Class: IX **Sub: IT**

UNIT 4: ELECTRONIC SPREADSHEET

1. CREATE A SPREADSHEET

1.1 Introduction to spreadsheet:

Spreadsheet:A **spreadsheet** ~~or **worksheet**~~ is a file made of rows and columns that helps to sort, organize, and arrange data efficiently, and calculate numerical data.

Electronic Spreadsheet: An electronic spreadsheet can be used to automatically perform numerical calculations.

Examples of spreadsheet programs:

- Google Sheets - (online and free).
- iWork Numbers - Apple Office Suite.
- LibreOffice ->Calc (free).
- Microsoft Excel.
- OpenOffice ->Calc (free).

Uses for spreadsheet software:

- Household Finance Planning
- Business Accounts and Budgeting
- Invoices
- Wages
- Calculations e.g. Adding, Subtracting, etc.
- Creating Graphs e.g. bar chart, pie chart.
- Collect data from different sources e.g. phone number, prices.

Advantages of Spreadsheet:

- Calculations are correct.
- Calculations are completed automatically.
- Information is organised and easy to access.

- Information is easy to edit if a mistake has been made by retyping or using 'undo'.
- Data can be easily sorted and filtered.
- Data can be quickly analysed.
- Reports can be made more visual by using charts and graphs.

1.2 Starting a Spreadsheet:

Steps to start MS-Excel are:-

1. Double Click on a shortcut key of the MS-Excel icon, if available, on the desktop.

OR

2. Click **Start - > All Programs->Microsoft Office->MS Excel**

1.3 Components of a Spreadsheet:

Following are the components of a spreadsheet are:-

1. Worksheet: It is grid of horizontal rows and vertical columns.

2. Workbook: A workbook contains one or more worksheets.

3. Row: A row is horizontal arrangement of cells.

- The rows are named by numbers (1, 2, 3, 4…).
- There are 1,048,576 rows on a worksheet.
- Row height is 409 points.

4. Column:A column is a vertical arrangement of cells.

- The columns are named by alphabets (A, B, C….Y, Z, AA, AB, AC… AZ, BA, BB…)
- There are 16,384 columns on a worksheet.
- Column width is 255 characters.

5. Cell:A cell is where the rows and columns intersect. Worksheet is also called an array of cells.

- A cell may contain text, numbers, date or a formula.
- A cell address in a spreadsheet identifies location of the cell.

- It is a combination of column name and row number of the cell, such as A2 or B16 etc.

6. Active cell: This is the cell on which the cursor is currently placed. It is outlined by a dark border. Data is always entered in the active cell.

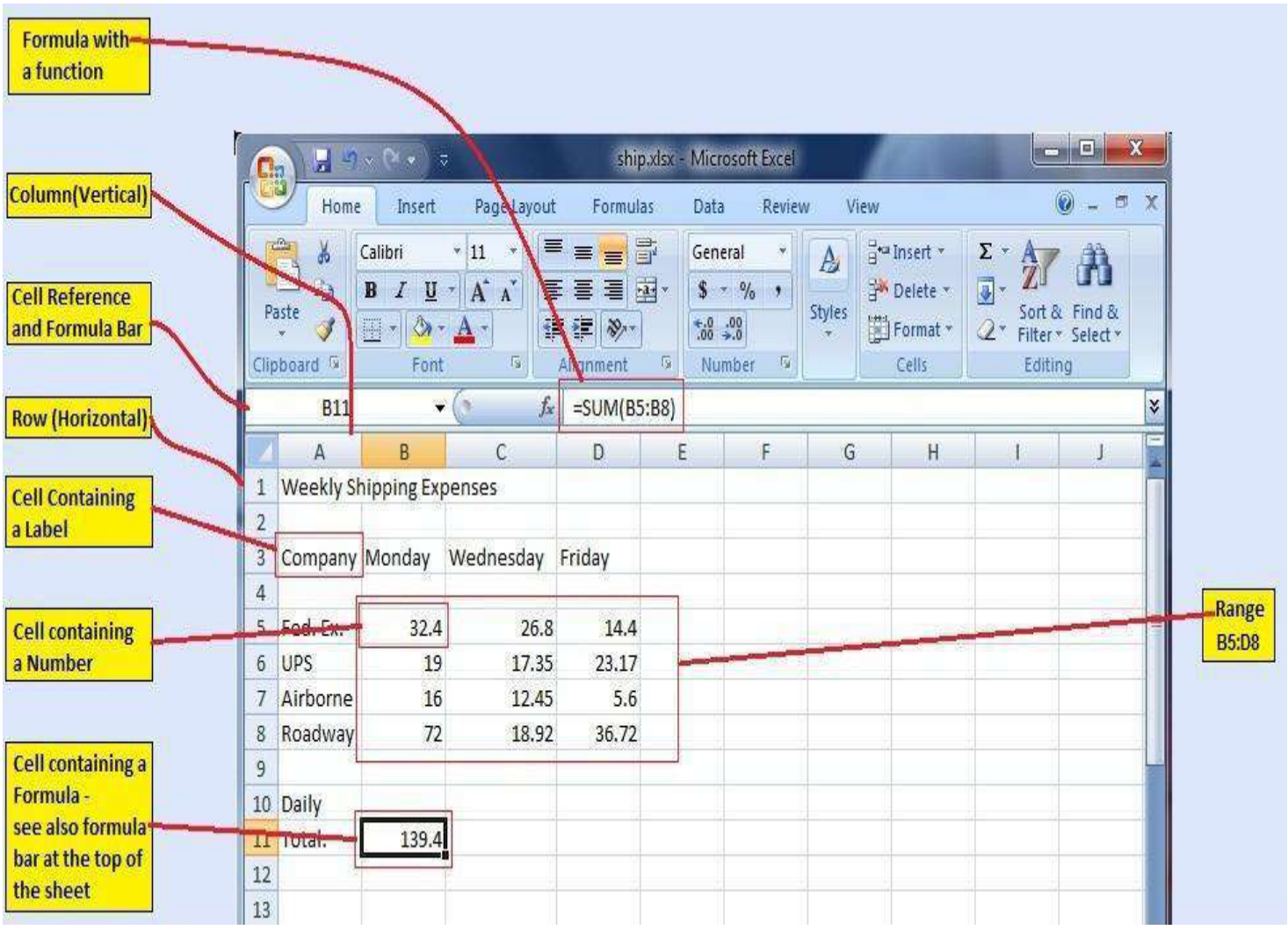
7. Formula Bar: This is located below the Ribbon. It displays the contents of the active cell. It can also be used to enter and edit data.

8. Scroll Bar: These helps to scroll through the content and body of the worksheet. There are two scroll bars –

a. Horizontal scrollbar

b. Vertical scroll bar

9. Cell Range: A cell range in an Excel file is a collection of selected cells.



2.APPLY FORMULA AND FUNCTIONS IN SPREADSHEET

2.1 Different types of data:

There are three types of data in cells: labels, values, and formulas.

a) Label (text): Labels are descriptive pieces of information, such as names, months, or other identifying statistics, and they usually include alphabetic characters.

b) Values (numbers): Values are generally raw numbers or dates.

c) Formula: Formulas are instructions for Excel to perform calculations.

2.2 Entering Data:

1. To enter data in Excel, just select a cell and begin typing. You'll see the text appear both in the cell and in the formula bar above.
2. To tell Excel to accept the data you've typed, press enter. The information will be entered immediately, and the cursor will move down one cell.
3. You can also press the tab key instead of the enter key. If you press tab, the cursor will move one cell to the right once the information has been entered.
4. When Excel sees that you are typing into a list, pressing enter at the end of the row will move the cursor down one row and back to the first column.
5. At any time while you are typing you can press the escape key to cancel. This brings Excel back to the state it was in before you started typing.
6. When you want to delete information that has already been entered, just select the cells, and press the delete key.

2.3 Mathematical Operators used in formula:

1. Excel uses standard operators for equations, such as a
2. **plus sign** for addition (+),
3. **minus sign** for subtraction (-),
4. **asterisk** for multiplication (*),
5. **forward slash** for division (/), and

6. **caret** (^) for exponents.

Note: All formulas must begin with an **equals sign** (=).

Addition	+	=5+5
Subtraction	-	=5-5
Multiplication	*	=5*5
Division	/	=5/5
Exponents	^	=5^5

2.4

Entering Formula:

To enter a formula, execute the following steps.

1. Select a cell.
2. To let Excel know that you want to enter a formula, type an equal sign (=).
3. Type the formula for example, A1+A2.
4. Press Enter key

Edit a Formula

When you select a cell, Excel shows the value or formula of the cell in the formula bar.

1. To edit a formula, click in the formula bar and change the formula.
2. Press Enter key.

2.5 Entering Function:

Function:A **function** is a **predefined formula** that performs calculations using specific values in a particular order.

Insert a Function in Excel:

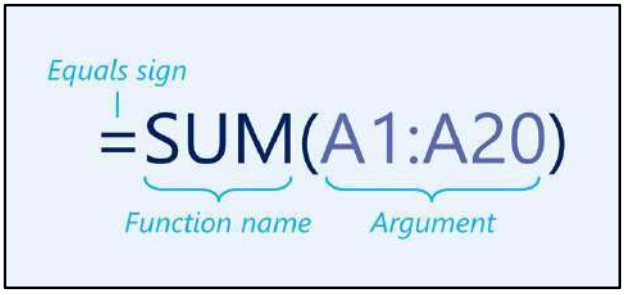
1. Click the cell where you want to add a formula.
2. Click the Insert Function button.
3. Search for a function using one of these methods: Type a few keywords that describe the function you want and click Go. ...
4. Select the desired function.
5. Click OK. ...
6. Enter the formula arguments.
7. Click OK.

The parts of a function:

Syntax: 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**.

Syntax →



There are three parts in syntax:

1. Equal sign (=)
2. Function name
3. Argument

- 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.
- Once you are familiar with the function you want to use, all you have to do is enter an equal sign (=) in the cell, followed by the name of the function and the cell range it applies to.

Creating a function:

There are a variety of functions available in Excel. Here are some of the most common functions you'll use:

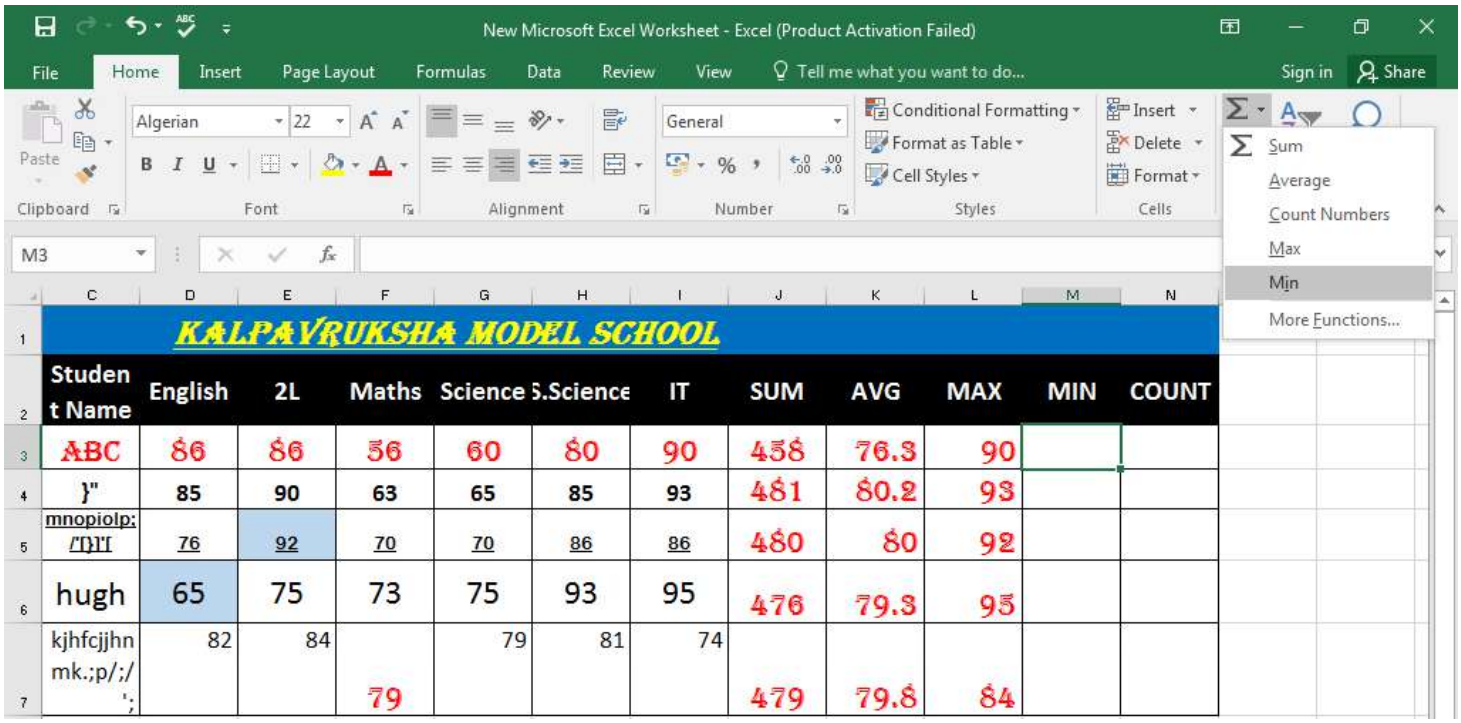
- **SUM**: This function **adds** all of the values of the cells in the argument.
- **AVERAGE**: This function determines the **average** of the values included in the argument. It calculates the sum of the cells and then divides that value by the number of cells in the argument.

- **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.

Creating function using the AutoSum command:

The **AutoSum** command allows you to automatically insert the most common functions into your formula, including SUM, AVERAGE, COUNT, MIN, and MAX.

- AutoSum command is available under **Home tab** in **Editing Group**.



Student Name	English	2L	Maths	Science	S.Science	IT	SUM	AVG	MAX	MIN	COUNT
ABC	86	86	56	60	80	90	458	76.3	90		
}"	85	90	63	65	85	93	481	80.2	93		
mnopiolp;/'[}]'[	76	92	70	70	86	86	480	80	92		
hugh	65	75	73	75	93	95	476	79.3	95		
kjhfcjjhnmk.;p/;/';	82	84	79	79	81	74	479	79.8	84		

Steps to insert a function using AutoSum Command:

1) Select the **cell** that will contain the function.
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.
3) Excel will place the **function** in the cell and automatically select a **cell range** for the argument.
4) Press **Enter** on your keyboard. The function will be **calculated**, and the **result** will appear in the cell.

Note: The **AutoSum** command can also be accessed from the **Formulas** tab on the **Ribbon**.

Insert a column:

Following are the steps to insert a column.

1) Select a column where you want to insert a column.
2) Click mouse right button, it display a menu and select insert option.
3) A column will be inserted.

Insert a Row:

Following are the steps to insert a row.

1) Select a column where you want to insert a row.
2) Click mouse right button, it display the menu and select insert option.
3) A row will be inserted.

Delete a column:

Following are the steps to delete a column.

1) Select a column which you want to delete.
2) Click mouse right button, it display the menu and select delete option.
3) Selected column will be deleted.

Delete a row:

Following are the steps to delete a row.

1) Select a row which you want to delete.
2) Click mouse right button, it display the menu and select delete option.
3) Selected row will be deleted.

Rename a Sheet in a spreadsheet:

Following are the steps to insert a sheet in a spreadsheet.

1) Select the sheet which you want to rename.
2) Click mouse right button, it display the menu and select rename option.
3) Selected sheet will be renamed.

Delete a Sheet in a spreadsheet:

Following are the steps to delete a sheet in a spreadsheet.

1) Select the sheet which you want to delete.
2) Click mouse right button, it display the menu and select delete option.
3) Selected sheet will be deleted.

3. FORMAT DATA IN THE SPREADSHEET:

3.1 Formatting tool:

- 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:

- By default, the font of each new workbook is set to Calibri.
- When creating a workbook in the workplace, you have to select a font that is easy to read.
- Along with Calibri, standard reading fonts include Cambria, Times New Roman, and Arial.

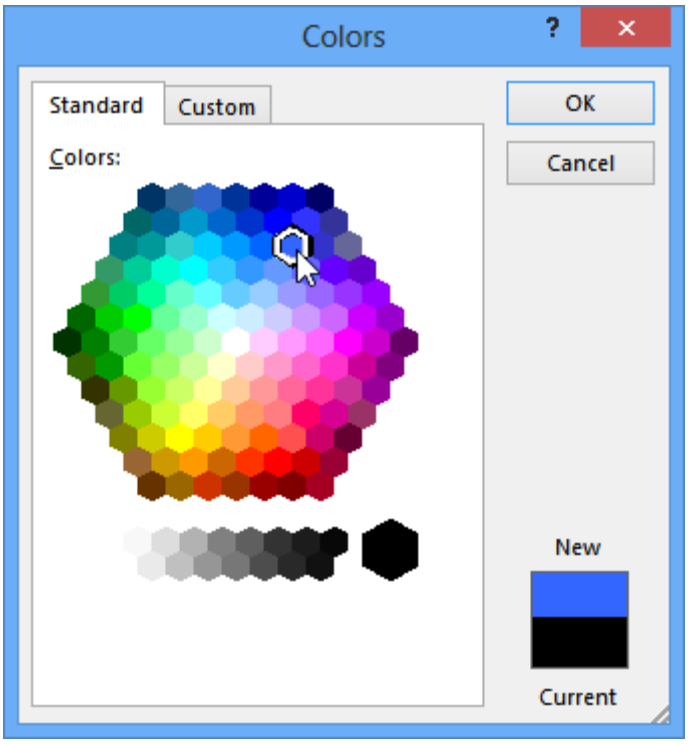
To change the font size:

1. Select the cell(s) you want to modify.
2. Click the drop-down arrow next to the Font Size command on the Home tab. The Font Size drop-down menu will appear.
3. Select the desired font size. A live preview of the new font size will appear as you hover the mouse over different options. In our example, we will choose 16 to make the text larger.
4. The text will change to the selected font size.

To change the font color:

1. Select the **cell(s)** you want to modify.
2. Click the **drop-down arrow** next to the **Font Color** command on the **Home** tab. The **Color** menu will appear.
3. Select the desired **font color**. A **live preview** of the new font color will appear as you hover the mouse over different options. In our example, we'll choose **Green**.
4. The text will change to the **selected font color**.

Note:Select More Colors at the bottom of the menu to access additional color options.



To use the Bold, Italic, and Underline commands:

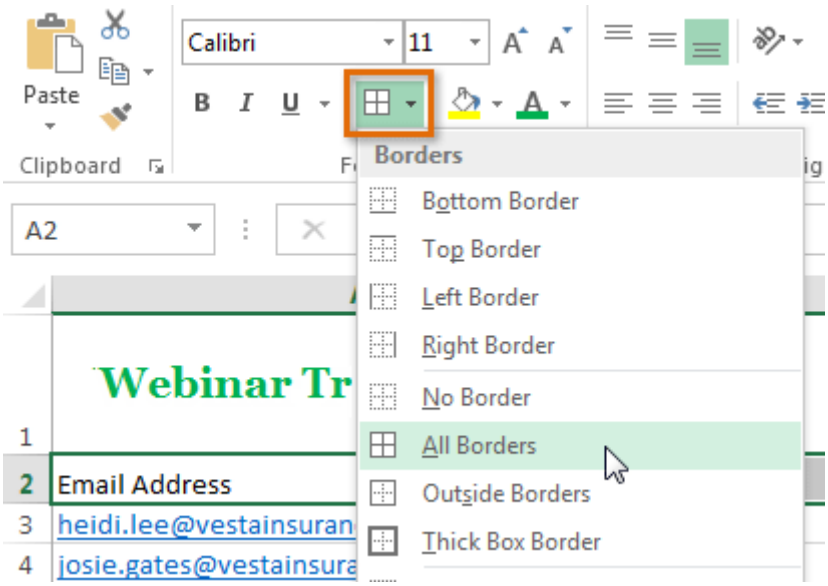
1. Select the **cell(s)** you want to modify.
2. Click the Bold (**B**), Italic (*I*), or Underline (U) command on the **Home** tab. In our example, we'll make the selected cells **bold**.
3. The **selected style** will be applied to the text.

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.

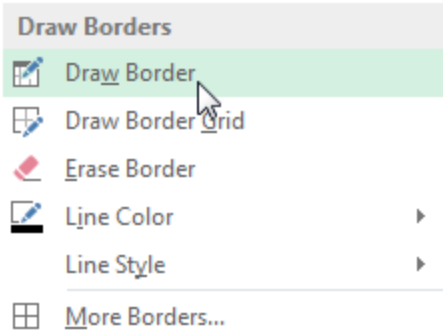
To add a border:

1. Select the **cell(s)** you want to modify.
2. Click the **drop-down arrow** next to the **Borders** command on the **Home** tab. The **Borders** drop-down menu will appear.
3. Select the **border style** you want to use. In our example, we will choose to display **All Borders**.



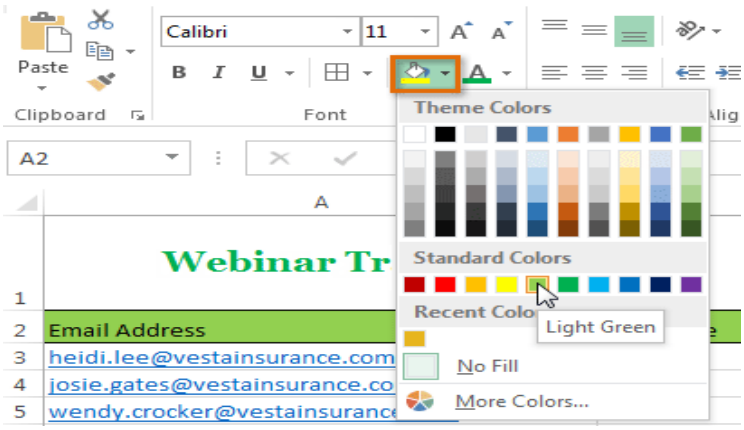
4. The **selected border style** will appear.

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.



To add a fill color:

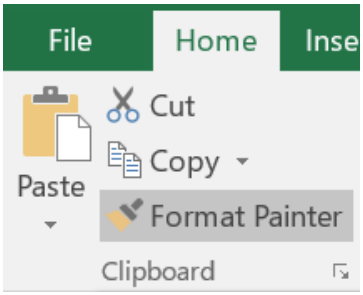
1. Select the **cell(s)** you want to modify.
2. Click the **drop-down arrow** next to the **Fill Color** command on the **Home** tab. The **Fill Color** menu will appear.
3. Select the **fill color** you want to use. A **live preview** of the new fill color will appear as you hover the mouse over different options. In our example, we'll choose **Light Green**.



4. The **selected fill color** will appear in the selected cells.

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 you want to paste the formatting to.



Text alignment

- By default, any text entered into your worksheet will be aligned to the bottom-left of a cell.
- By default, any numbers entered 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.

Following are the two different types of text alignment options:

1) Horizontal text alignment:

a) **Left align:**Aligns content to the left border of the cell
b) **Centre align:** Aligns content an equal distance from the left and right borders of the cell
c) **Right Align**: Aligns content to the right border of the cell

2) Vertical text alignment:

a) **Top Align:** Aligns content to the top border of the cell
b) **Middle Align:** Aligns content an equal distance from the top and bottom borders of the cell.
c) **Bottom Align:** Aligns content to the bottom border of the cell

To change horizontal text alignment:

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 **Centre 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**.

Note: You can apply **both** vertical and horizontal alignment settings to any cell.

Change the orientation of text in a cell:

1. Select a cell, row, column, or a range.
2. Select **Home** > **Orientation**, and then select an option.

You can rotate your text up, down, clockwise, or counter clockwise, or align text vertically:

Rotate text to a precise angle:

1. Select a cell, row, column, or a range.
2. Select **Home** > **Orientation** > **Format Cell Alignment**.
3. Under **Orientation** on the right side, in the **Degrees** box, use the up or down arrow to set the exact number of degrees that you want to rotate the selected cell text.

Wrap text in a cell:

Microsoft Excel can wrap text so it appears on multiple lines in a cell. You can format the cell so the text wraps automatically, or enter a manual line break.

Wrap text automatically

1. In a worksheet, select the cells that you want to format.
2. On the **Home** tab, in the **Alignment** group, click **Wrap Text**. (On Excel for desktop, you can also select the cell, and then press **Alt + H + W**.)

Notes:

- Data in the cell wraps to fit the column width, so if you change the column width, data wrapping adjusts automatically.

- If all wrapped text is not visible, it may be because the row is set to a specific height or that the text is in a range of cells that has been merged.

Adjust the row height to make all wrapped text visible

1. Select the cell or range for which you want to adjust the row height.
2. On the **Home** tab, in the **Cells** group, click **Format**.
3. Under **Cell Size**, do one of the following:

- To automatically adjust the row height, click **AutoFit Row Height**.
- To specify a row height, click **Row Height**, and then type the row height that you want in the **Row height** box.

Tip: You can also drag the bottom border of the row to the height that shows all wrapped text.

Merge Cells in Excel

Merged cell: Combines two or more cells in Excel to create a new, larger cell is called merged cell.

- This is useful for organizing information and creating headers, without the need to resize individual cells. Here's how to do it.

Merge Cells with the Merge &Center Command in the Home Tab

1. **Select** the cells you want to merge together.
2. Go to the **Home** tab.
3. Click on the **Merge &Center** command found in the **Alignment** section.

Fill Handle:

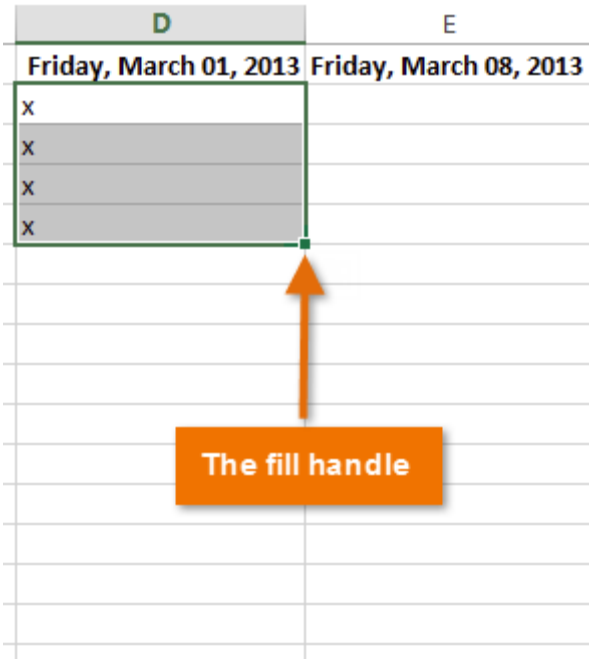
- There may be times when you need to copy the content of one cell to several other cells in your worksheet.

- You could **copy and paste** the content into each cell, but this method would be time consuming.

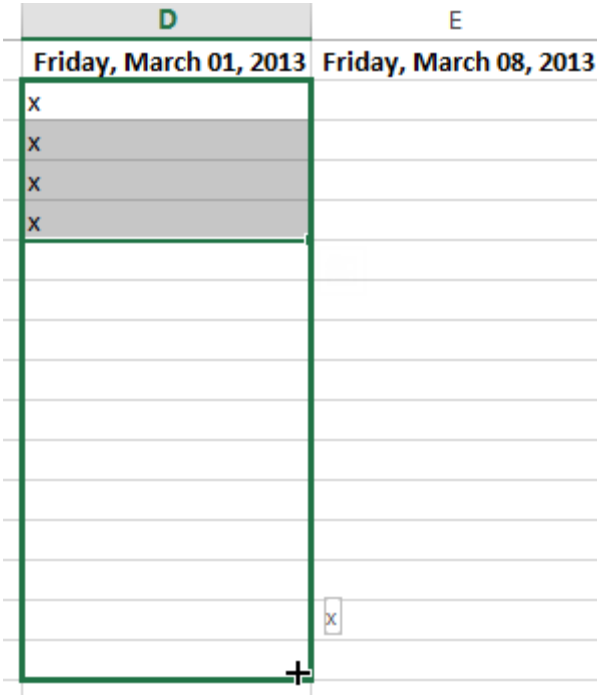
- Instead, you can use the **fill handle** to quickly copy and paste content to **adjacent cells** in the same row or column.

Steps to use fill handle:

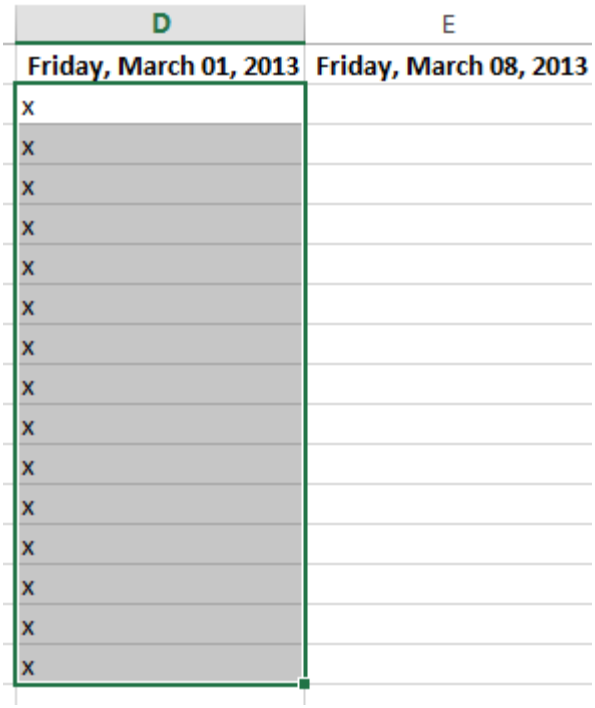
1. Select the **cell(s)** containing the content you want to use. The **fill handle** will appear as a small square in the bottom-right corner of the selected cell(s).



