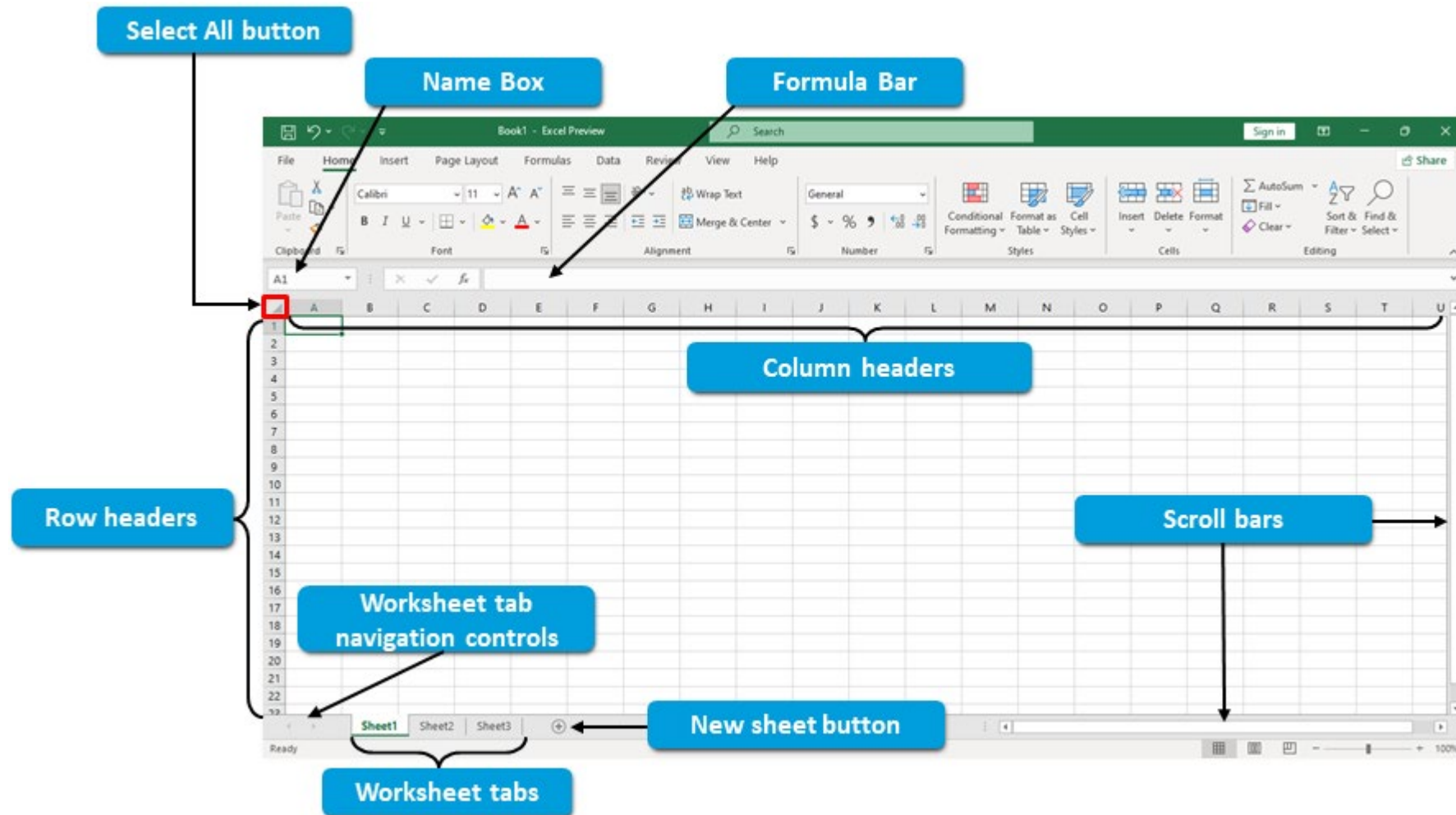
The General Excel UI

- The Excel user interface (UI) contains all of the workspaces and commands that you will use to create and work with workbooks and worksheets. The general areas along the top and bottom of the Excel UI contain elements that display information about the current workbook and provide you with access to some of the more commonly used commands and tools.



The Workbook and Worksheet UI Elements

- The inner part of the Excel UI displays your workbook and worksheet contents and some common navigation controls to help you locate and work with data.



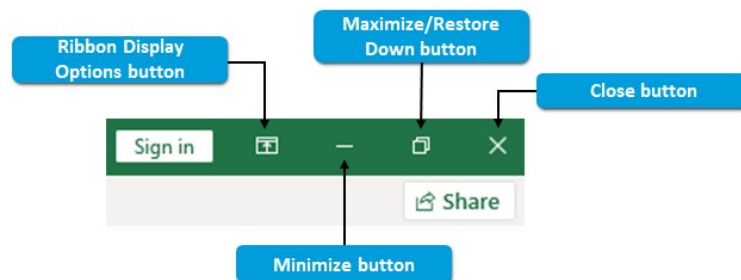


The Workbook and Worksheet UI Elements

| Excel UI Element | Description |
|-----------------------------------|--|
| Formula Bar | Displays the contents of the currently selected cell in a worksheet. You can also use the Formula Bar to edit cell contents. |
| Name Box | Displays the cell reference for the currently selected cell, or the cell reference of the active cell in the currently selected range. The Name Box can also display custom range names and can be used to navigate to a particular cell. |
| Column headers | Identify each separate column with a unique letter or letter combination. |
| Row headers | Identify each separate row with a unique number. |
| Select All button | Selects all cells in the worksheet. |
| Scroll bars | Navigate vertically and horizontally across worksheets. |
| Worksheet tab navigation controls | Navigate among the various worksheets within a workbook. |
| Worksheet tabs | Open a particular worksheet within a workbook. You can also use worksheet tabs to name, rename, and arrange worksheets, and you can apply certain formatting options to the tabs. |
| New sheet button | Adds a blank worksheet to the workbook |