2. Click, hold, and drag the **fill handle** until all of the cells you want to fill are **selected**.



3. Release the mouse to **fill** the selected cells.

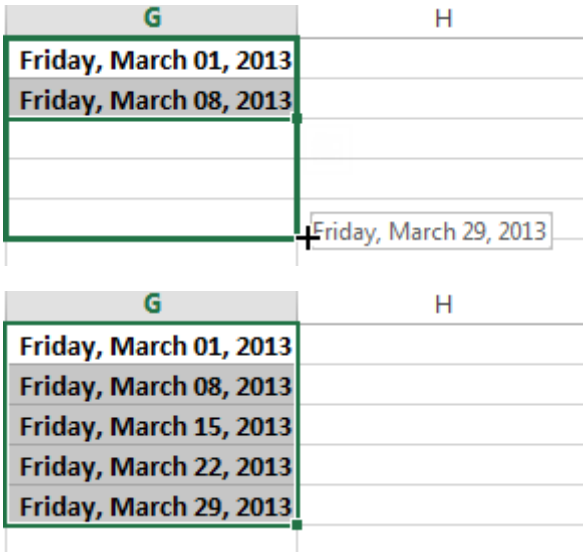


To continue a series with the fill handle:

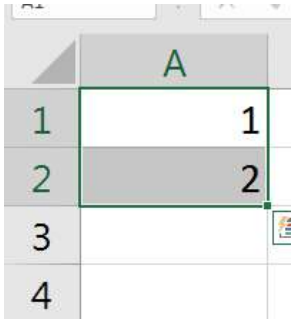
- The fill handle can also be used to **continue a series**. Whenever the content of a row or column follows a sequential order, like **numbers (1, 2, 3)** or **days (Monday, Tuesday, Wednesday)**, the fill handle can guess what should come next in the series.

- In many cases, you may need to select **multiple cells** before using the fill handle to help Excel determine the series order.

- In our example below, the fill handle is used to extend a series of **dates** in a column.



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.



4. UNDERSTAND AND APPLY REFERENCING

4.1 Concept of cell referencing in a spreadsheet:

Cell Reference: **Cell reference in excel** is the like referring to other cells to a cell to use its values or its properties to other cell.

- In simple terms if we have data in some random cell A2 and we want to use that value of cell A2 in cell A1 we can simply use =A2 in cell A1 and this will copy the value of A2 in A1, this is called as cell referencing in excel.

Types of Cell Reference in Excel

1. **Relative cell references:**

It does not contain dollar signs in a row or column, e.g., A2. **Relative cell reference type in excel** changes when a formula is copied or dragged to another cell; in Excel, cell referencing is relative by default; it is the most commonly used cell reference in the formula.

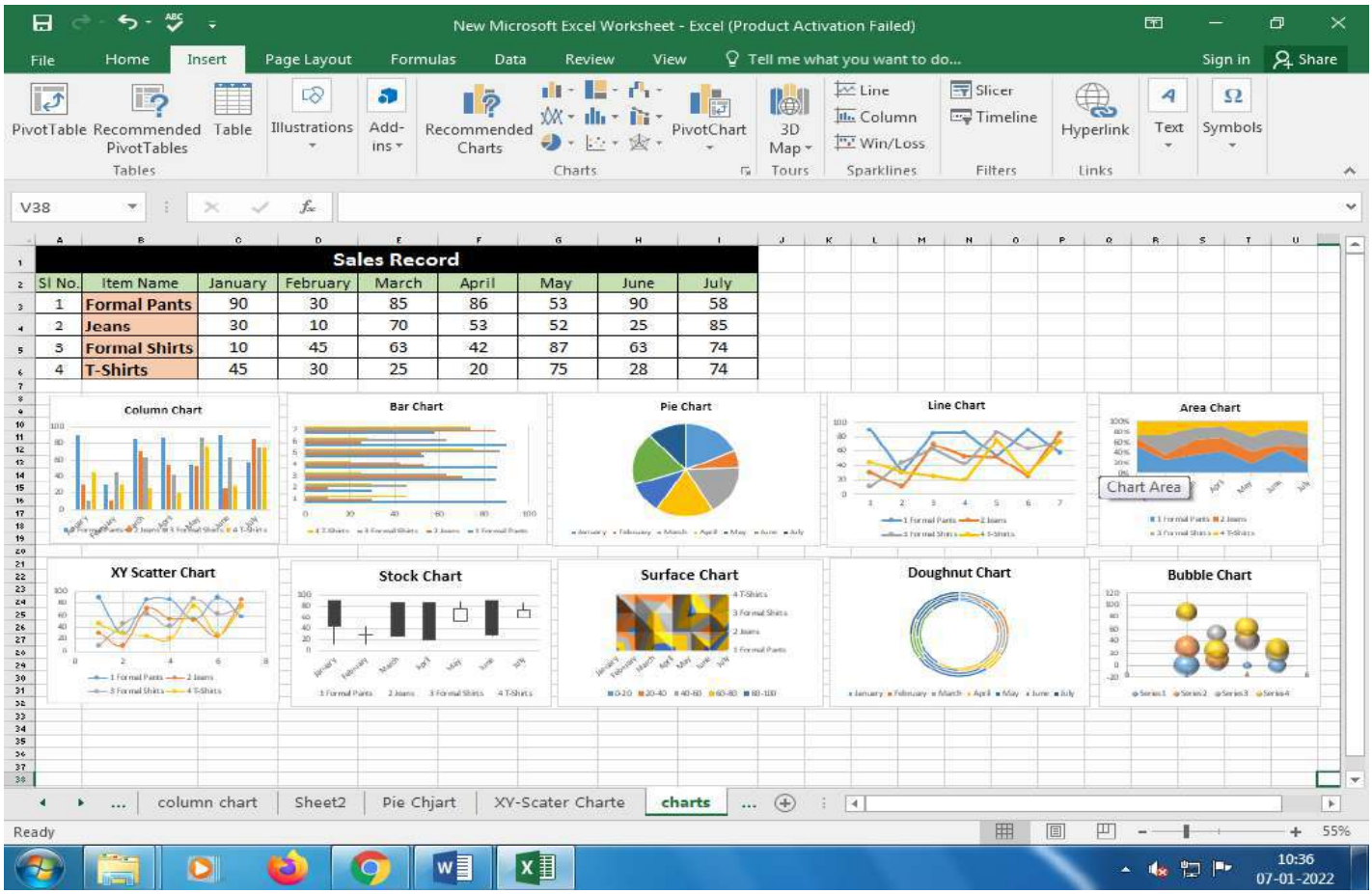
2. **Absolute cell references:**

Absolute Cell Referencecontains dollar signs attached to each letter or number in a reference, e.g., B4, Here if we mention a dollar sign before the column and row identifiers, it makes absolute or locks both the column and the row, i.e., where Cell reference remains constant even if it copied or dragged to another cell.

3. **Mixed cell references in Excel:**

It contains dollar signs attached to either the letter or the number in a reference. E.g., $B2 or B$4**.** It is a combination of relative and absolute references.

5. WORKING WITH CHARTS:



Charts: A chart is a visual representation of numeric values.

- **Charts** allow you to illustrate your workbook data **graphically,** which makes it easy to visualize **comparisons**

Types of Charts: All types of charts are available in **Chart group** under **Insert tab.**

Column: column chart is a bar-shaped chart that has a bar placed on the X-axis. This type of chart in excel is called a column chart because the bars are placed on the columns.

- Such charts are very useful in case we want to make a comparison.

Bar: In the Bar chart, the data is plotted on the Y-axis. This is why this is called a bar chart. As compared to the column chart, these charts use the Y-axis as the primary axis.

- This chart is plotted on rows that are why this is called a row chart.

Pie: A pie chart is a circle-shaped chart that is capable of representing only one series of data. A pie chart has various variants that are a 3d chart and doughnut charts.

- This is a circle-shaped chart that divides itself into various portions to show the quantitative value.

Line: Line charts are used in case we need to show the Trend in data. They are more likely used in analysis rather than showing data visually.

- In this type of chart, a line represents the data movement from one point to another.

Area: Area chart and the line charts are logically the same, but the difference that makes a line chart an Area chart is that the space between the Axis and the plotted value is coloured and is not blank. An area chart emphasizes the magnitude of change over time.

X Y Scatter: Anxy (scatter) chart shows the relationships among the numeric values in several data series, or plots two groups of numbers as one series of xy coordinates.

Stock: This chart type is most often used for stock price data, but can also be used for scientific data (for example, to indicate temperature changes).

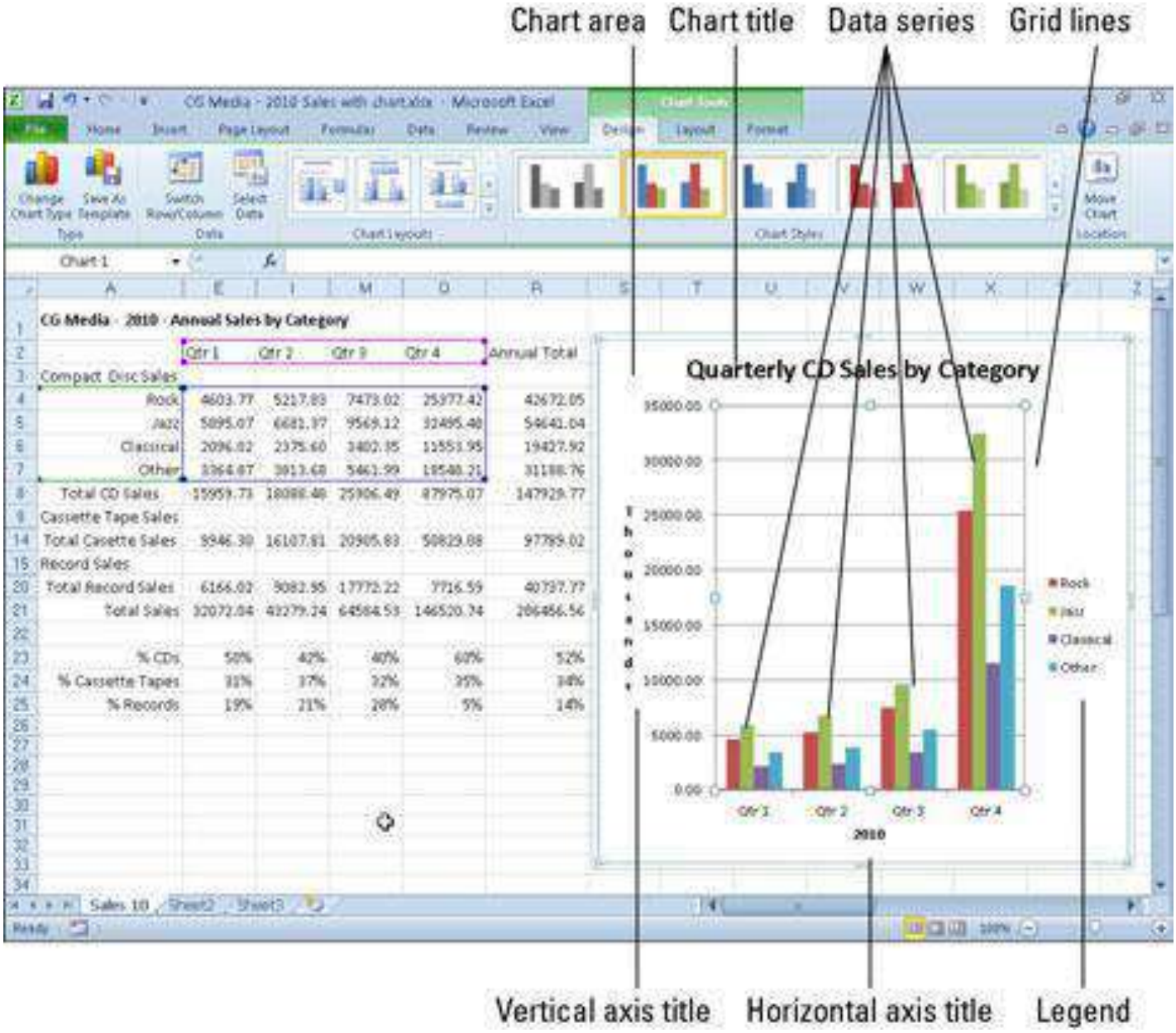
Surface: A surface chart is useful when you want to find the optimum combinations between two sets of data. As in a topographic map, colours and patterns indicate areas that are in the same range of values.

Doughnut: Like a pie chart, a doughnut chart shows the relationship of parts to a whole; however, it can contain more than one data series.

Bubble: Data that is arranged in columns on a worksheet, so that x values are listed in the first column and corresponding y values and bubble

Parts/elements of a Chart: Following are the parts/elements of a chart.

a) Chart area
b) Chart title
c) Data series
d) Grid line
e) Vertical axis title
f) Horizontal axis title
g) Legends



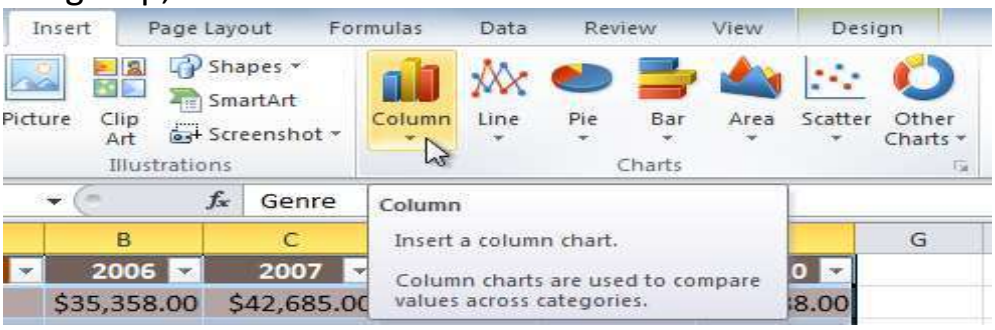
Steps to create a chart:

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.

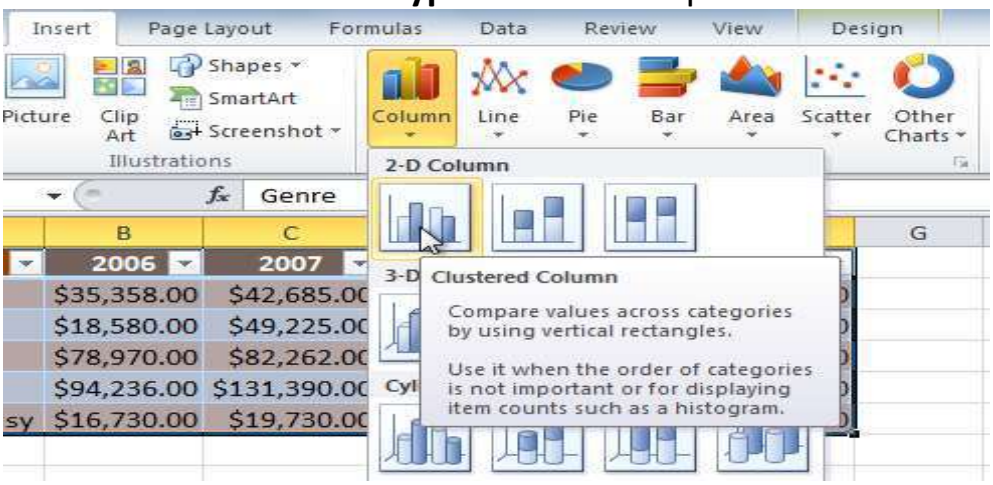
	A	B	C	D	E	F
1	Genre	2006	2007	2008	2009	2010
2	Young Adult	$35,358.00	$42,685.00	$20,893.00	$16,065.00	$21,388.00
3	Classics	$18,580.00	$49,225.00	$16,326.00	$10,017.00	$26,134.00
4	Mystery	$78,970.00	$82,262.00	$48,640.00	$49,985.00	$73,428.00
5	Romance	$94,236.00	$131,390.00	$79,022.00	$71,009.00	$81,474.00
6	Sci-Fi & Fantasy	$16,730.00	$19,730.00	$12,109.00	$11,355.00	$17,686.00
7						

2. Click the **Insert** tab.

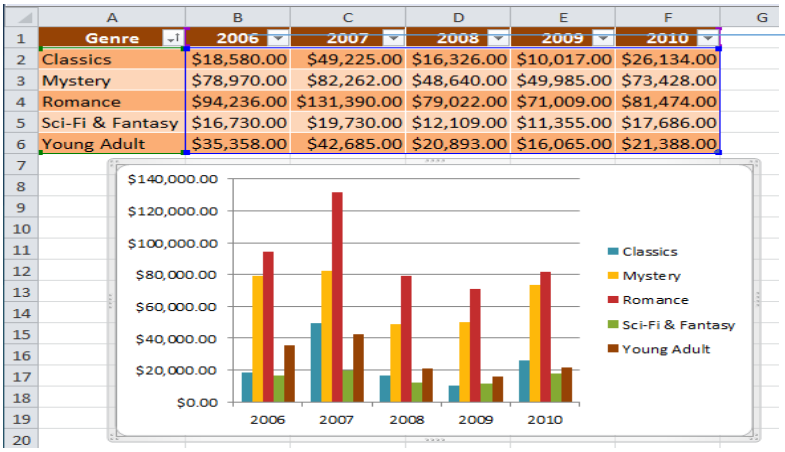
3. In the **Charts** group, select the desired **chart category**



4. Select the desired **chart type** from the drop-down menu.



5. The chart will appear in the worksheet.



Insert a Row:

Following are the steps to insert a row.

4) Select a column where you want to insert a row.
5) Click mouse right button, it display the menu and select insert option.
6) A row will be inserted.

Delete a column:

Following are the steps to delete a column.

4) Select a column which you want to delete.
5) Click mouse right button, it display the menu and select delete option.
6) Selected column will be deleted.

Delete a row:

Following are the steps to delete a row.

4) Select a row which you want to delete.
5) Click mouse right button, it display the menu and select delete option.
6) Selected row will be deleted.

Rename a Sheet in a spreadsheet:

Following are the steps to insert a sheet in a spreadsheet.

4) Select the sheet which you want to rename.
5) Click mouse right button, it display the menu and select rename option.
6) Selected sheet will be renamed.

Delete a Sheet in a spreadsheet:

Following are the steps to delete a sheet in a spreadsheet.

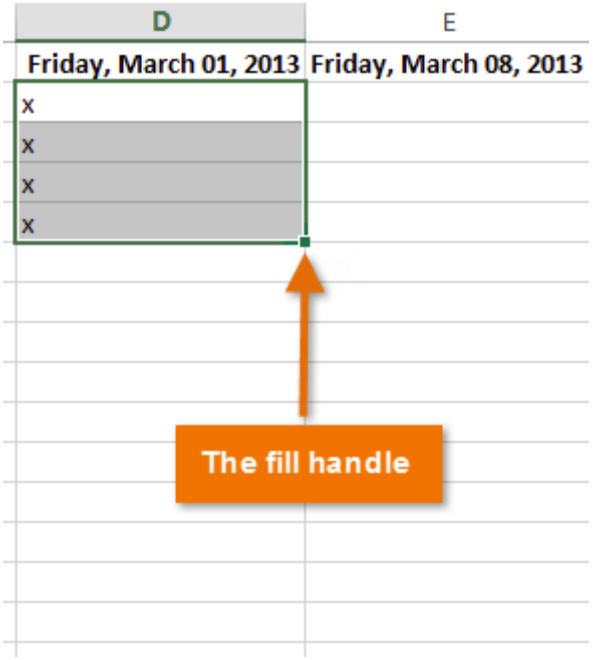
4) Select the sheet which you want to delete.
5) Click mouse right button, it display the menu and select delete option.
6) Selected sheet will be deleted.

Fill Handle:

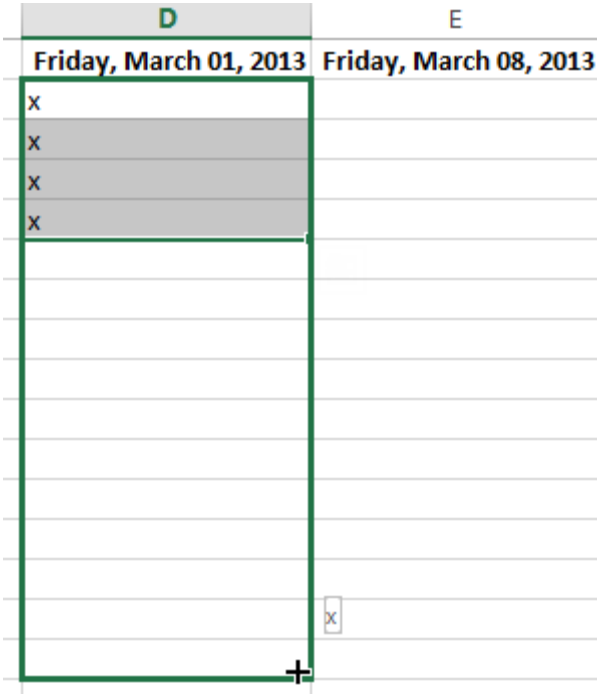
- There may be times when you need to copy the content of one cell to several other cells in your worksheet.
- You could **copy and paste** the content into each cell, but this method would be time consuming.
- Instead, you can use the **fill handle** to quickly copy and paste content to **adjacent cells** in the same row or column.

Steps to use fill handle:

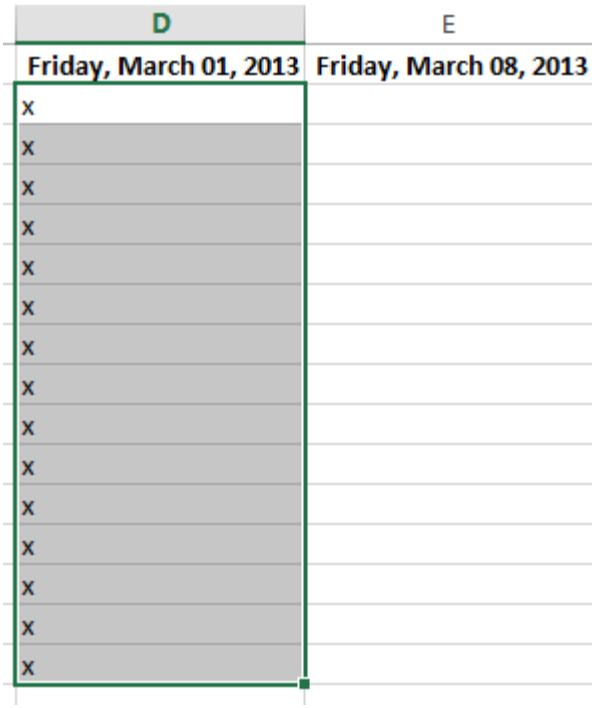
4. Select the **cell(s)** containing the content you want to use. The **fill handle** will appear as a small square in the bottom-right corner of the selected cell(s).



5. Click, hold, and drag the **fill handle** until all of the cells you want to fill are **selected**.



6. Release the mouse to **fill** the selected cells.

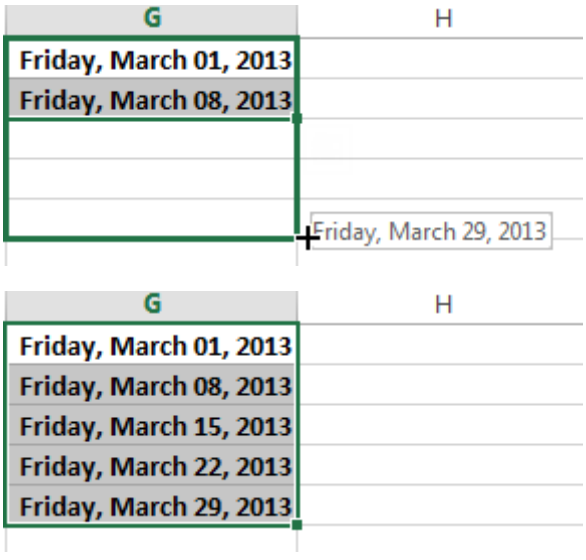


To continue a series with the fill handle:

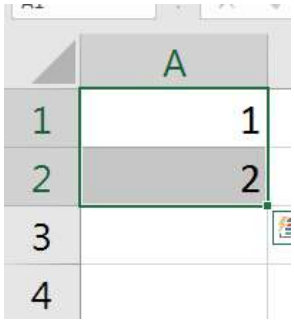
- The fill handle can also be used to **continue a series**. Whenever the content of a row or column follows a sequential order, like **numbers (1, 2, 3)** or **days (Monday, Tuesday, Wednesday)**, the fill handle can guess what should come next in the series.

- In many cases, you may need to select **multiple cells** before using the fill handle to help Excel determine the series order.

- In our example below, the fill handle is used to extend a series of **dates** in a column.



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.



4. UNDERSTAND AND APPLY REFERENCING

4.1 Concept of cell referencing in a spreadsheet:

Cell Reference: **Cell reference in excel** is the like referring to other cells to a cell to use its values or its properties to other cell.

- In simple terms if we have data in some random cell A2 and we want to use that value of cell A2 in cell A1 we can simply use =A2 in cell A1 and this will copy the value of A2 in A1, this is called as cell referencing in excel.

Types of Cell Reference in Excel

4. **Relative cell references:**

It does not contain dollar signs in a row or column, e.g., A2. **Relative cell reference type in excel** changes when a formula is copied or dragged to another cell; in Excel, cell referencing is relative by default; it is the most commonly used cell reference in the formula.

5. **Absolute cell references:**

Absolute Cell Reference contains dollar signs attached to each letter or number in a reference, e.g., B4, Here if we mention a dollar sign before the column and row identifiers, it makes absolute or locks both the column and the row, i.e., where Cell reference remains constant even if it copied or dragged to another cell.

6. **Mixed cell references in Excel:**

It contains dollar signs attached to either the letter or the number in a reference. E.g., $B2 or B$4**.** It is a combination of relative and absolute references.

UNIT 5: DIGITAL PRESENTATION

1. Understand features of an effective presentation:

Concept of presentation:

Presentation: A **presentation** conveys information from a speaker to an audience.

- Presentations are typically demonstrations, introduction, lecture, or speech meant to inform, inspire, motivate, build goodwill, or present a new ideas.

Digital Presentation: A presentation made using digital tools like Skype for Business or PowerPoint.

Elements of presentation:

a. **Focus the audience's attention**. Your visuals should focus attention on what you're saying, not distract from it. Consider clean, minimalist slides with little clutter and simple backgrounds. Don't distract with animations, busy headers and footers, and other visual debris.

b. **Be terse**. Use bullets, not paragraphs, and let the text compliment and summarize your points. Let the slides emphasize your main points -- they don't have to reiterate everything you're saying.

c. **Use images smartly**. A picture is worth a thousand words, so you can sometimes use an image to replace a slide full of text.

d. **Anchor the audience in your presentation**. If people don't know where you are and how much time is left, they can get frustrated and distracted. Keep the audience informed about where you are in the presentation. You can do that by showing an outline of your presentation up front, and then keeping everyone informed about where you are as you progress.

e. **Mastery of the subject:**
Every effective speaker vouches for this, that he went deep and wide into his subject. A good speaker gathers more information than may be required for the speech.

Characteristics of an effective presentation:

Opening and closing phrases:

- It should be carefully framed keeping in view the situation, audience and subject.
- The speaker must select an opener, which attracts listener's attention and interest by using relevant and neutral statements.

Audibility of voice and words:

- The very first requirement of a good presentation is that, in any given circumstance, the voice and words should be audible.

Bring out the meaning:

- It is not only the quality of the speaker's voice and the clear way in which he express his ideas; it is also the variety in his voice and gestures.
- Any interesting subject may become boring if a speaker of the subject is dull.

Simplicity:

- The speaker should deliver the speech in simple words and sentences.
- Simple words and sentences make the speech effective.

Sincerity:

- Thought, feeling and imagination must stimulate a speech if it is to sound sincere.
- All the elements should be present in a speech and the speaker must always think, feel and imagine before he speaks if he is to bring out the full meaning.

Use of quotations:

- A speaker should be very cautious in using quotations.
- He should avoid too many as well as long, foreign or Latin quotations.
- When the quotations are used, they should be correct and full.

Rehearsal:

- Fear of forgetting may result in stage phobia.
- A speaker with a stage phobia concentrations his mood excessively on himself than on the listeners of the message.
- Constant practice and self- confidence can, however, help in overcoming stage phobia.

Examples for presentation software:

- Google Slides
- Keynote
- Microsoft Power Point Presentation
- Slidebean

2. Create a Presentation:

Introduction to presentation software:

Power Point Presentation:

PowerPoint is a graphical presentation program used to organize and present information. PowerPoint presentations consist of a number of individual page s or "slides."

- Slides may contain text, graphics, sound, movies, and other objects that can be freel y arranged.
- Presentations can be printed, displayed live on a computer, or navigated through at the command of the presenter.
- For larger audiences, the presentation is often projected onto a large screen.
- Handouts, speaker notes, or outlines can also be produced from the slides.

Starting a presentation tool:

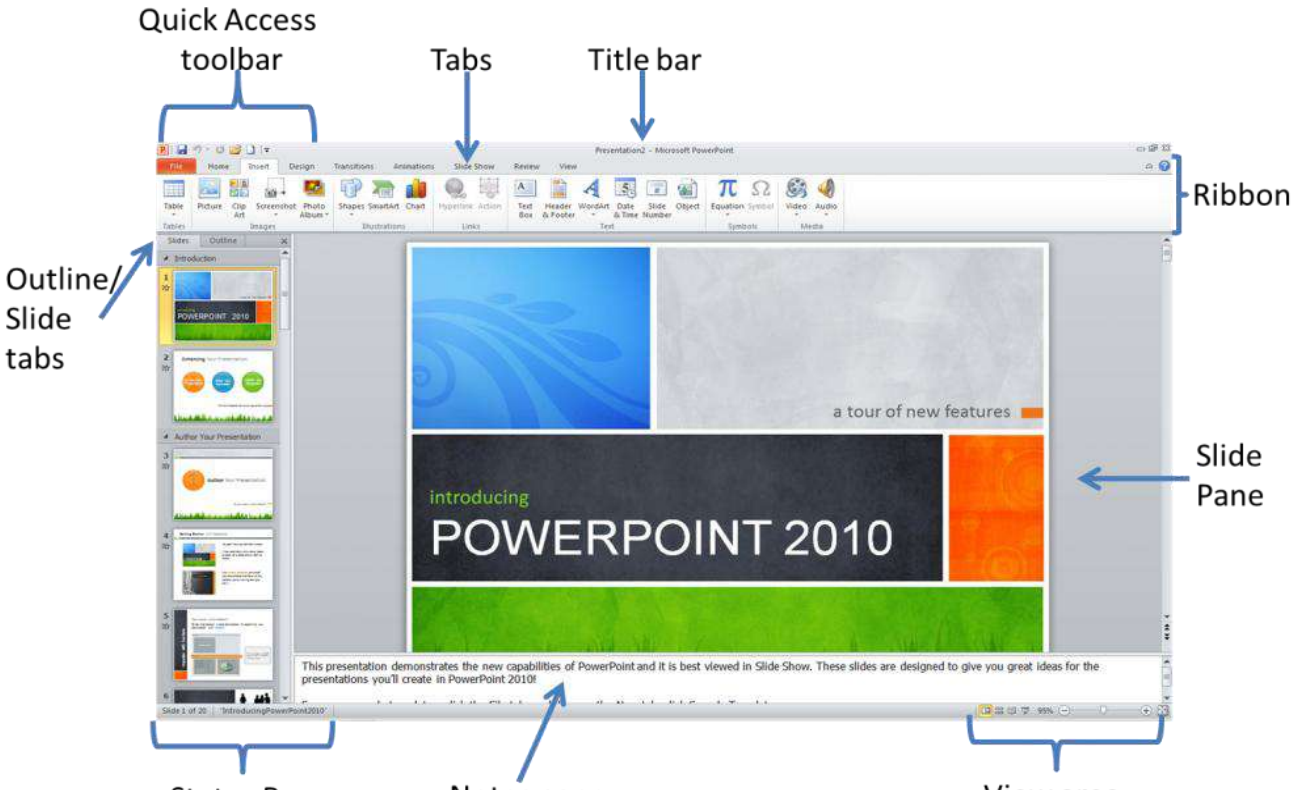
Steps to start MS- PowerPoint Presentation are:-

1. Double Click on a shortcut key of the MS-PowerPoint Presentation icon, if available, on the desktop.

   OR

2. Click **Start - > All Programs->Microsoft Office->MS PowerPoint Presentation**

Parts of a MS-PowerPoint Presentation window:



Quick access toolbar contains buttons for commonly-used commands.

Title bar indicates the software, the name of the presentation that is open, minimize, maximize, and close buttons.

Ribbon is the area containing the tabs.

Tabs contains groups and groups contains different commands related to that group.

Outline/Slides tab displays the presentation text in the form of an outline. Outline tab is used to organize and develop the content of your presentation. This tab enables you to move slides and text by dragging selected material. Slide tab displays the slides of your presentation as small images. This view allows easy navigation through slides.

Slide pane contains the current slide in your presentation. You can use the vertical scroll bar to view other slides in the presentation.

Notes pane is located below the slide pane and is used to type reference notes. The notes can be printed, then referenced when making the presentation.

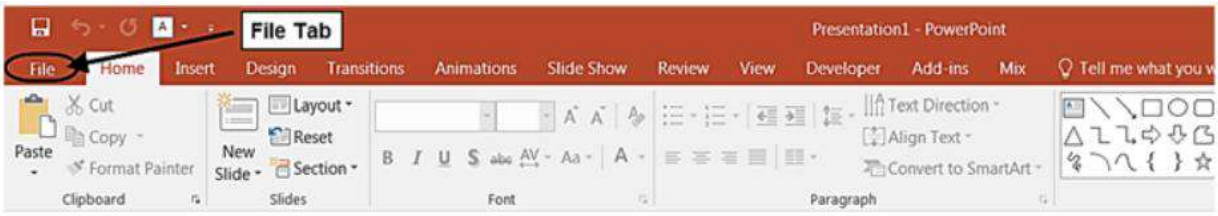
View area is located at the right hand bottom of the screen. It contains buttons that allow the ability to switch between PowerPoint views. The first view button allows you to view slides in normal view, the second is called the slide sorter view, the third is called the reader view and the fourth is called the slide show view. This area also contains the zoom feature.

Status bar is located at the bottom of the PowerPoint window, it shows messages and information about the view, such as the slide number and the current theme template used.

The **Help** feature displays information on PowerPoint commands and features. You can activate the help menu by clicking the Help button or by pressing F1 on the keyboard.

Opening PowerPoint

To open a PowerPoint 2016 presentation, click on the File tab in the upper left corner.



The most common choices for opening a presentation are:

New - allows you to open a Blank presentation or you may choose from a selection of Templates and Themes.

Open - lets you navigate to an existing file to view and/or modify a presentation that has already been created.

Recent – displays a list of your most recently created presentations and their

file locations.

Creating New Presentations:

- The New selection gives you several options:
- **Blank presentation** creates a new presentation using default settings for Text and color.
- Theses slides will not include content or design elements.
- **Templates and Themes** are used to create a new presentation based on Pre-designed slide styles. These options also do not include content.

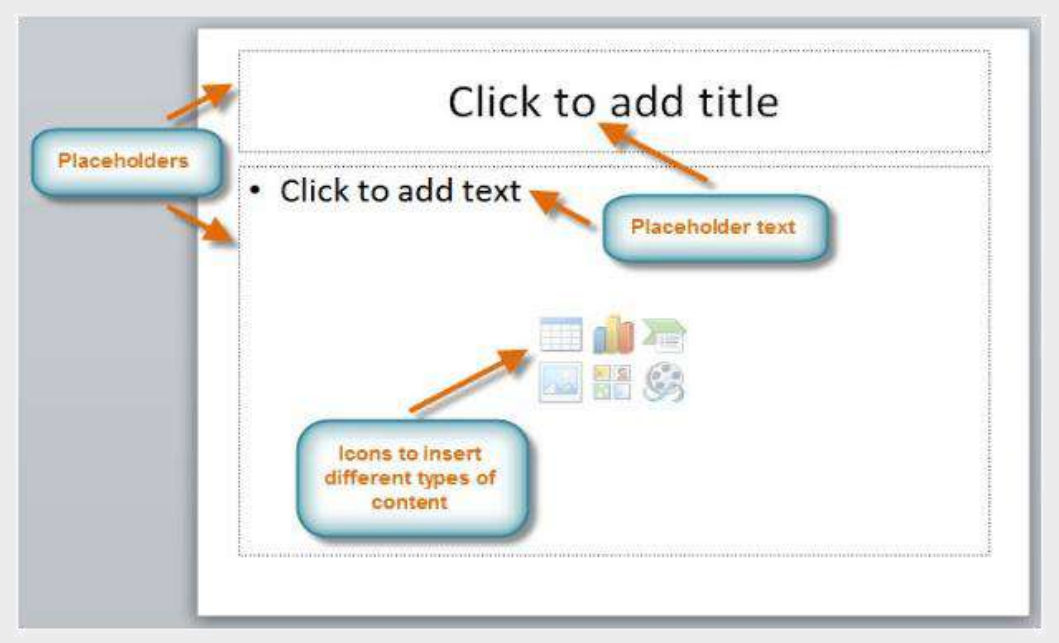
3. Working with slides:

Slide basics

Every PowerPoint presentation is composed of a series of **slides**. To begin creating a slide show, you'll need to know the basics of working with slides. You'll need to feel comfortable with tasks such as **inserting** a new slide, **changing the layout** of a slide, **arranging** existing slides, **changing slide view**, and **adding notes** to a slide.

About slides

Slides contain placeholders, which are areas on the slide that are enclosed by dotted borders. Placeholders can contain many different items, including text, pictures, and charts. Some placeholders have placeholder text, or text you can replace. They also have thumbnail-



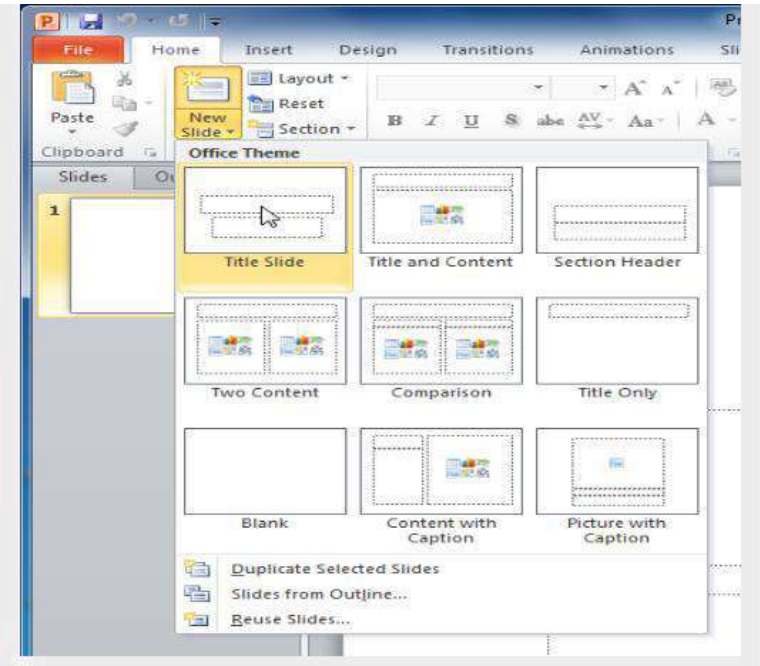
sized icons that represent specific commands such as Insert Picture, Insert Chart, and Insert ClipArt. In PowerPoint, hover over each icon to see the type of content you can insert in a placeholder.

About slide layouts

Placeholders are arranged in different **layouts** that can be **applied to existing slides** or chosen when you **insert a new slide**. A slide layout **arranges** your

content using different types of placeholders, depending on what information you might want to include in your presentation.

In the example above, the layout is called **Title and Content** and includes title and content placeholders. While each layout has a descriptive name, you can also tell from the image of the layout how the placeholders will be arranged.



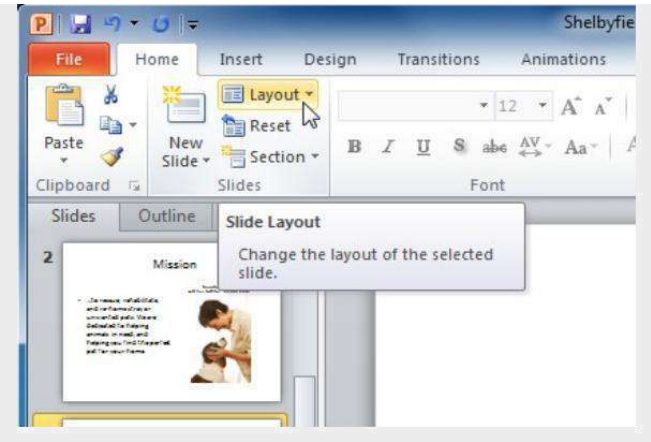
Customizing slide layouts

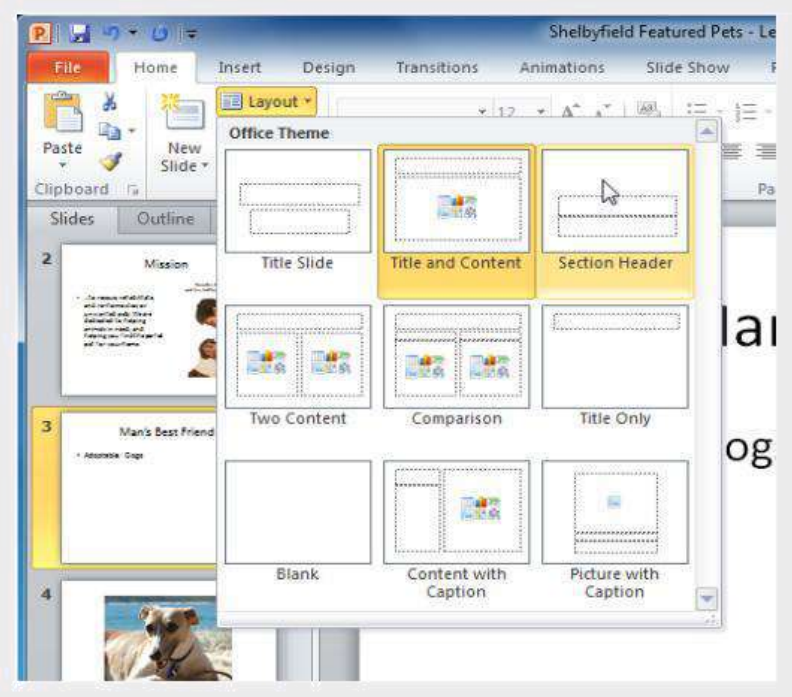
To change the layout of an existing slide:

1. Select the slide you want to change.

2. Click the **Layout** command in the **Slides** group on the **Home** tab.

3 A menu will appear with your options.





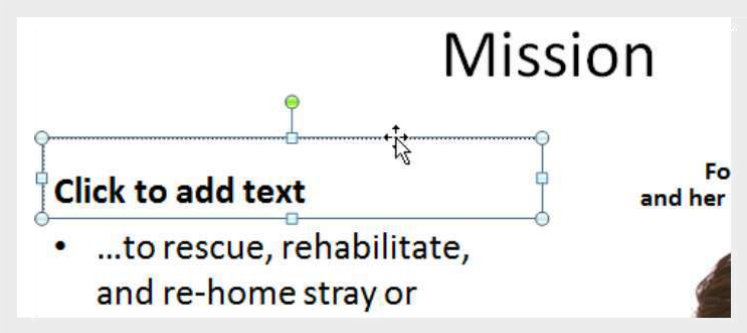
4 Choose a layout from the menu. The slide will change in the presentation.

To delete a placeholder:

You can easily customize your layout by deleting unwanted—or extra—placeholders from any slide.

1 Position your mouse on the **dotted border** of the placeholder so it changes to a **cross with arrows**.

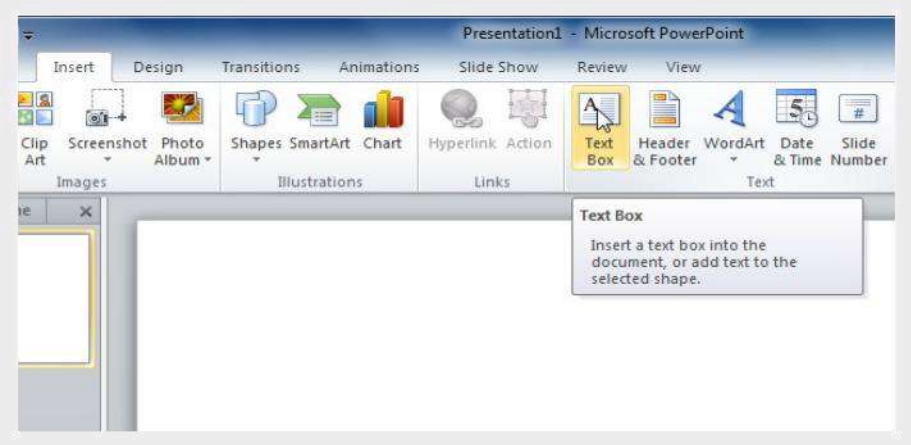
2 Click the border to select it.



Press **Backspace** or **Delete** on your keyboard. The placeholder will be removed from the slide.

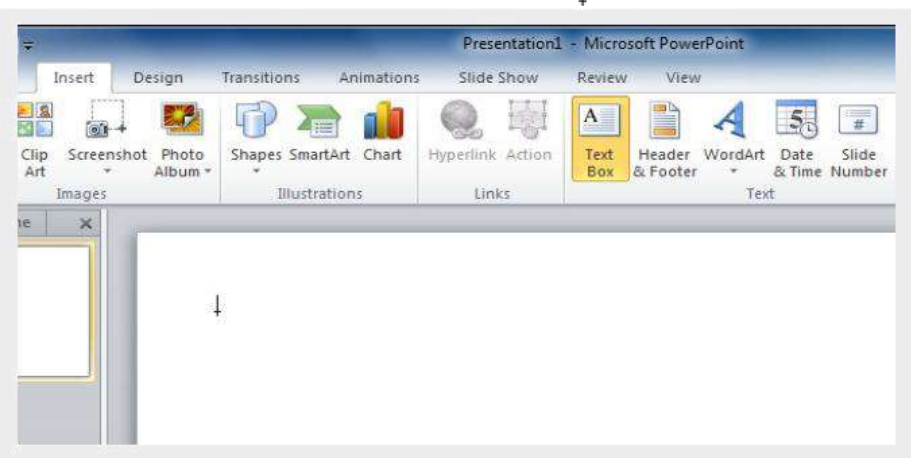
To add a text box:

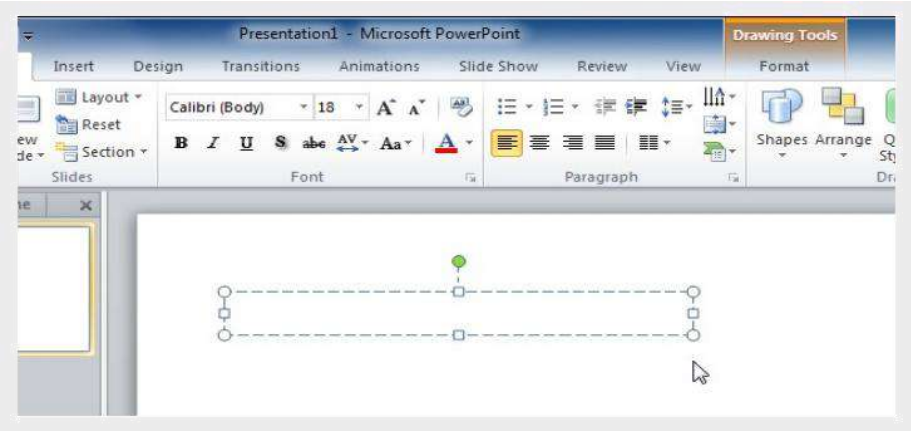
Text boxes allow you to add to your current layout, so you can place text wherever you want on your slide.



1 From the **Insert** tab, click the **Text Box** command.

Your cursor will turn into an **upside-down cross.**



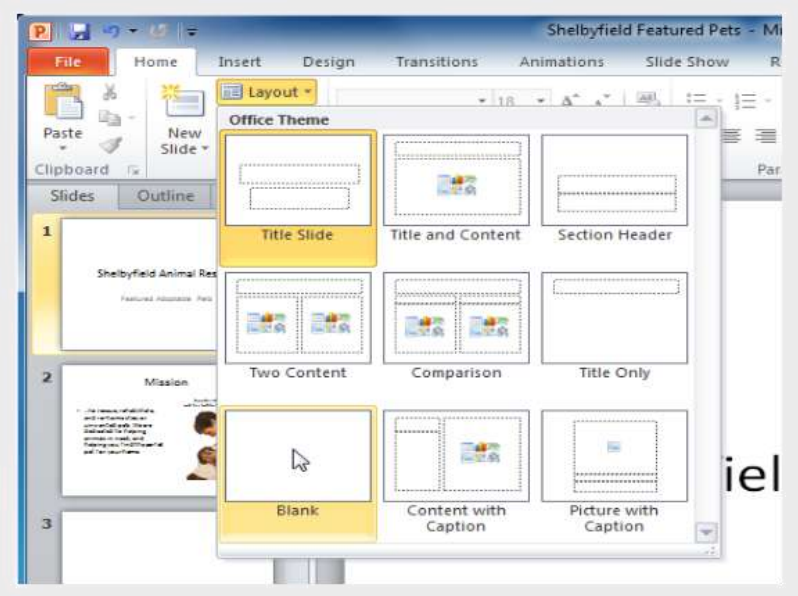


3 Click, hold, and **drag** your mouse to draw a text box. A text box will appear.

Explore our **Text Basics** lesson to learn more about inserting and using text boxes in PowerPoint 2010.

To use a blank slide:

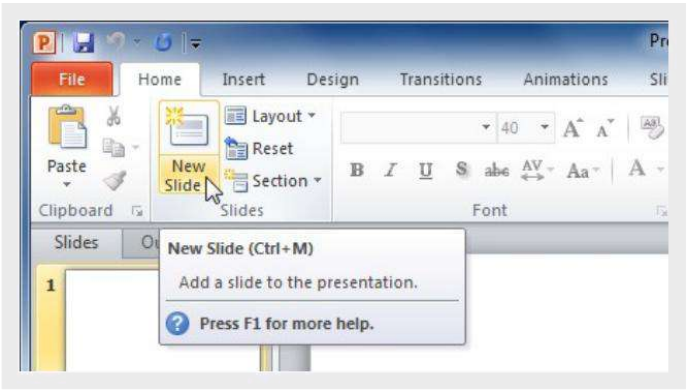
For more control over your content, you may prefer a blank slide—a slide without placeholders—over one of the existing layouts. Blank slides can be customized by adding your own text boxes, pictures, charts, and more.



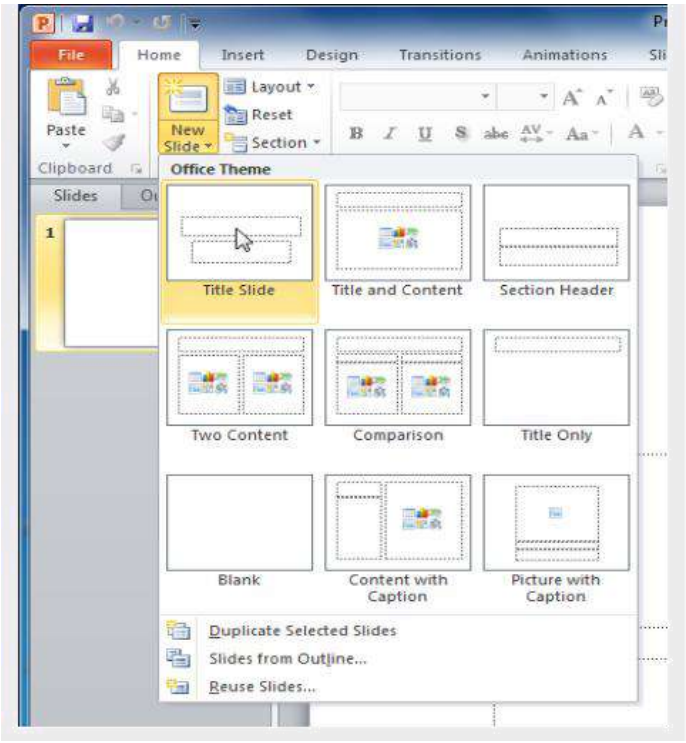
▸ Select **Blank** from the menu of layout options.

To insert a new slide:

1 From the **Home** tab, click the bottom half of the **New Slide** command to open the menu of slide layout options.



2 Select the slide you want to insert.



3 A new slide will be added your presentation.

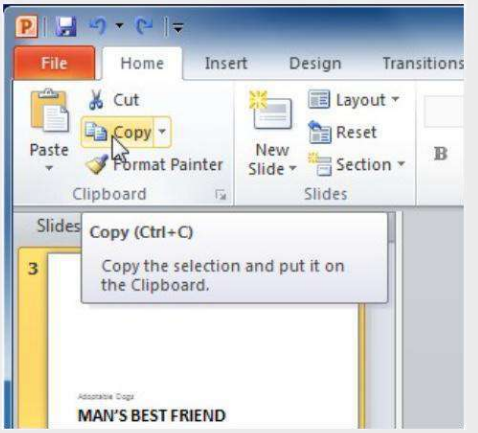
To instantly add a slide that uses the same layout as the one you have

selected, click the top half of the **New Slide** command.

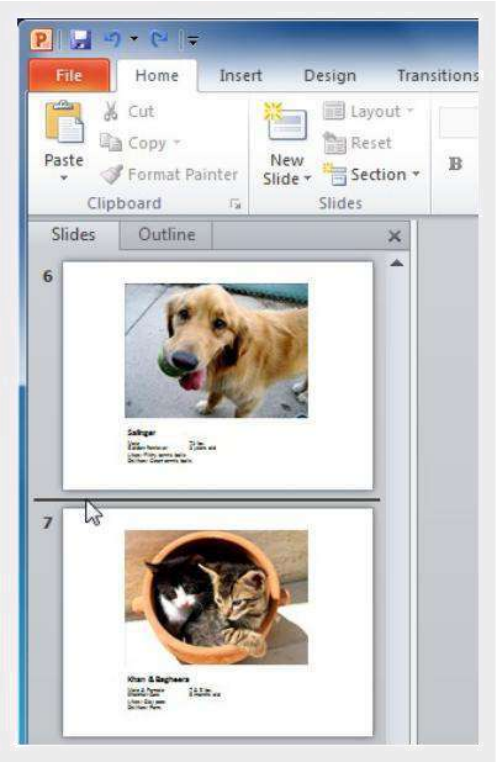
To copy and paste a slide:

1 On the **Slides** tab in the left pane, select the slide you want to copy.

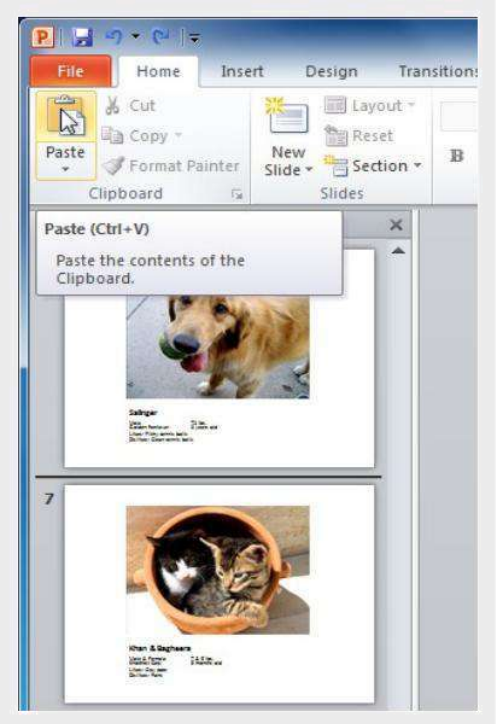
2 Click the **Copy** command on the **Home** tab. You can also right-click your selection and choose **Copy**.



In the left pane, click just below a slide—or between two slides—to choose the location where you want the copy to appear. A **horizontal insertion point** will mark the location.



3.Click the **Paste** command on the Home tab. You can also right-click and choose **Paste**. The copied slide will appear.



To select multiple slides, press and hold **Ctrl** on your keyboard and click the slides you want to select.

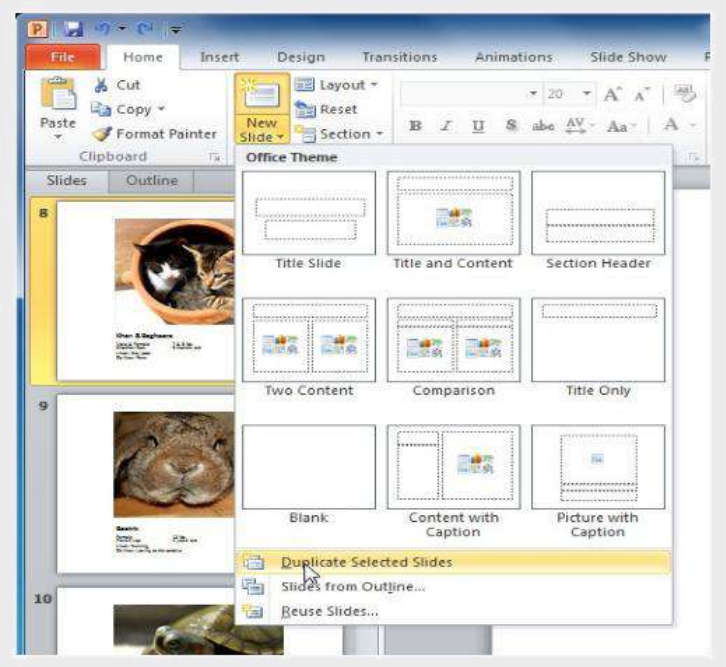
To duplicate a slide:

An alternative to copying and pasting, **duplicating slides** copies the selected slide and— in one step—pastes it directly underneath. This feature does not

allow you to choose the location of the copied slide, nor does it offer Paste Options for advanced users, so it's more convenient for quickly inserting similar slides.

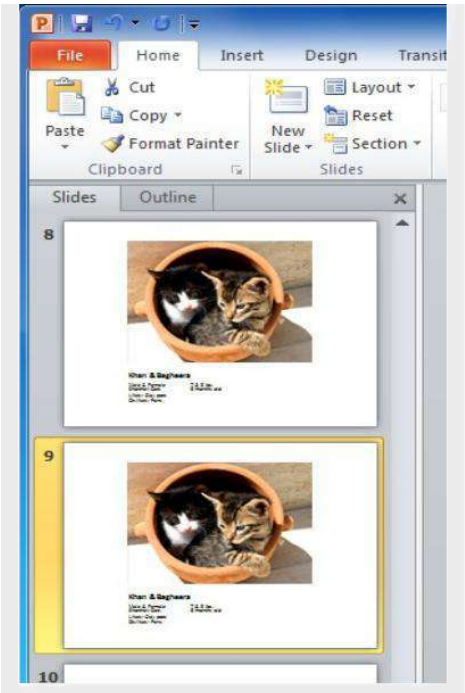
1 Select the slide you want to duplicate.

2 Click the **New Slide** command.



3 Choose **Duplicate Selected Slides** from the drop-down menu.

4 A copy of the selected slide appears underneath the original.



To delete a slide:

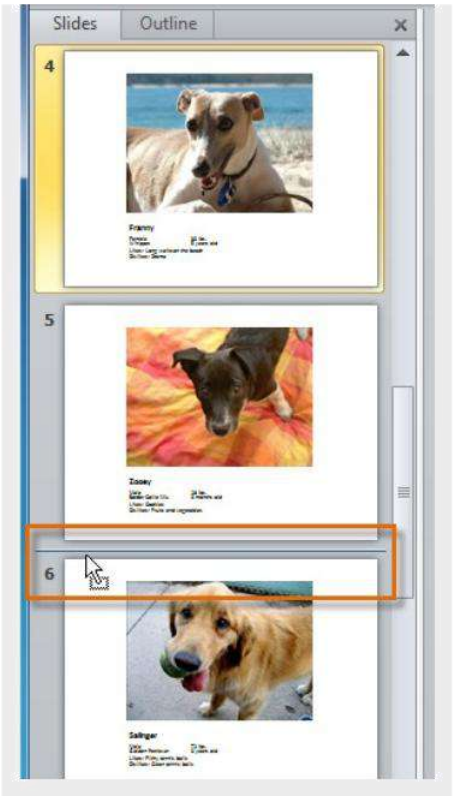
1 Select the slide you want to delete.

2 Press the **Delete** or **Backspace** key on your keyboard.

To move a slide:

1 Select the slide you want to move.

2 Click, hold, and **drag** your mouse to a new location. A horizontal insertion point will mark the location.



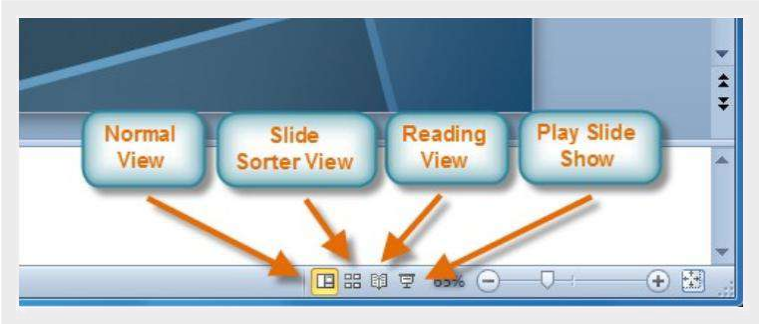
3 **Release** the mouse button. The slide will appear in the new location.