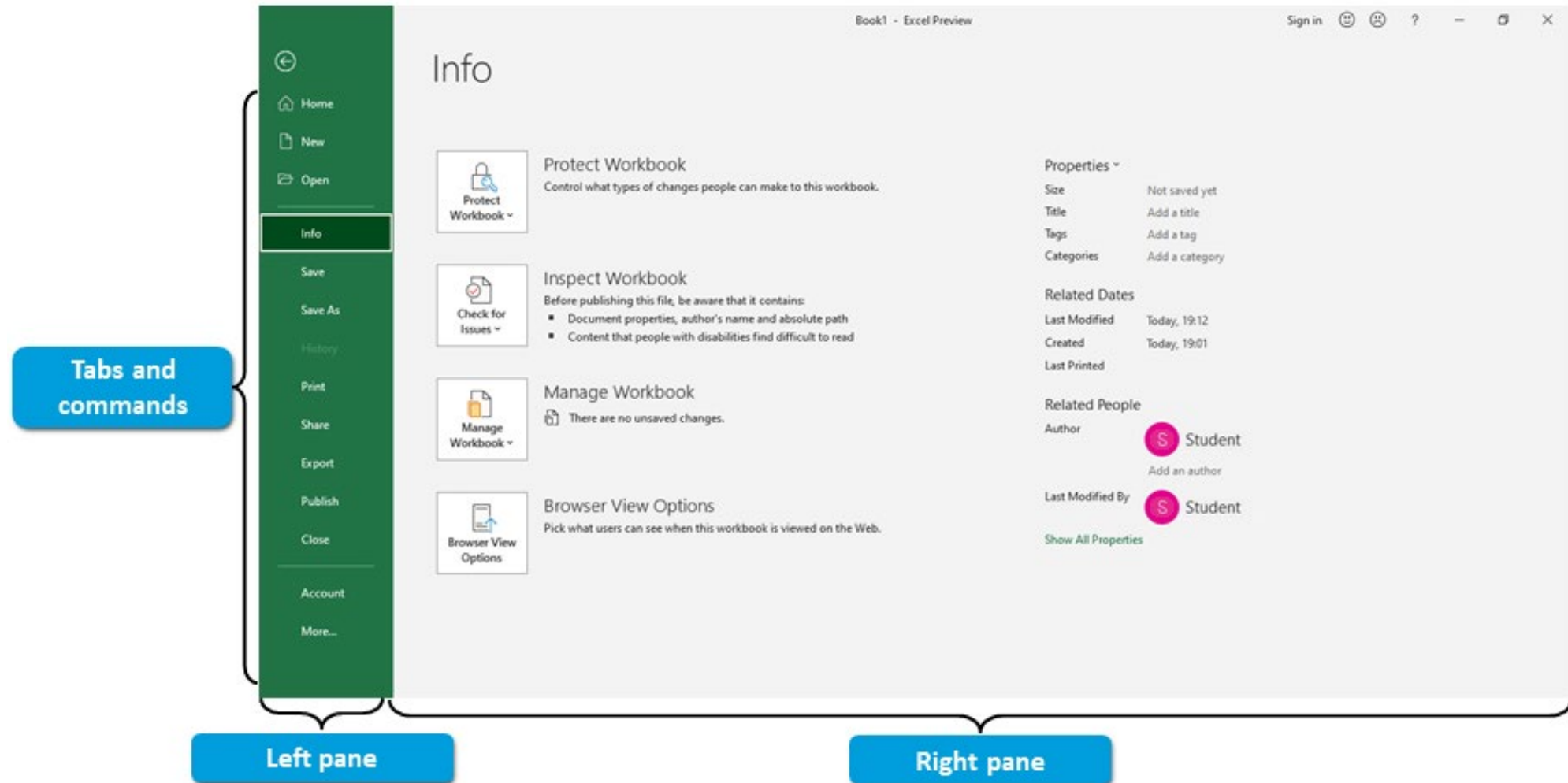
Excel Window Commands

| Command | Enables You To |
|-------------------------------|---|
| Ribbon Display Options button | <p>Change how Excel displays the ribbon in the UI. You have the following three options: Auto-hide Ribbon: This option hides the ribbon entirely until you select the top of the Excel UI. Once displayed, the ribbon remains visible until you select something outside of it.</p> <p>Show Tabs: This option hides the ribbon groups and commands, but leaves the ribbon tabs visible. The command groups and commands appear when you select a ribbon tab and disappear again when you select an item outside the ribbon.</p> <p>Show Tabs and Commands: This is the default ribbon display option, which leaves the entire ribbon on screen at all times.</p> |
| Minimize button | Hide the entire Excel 2021 UI. The application remains open, however, and the Excel 2021 icon still appears on the Windows® taskbar. |
| Maximize/Restore Down button | Reduce the size of the Excel UI from full screen to a smaller sized window, or maximize a smaller window back to full screen. When the window is reduced in size, you can drag the bottom-right corner of the UI to resize the Excel window to suit your needs. |
| Close button | Close the currently selected workbook. If there is only one Excel workbook file open when you select the Close button, the entire application closes, too. |



The Backstage View

- The Backstage view appears when you select the **File** tab on the ribbon. Along the left pane in the **Backstage** view, Excel displays a series of commands and tabs that enable you to save and access Excel workbooks, as well as work with your Excel files and configure Excel application options.



Backstage View Element








| Backstage View Element | Description |
|------------------------|--|
| Left pane | Displays the file commands and the various Backstage view tabs. |
| File commands | Enable you to open, close, and save your Excel workbook files. |
| Tabs | Provide you with access to commands for working with your Excel workbooks and various options for configuring the Excel environment. |
| Right pane | Displays various commands and options for working with your Excel workbook files depending on the tab you select in the left pane. |

- Common tasks you may perform in the Backstage view include previewing and printing workbooks, saving and accessing Excel files, applying security options, and sharing workbooks with colleagues. You can exit the Backstage view by selecting the Back button at the top of the left pane.

Mouse Navigation

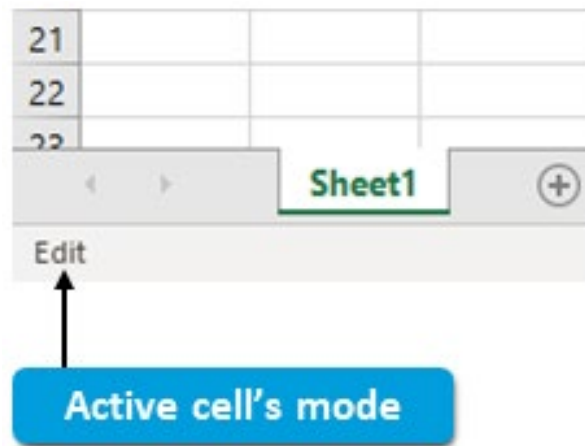
| Navigation Option] | Mouse Command |
|--|--|
| Select a particular cell. | Select the desired cell. |
| Select a range of cells. | Click and drag to select the desired range of cells. |
| Select an entire column or row. | Select the desired column or row header. |
| Move the worksheet display up or down by a single row. | Select one of the vertical scroll arrows. |
| Move the worksheet display left or right by a single column. | Select one of the horizontal scroll arrows. |
| Move the worksheet display by more than one row or column at a time. | Click and drag the vertical or horizontal scroll bars to the desired view. |
| Move the worksheet display one screen at a time. | On the vertical scroll bar, select the area between the scroll bar and the desired direction's scroll arrow. |
| Display a different worksheet. | Select the desired worksheet tab along the bottom of the workbook window. |

Mouse Cursor Icons

| Icon | Cursor Context/Location | Description |
|---|--|--|
|  | Placed on ribbon tabs or commands, Backstage tabs or commands, Quick Access Toolbar commands, scroll bars, sheet tabs and navigation commands, and view and zoom controls. | Select an element to perform the associated action. |
|  | Placed at any edge of a cell or range of cells. | Drag a cell or range of cells to move the data inside to another cell or range. |
|  | Placed over a cell in a worksheet. | Select an individual cell, or drag to select a range of cells. |
|  | Placed between worksheet column headers. | Resize the column to the left of the cursor, or double-click to AutoFit the column to the left of the cursor. |
|  | Placed between worksheet row headers. | Resize the row above the cursor, or double-click to AutoFit the row above the cursor. |
|  | Placed inside an active cell, the Formula Bar , or various text boxes. | Select inside a text box or the Formula Bar to begin typing data into it. Or, double-click an active cell to do likewise. |
|  | Placed at the bottom-right corner of a cell or range of cells. | Drag vertically or horizontally to copy or AutoFill data into adjacent cells. |

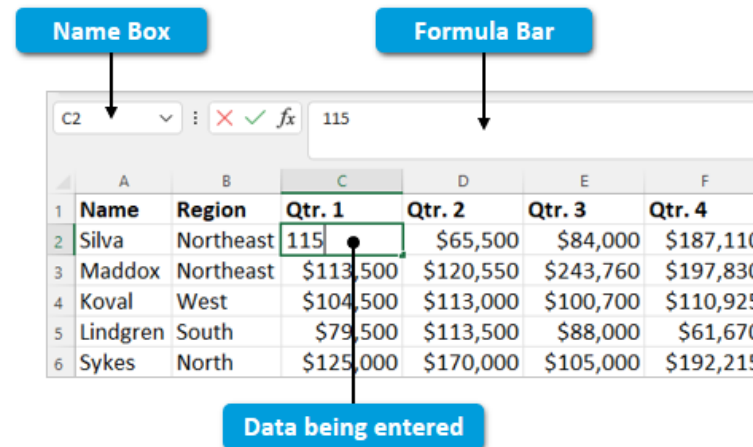
The Active Cell

- When you select a cell in Excel, it becomes the active cell, and it is only into the active cell that you can initially enter data. An active cell is displayed with a solid green border around it.
- You can use the **Tab** and the **Enter** keys to navigate among cells within a selected range while maintaining the range as your selection.
- When interacting with the cells in your worksheets, an active cell can be in one of three modes: **Ready**, **Enter**, or **Edit**. Excel displays the status of the selected cell on the left side of the status bar.
 - **Ready** mode tells you a cell is selected and that it is waiting for you to interact with it.
 - **Enter** mode activates once you start typing data into a cell.
 - **Edit** mode activates and allows you to enter or edit data.