Managing slides and presentations

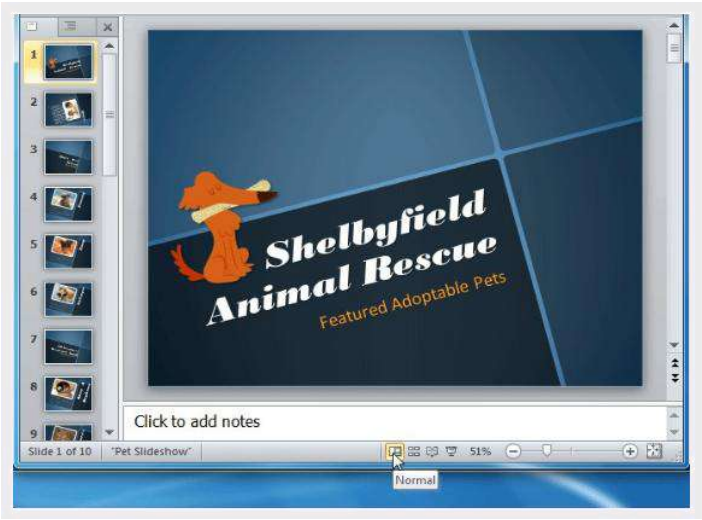
As you add slides to your presentation, PowerPoint offers a variety of views and tools to help you organize and prepare your slide show.

About slide views

It's important to be able to access the different slide views and use them for various tasks. The **slide view commands** are located on the bottom-right of the PowerPoint window in Normal view.



Normal view: This is the default view where you create and edit your slides. You can also move slides in the Slides tab in the pane on the left.



Slide Sorter view: In this view, miniature slides are arranged on the screen. You can drag and drop slides to easily reorder them and to see more slides at one time. This is a good view to use to confirm that you have all the needed slides and that none have been deleted.

Reading view: This view fills most of the computer screen with a preview of your presentation. Unlike Slide Show view, it includes easily accessible

buttons for navigation, located at the bottom-right.

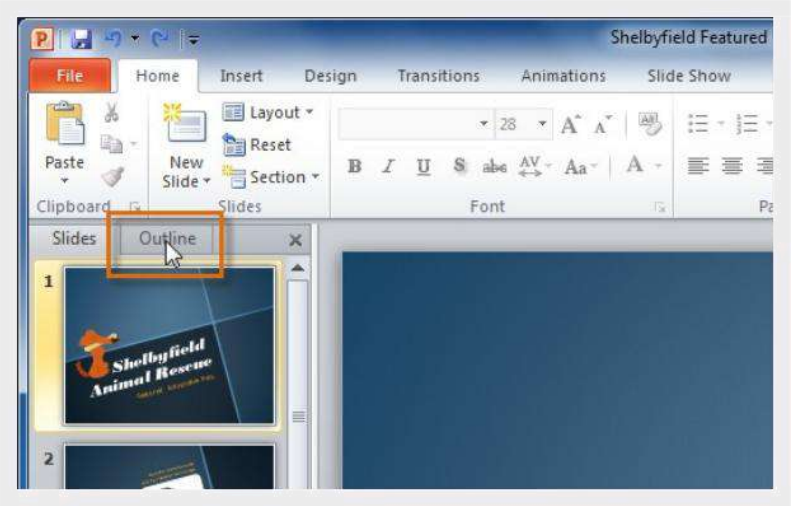
Slide Show view: This view completely fills the computer screen and is what

the audience will see when they view the presentation. Slide Show view has an additional menu that appears when you hover over it, allowing you to navigate slides and access other features you can use during a presentation.

Use the keys on your keyboard—including the arrow keys, Page Up and Page Down keys, spacebar, and Enter key—to move through the slides in Slide Show view. Press the Esc key to end the slide show.

To view an outline of your presentation:

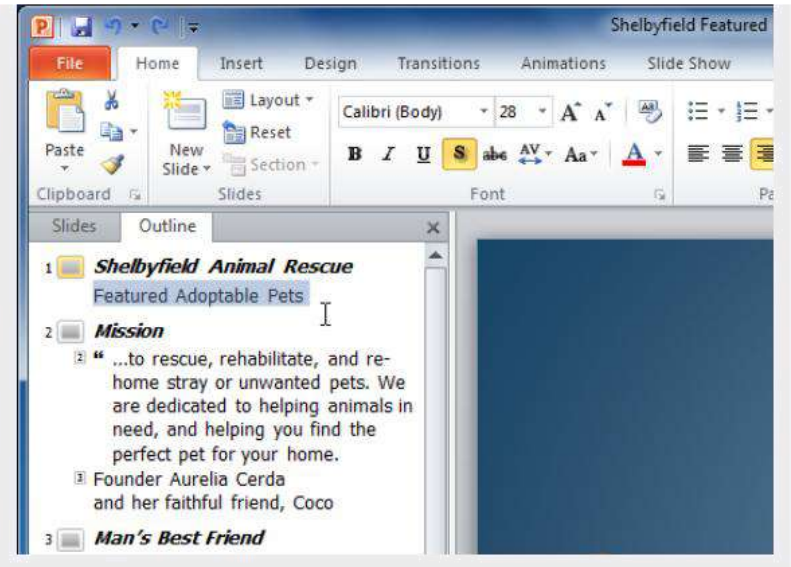
The Outline tab shows your slide text in outline form. This allows you to quickly edit your slide text and view the contents of multiple slides at once.



1 Click the **Outline** tab in the left pane.

2 An outline of your slide text appears.

3 Type directly in the pane to make changes to your text.

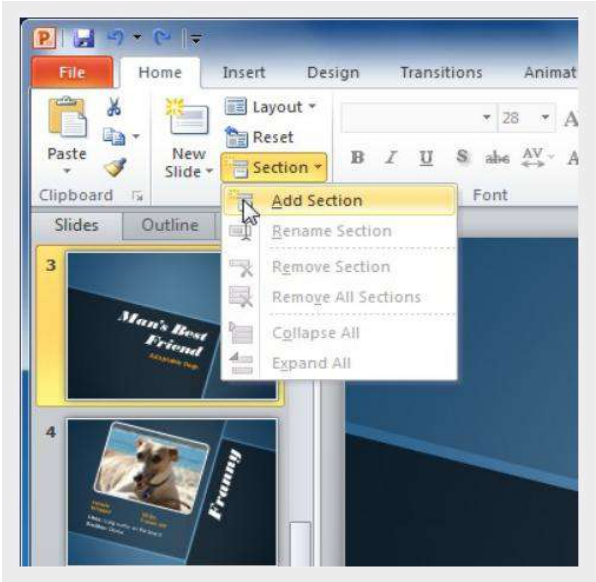


To organize slides into sections:

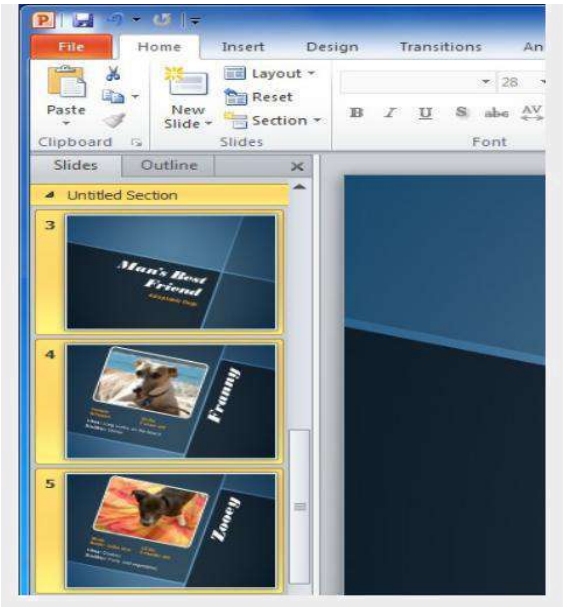
You can organize your slides into sections to make your presentation easier to navigate. Sections can be collapsed or expanded in the left pane and named for easy reference. In this example, we will add two sections: one for dogs that are available for adoption, and another for cats and other pets.

1 .Select the slide you want to begin your first section.

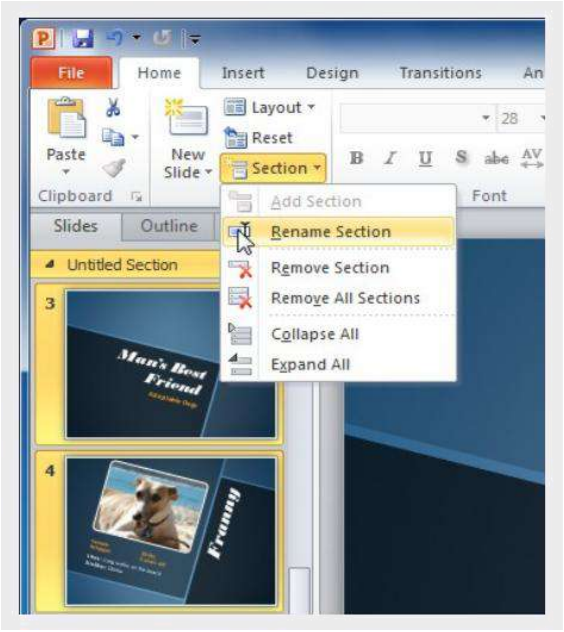
2.From the **Home** tab, click the **Section** command.
3.Choose **Add Section** from the drop-down menu.



4.An **Untitled Section** appears in the left pane.



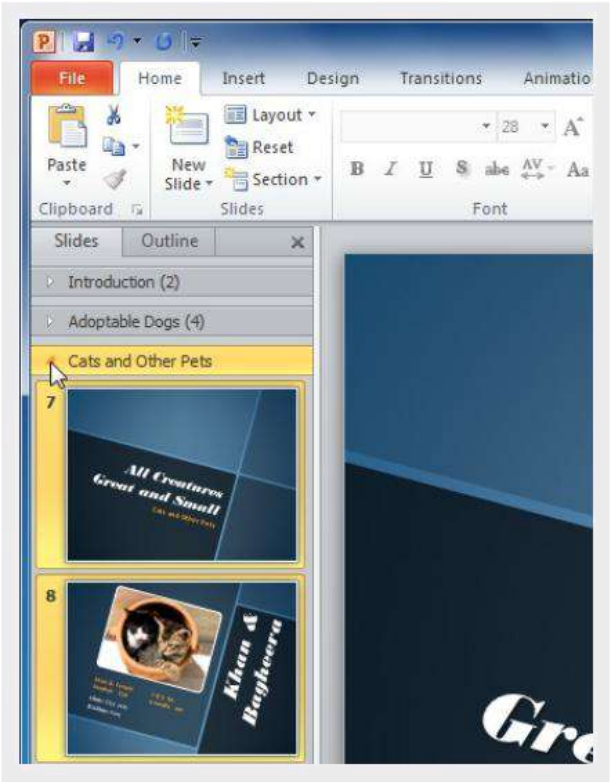
5To rename the section while it is still selected, click the **Section** command, then choose **Rename Section** from the drop-down menu.



6 Enter your new section name in the dialog box. Click **Rename**.

7 Repeat to add as many sections as you want.

8 In the left pane, click the **arrow** next to a section name to collapse or expand it.



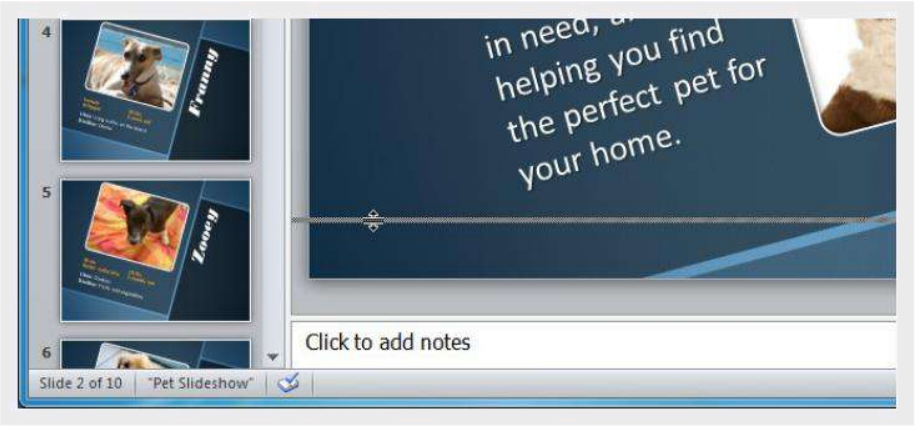
Adding notes to slides

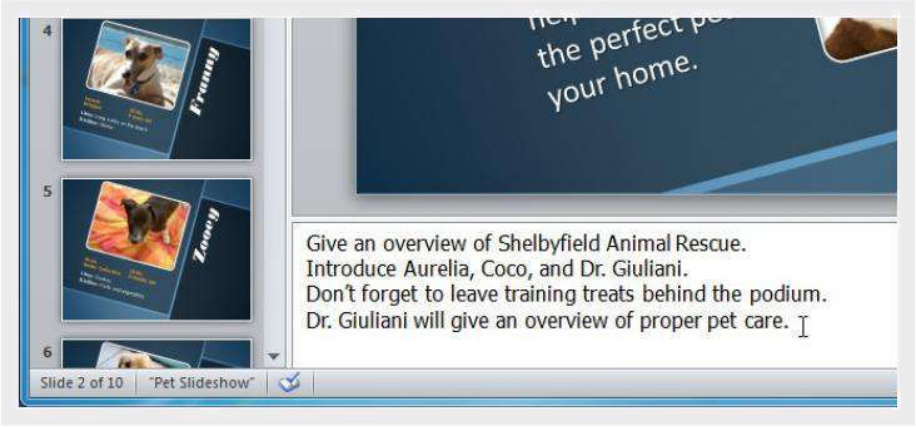
PowerPoint gives you the ability to add notes to your slides—often called **speaker notes**—to help you deliver or prepare for your presentation. You can enter and view your speaker notes using the Notes pane or the Notes Page view.

To use the Notes pane:

1. Locate the **Notes** pane at the bottom of the screen, directly below the **Slide** pane.

2 Click and **drag** the edge of the pane to make it larger or smaller.





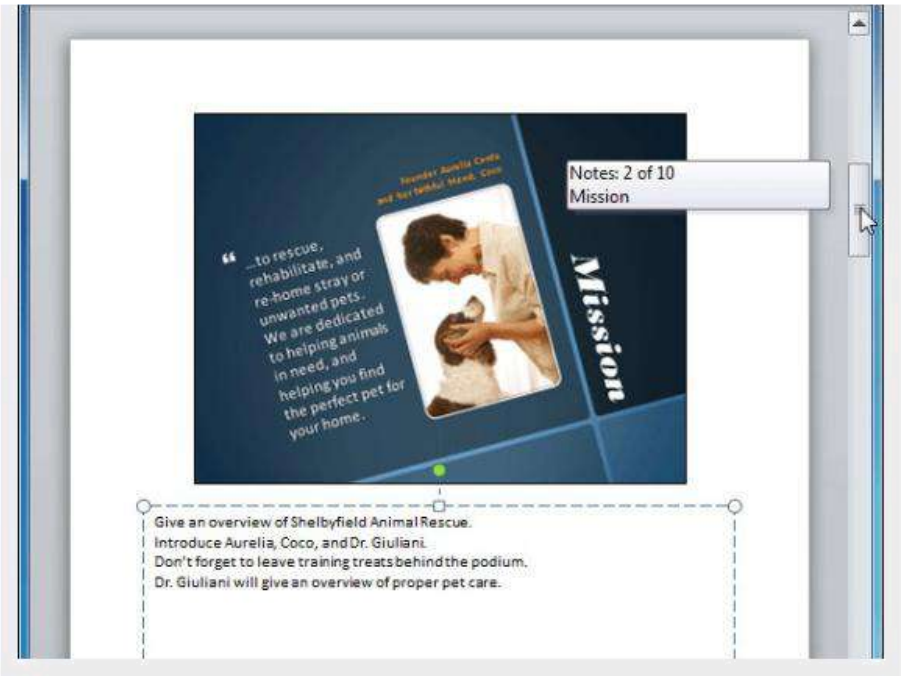
3 Type your notes in the **Notes** pane.

To use Notes Page view:

1 Go to the **View** tab.

2 Click the **Notes Page** command in the **Presentation Views** group.

3 Type your notes in the **text box**, or use the **scroll bar** to review your slides.



4. Format text and apply animations:

The Formatting toolbar:

PowerPoint's default font or text type is Arial. However, you may want to change the font type, font size, and other formatting. Use the **Formatting toolbar** to set the color, size, and overall look of your text. It doesn't matter whether the text is an original slide or in a preset layout.

Here are some of the formatting options:

- Font type
- Font size
- Bold, italics, and underline
- Center, align left, and align right
- Bullets and numbering
- Font color
- Increase font size
- Decrease indent
- Text alignment

Formatting text:

The Formatting toolbar allows you to make many changes to your text to give it the look you want for your presentation.

Formatting text

You can help your text stand out on the slide by changing its **formatting**, including font size, color, and style.

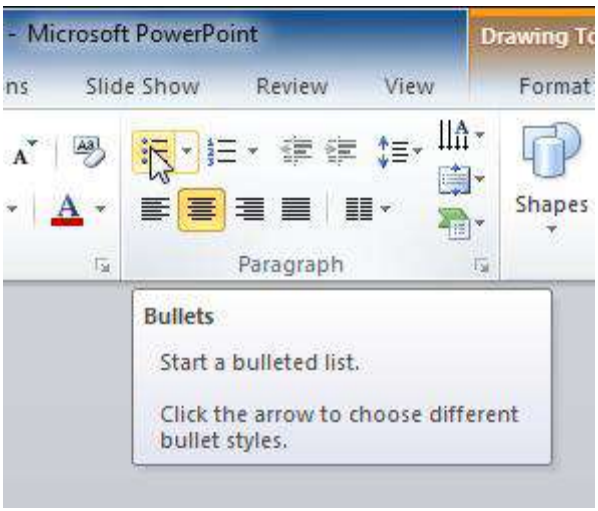
Click the buttons in the interactive below to learn about the different commands in the **Font** group.

To learn more about using the **Font** commands, visit the **Formatting Text** lesson from our Word 2010 tutorial.

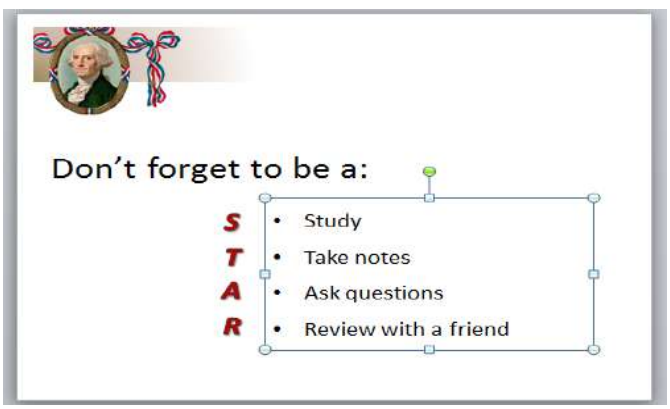
Modifying text

To insert a bulleted list:

1. Select the text box or specific text you want to format as a bulleted list.
2. Click the **Bullets** command in the **Paragraph** group on the **Home** tab.



3. A bulleted list will appear.



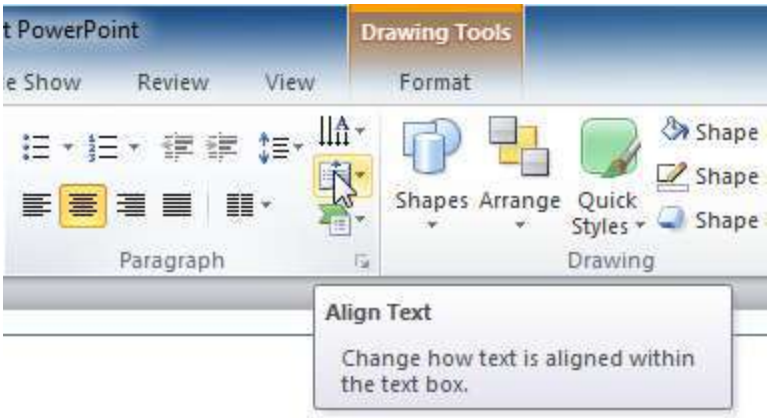
To change horizontal text alignment:

1. Select the text you want to modify.
2. Select one of the four **alignment options** in the **Paragraph** group.
    - **Align Text Left:** Aligns all of the selected text to the left margin
    - **Center:** Aligns text an equal distance from the left and right margins
    - **Align Text Right:** Aligns all of the selected text to the right margin
    - **Justify:** Aligns text equally on both sides to the right and left margins; used by many newspapers and magazines

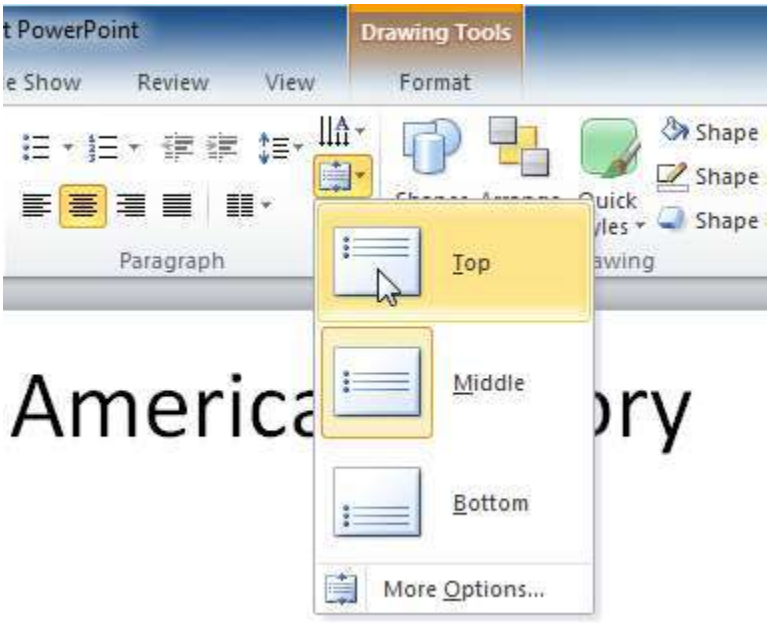
The alignment commands align the text within the placeholder or text box it is in, not across the slide.

To change vertical text alignment:

1. Select the text you want to modify.
2. Click the **Align Text** command in the **Paragraph** group. A menu will appear.

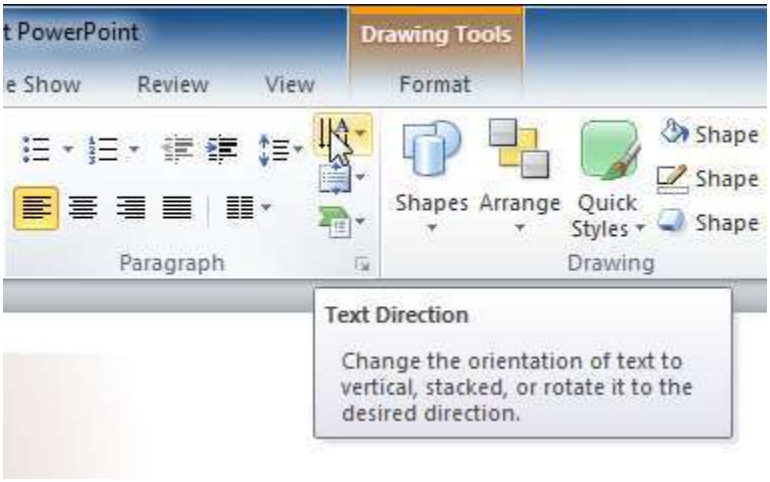


3. Choose to align the text at the **Top**, **Middle**, or **Bottom** of the text box.

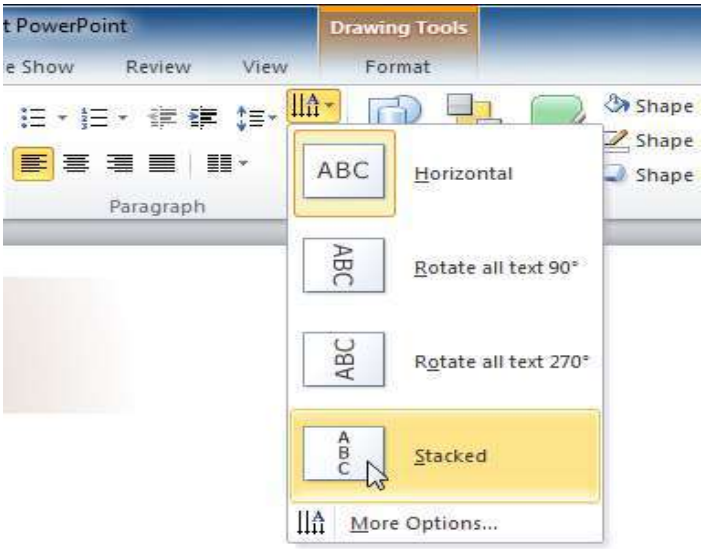


To change text direction:

1. Select the text you want to modify.
2. Click the **Text Direction** command in the **Paragraph** group. A menu will appear.



3. Choose for the direction of the text to be **Horizontal**, **Rotated**, or **Stacked**.



Animating Text and Objects:

In PowerPoint you can **animate** text and objects such as clip art, shapes, and pictures. Animation—or movement—on the slide can be used to **draw** the **audience's attention** to specific content or to make the slide easier to read.

In this lesson, you will learn how to add **animation effects** to text and objects and **customize them**.

Animating text and objects

PowerPoint offers a variety of **animations** you can use to enhance your presentation. Animations can be used to make text or objects **appear** on a slide, **exit** a slide, or **emphasize** the text or objects already on a slide. You can even use **motion paths** to create a customized animation.

The four types of animations

There are many different animation effects you can choose from, and they are organized into four types:

- **Entrance:** These control how the object enters the slide. For example, with the **Bounce** animation, the object will drop onto the slide and then bounce several times.

- **Emphasis:** These animations occur while the object is on the slide and are often triggered by a **mouse click**. For example, you can set an object to **Spin** when you click the mouse.

- **Exit:** These control how the object exits the slide. For example, with the **Fade** animation, the object will simply fade away.

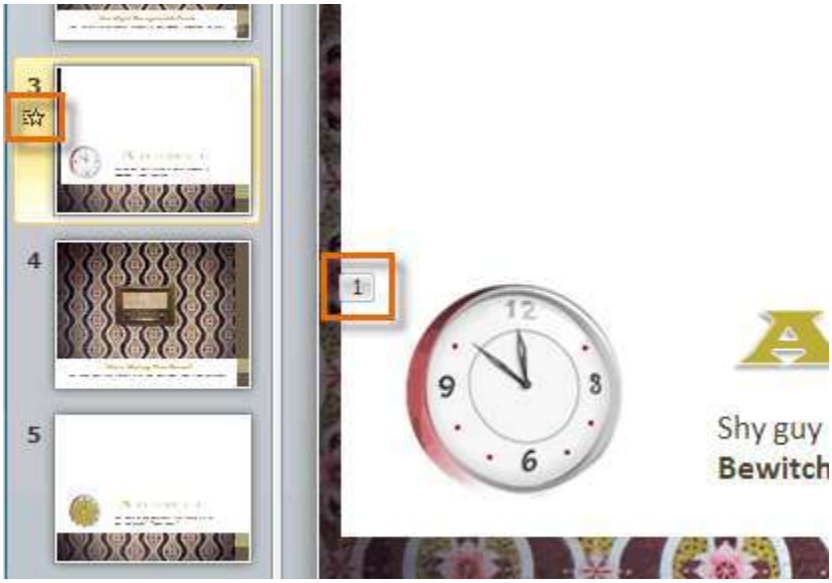
- **Motion Paths:** These are similar to **Emphasis** effects, except the object moves within the slide along a predetermined path, like a **circle**.

To apply an animation to an object:

1. Select an object.
2. Click the **Animations** tab.
3. In the **Animation** group, click the **More** drop-down arrow to view the available animations.

4. Select the desired animation effect.

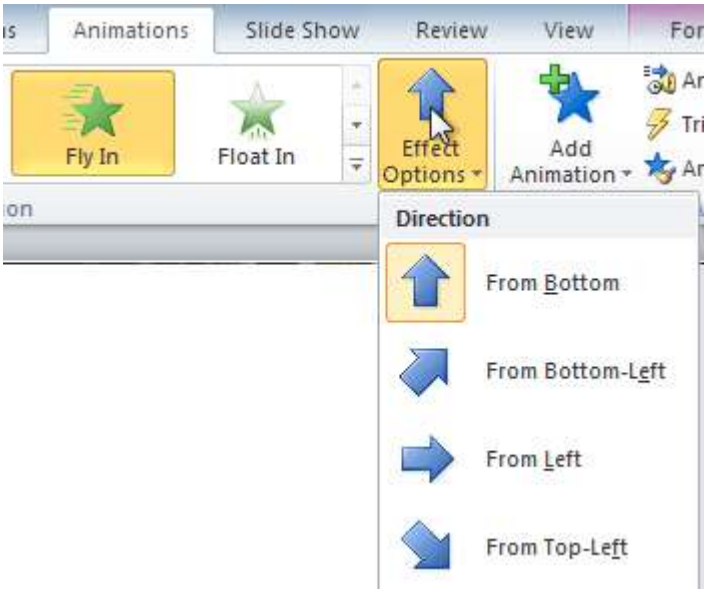
5. The object will now have a small **number** next to it to show that it has an animation. Also, in the Slide pane, the slide will now have a **star** symbol next to it.



At the bottom of the menu, you can access even more effects.

Effect options

Some effects will have **options** you can change. For example, with the **Fly In** effect, you can control **which direction** the object comes from. These options can be accessed from the **Effect Options** command in the Animation group.

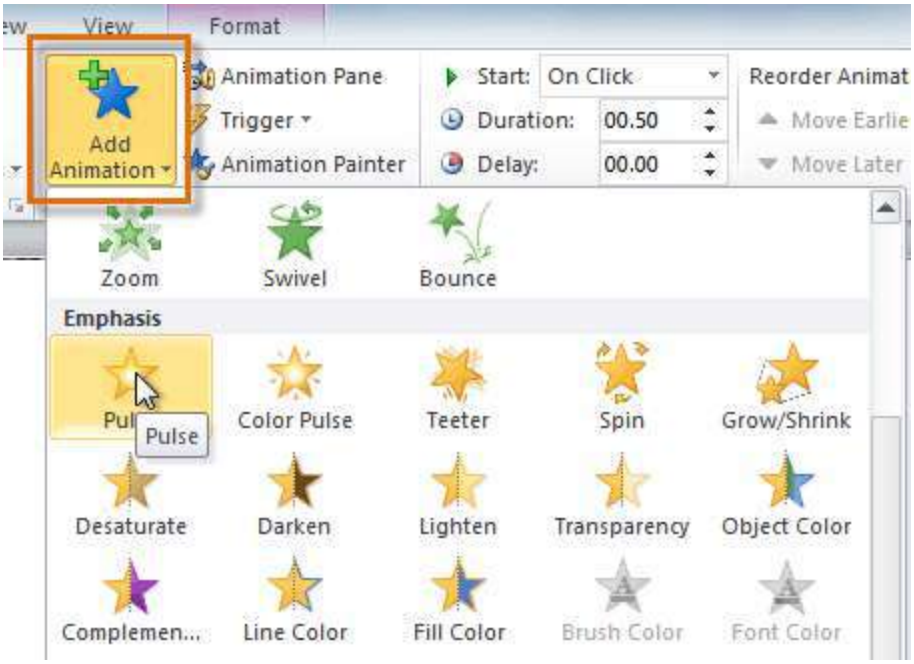


Working with animations

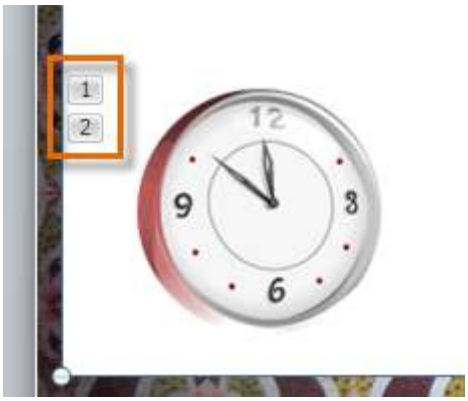
To add multiple animations to an object:

If you select a new animation from the menu in the Animation group, it will **replace the object's current animation**. However, you'll sometimes want to place **more than one animation** on an object, such as with an **entrance** and **exit** effect. To do this, you'll need to use the **Add Animation** command, which will allow you to keep your current animations while adding new ones.

1. Select the object.
2. Click the **Animations** tab.
3. In the **Advanced Animation** group, click the **Add Animation** command to view the available animations.
4. Select the desired animation effect.



5. If the object has more than one effect, it will have a different **number** for each effect. The numbers indicate the **order** in which the effects will occur.

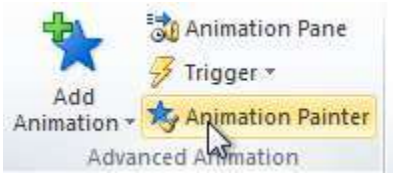


It's important to consider how you want animations to appear in your slide show. Well-placed animations can help emphasize important points or information, while too many animations can become distracting for your audience.

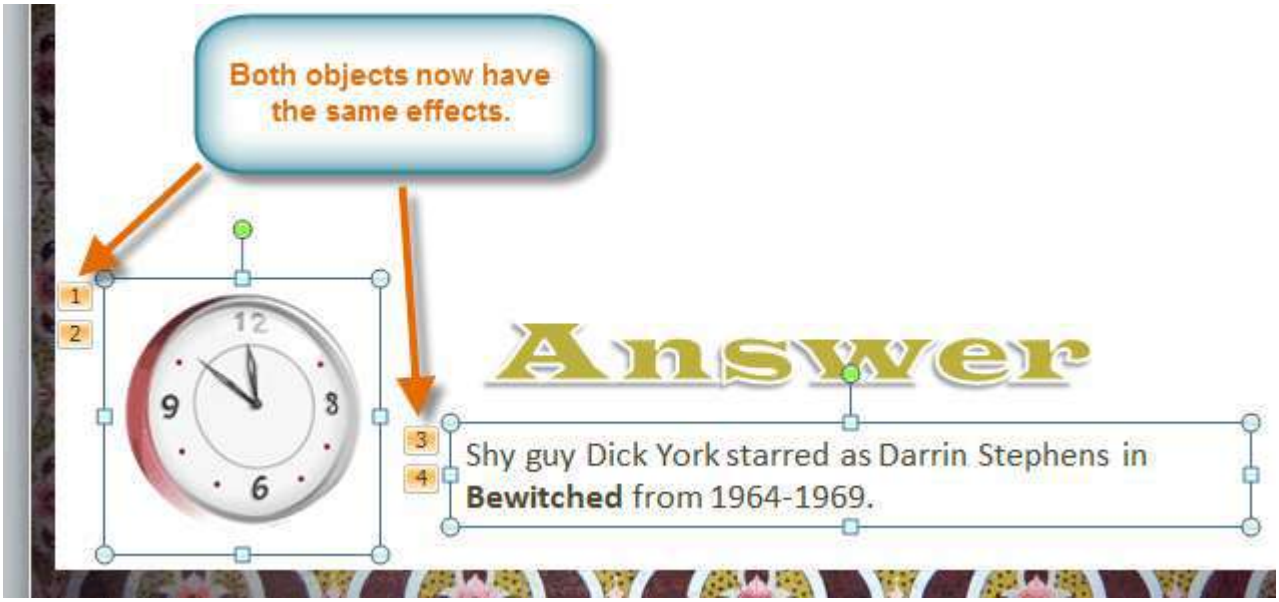
To copy animations with the Animation Painter:

Sometimes you may want to apply the same effects to more than one object. You can do this by **copying** the effects from one object to another using the **Animation Painter**.

1. Click the object that has the effects you want to copy.
2. From the **Animations** tab, click the **Animation Painter** command.



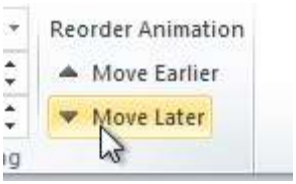
3. Click the object you want to copy the effects to. The effects will be applied to the object.



To reorder the animations:

1. Select the **number** of the effect you want to change.

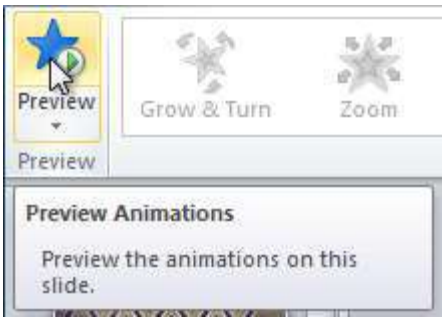
2. From the **Animations** tab, click the **Move Earlier** or **Move Later** commands to change the ordering.



To preview animations:

Any animation effects you have applied will show up when you play the slide show. However, you can also quickly **preview** the animations for the current slide without viewing the slide show.

1. Navigate to the **slide** you want to preview.
2. From the **Animations** tab, click the **Preview** command. The animations for the current slide will play.

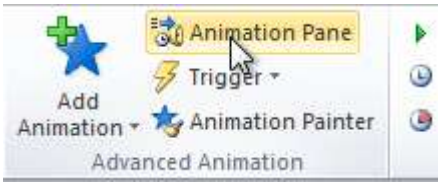


The Animation pane

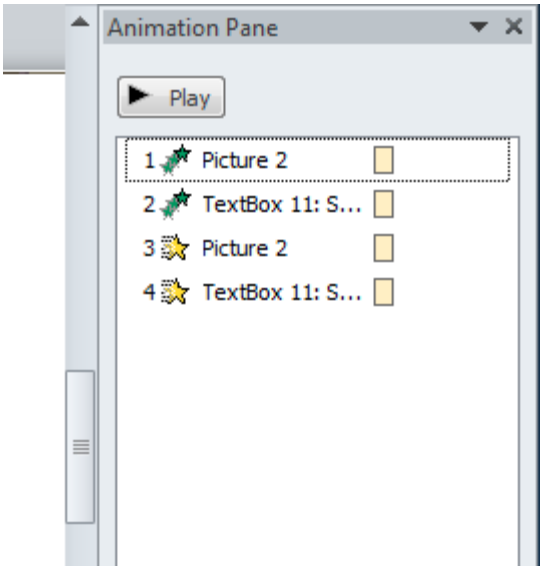
The **Animation pane** allows you to view and manage all of the effects that are on the current slide. You can **modify** and **reorder** effects directly from the Animation pane, which is especially useful when you have several effects.

To open the Animation pane:

1. From the **Animations** tab, click the **Animation Pane** command.

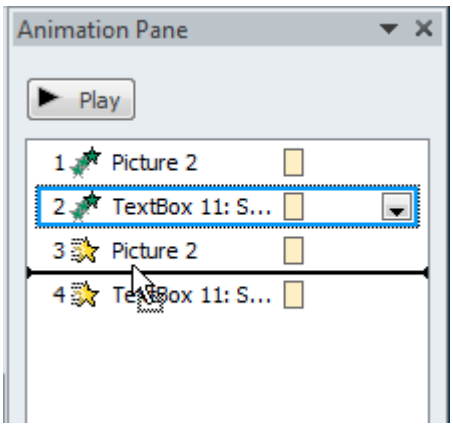


2. The Animation pane will open on the right side of the window. It will show all of the effects for the current slide in the order they will appear.



To reorder effects from the Animation pane:

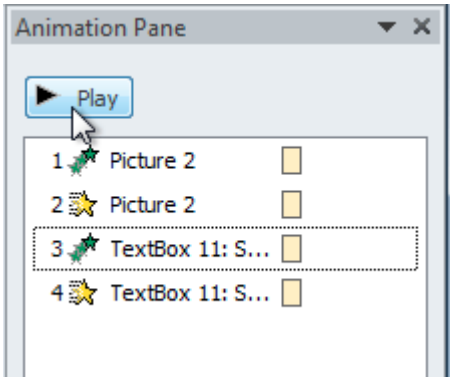
1. On the **Animation pane**, click and drag an effect up or down.



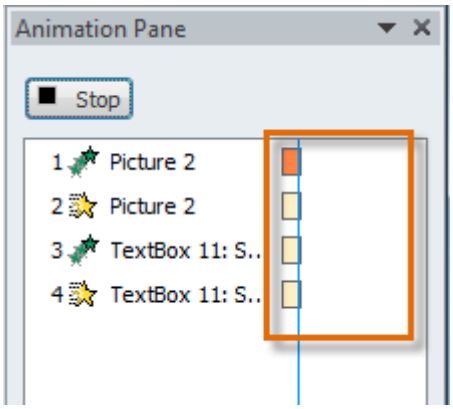
2. The effects will reorder.

To preview effects from the Animation pane:

1. From the **Animation pane**, click the **Play** button.



2. The effects for the current slide will play. On the right side of the Animation pane, you will be able to see a **timeline** that shows the progress through each effect.

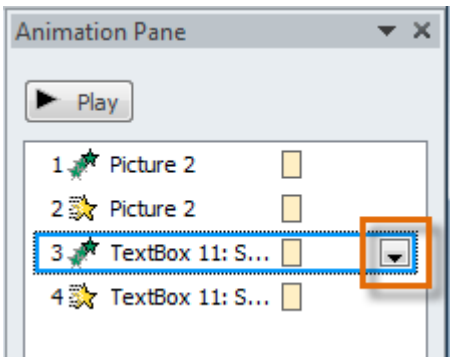


If the timeline is not visible, click the drop-down arrow for an effect, then select **Show Advanced Timeline**.

To change an effect's start option:

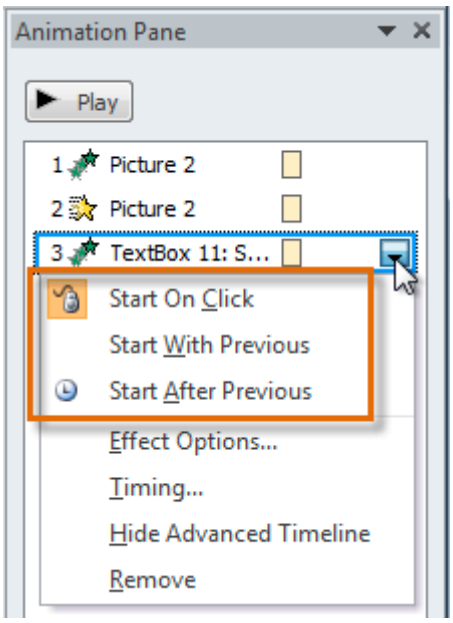
By default, an effect begins playing when you click the mouse during a slide show. If you have multiple effects, you will need to click multiple times to start each effect individually. However, by changing the **start option** for each effect, you can have effects that automatically play **at the same time** or **one after the other**.

1. From the **Animation pane**, select an effect. A drop-down arrow will appear next to the effect.



2. Click the drop-down arrow. You will see three **start options**:
    - **Start on Click:** This will start the effect when the mouse is clicked.

- **Start With Previous:** This will start the effect at the same time as the previous effect.
- **Start After Previous:** This will start the effect when the previous effect ends.



3. Select the desired start option.

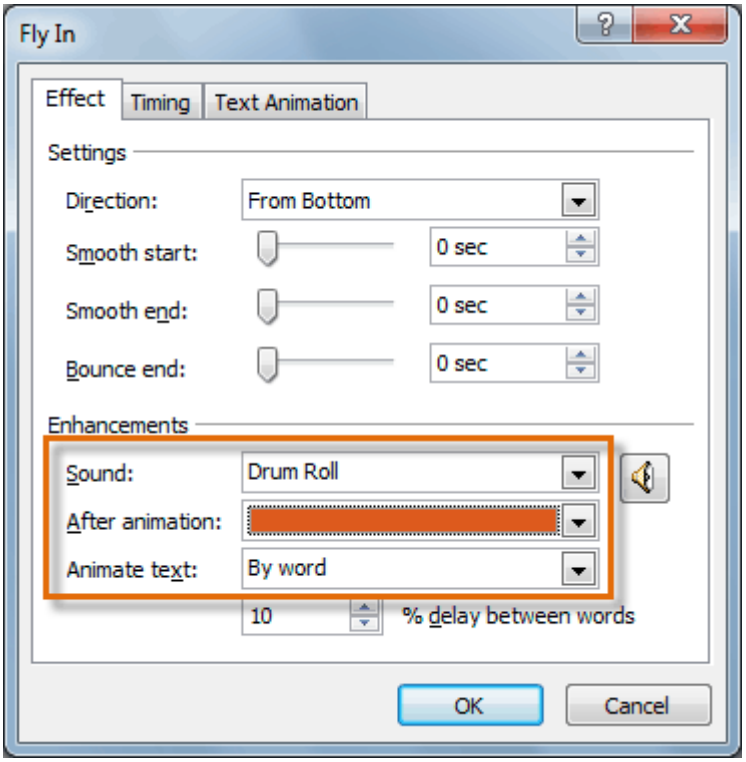
When you **preview** the animations, all of the effects will play through automatically. To test effects that are set to **Start on Click**, you will need to play the slide show.

The Effect Options dialog box

From the Animation pane, you can access the **Effect Options** dialog box, which contains more advanced options you can use to fine tune your animations.

To open the Effect Options dialog box:

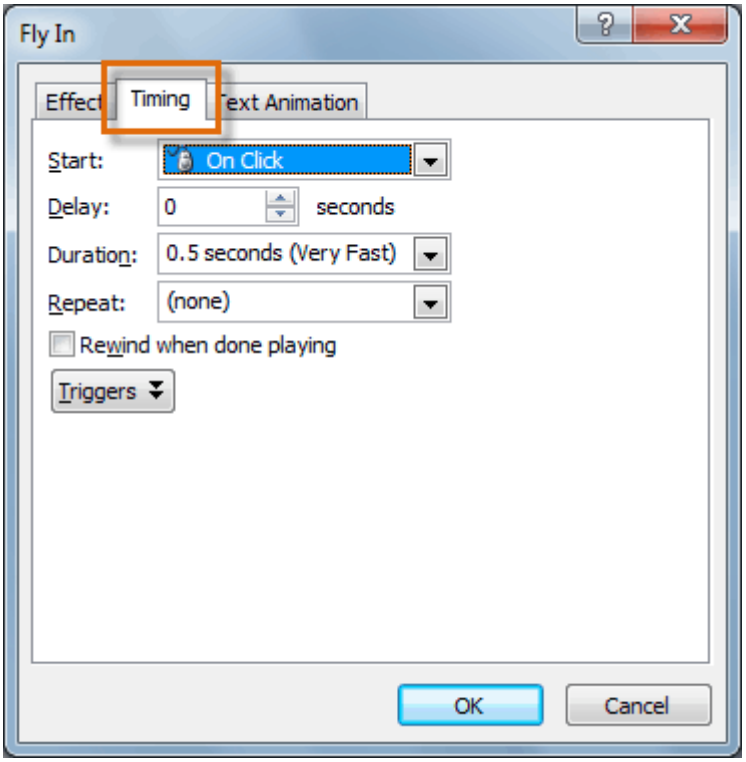
1. From the **Animation pane**, select an effect. A drop-down arrow will appear next to the effect.
2. Click the drop-down arrow, and select **Effect Options**. The Effect Options dialog box will appear.
3. From here, you can add various **enhancements** to the effect:
   - **Sound**: This adds a sound effect to the animation.
   - **After animation**: This changes the color or hides the object after the animation is over.
   - **Animate text**: If you are animating text, you can choose to animate it **all at once**, **one word at a time**, or **one letter at a time**.



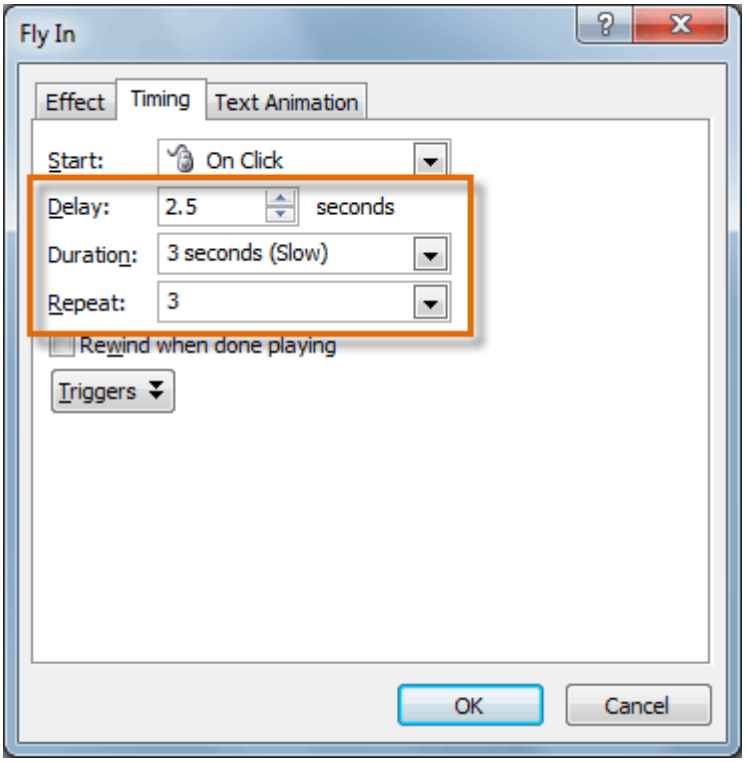
Some effects have **additional options** you can change. These will vary depending on the effect you've selected.

To change the effect timing:

1. From the **Effect Options** dialog box, select the **Timing** tab.



2. From here, you can add a **delay** before the effect starts, change the **duration** of the effect, and control whether the effect **repeats**.



5. **Create and use tables:**

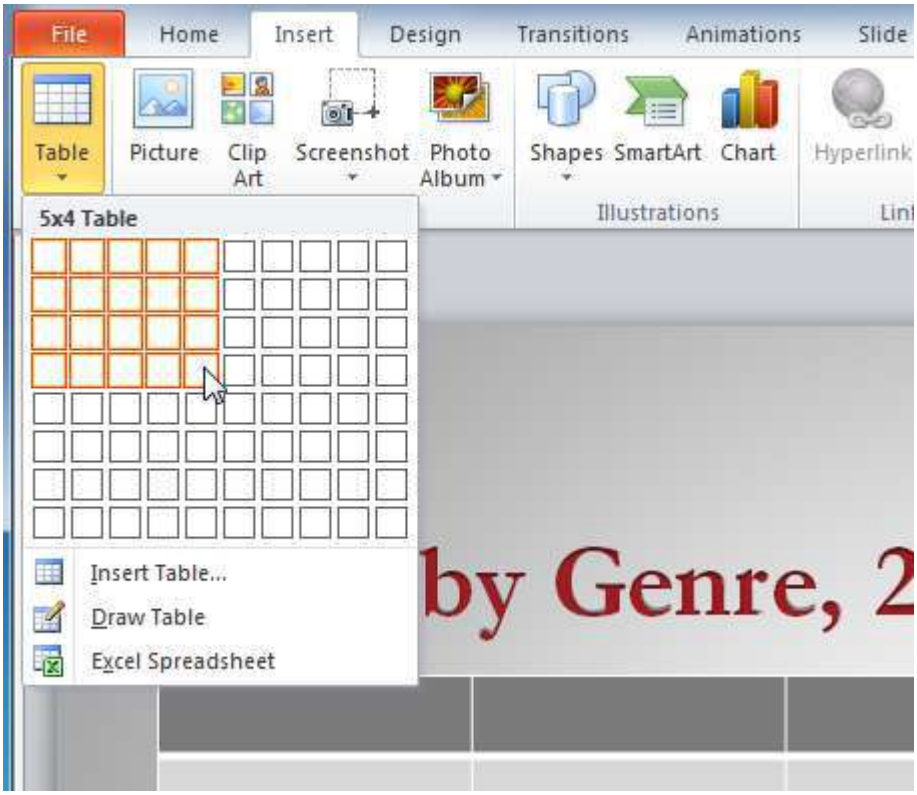
Table: A **table** is a grid of cells arranged in **rows** and **columns**.

Working with tables

In PowerPoint, tables are useful for organizing and presenting data. To use tables in your slide show, you'll need to know how to **insert** them, apply **table styles**, and **format** them.

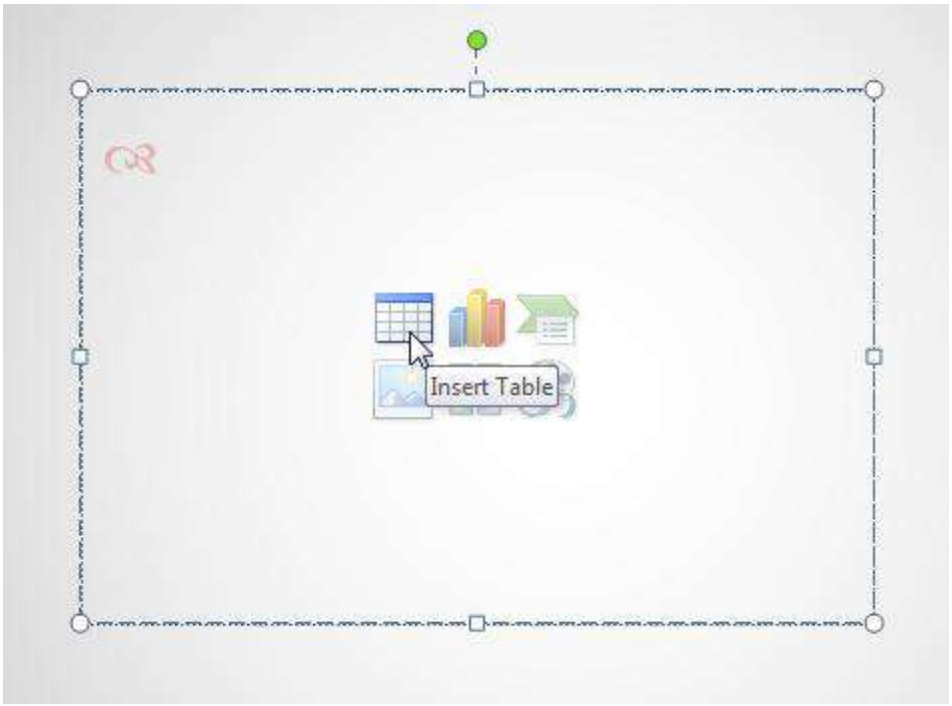
To insert a blank table:

1. On the **Insert** tab, click the **Table** command.
2. Hover your mouse over the diagram squares to select the number of **columns** and **rows** in the table.



3. Click your mouse. The table will appear on the slide.
4. You can now place the insertion point anywhere in the table to add text.

To make sure your table looks good with the slide layout, you can also insert a table using the **placeholder**. Click the **Insert Table** icon in the placeholder, then enter the desired number of rows and columns.



To move a table:

1. Place the cursor over the **edge** of the table. The cursor will turn into a cross with arrows.
2. Click and drag the table to the desired location.

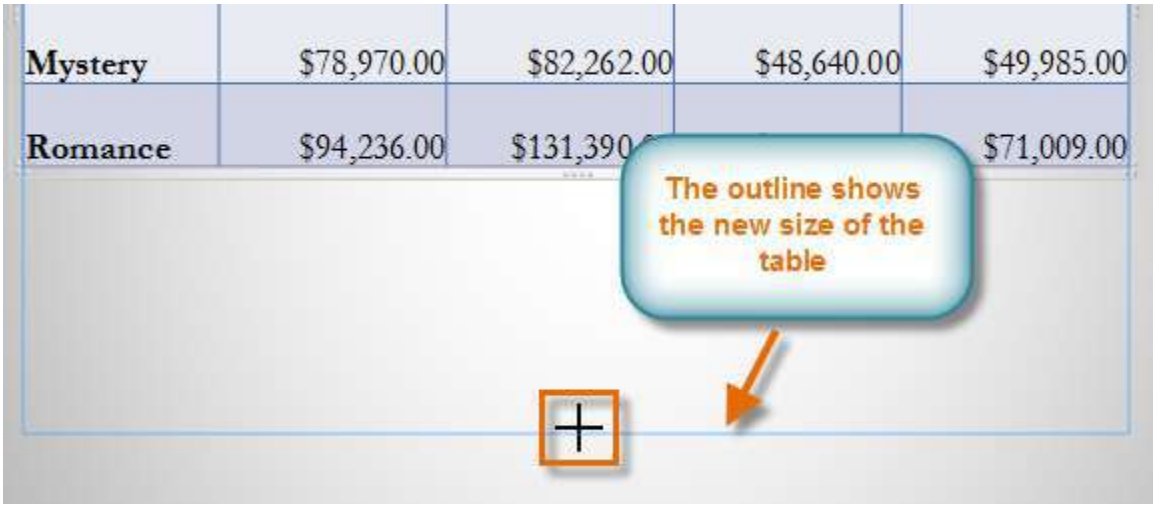
3. Release the mouse button to drop the table in the new location.

Modifying tables

To resize a table:

1. Position the mouse over one of the **sizing handles** located around the edge of the table. The cursor will become a pair of directional arrows⇔.

2. Click, hold, and **drag** your mouse to make the table larger or smaller.

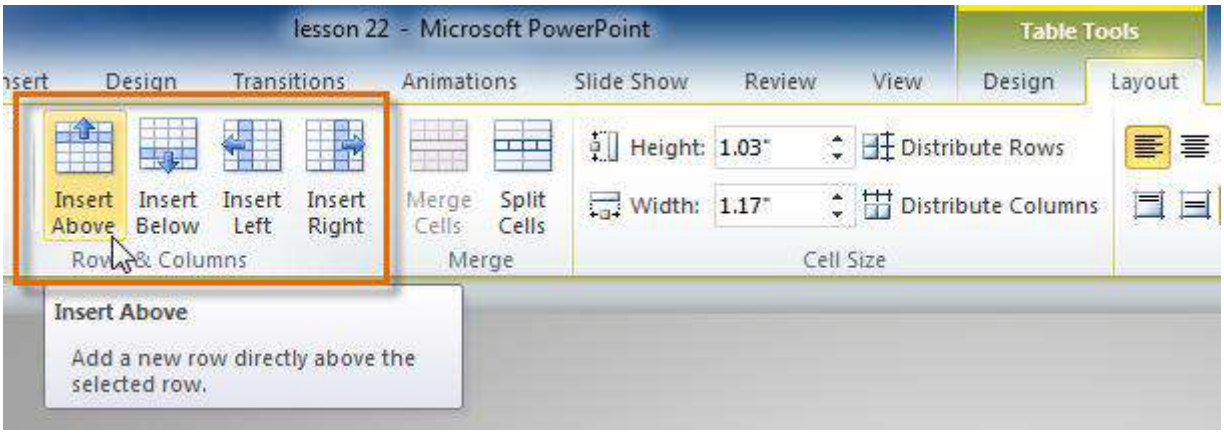


3. Release the mouse. The table will be resized.

To add a column or row:

1. Place the insertion point in a cell **adjacent to** the location where you want to add a row or column.

2. Select the **Table Tools Layout** tab, and locate the **Rows & Columns group**.

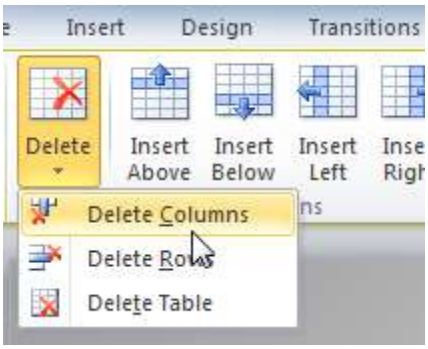


3. If you want to insert a new **row**, select either **Insert Above** or **Insert Below**. If you want to insert a new **column**, select either **Insert Left** or **Insert Right**.
4. A new row or column will appear.