Basic Data Entry

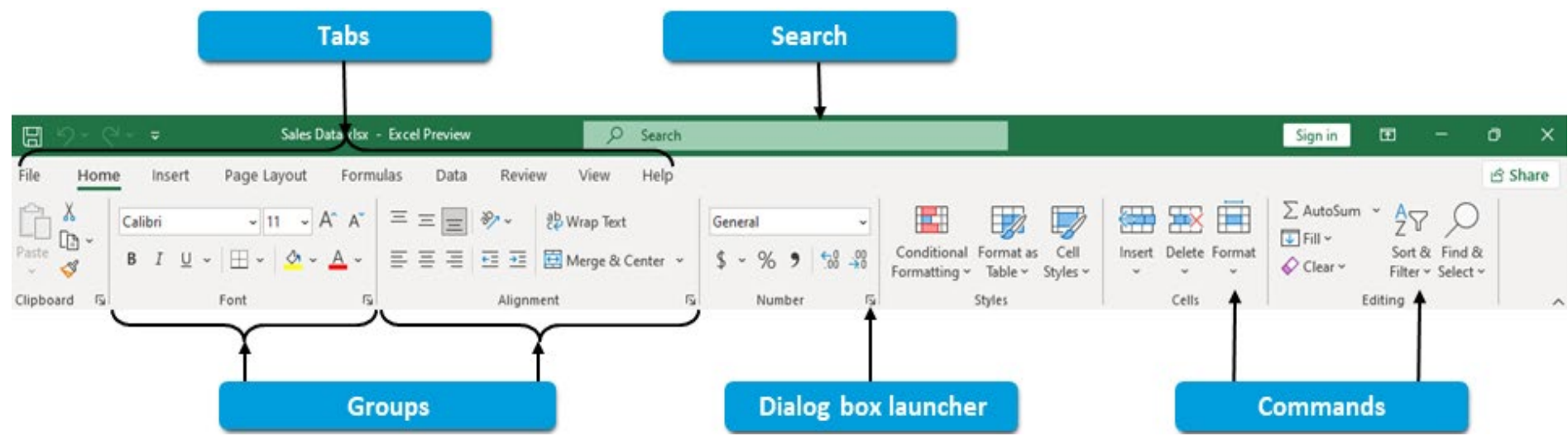
| Data Entry Method | Description |
|-------------------------------|--|
| Directly into the active cell | The most basic method of entering data into a cell is to select the cell, type the data, and then press either the Tab or the Enter key. Pressing Tab will enter the data and navigate one cell to the right. Pressing Enter will enter the data and navigate to the first open cell in the next row down. If there is already data in the cell, using this method will overwrite the previous data. |
| Using Edit mode | You can use Edit mode to either enter new data in an empty cell or edit existing data. Using Edit mode is more useful for editing existing data; otherwise, Edit mode is simply an extra step if you're just adding new data. To use Edit mode, either double-click the desired cell, select the desired cell and then place the insertion point in the Formula Bar , or select the desired cell and then press F2 . Once in Edit mode, you can place the insertion point wherever you like, in the cell or the Formula Bar , and edit the existing data as you normally would in a word-processing application. Once you've edited the data, regardless of where the insertion point is, you can press either Tab or Enter to enter the data and navigate to the desired next cell. |



Use Excel Commands



The Ribbon



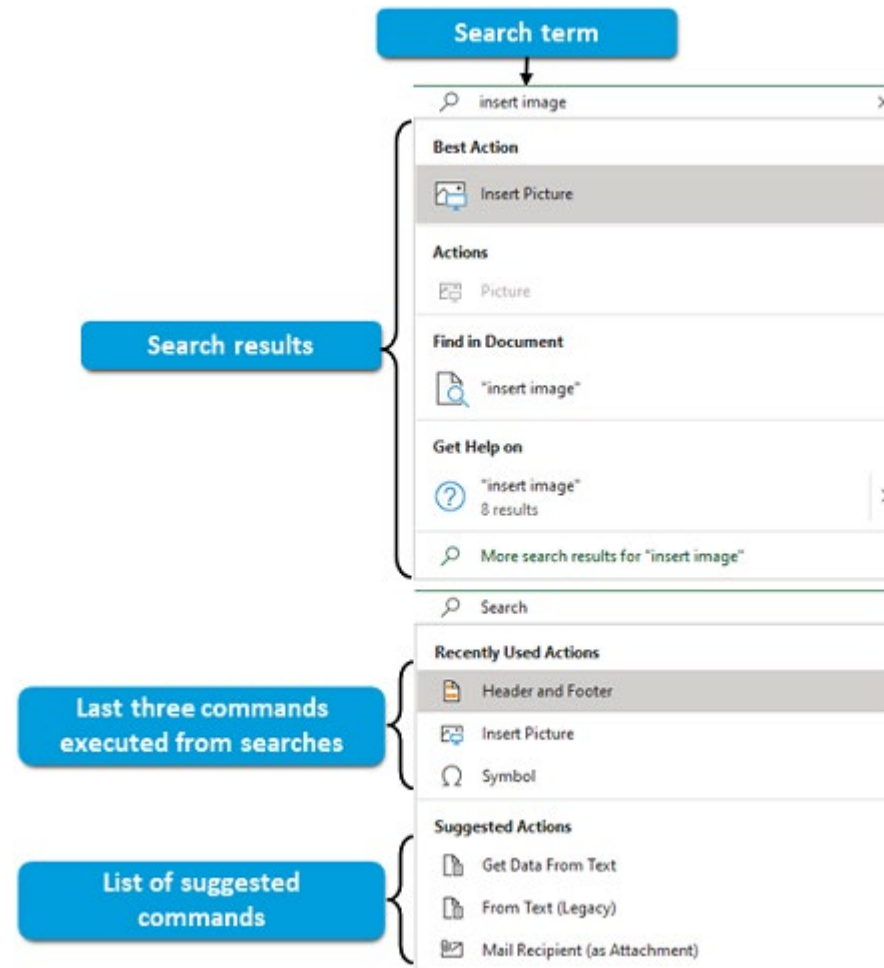
| Ribbon Element | Description |
|----------------------|---|
| Tabs | Organize the ribbon at the highest level according to task functions such as inserting objects, working with formulas, and configuring the view of your worksheets. |
| Groups | Contain functionally related sets of commands that you will use to perform most Excel tasks. |
| Commands | Execute the desired action or configure the desired settings and options. |
| Dialog box launchers | Open dialog boxes containing further commands or options related to the functionality of the group's commands. |
| Search | Allows you to perform a keyword search for Excel commands. |

The Ribbon Tabs

| Ribbon Tab | Contains Commands For |
|-------------|---|
| File | Working with your Excel files and configuring system-wide and application settings and options. Selecting the File tab accesses the Backstage view, providing you with access to these commands and settings. |
| Home | Executing some of the most common Excel tasks. The Home tab displays commands for basic text formatting and editing; applying various styles and formatting to your data; and sorting, filtering, and searching your data. |
| Insert | Inserting a variety of objects, such as charts, tables, and graphics, into your workbooks; creating and editing hyperlinks; adding headers and footers to worksheets; and inserting equations and symbols. |
| Page Layout | Applying themes and effects to worksheets; configuring the overall layout of your worksheets; and arranging worksheet objects. |
| Formulas | Inserting and working with formulas and functions; naming cells and ranges; troubleshooting workbook data, functions, and formulas; and setting calculation options. |
| Data | Importing data from other sources; performing various data analysis tasks; and organizing worksheet data into a hierarchical structure. |
| Review | Reviewing, proofing, adding comments to, and sharing your workbooks. |
| View | Configuring workbook views, viewing multiple workbooks simultaneously, and setting the magnification level. |
| Help | Searching the documentation, contacting support, providing feedback, suggesting a feature, and accessing Microsoft resources such as the user community and the blog. |