Genre	2006	2007	2(
Classics	$18,580.00	$69,225.00	
Mystery	$78,970.00	$82,262.00	
Romance	$94,236.00	$131,390.00	

To delete a row or column:

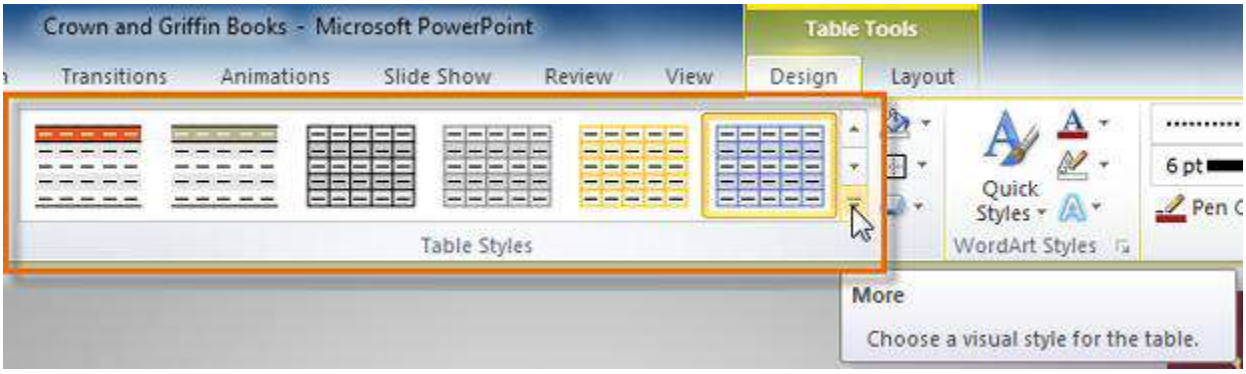
1. Select the row or column by placing the insertion point in any cell in that row or column.
2. Select the **Table Tools Layout** tab.
3. In the **Rows & Columns group**, click **Delete**. A drop-down menu appears.
4. Select **Delete Rows** or **Delete Columns**.



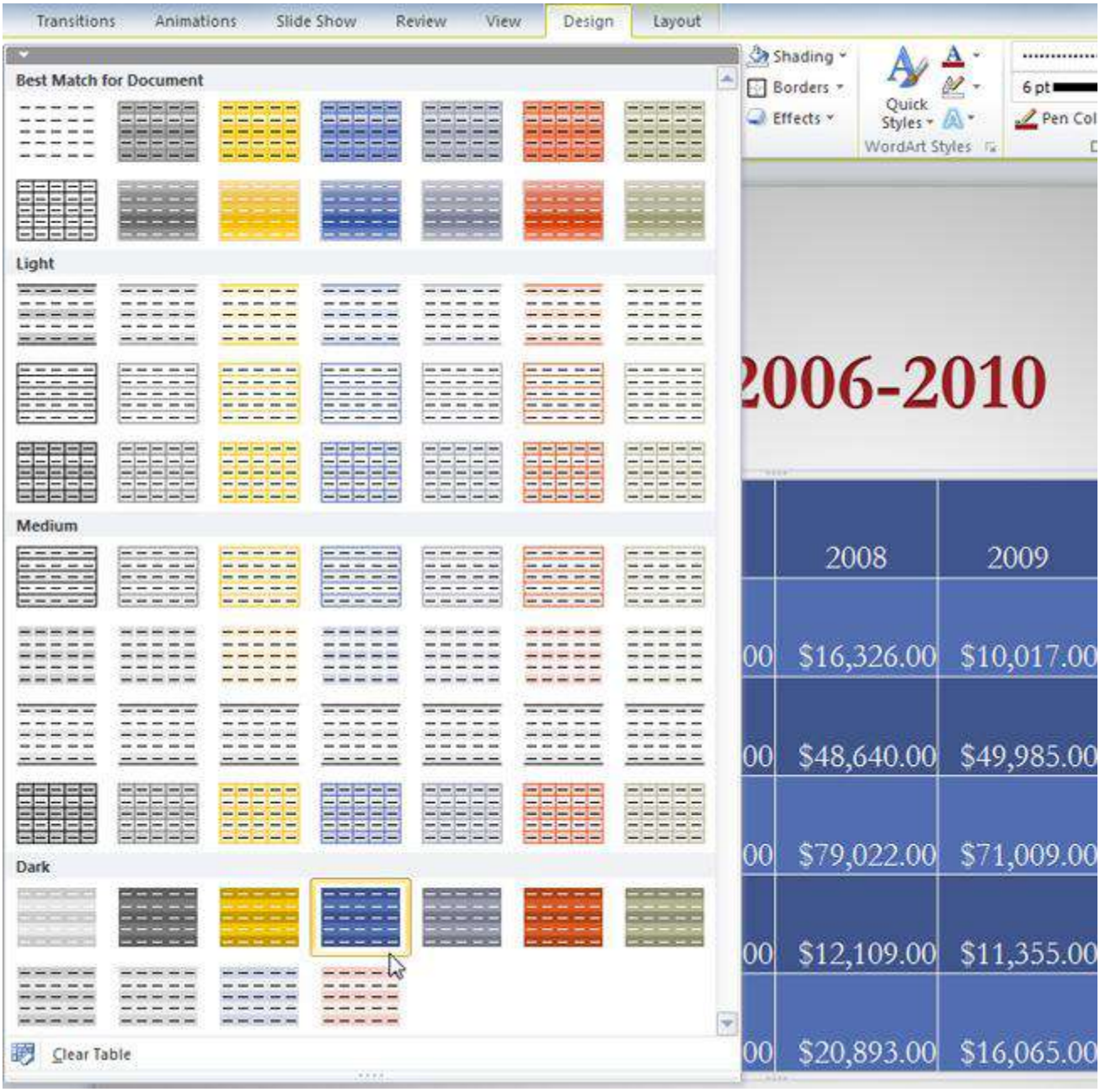
Modifying the table style

To apply a table style:

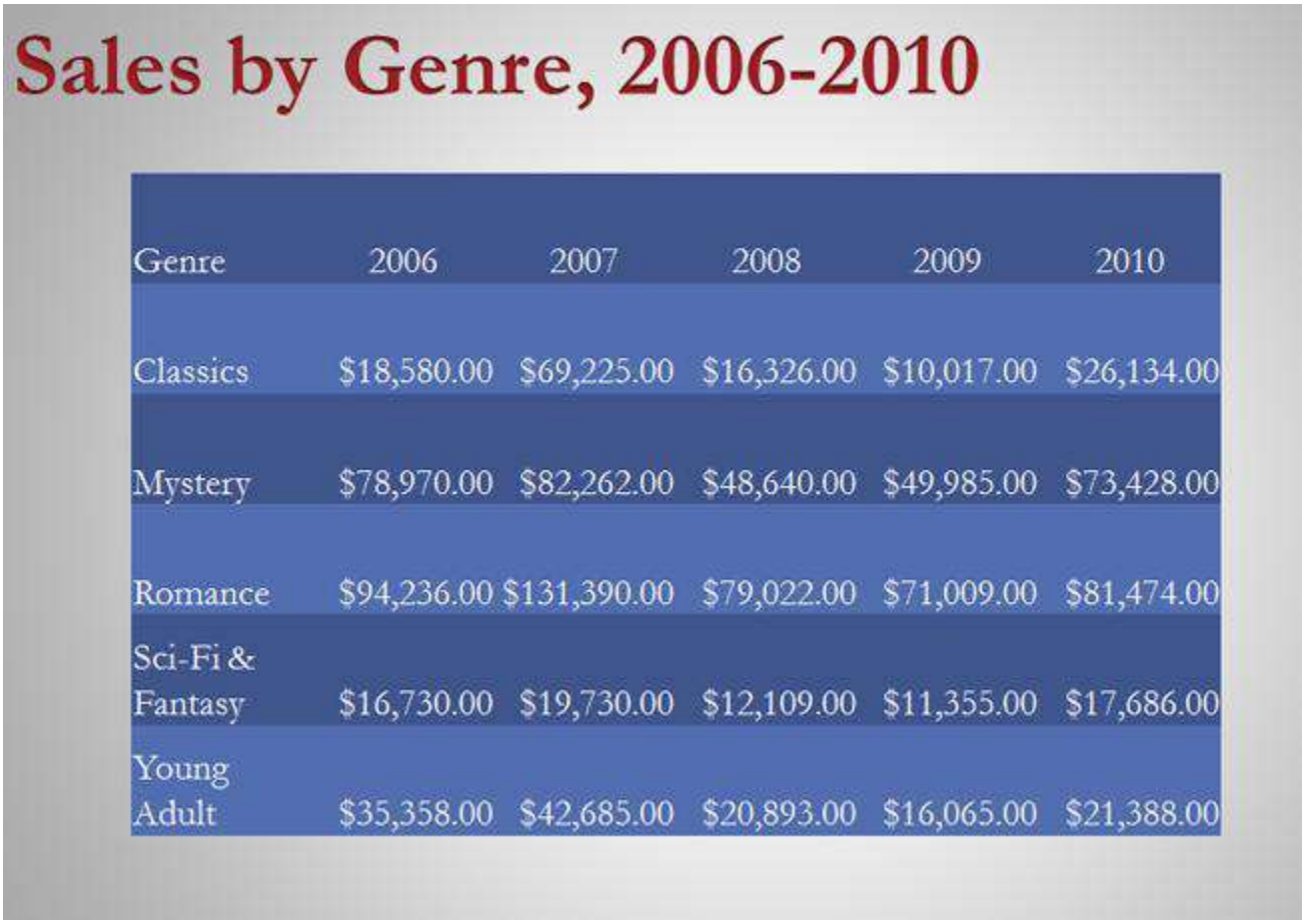
1. Click anywhere on the table. The **Table Tools** tab will appear on the Ribbon.
2. Select the **Table Tools Design** tab, and locate the **Table Styles**.
3. Click the **More** drop-down arrow to see all of the table styles.



4. Hover the mouse over the various styles to see a live preview.



5. Select the desired style.



To change table styles options:

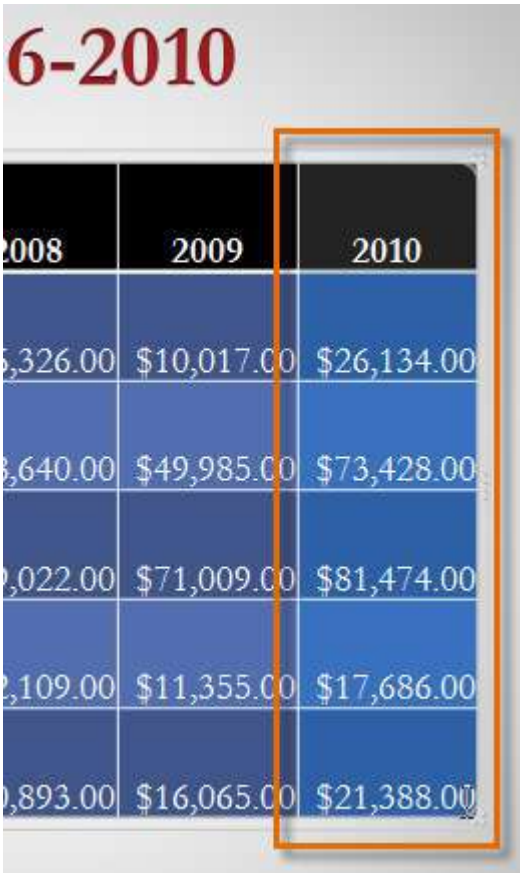
Once you've chosen a table style, you can turn various options **on** and **off** to change the appearance of the table. There are six options: **Header Row**, **Total Row**, **Banded Rows**, **First Column**, **Last Column**, and **Banded Columns**.

1. Click anywhere on the table. The **Table Tools** tab will appear.
2. Click the **Table Tools Design** tab.
3. Hover the mouse over each option in the **Table Style Options** group to see an explanation of what it does, and **check** or **uncheck** the desired options.

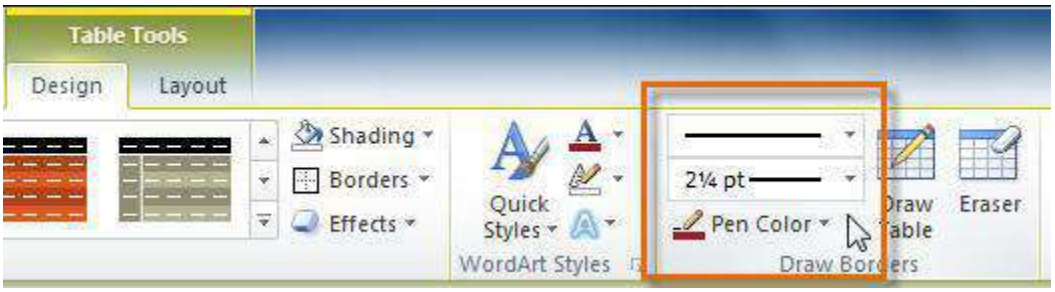
Depending on the **table style** you're using, certain **table style options** may have somewhat different effects. You may need to **experiment** to get the exact look you want.

To add borders to a table:

1. Select the cells you want to add a border to.



2. From the **Table Tools Design** tab, select the desired **Line Style**, **Line Weight**, and **Pen Color**.



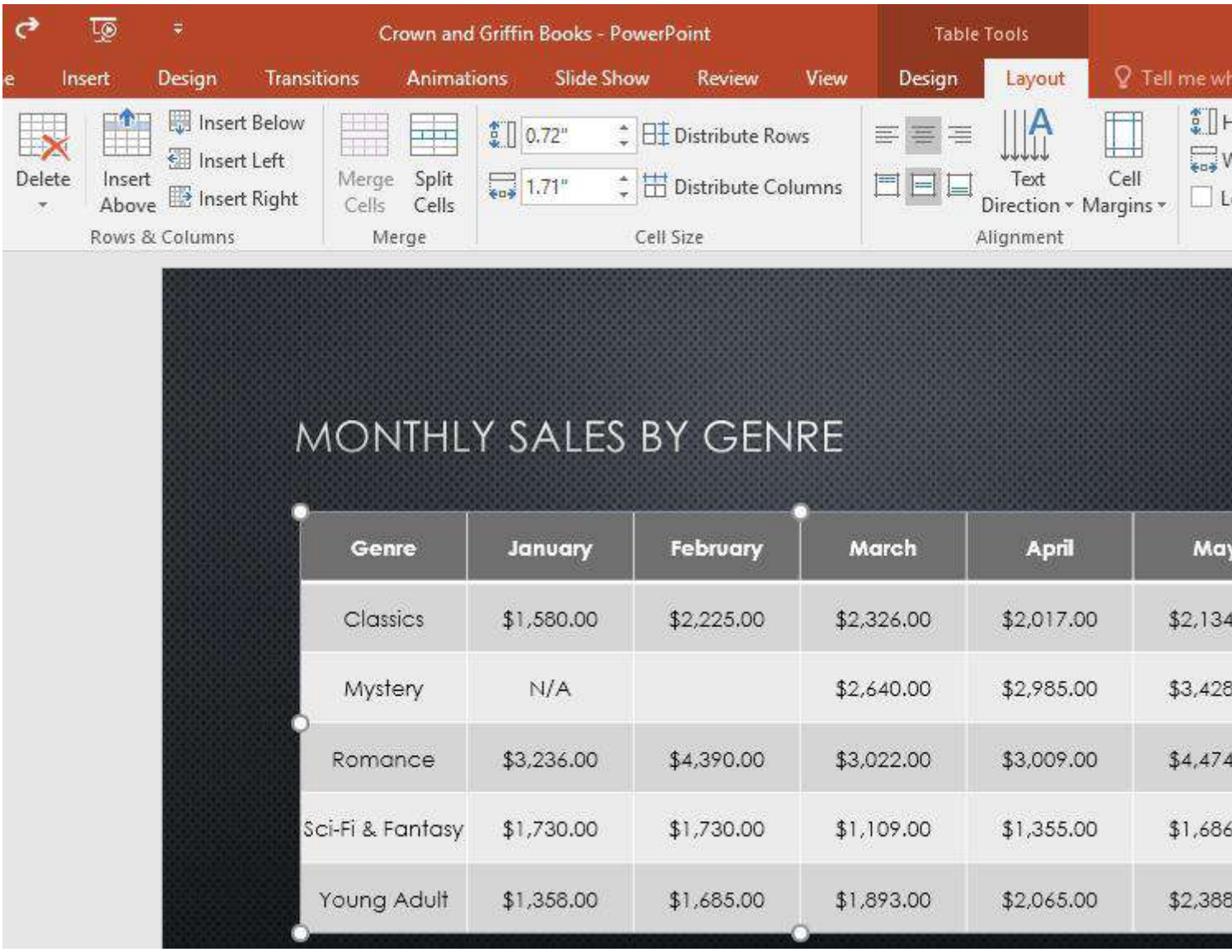
3. Click the **Borders** drop-down arrow.
4. From the drop-down menu, select the desired **border type**.

5. The border will be added to the selected cells.

Modifying a table using the layout tab

When you select a table in PowerPoint 2010, **Design** and **Layout** tabs appear under **Table Tools** on the Ribbon. Using commands on the **Layout** tab, you can make a variety of modifications to the table.

Click the buttons in the interactive below to learn about the different ways you can modify a table with the Layout tab.



6. **<u>Insert and format image in presentation:</u>**
   Adding images to your presentations makes them more interesting and engaging. Pictures, clip art, and screenshots can be inserted into PowerPoint to help you effectively communicate your ideas to your audience.

Working with images

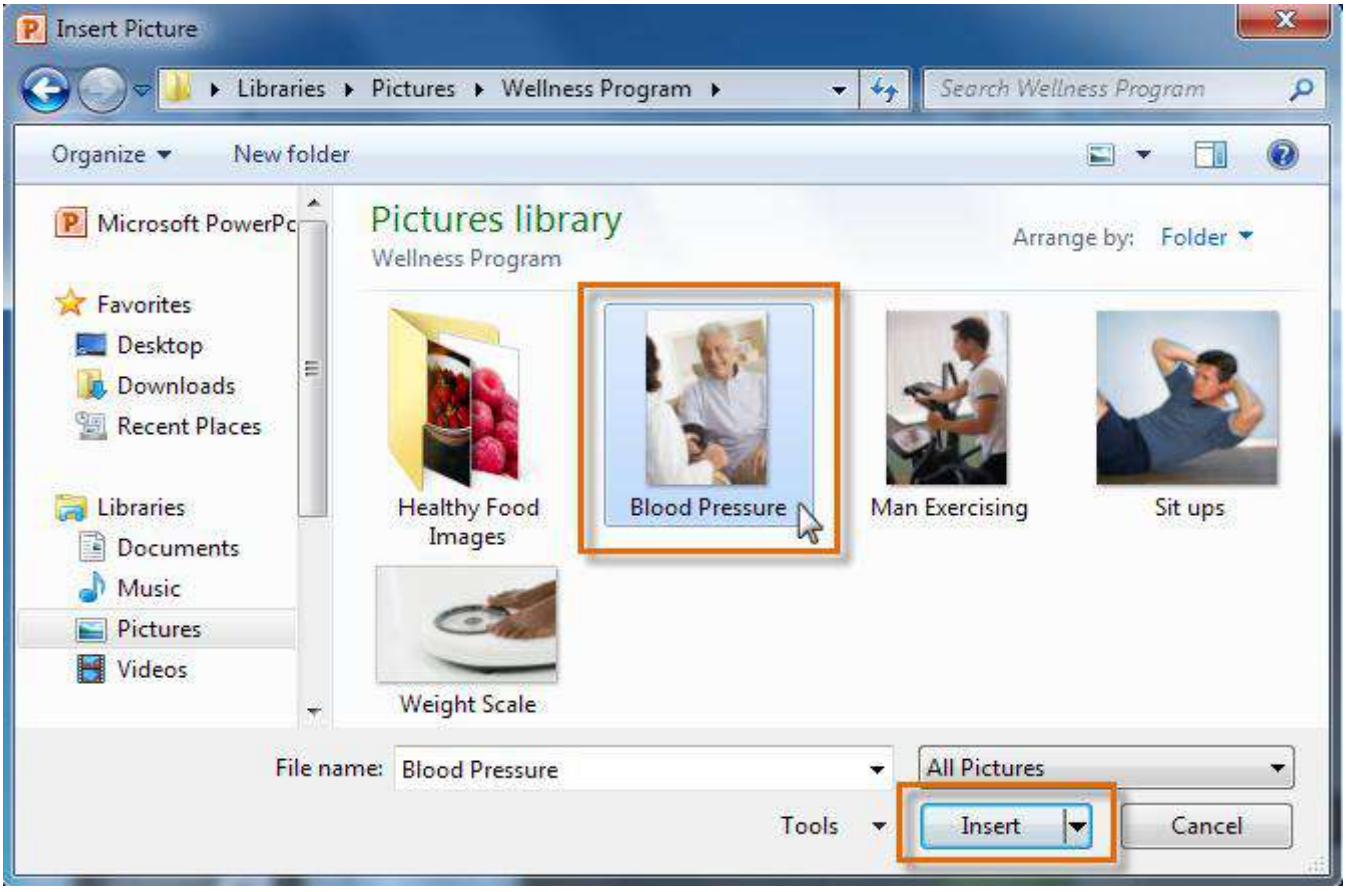
Adding **clip art** and **pictures** to your presentation can be a great way to **illustrate important information** or **add decorative accents** to existing text. You can insert images from your computer, search Microsoft's large selection of clip art to find the image you need, or add a

screenshot of your own. Once an image has been inserted, you can resize and move it to the location you want.

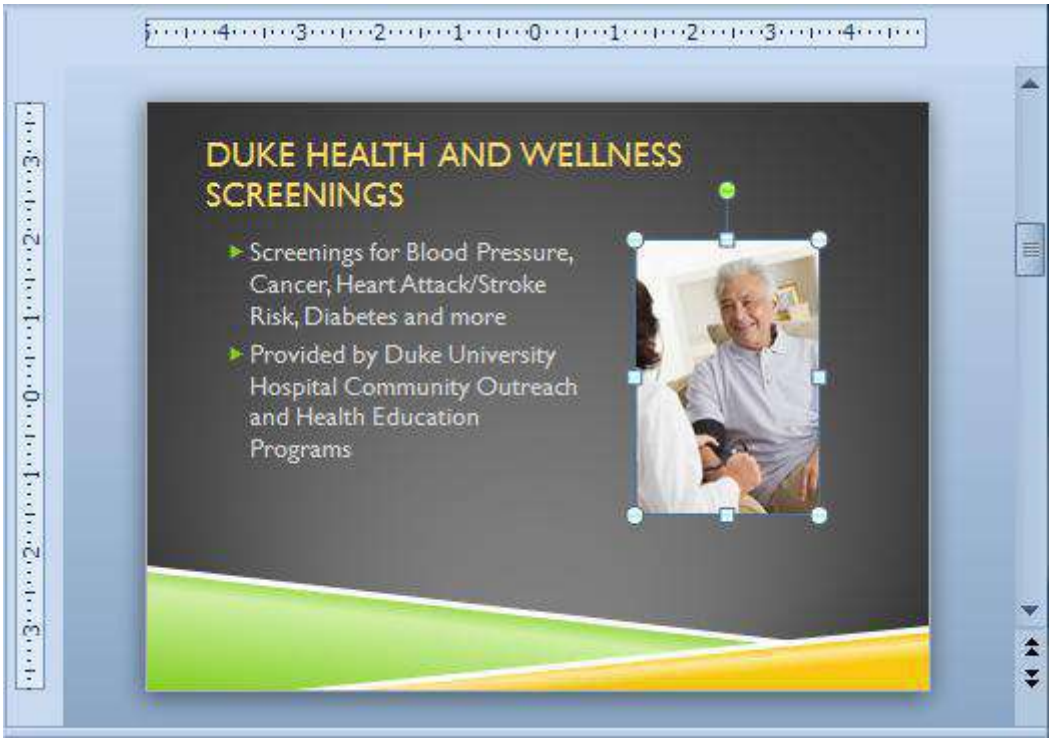
To insert an image from a file:

1. Select the **Insert** tab.
2. Click the **Picture** command in the **Images** group. The Insert Picture dialog box appears.

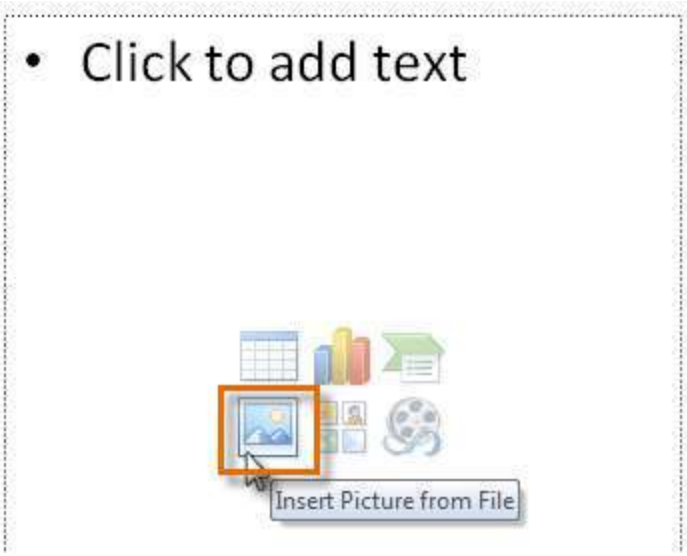
3. Select the desired image file, then click **Insert**.



4. The picture will appear in your slide.

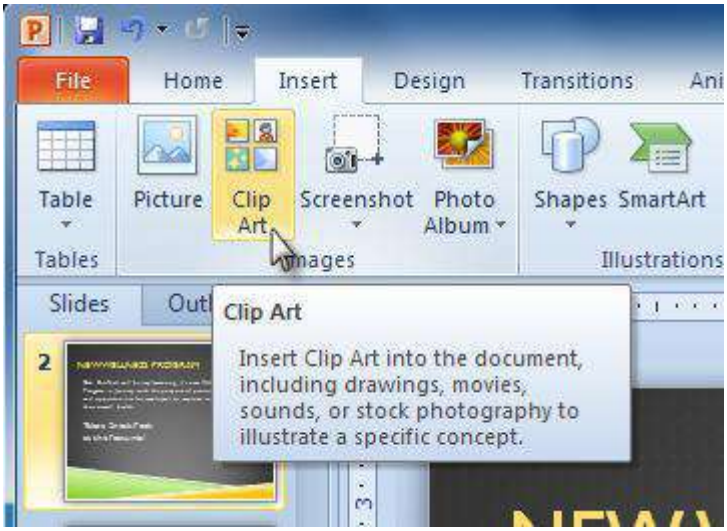


You can also select the **Insert Picture from File** command in a **placeholder** to insert images.

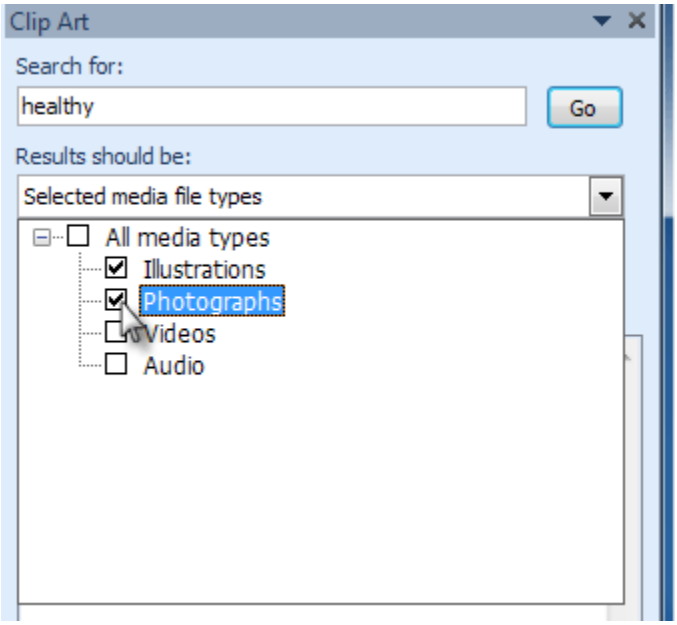


To locate clip art:

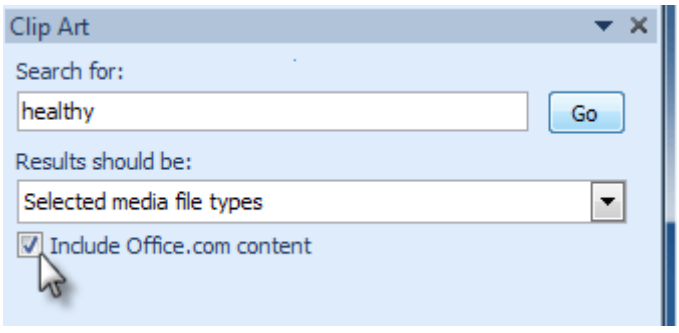
1. Select the **Insert** tab.
2. Click the **Clip Art** command in the **Images** group.



3. The clip art options appear in the **task pane** to the right of the document.
4. Enter keywords in the **Search for:** field that are related to the image you want to insert.
5. Click the drop-down arrow in the **Results should be:** field.
6. Deselect any types of media you do not want to see.



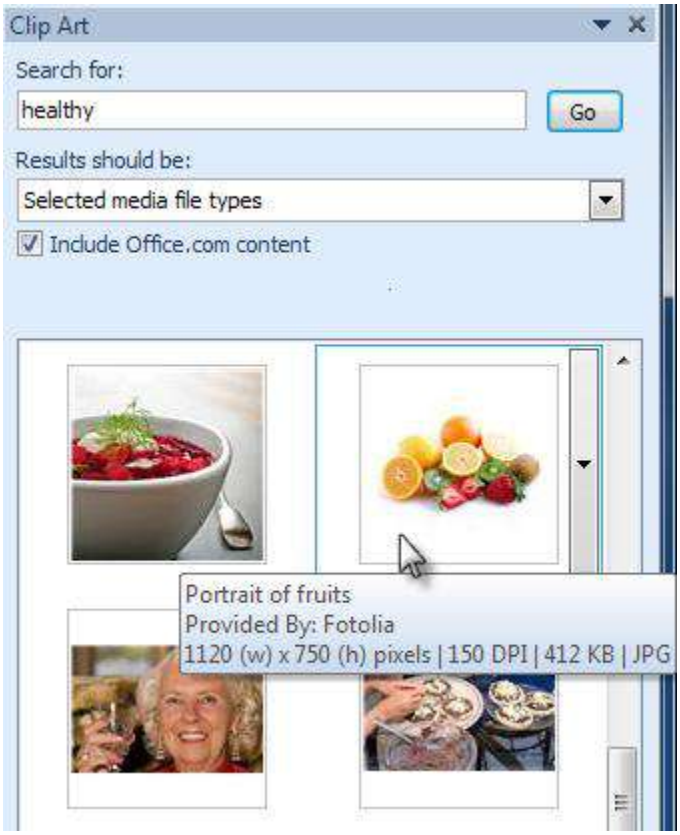
7. If you want to also search for clip art on Office.com, place a check mark next to **Include Office.com content**. Otherwise, it will just search for clip art on your computer.



8. Click **Go**.

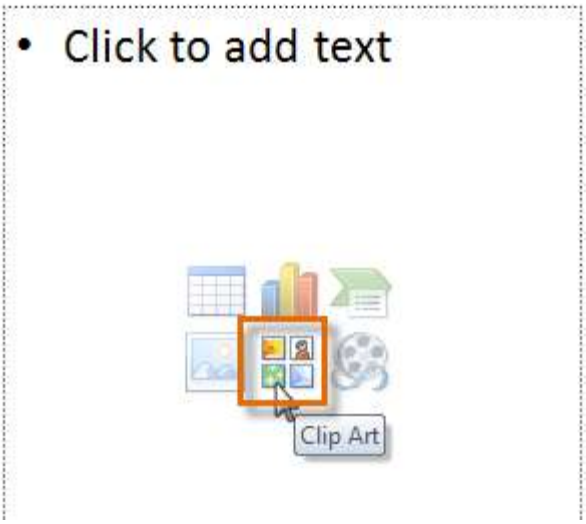
To insert clip art:

1. Review the results from a clip art search in the **Clip Art** pane.
2. Select the desired image.



3. The clip art will appear in your slide.

You can also select the **Insert Clip Art from File** command in a **placeholder** to insert clip art.



Inserting screenshots

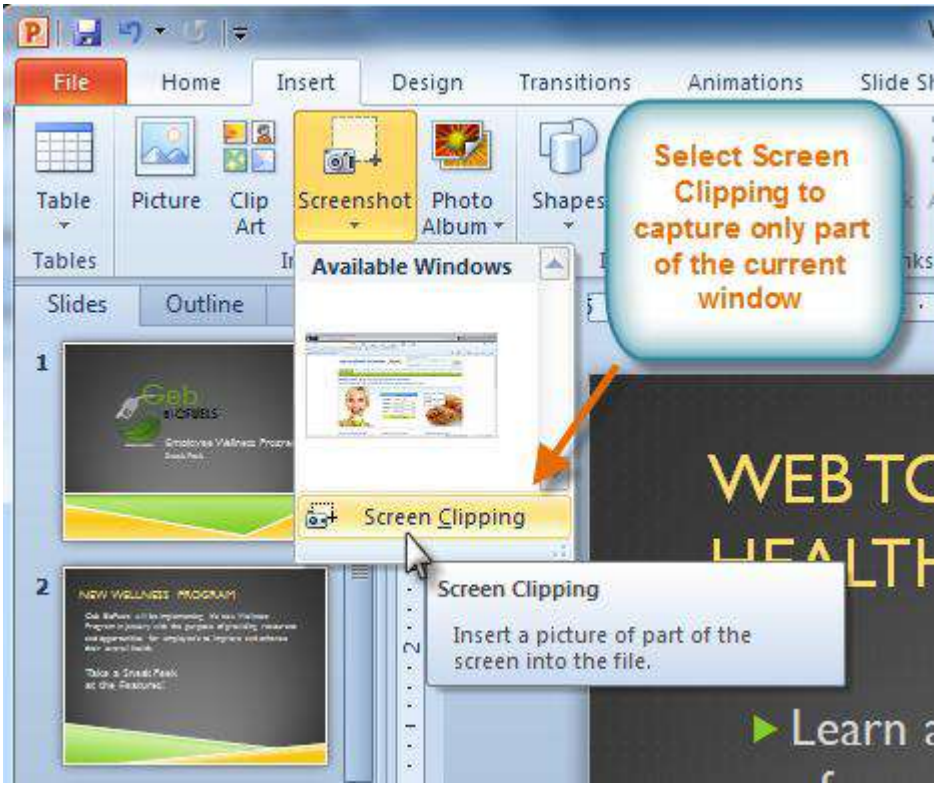
Screenshots are pictures that capture the visible windows and items displayed on your computer screen. They may include an open window of a website, items on your desktop, or an open program, like the PowerPoint images displayed in this tutorial. These images can be useful for explaining or displaying computer programs, functions, and websites. PowerPoint allows you to capture an image of an entire window or a **screen clipping** of part of a window.

To insert screenshots of a window:

1. Select the **Insert** tab.
2. Click the **Screenshot** command in the **Images** group.
3. The **Available Windows** from your desktop will appear. Select the window you want to capture as a screenshot.
4. The screenshot will appear in your slide.

To insert a screen clipping from a window:

1. Select the **Insert** tab.
2. Click the **Screenshot** command, then select **Screen Clipping**.



3. A faded view of your current desktop will appear, and your cursor will turn into a cross shape +.
4. Click, hold, and drag on the area of the window you want to capture.

5. The screen clipping will appear in your slide.

Resizing and moving images

To resize an image:

1. Click the image.
2. Position your mouse over any one of the **corner sizing handles**. The cursor will become a pair of directional arrows⇔.
3. Click, hold, and drag your mouse until the image is the desired size.

4. Release the mouse. The image will be resized.

The side sizing handles change the image's size but do not keep the same proportions. If you want to keep the image's proportions, always use the corner handles.

To move an image:

1. Click the image. The cursor will turn into a cross with arrows .
2. While holding down the mouse button, **drag the image** to the desired location.

3. Release the mouse button. The box will be moved.

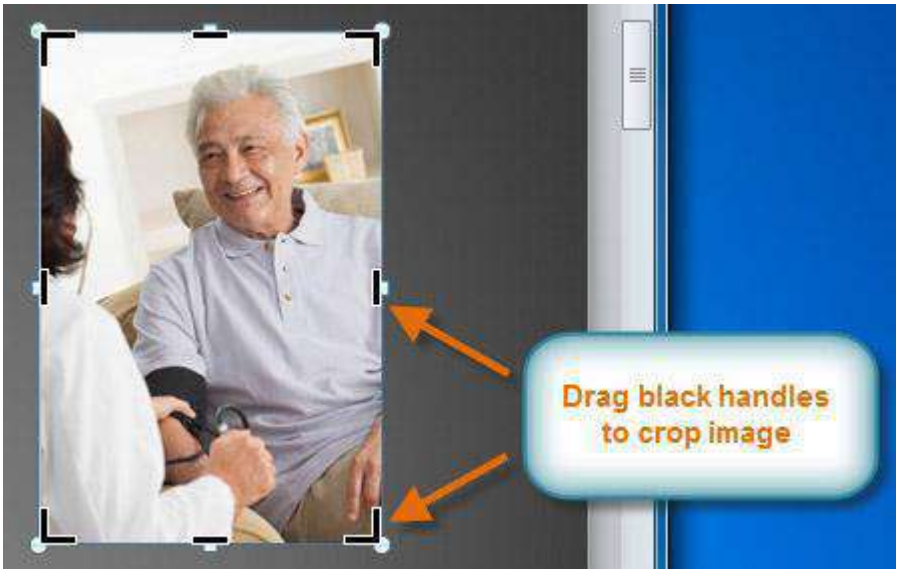
To rotate the image, click and drag on the green circle located at the top of the image.

Formatting Pictures

Have you inserted a picture onto a slide that you want to trim or make appear smaller on the slide? Perhaps you'd like to add an artistic effect or border to the image to make it stand out from the slide's background. You can use PowerPoint's **picture tools** to help you modify the picture **style** and **shape**, add a **border**, **crop**, add **artistic effects**, and even **compress** pictures.

To crop an image:

1. Select an image. The **Format** tab will appear.
2. Select the **Format** tab.
3. Click the **Crop** command. The black cropping handles appear.

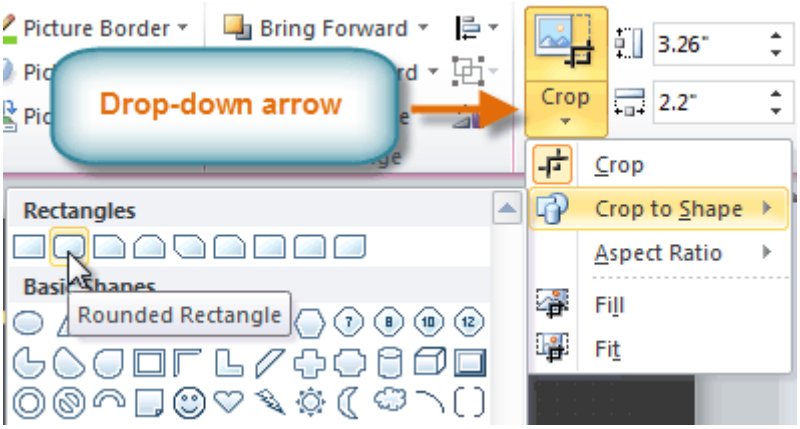


4. Click and drag a **handle** to crop an image.
5. Click the **Crop** command to deselect the crop tool.

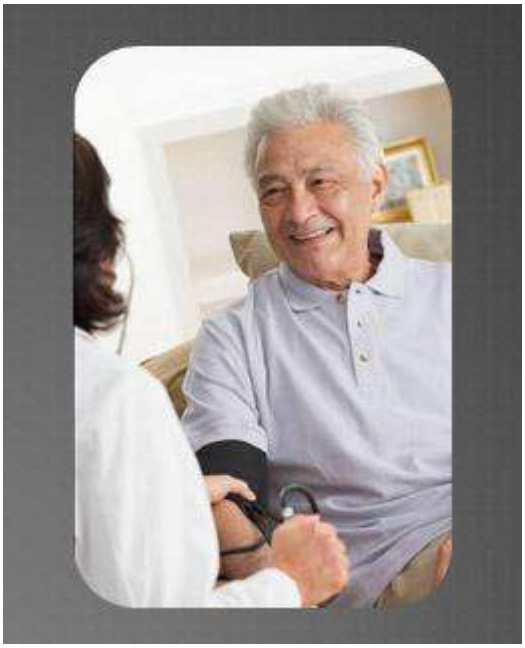
Corner handles will allow you to simultaneously crop the image horizontally and vertically.

To crop an image to a shape:

1. Select the image. The **Format** tab will appear.
2. Select the **Format** tab.
3. Click the **Crop** drop-down arrow (below the Crop command). A drop-down menu will appear.



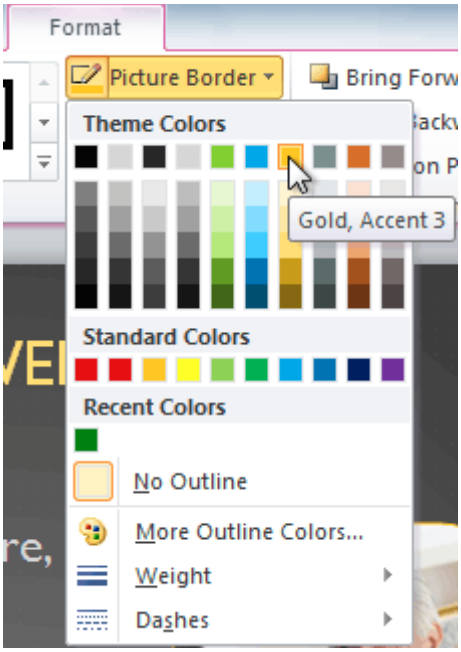
4. Select a shape from the drop-down menu.
5. The image will take the shape you have selected.



You may want to crop the image to the desired size before cropping it to a shape.

To add a border to a picture:

1. Select the picture.
2. Select the **Format** tab.
3. Click the **Picture Border** command. A drop-down menu will appear.



4. From the drop-down menu, you can select a **color**, **weight** (thickness), and whether the line is **dashed**.

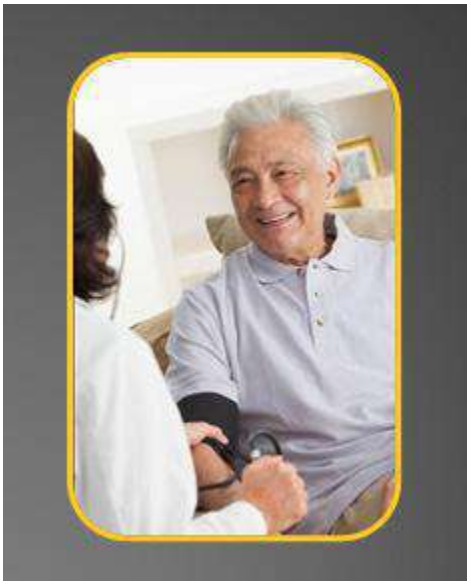
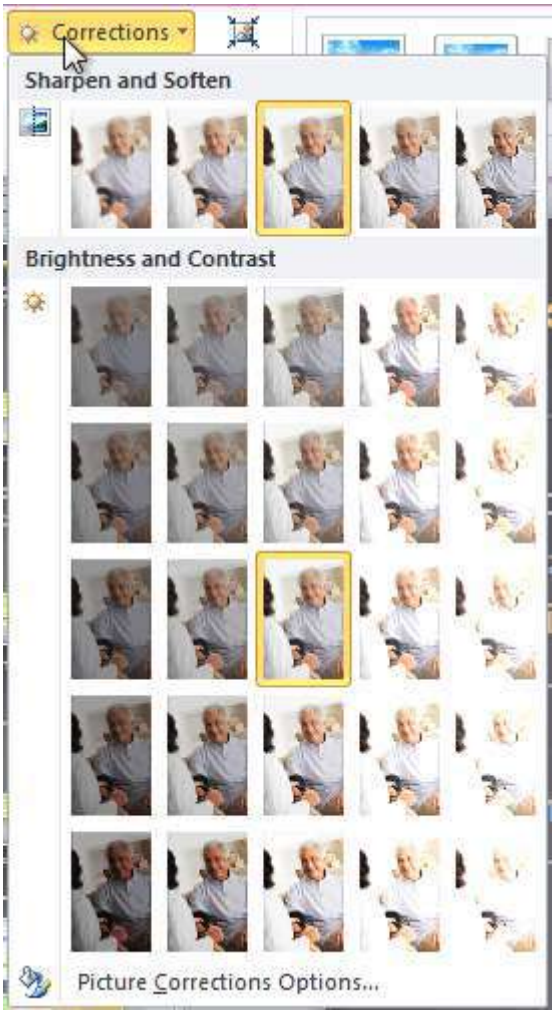


Image adjustments

To make image corrections:

1. Select the image. The **Format** tab will appear.
2. Click the **Format** tab.
3. Click the **Corrections** command. A drop-down menu will appear.

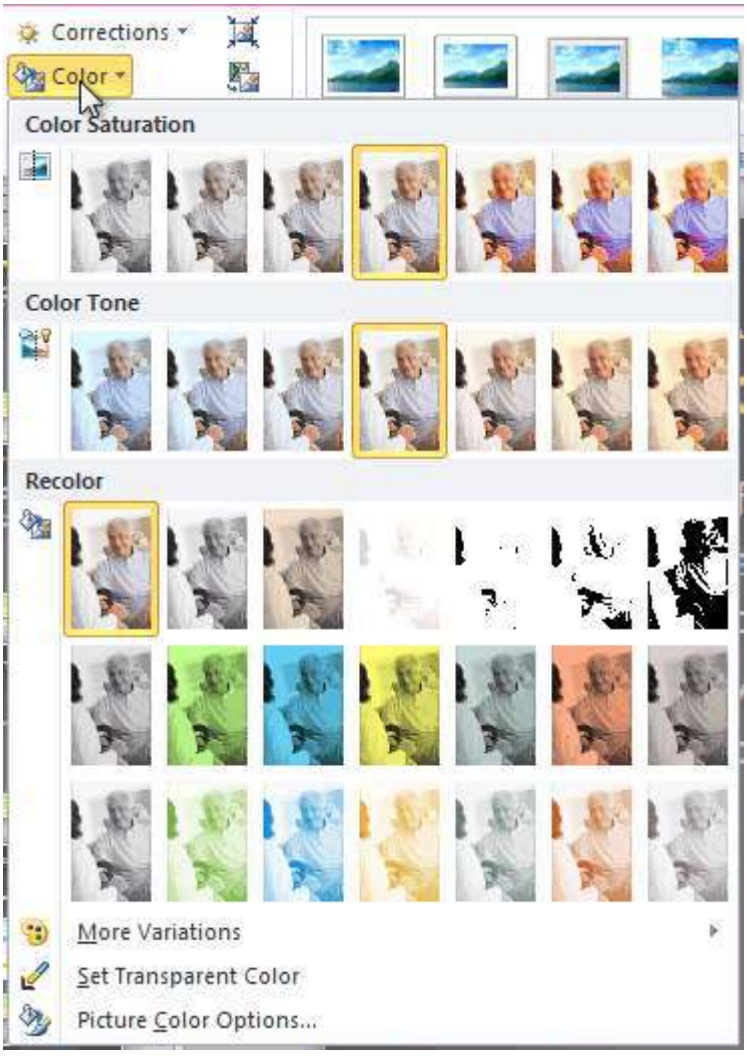


4. To sharpen or soften the image, hover over the **Sharpen** and **Soften** presets. You'll see a live preview of the presets in the slide.
5. Select the desired Sharpen and Soften preset.
6. Click the **Corrections** command again.
7. Hover over the **Brightness and Contrast** presets to see a live preview.
8. Select the desired Brightness and Contrast preset.

You can also select **Picture Corrections Options** from the drop-down menu to refine the settings.

To adjust the color in an image:

1. Select the image. The **Format** tab will appear.
2. Click the **Format** tab.
3. Click the **Color** command. A drop-down menu will appear.



4. From the drop-down menu, you can choose a preset from each of the three categories:
    - **Color Saturation:** This controls how vivid the colors are in the image.

- **Color Tone:** This controls the temperature of the color, from **cool** to **warm**.
- **Recolor:** This controls the overall color of the image. Use this option to make the image **black and white**, **grayscale**, or to **colorize** it with a different color.

You can also select **Picture Color Options** from the drop-down menu to refine the settings.

Artistic effects and styles

To apply an artistic effect:

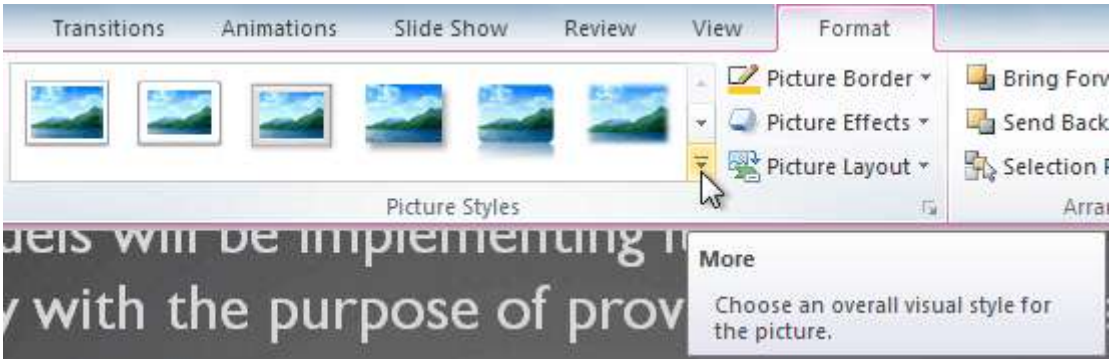
1. Select the picture. The **Format** tab will appear.
2. Click the **Format** tab.
3. Click the **Artistic Effects** command. A drop-down menu will appear.

4. Hover over the different presets to see a live preview of each one.
5. When you've found a preset you like, click it to select it.
6. To adjust the settings for the effect, click **Artistic Effects** again and select **Artistic Effect Options**.

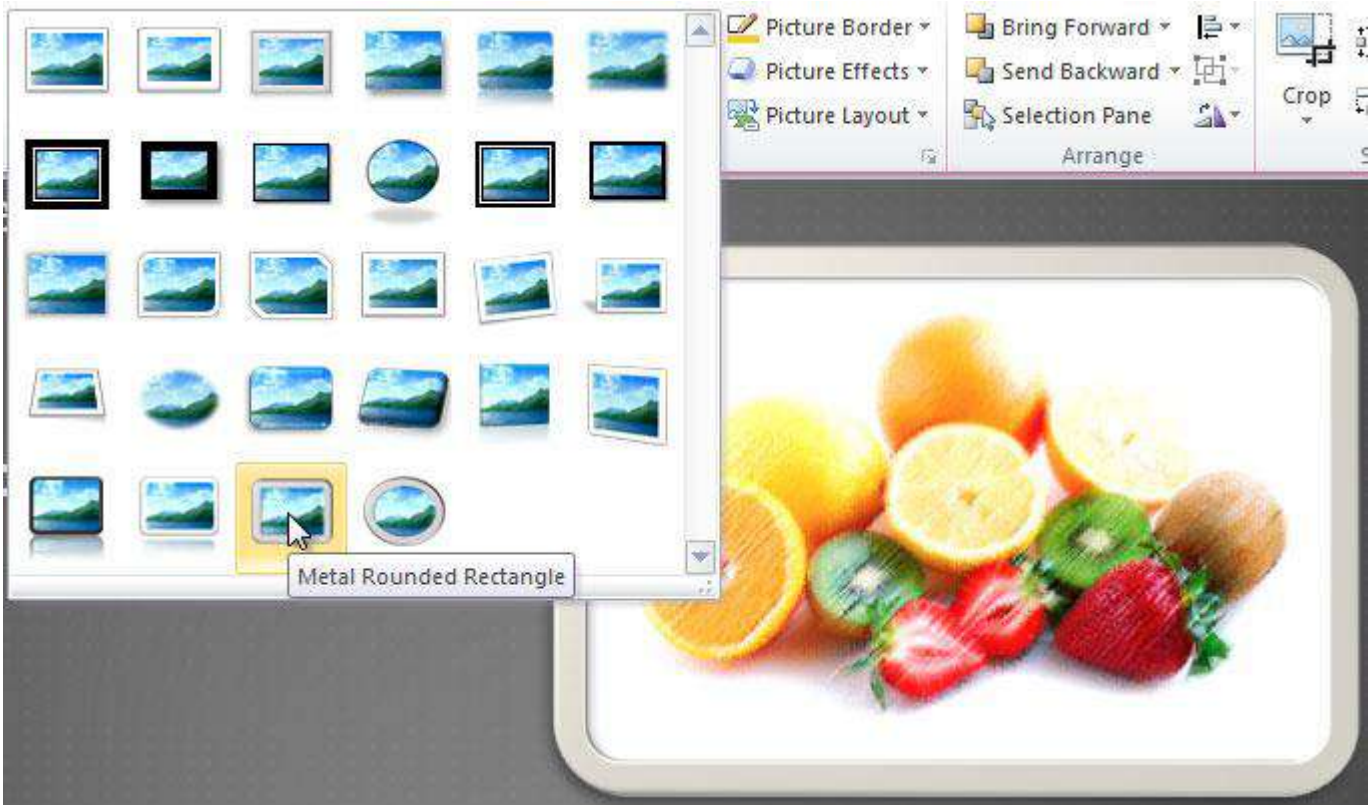
Many **clip art** images do not allow you apply artistic effects. Generally speaking, the ones that look hand-drawn or painted do not work, while photographs do.

To apply a picture style:

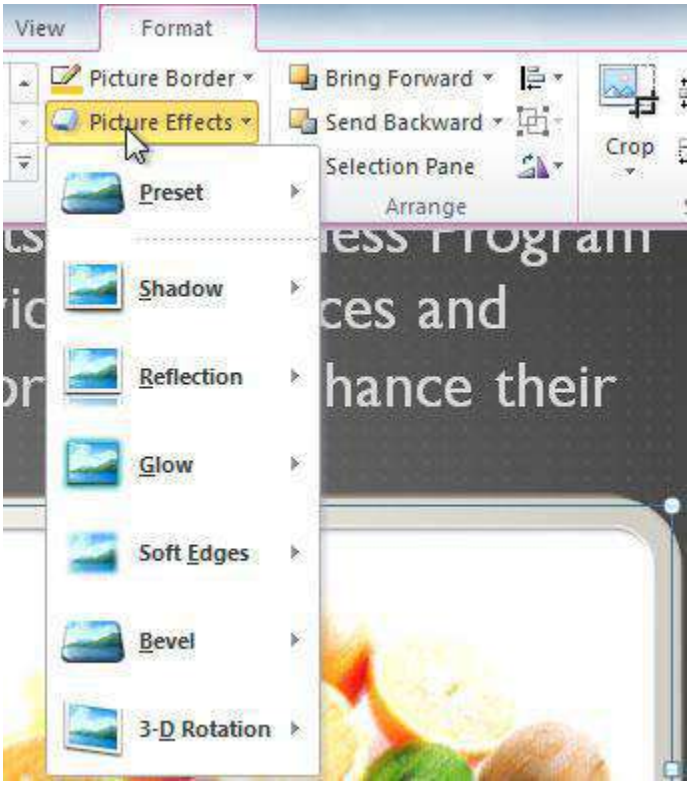
1. Select the picture. The **Format** tab will appear.
2. Select the **Format** tab.
3. Click the **More** drop-down arrow to display all picture styles.



4. Hover over a picture style to display a live preview of the style in the slide.
5. Select the desired style.



6. To refine the picture style, click the **Picture Effects** command to see the **Effects** drop-down menu.

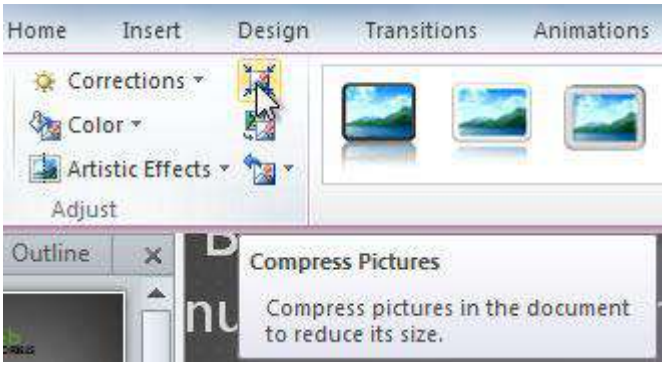


Compressing pictures

You'll need to monitor the **file size** of your presentations that include pictures, especially if you send them via email. Large high-resolution pictures can quickly cause your presentation to become too large, which may make it difficult or impossible to attach to an email. In addition, **cropped areas** of pictures are saved with the presentation by default, which can add to the file size. PowerPoint can reduce the file size by **compressing pictures, lowering their resolution**, and **deleting cropped areas**.

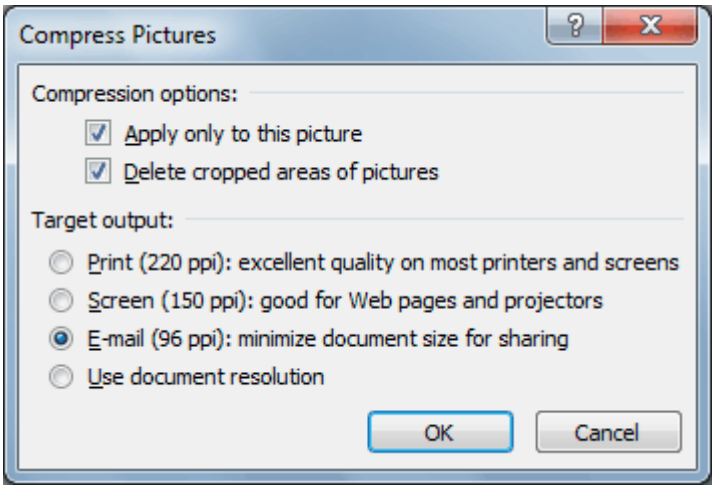
To compress a picture:

1. Select the picture. The **Format** tab will appear.
2. Select the **Format** tab.
3. Click the **Compress Pictures** command in the Adjust group. A dialog box appears.



4. Place a check mark 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 presentation.

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



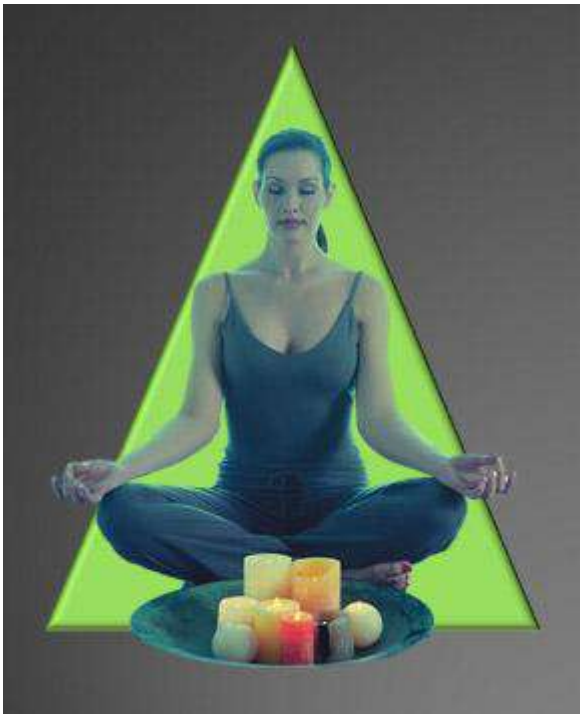
6. Click **OK**.

Removing the background from an image

Removing the background from an image can give the image a cleaner appearance and will allow the slide background—or other objects—to show through. If you're printing your presentation, it can also save ink.

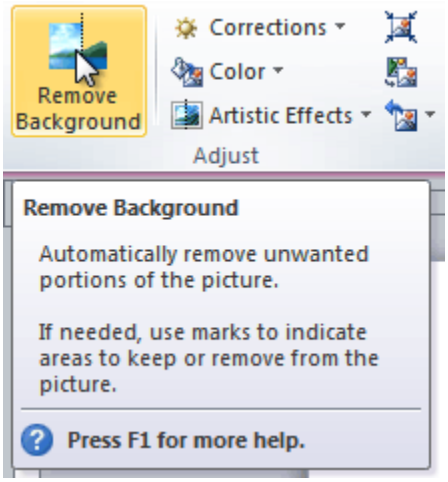
About Background Removal

With **Background Removal**, PowerPoint uses special algorithms to determine which parts of the image are the background and then removes these areas from the image.