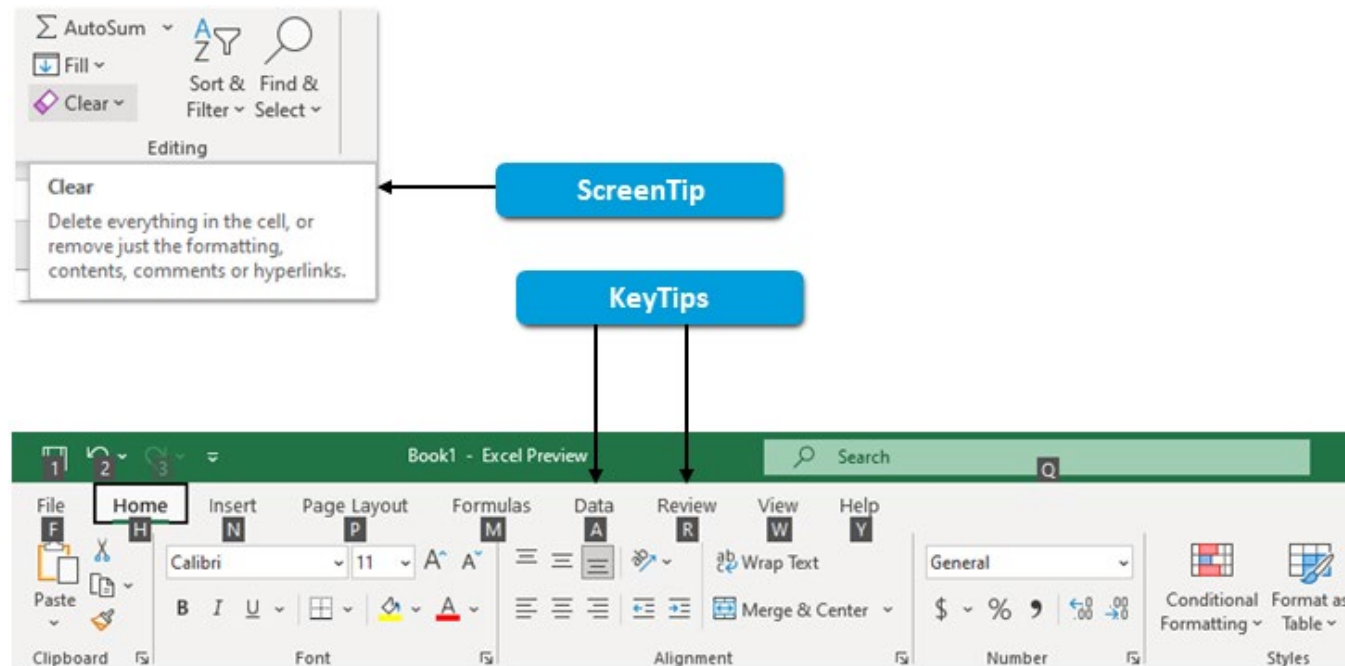
Search

- By typing text into the **Search** text box, Excel will return several of the most relevant search results in a drop-down menu; each keystroke will update the results on-the-fly, so the more information you provide in your search, the more likely the **Search** feature is to show you what you're looking for.



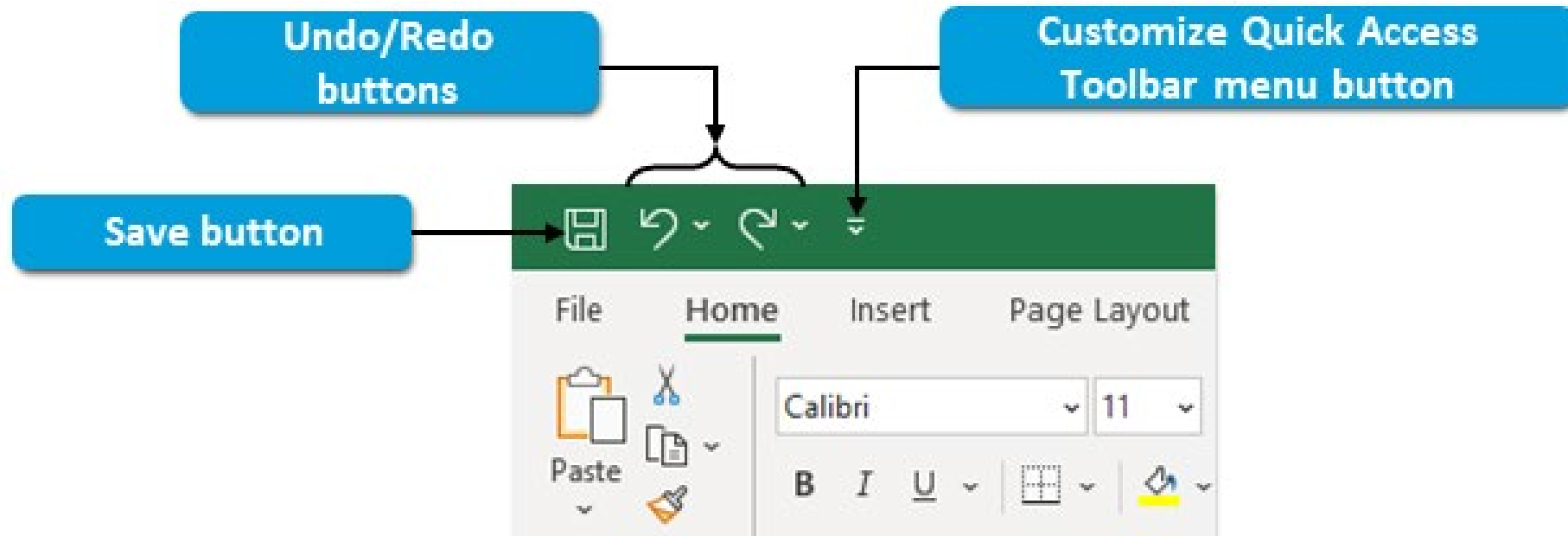
ScreenTips and KeyTips

- **ScreenTips** appear when you place the mouse pointer over commands and some other elements of the UI. ScreenTips appear in a small pop-up window and provide information such as a command's name, a description of what the command or screen element does, and the keyboard shortcut that performs the same function.
- **KeyTips** appear along the ribbon and the **Quick Access Toolbar** when you press the **Alt** key. KeyTips appear as either a single alphanumeric character or a sequence of them.



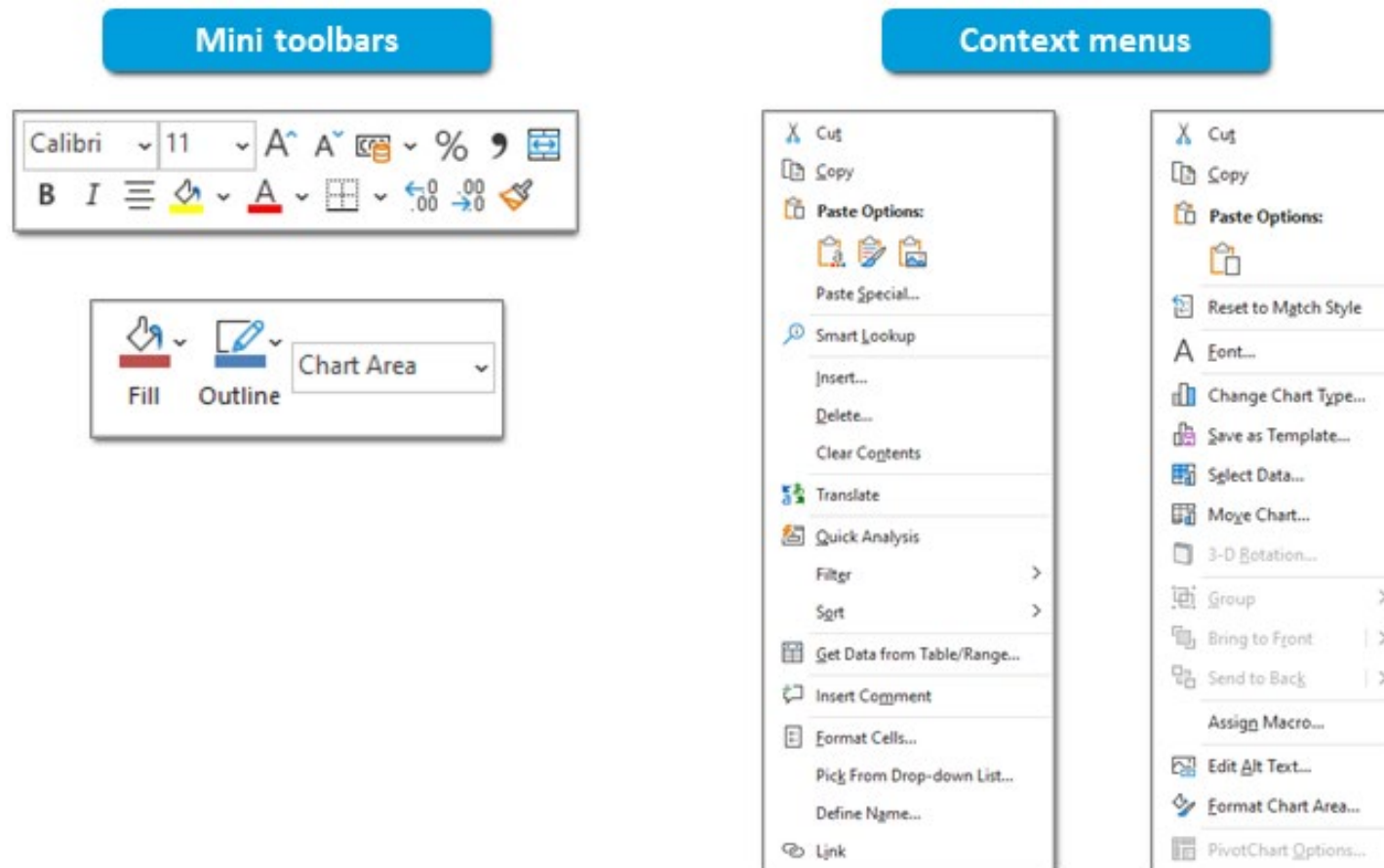
The Quick Access Toolbar

- The Quick Access Toolbar is another element of the Excel UI that provides you with easy access to commonly used commands. The **Quick Access Toolbar** appears above the ribbon in the top-left corner of the Excel UI. By default, the **Save**, **Undo**, and **Redo** commands appear on the **Quick Access Toolbar**. Like the ribbon, the **Quick Access Toolbar** can be customized.



The Mini Toolbar and Context Menus

- In Excel 2021, there are actually multiple versions of the **Mini** toolbar: the main version that is displayed when you right-click an active cell, and variations of the main **Mini** toolbar that are displayed when you right-click various other objects on worksheets, such as images and charts.



Create and Save a Basic Workbook

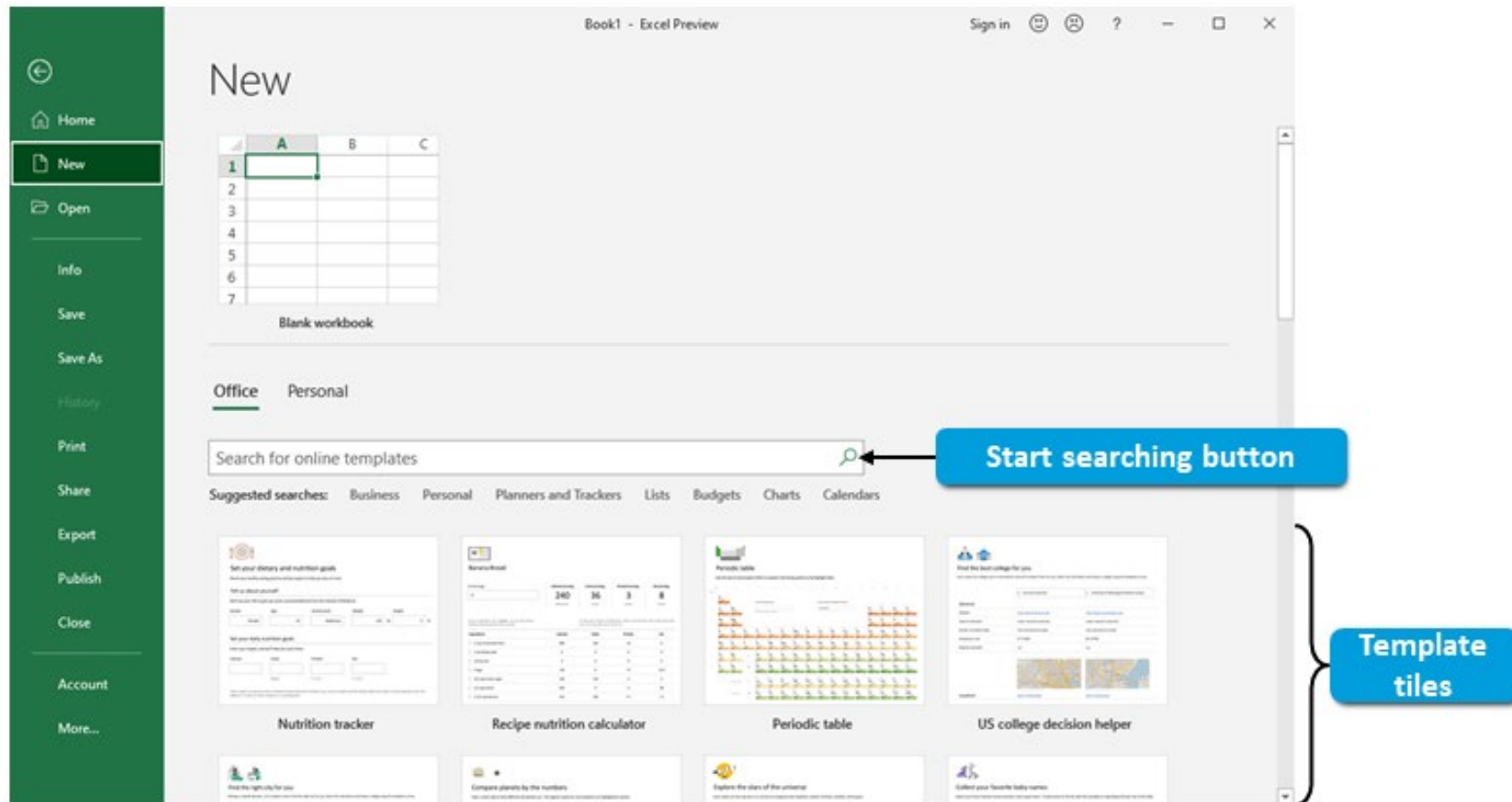
 Microsoft



Excel 2021

The New Tab

The **Backstage** view's **New** tab provides you with a variety of options for creating new Excel workbooks. You can create a new blank workbook to start from scratch, or you can decide to start with an existing Excel workbook template, and then make changes to suit your needs.



The Excel 2021 Backstage view.

The **Backstage** view's **New** tab provides you with a variety of options for creating new Excel workbooks. You can create a new blank workbook to start from scratch, or you can decide to start with an existing Excel workbook template, and then make changes to suit your needs.

| New Screen Element | Is Used To |
|-----------------------------------|--|
| Search for online templates field | Enter search criteria to look for available Excel workbook templates from Office.com . |
| Start searching button | Execute a search based on the search term(s) entered in the Search for online templates field. |
| Suggested searches section | Search for Office.com templates in a variety of commonly searched categories. These categorized searches are also broken down into sub-categories for more precise searching. |
| Blank workbook tile | Create a new, blank workbook. |
| Template tiles | Create new Excel workbooks based on the selected template. |

Excel 2021 File Formats

| File Type and Extension | Description |
|--------------------------------------|--|
| Excel Workbook (.xlsx) | The default file type in Excel 2021. |
| Excel Macro-Enabled Workbook (.xlsm) | Allows you to save workbook files containing Visual Basic® for Applications macrocode. |
| Excel Binary Workbook (.xlsb) | Compressed, binary-based file format that reduces file size and improves performance in complex, calculation-dense workbooks. This file type may not be compatible with some applications that work only with XML-based files. |
| Excel 97-2003 Workbook (.xls) | The previous default Excel file format. The XLS format is a binary file format, which isn't as compatible with other computer applications as the newer, XML-based file format. |
| Excel Template (.xltx) | The default file type for Excel templates. This format is used to save workbooks as templates so that you can create new workbooks based on the template contents, layout, and format. |
| Excel Macro-Enabled Template (.xltn) | The default file format for Excel macro-enabled templates. |
| Excel 97-2003 Template (.xlt) | The default template file format in prior versions of Excel. |
| PDF (.pdf) | Allows you to save workbooks in the Portable Document Format (PDF). |

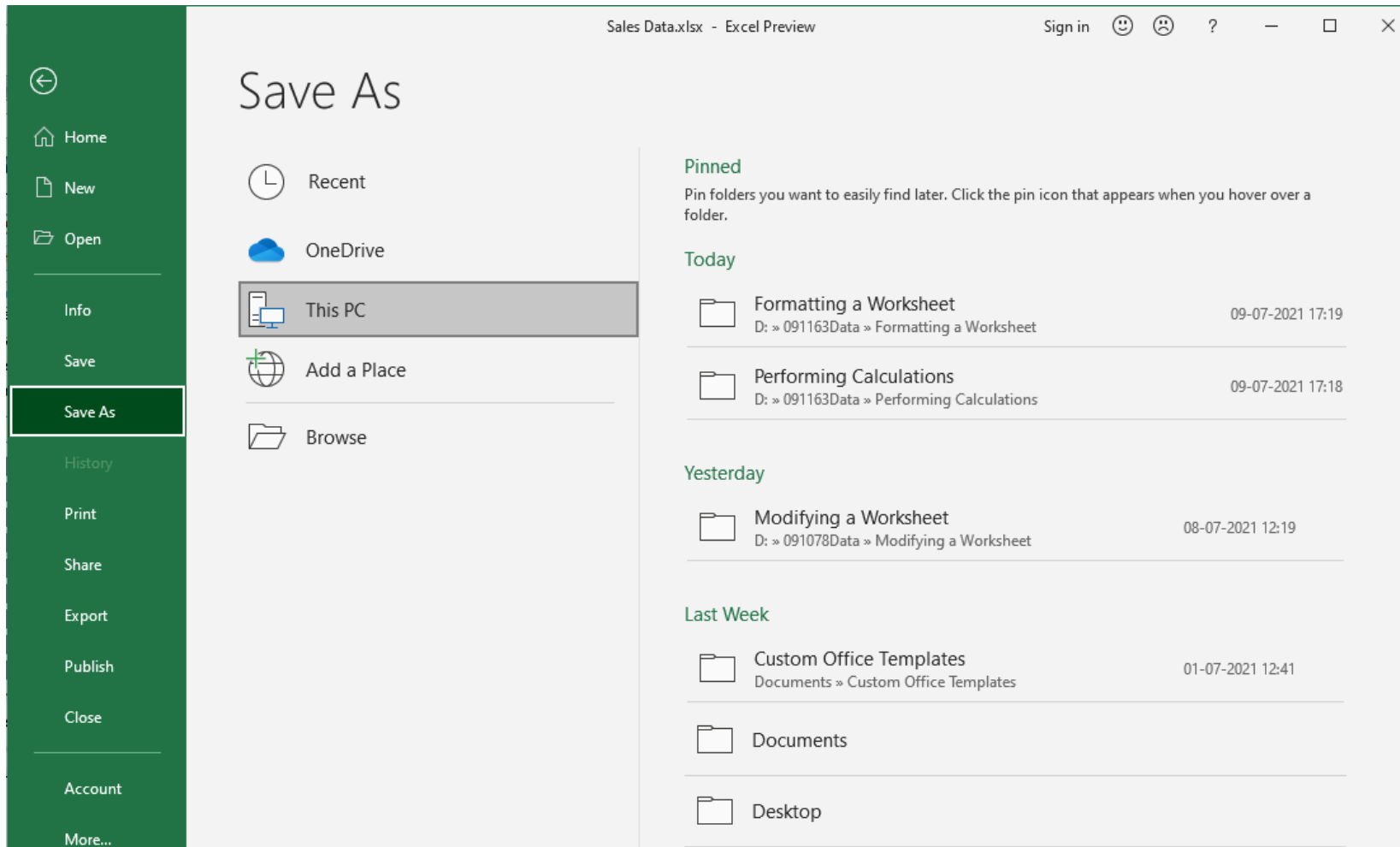
The Save and Save As Commands

Excel provides you with two options for saving your new and existing workbook files:

- The **Save** command—save changes to an existing workbook without changing the file name or the file location.
- The **Save As** command—save new workbook files or to make changes to existing files, such as the file name and location.
- Both the **Save** and **Save As** commands are accessible in the left pane in the **Backstage** view. The **Quick Access Toolbar** also provides access to the **Save** command by default.
- If you select **Save** to save a new workbook file, Excel 2021 automatically displays the **Save As** screen, as you must specify a location and a file type when saving new files.

The Save As Screen

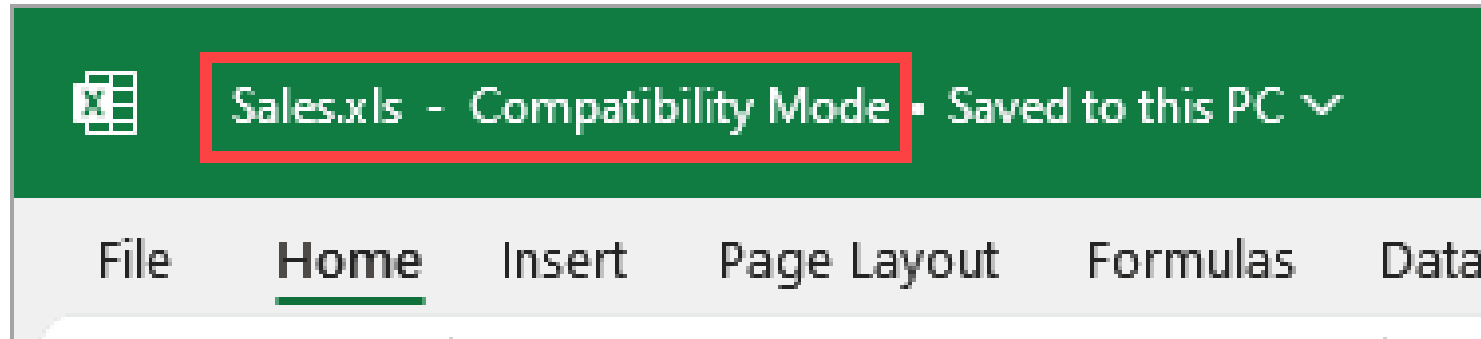
The **Save As** screen contains the commands and options you will use to select a location to save your workbook files, either on your computer, on an attached storage device, or in a remote location such as a network share or an online file storage service.



The Save As Options

| Save As Option | Description |
|----------------|---|
| Recent | This option provides you with a list of recent and pinned folders. |
| OneDrive | This option provides you with direct access to your personal Microsoft OneDrive® account, if you have one. OneDrive is a file storage and sharing service that enables individuals to store files online (or "in the cloud") for easy access from any location that has Internet access. There are two versions of OneDrive: personal and business. Anyone can create a personal Microsoft account with OneDrive, and it is free to sign up. It is possible that your Office 2021 administrator will block usage of personal accounts for your organization. OneDrive for Business is only included with Microsoft 365, not Excel 2021. |
| This PC | This option acts as a shortcut to display a list of locations that you've recently saved your workbooks to. The shortcuts are divided into various sections based on time, such as Today , Yesterday , and Last Week . Selecting one of the shortcuts opens a Save As dialog box to that location. In this dialog box, you can name your file and select the appropriate file type. |
| Add a Place | You can use this option to add other options for workbook file storage, such as network servers, OneDrive, and Microsoft SharePoint® sites. |
| Browse | This option immediately opens the Save As dialog box to your local Documents folder, or to the current workbook's location if it has already been saved. You can use this option to quickly browse to a specific location where you want to save your workbook. |

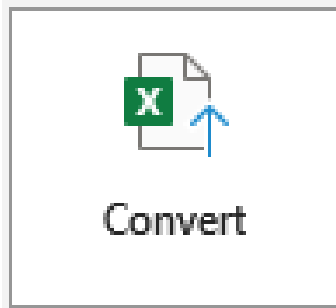
Compatibility Mode



When you open a workbook file in Excel 2021 that was created by using Excel 2003 (or an earlier version), Excel opens the file in Compatibility mode and the **Title bar** displays the file name with the text *[Compatibility Mode]* next to it. You can open and work with files in Compatibility mode to preserve the original file format, allowing you to subsequently open the file in previous versions of Excel. Keep in mind that some Excel 2021 features are not available in all versions of Excel.

The Convert Option

When you open a workbook in Excel 2021 that was created in a 97-2003 version of Excel, and you no longer need to keep the workbook in the previous file format; you can convert the workbook into the current XLSX format. Using the Convert option provides you with access to all of the features and functionality available in Excel 2021. Often, converting a file to the newer file format will also reduce the size of your workbook file.



Compatibility Mode

Some new features are disabled to prevent problems when working with previous versions of Office. Converting this file will enable these features, but may result in layout changes.

When you convert a workbook, Excel replaces the old file with a copy of the workbook in the XLSX or the XLSM file format. The previous version of the file is no longer available for you to work with. You can access the **Convert** option from the **Info** tab in the **Backstage** view of any workbook that is open in Compatibility mode.

The Compatibility Checker

The Compatibility Checker allows you to test the compatibility of objects and data in an Excel 2021 workbook when you intend to save it in an earlier Excel file format. This is typical when you need to share a file you created in a newer version of Excel with a user who has an older version of Excel installed on their machine.

Selecting the **Check Compatibility** command opens the **Microsoft Excel - Compatibility Checker** dialog box, in which you can view a list of features in your Excel 2021 file that are not supported in earlier versions of Excel. You can access the **Check Compatibility** command by selecting **File → Info → Check for Issues**. Excel will also run the Compatibility Checker automatically when you attempt to save a current Excel workbook file in the previous file format.

Unchecking the **Check compatibility when saving this workbook** check box allows you to save in previous versions without the Compatibility Checker running automatically. However, be careful when you uncheck this feature; you will lose certain functionality when you save back to previous versions.

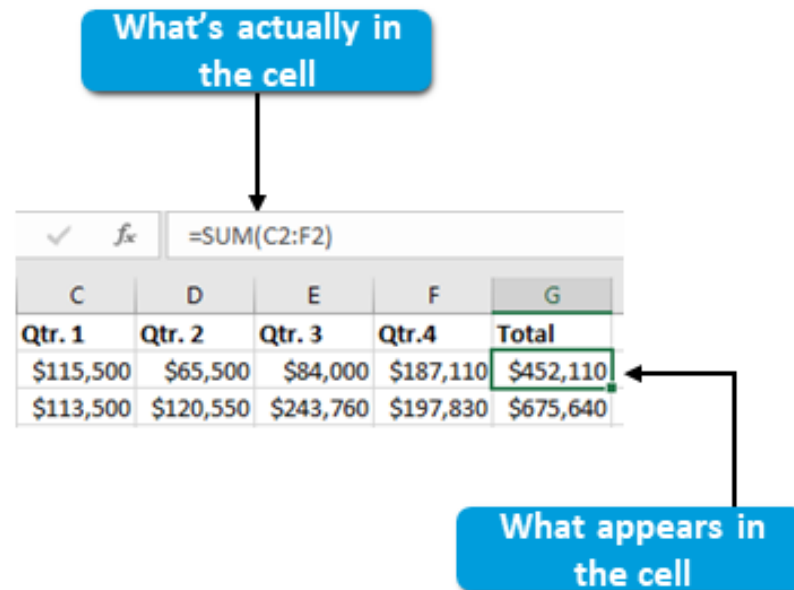
Enter Cell Data



Excel 2021

It's Not WYSIWYG

One of the most fundamentally important things to understand about Excel is that it is not a "what you see is what you get" (WYSIWYG) type of environment. Often, the value or text that appears within a cell is not what is actually stored in the cell. A simple example of this is the result of a calculation. If you have a formula entered in a cell, by default, the cell will display the result of the formula. For example, if the cell contains a formula that is the equivalent of "1 + 1," the cell will display the result of that formula: 2. But 2 is not the actual cell data; the formula is. Although this may, at first, not seem highly important, as you begin to work with the more complex functionality in Excel, it will become a critical concept to understand.



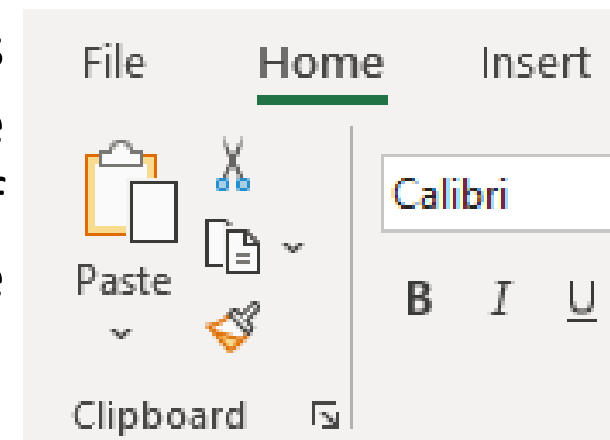
Data Types

Although Excel cells can contain an incredible array of content, there are really only a few general categories of data that you'll work with on a regular basis.

| Data Category | Description |
|------------------------|---|
| Values | Numeric constants that do not change unless you edit the cell contents. Examples include 1, 345, 11.6, and .002. |
| Labels/text | Alphanumeric text not used to perform calculations or store numeric values. These can largely be viewed as labels for related sets of data on a worksheet. Examples include "Sales," "Q1," and "Total." |
| Formulas | Mathematical equations used to perform calculations or data analysis. Formulas are dynamic, so the displayed value can change if you change the cell data "feeding" the formula. |
| Dates and times | Date and time values. These can be used both as simple labels or as part of certain mathematical or logical operations. |


The Cut, Copy, and Paste Commands


Although Excel is different from other Office applications such as Word and PowerPoint®, you'll find some of the functionality is quite similar. The **Cut**, **Copy**, and **Paste** commands are a good example of this. You will use the **Cut**, **Copy**, and **Paste** commands either to make a copy of cell data and place it in another cell, or to remove data from one cell and put it in another.



| Command | Performs This Action |
|---------|---|
| Cut | Removes data from the selected cell or removes the selected data, and places a copy of it on the clipboard. |
| Copy | Makes a copy of the data in the selected cell or a copy of the selected data, and places the copy on the clipboard. |
| Paste | Places the data that was most recently added to the clipboard in the destination cell or location. |

Drag-and-Drop Cut and Paste

In addition to using the Cut, Copy, and Paste commands to move content, you can use Excel's drag-and-drop editing functionality. When you select a cell or a range, the cell or range is displayed with a solid green border around it. If you place the mouse pointer over the green border anywhere other than above the fill handle, Excel displays the mouse pointer as a move icon.  When the move pointer appears, you can click and drag the selected cell or range and drop it in place anywhere else on the worksheet. This effectively cuts and pastes all content within the selection to the new location.

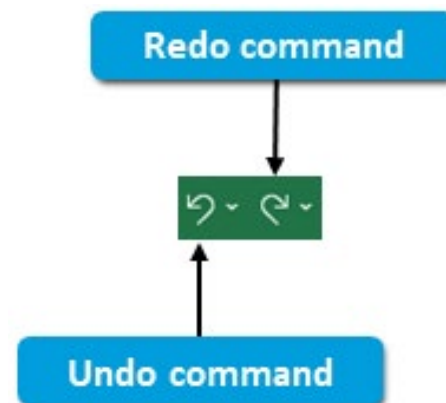
If you press and hold down the Ctrl key while performing this procedure, the mouse pointer changes into the copy pointer.  By using the copy pointer, you can drag a copy of the content in the selected cell(s) to a new location. This is the same as copying and pasting the content.

The Undo and Redo Commands

Inevitably, as you work with Excel, you will make a mistake. Fortunately, Excel, like many other Office applications, provides you with the **Undo** and **Redo** commands to help you correct errors as you work. The **Undo** command will cancel out the last action you performed, or the last several actions you performed, so you can correct any mistakes you've made while working with your workbooks. The **Undo** command works on a wide variety of actions, including entering data/typing text, performing calculations, adding objects to your worksheets, and formatting worksheets and worksheet objects. Once you've used the **Undo** command, Excel activates the **Redo** command, which will cancel out the last undo action or a series of undo actions.

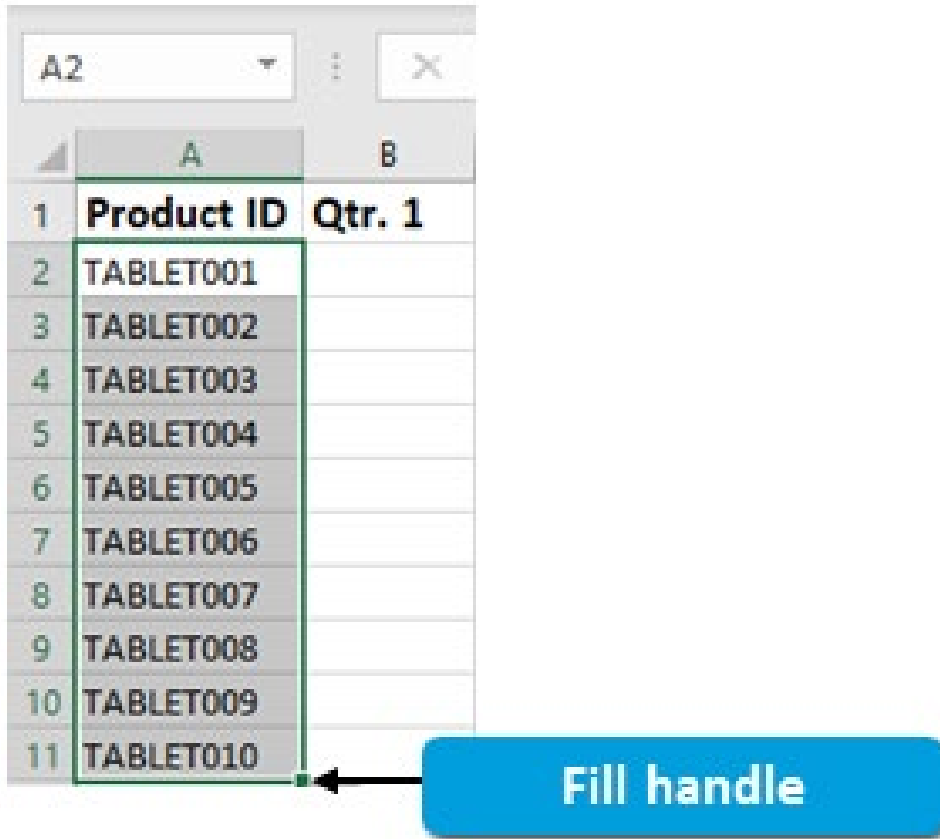
By default, the **Undo** and **Redo** commands are available on the **Quick Access Toolbar**.

The keyboard shortcuts for **Undo** and **Redo**: **Ctrl + Z** and **Ctrl + Y**, respectively.



The AutoFill Feature

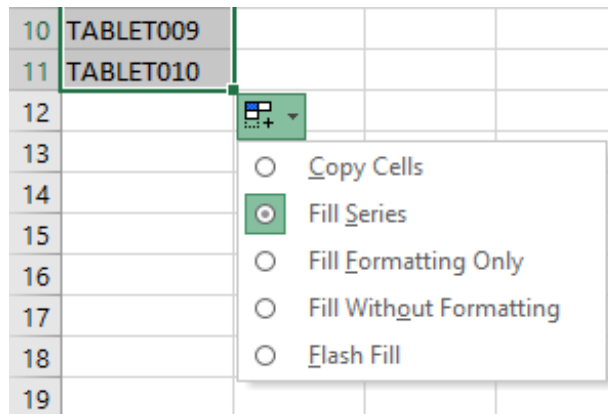
Excel 2021 includes a number of features meant to make your life a bit easier. One of these is the AutoFill feature. The AutoFill feature attempts to recognize an existing pattern in the data you have already entered, and then apply that pattern to filling in additional cells.



To use the AutoFill feature, you must first select the sequence of cells you want the pattern to be based on. When you select a cell or a range, Excel displays the cell or range within a solid green border. At the bottom-right corner of the border, Excel displays a fill handle. To use the AutoFill feature, you simply drag the fill handle until the border surrounds the desired range of cells, and then release it. When the mouse pointer is directly over the fill handle, it is displayed as a thin black plus symbol. +

AutoFill Options

| AutoFill Option | Description |
|-------------------------|---|
| Copy Cells | Ignores any recognizable pattern and fills the remaining cells with the same data the originally selected cells contain. For example, you could use Copy Cells to repeat the values 1, 2, 3 in the rows below to prevent Excel from making these new values 4, 5, 6. |
| Fill Series | The default AutoFill option. Excel applies the pattern it recognizes in filling the remaining cells. |
| Fill Formatting Only | Applies any formatting in the originally selected cells to the remaining cells without populating the cells with content. |
| Fill Without Formatting | Fills the remaining cells with data based on the recognized pattern while ignoring any formatting applied to the originally selected cells. |
| Flash Fill | Fills in cells following a pattern in one column that is based on the cells in the same row in other columns. |



Flash Fill

In addition to being an AutoFill option, the Flash Fill feature can automatically recognize patterns across rows as you enter data, and then copy those patterns down a column of entries. The key difference between this and the AutoFill feature is that it depends on a recognizable pattern based on the entries in cells in other columns.

The Flash Fill feature cannot recognize patterns in a column and then copy the pattern across a row. It works only down columns.

The Flash Fill feature will work only if there are no empty columns between the original data and the column you're trying to fill following a pattern. There can, however, be columns of data that don't relate to the pattern in between the cells containing the original data and the cells you are trying to fill.

| | A | B | C |
|----|------------------|-------------------|----------------------------------|
| 1 | Last Name | First Name | Email Address |
| 2 | Silva | John | john.silva@develetech.com |
| 3 | Maddox | Sandy | sandy.maddox@develetech.com |
| 4 | Koval | Aaron | aaron.koval@develetech.com |
| 5 | Lindgren | Michael | michael.lindgren@develetech.com |
| 6 | Sykes | Emilia | emilia.sykes@develetech.com |
| 7 | Lee | Albert | albert.lee@develetech.com |
| 8 | Gilgamos | Fancisco | fancisco.gilgamos@develetech.com |
| 9 | Matthews | Trent | trent.matthews@develetech.com |
| 10 | Anderson | Linda | linda.anderson@develetech.com |
| 11 | Smith | Caroline | caroline.smith@develetech.com |
| 12 | Wagner | Leonard | leonard.wagner@develetech.com |
| 13 | Roberts | Thomas | thomas.roberts@develetech.com |
| 14 | Avellone | Xavier | xavier.avellone@develetech.com |
| 15 | Clarke | Janine | janine.clarke@develetech.com |
| 16 | Chen | Erica | erica.chen@develetech.com |



The Clear Command

Because you need to enter data into worksheet cells, it stands to reason that you will also need to delete cell data from time to time. The most basic method of doing this is to select the cell that contains the data you wish to remove and then press the **Delete** key. Excel also provides an alternative with the **Clear** command, which gives you access to a number of options for removing cell content that don't always include removing everything from the cell. The **Clear** command is available in the **Editing** group on the **Home** tab.

| Clear Command Option | Clears |
|----------------------|--|
| Clear All | Everything from the selected cell(s). |
| Clear Formats | Only formatting applied to the selected cell(s). The content is left in place, including any existing comments. |
| Clear Contents | Only the contents of the selected cell(s), but not the formatting. |
| Clear Comments | Only comments from the selected cell(s). |
| Clear Hyperlinks | Hyperlinks from cell contents. The formatting is left in place, including formatting applied to the text when the hyperlink was created. |
| Remove Hyperlinks | Hyperlinks and all formatting. |

Use Excel Help





Microsoft Excel Help

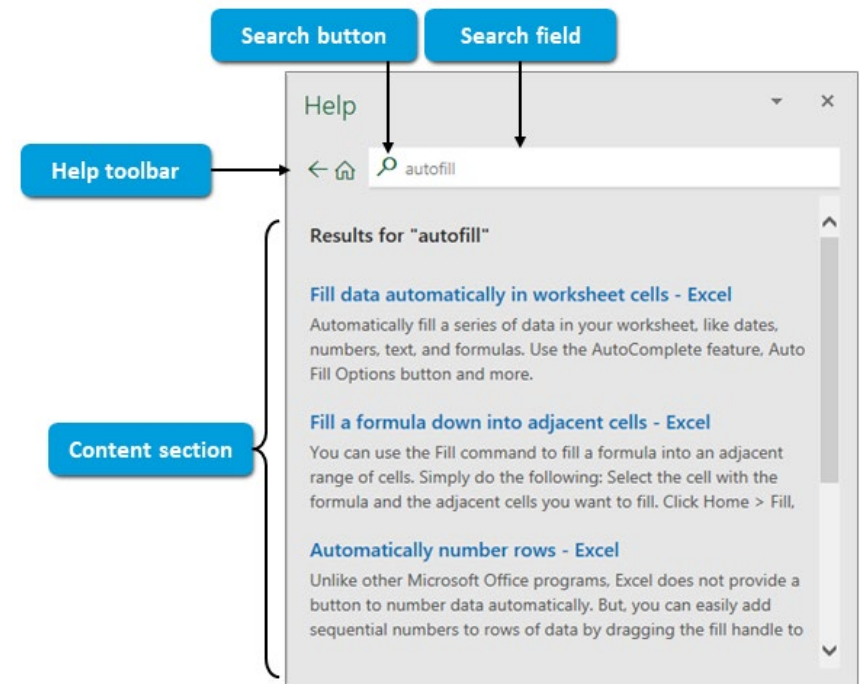
Microsoft Excel Help provides you with access to articles that can answer your Excel questions and show you how to perform various tasks within the application. Excel Help checks Microsoft Office's support website for these articles, which can include text, screenshots, and video. In order to access Help articles, you must have an active Internet connection.

To access the Excel Help system, press the **F1** key or select **Help → Help**. You can also reach Help on specific topics by searching for the topic in Search, or you can select the Microsoft Excel Help button in the top-right corner of the Excel UI while in the Backstage view. This opens your web browser to a Help article on that particular Backstage command.

The Help Task Pane

When you open the Excel Help system, Excel displays the **Help** task pane. You can use the **Help** task pane to search for, browse through, and review the various web articles available to you.

The **Help** task pane is divided into a number of sections and displays a variety of commands to help you locate the desired Help resources. The following table describes each of these in some detail.



| Help Task Pane Element | Is Used To |
|------------------------|--|
| Help toolbar | Navigate back through Help search results and go to the Help home page. |
| Search field | Enter search terms for locating Help resources. |
| Search button | Execute Help searches. |
| Content section | Display the results of a search or the contents of an online Help article. |