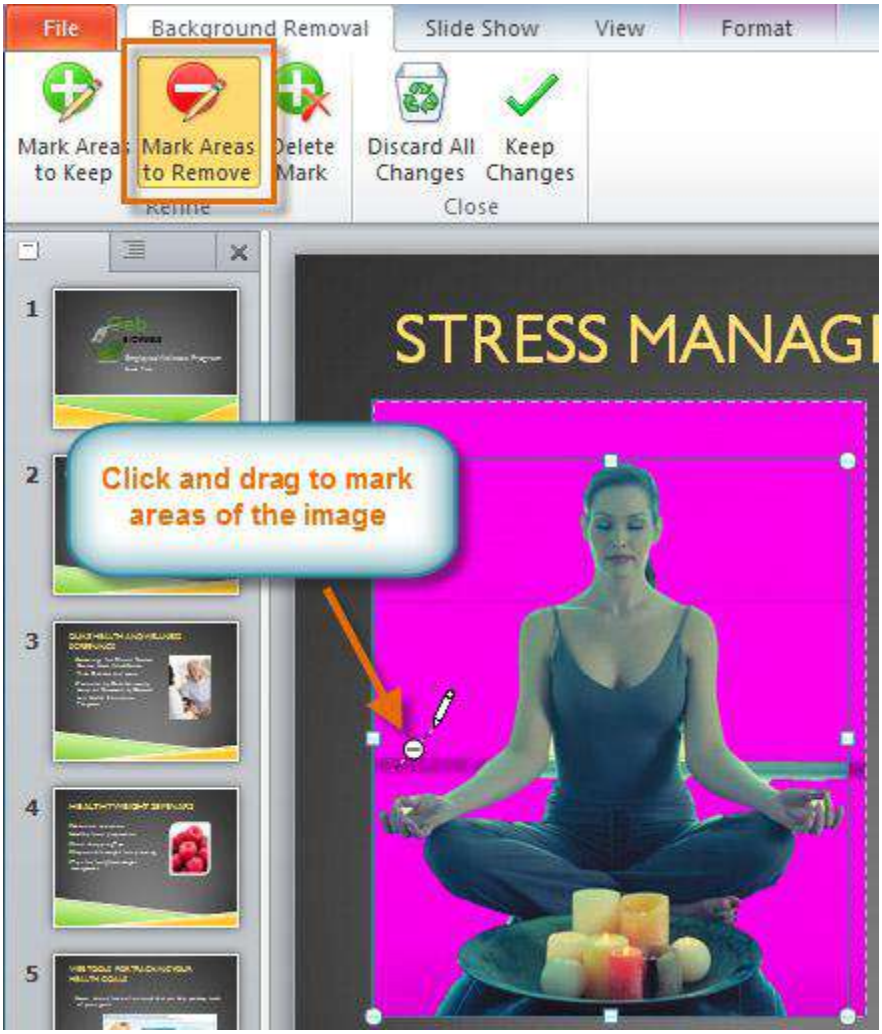
To remove the background from an image:

1. Click the image. The **Format** tab will appear.
2. Click the **Format** tab.
3. Click the **Remove Background** command.



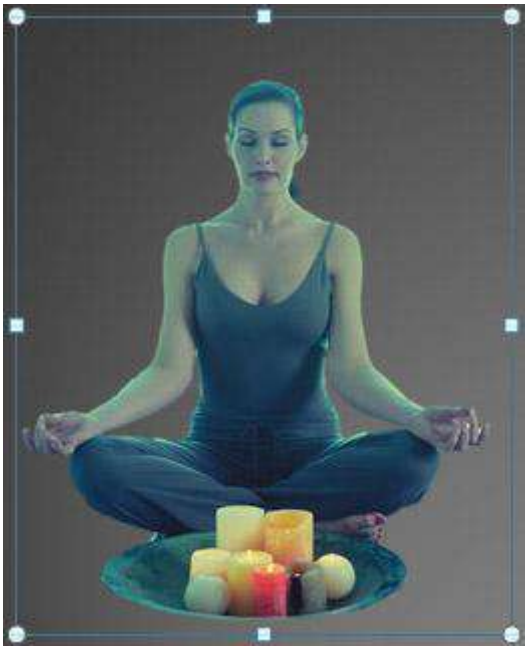
4. PowerPoint will try to guess which part of the image is the background, and it will mark that area with a **magenta** fill. It will also place a box around the image with selection handles.

5. Drag the selection handles until all of the foreground is inside the box. After you do this, PowerPoint may readjust the background.
6. At this point, you may need to help PowerPoint decide which parts of the image are **foreground** and which parts are **background**. You can do this by using the **Mark Areas to Keep** and **Mark Areas to Remove** commands:
    - If PowerPoint has marked part of the foreground magenta, click **Mark Areas to Keep** and draw a line in that region of the image.
    - If part of the background has not been marked with magenta, click **Mark Areas to Remove** and draw a line in that region of the image.



7. After you add your marks, PowerPoint will readjust the image.

8. When you're satisfied with the image, click **Keep Changes**. All of the magenta areas will be removed from the image.



9. You can adjust the image at any time by clicking the **Remove Background** command again.

As with **artistic effects**, Background Removal will not work with some **clip art** images.

Grouping and un-grouping objects:

In PowerPoint, each slide may have multiple items, such as pictures, shapes, and text boxes. PowerPoint lets you arrange the objects the way you want by **aligning**, **grouping**, **rotating**, and **ordering** them in various ways.

Arranging objects

After adding objects to a slide, it may be necessary to arrange them so the objects appear the way you want. You can **align**, **group**, **rotate**, and **order** objects to create the desired arrangement.

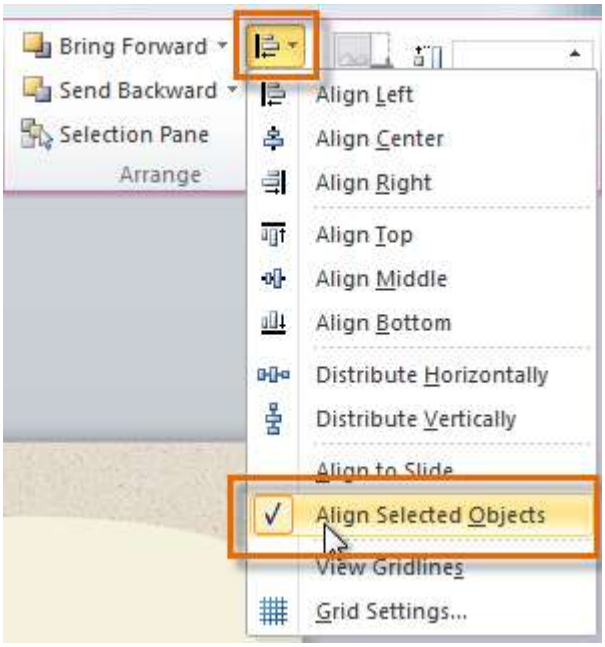
Aligning objects

You can **click** and **drag objects** to align them manually, but guesswork will never give you the best result. Additionally, aligning objects in this way can take a great deal of time. Luckily, PowerPoint provides you with several commands that allow you to **easily arrange** and position objects.

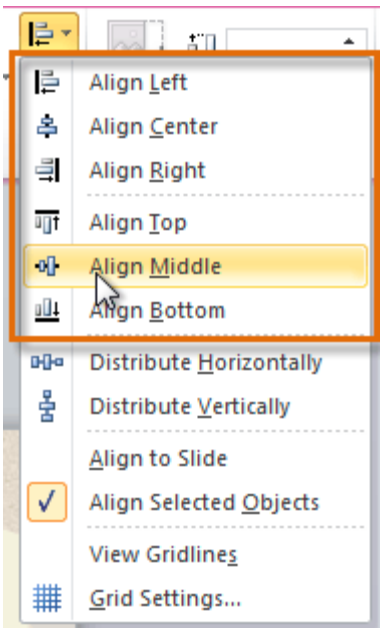
To align two or more objects:

1. Click and drag your mouse to form a **selection box** around the objects you want to align. All of the objects will now have **sizing handles** to show that they are selected.

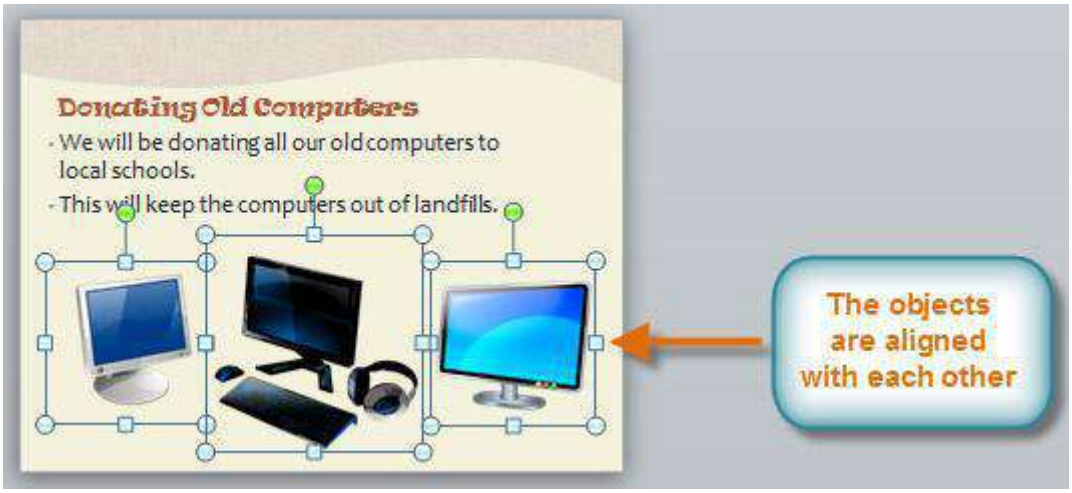
2. From the **Format** tab, click the **Align** command, and select **Align Selected Objects**.



3. Click the **Align** command again, and select one of the six **alignment options**.



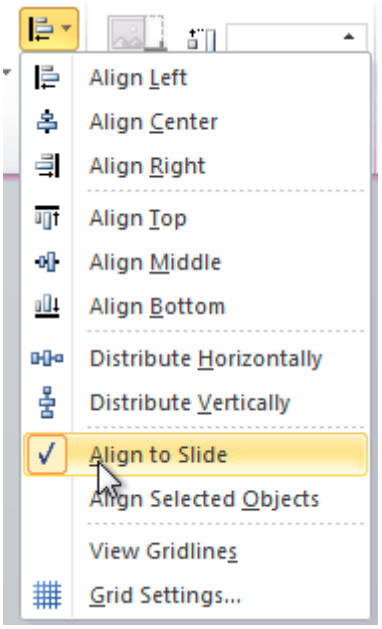
4. The objects will align to each other based on the option you have selected.



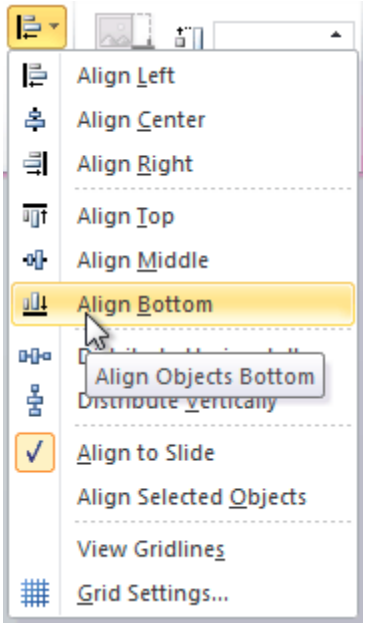
To align objects to the slide:

Sometimes you may want to align one or more objects to a **specific location within the slide**, such as the top or bottom. You can do this by selecting the **Align to Slide** option before you align the objects.

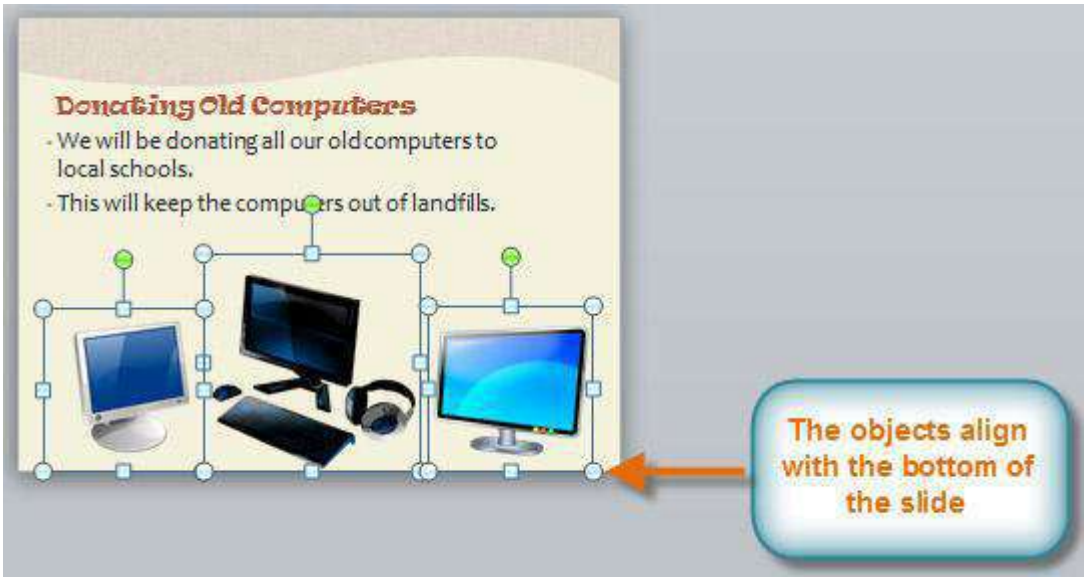
1. Click and drag your mouse to form a **selection box** around the objects you want to align. All of the objects will now have **sizing handles** to show that they are selected.
2. From the **Format** tab, click the **Align** command, and select **Align to Slide**.



3. Click the **Align** command again, and select one of the six **alignment options**.



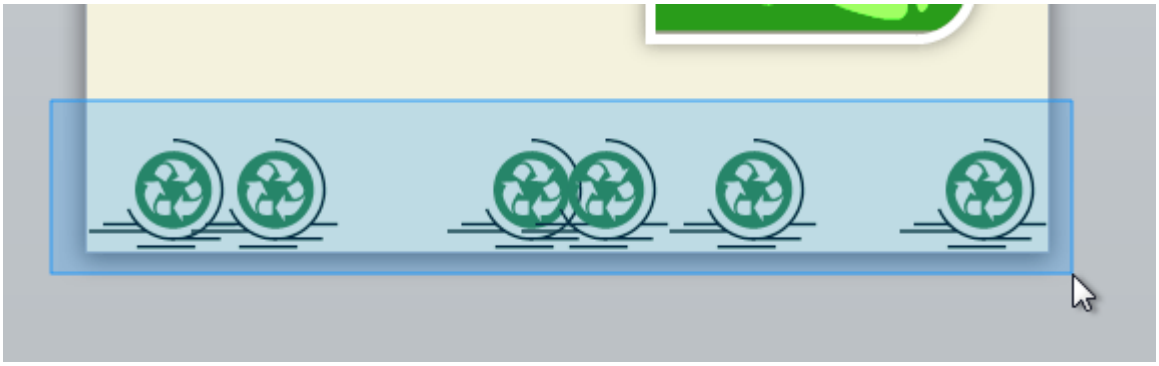
4. The objects will align to the slide based on the option you have selected.



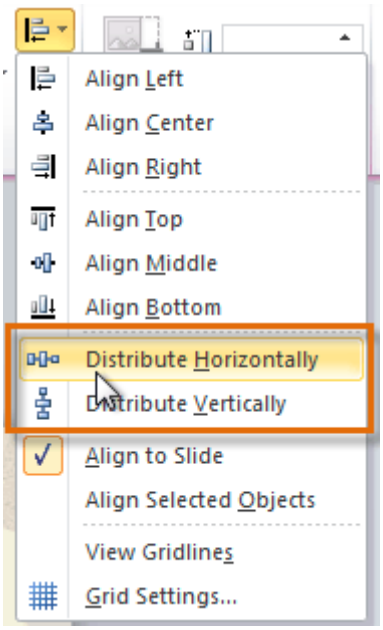
To distribute objects evenly:

If you have arranged 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. Click and drag your mouse to form a **selection box** around the objects you want to align. All of the objects will now have **sizing handles** to show that they are selected.



2. From the **Format** tab, click the **Align** command.
3. From the menu, select **Distribute Horizontally** or **Distribute Vertically**.



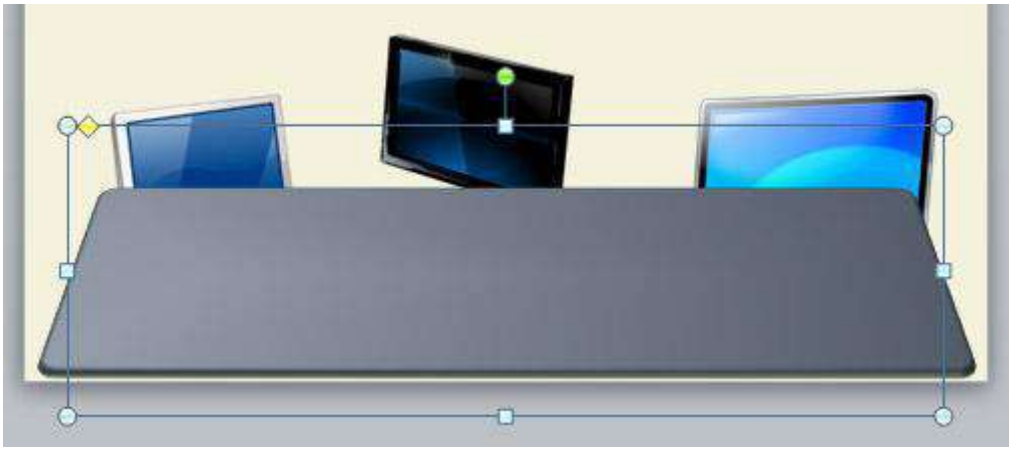
4. The objects will be distributed evenly.

Ordering and rotating objects

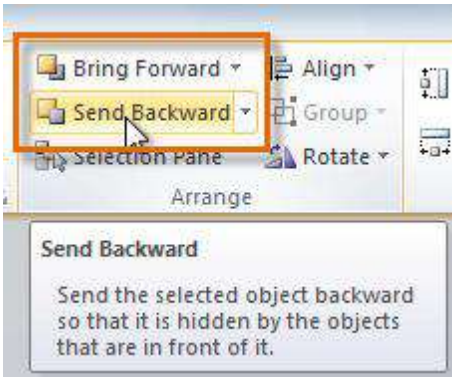
In addition to aligning and grouping objects, PowerPoint gives you the ability to **arrange objects** in a **specific order**. Ordering is important when two or more objects **overlap** because it will determine which objects are in the **front** or **back**.

To change the ordering by one level:

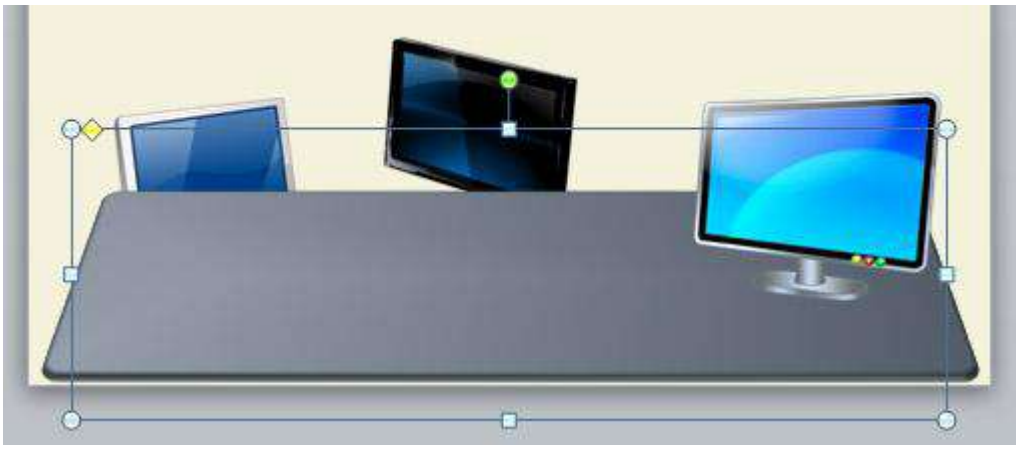
1. Select an object. The Format tab will appear.



2. From the **Format** tab, click the **Bring Forward** or **Send Backward** command to change the object's ordering by **one level**. If the object overlaps with more than one other object, you may need to click the command **several times** to achieve the desired ordering.



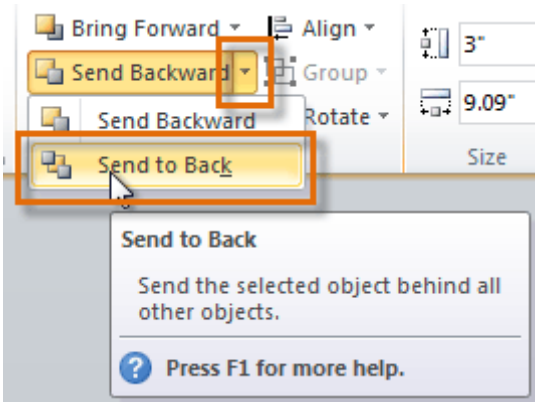
3. The objects will reorder.



To bring an object to the front or back:

If you want to move an object behind or in front of several objects, it's usually faster to **bring it to front** or **send it to back** rather than clicking the ordering commands multiple times.

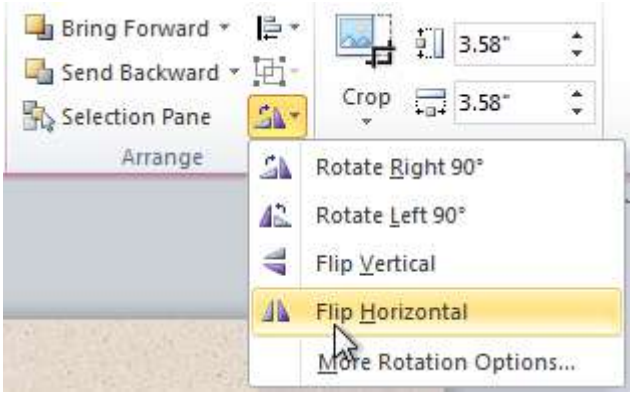
1. Select an object. The Format tab will appear.
2. From the **Format** tab, click the **Bring Forward** or **Send Backward** drop-down box.
3. From the drop-down menu, select **Bring to Front** or **Send to Back**.



4. The objects will reorder.

*To **rotate** an object:*

1. Select an object. The Format tab will appear.
2. From the **Format** tab, click the **Rotate** command. A drop-down menu will appear.
3. Select the desired **rotation option**.



4. The object in the slide will rotate.

Grouping objects

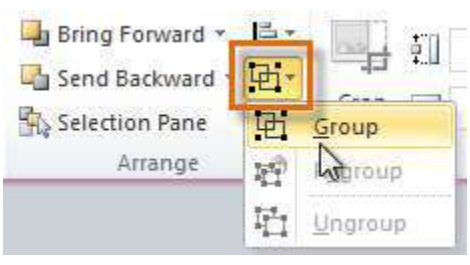
Sometimes you may want to **group** multiple objects into **one object** so they will stay together if they are moved. Often, this is easier than selecting all of the objects every time you want to move them.

Pictures, shapes, clip art, and text boxes can all be grouped together, but **placeholders** cannot be grouped. Therefore, make sure not to insert your pictures into placeholders if you will be grouping the pictures.

To group objects:

1. Click and drag your mouse to form a **selection box** around the objects you want to align. All of the objects will now have **sizing handles** to show that they are selected.

2. From the **Format** tab, click the **Group** command, then select **Group**.

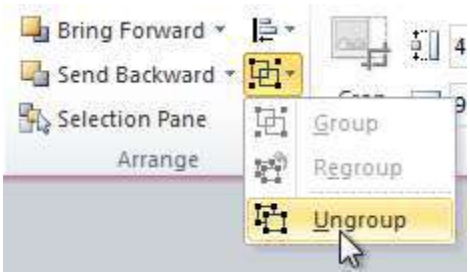


3. The selected objects will now be grouped. There will be a **single box with sizing handles** around the entire group to show that they are one object.

If you select the objects and the **Group** command is disabled, it may be because one of the objects is inside a **placeholder**. If this happens, try **reinserting** the images or **cutting** and **pasting** them into the same slide outside of any placeholders.

To ungroup objects:

1. Select the grouped object you want to ungroup.
2. From the **Format** tab, click the **Group** command, then select **Ungroup**.



3. The objects will be ungrouped.

7. **Applying Transitions:**
   Transitions are motion effects that when in Slide Show view add movement to your

slides as you advance from one slide to another. There are many transitions to choose from, each one of which allows you to control the speed and even add sound.

Applying transitions

If you've ever seen a PowerPoint presentation that had **special effects** between each slide, you've seen **slide transitions**. A transition can be as simple as fading to the next slide or as complex as a flashy, eye-catching effect. This means you can choose transitions to fit the style of any presentation.

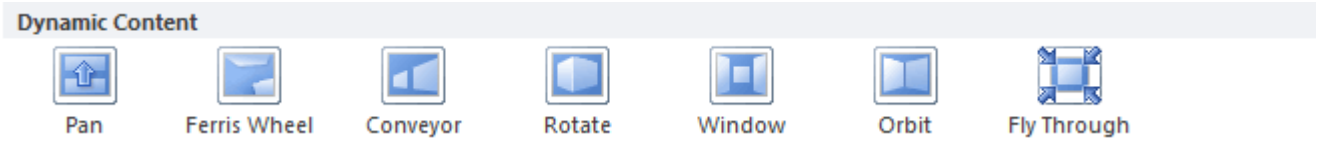
About transitions

There are **three categories** of unique transitions to choose from, all of which can be found on the **Transitions** tab:

- **Subtle** (slight transitions)

- **Exciting** (strong transitions)

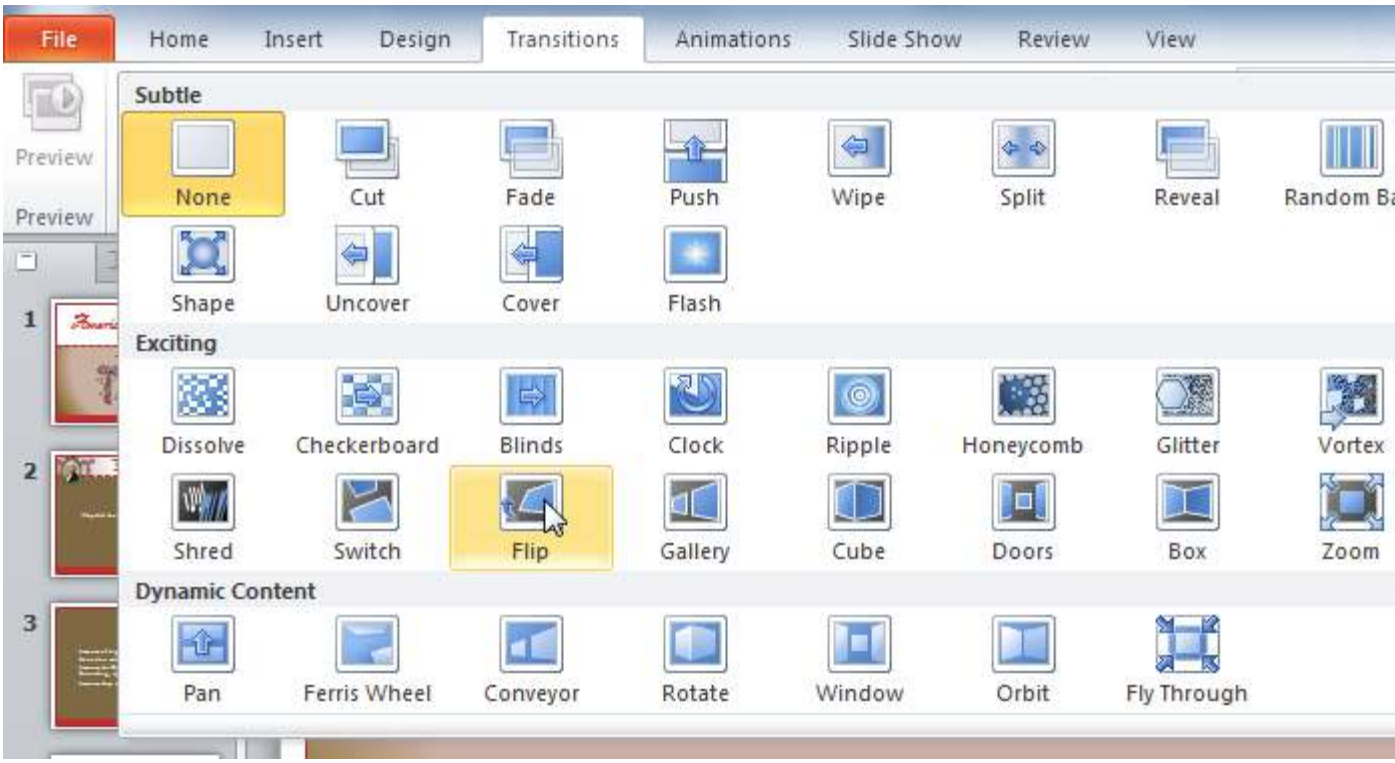
- **Dynamic Content** (strong transitions that affect only the content, such as text or images)



To apply a transition:

1. Select the **slide** you want to modify.
2. Click the **Transitions** tab.
3. Locate the **Transition to This Slide** group. By default, **None** is applied to each slide.

4. Click the **More** drop-down arrow to display all of the transitions.
5. Click a **transition** to apply it to the selected slide. This will automatically preview the transition as well.

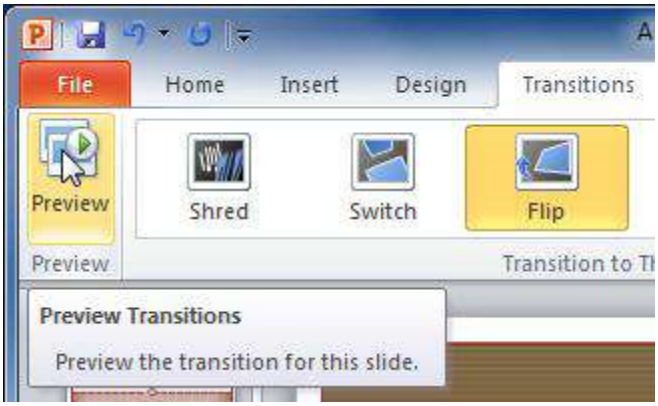


When working with transitions, the **Apply To All** command in the **Timing** group can be used at any time to make your presentation uniform. Use this command with caution. Not only does it apply the **same transition** to every slide, but it also applies the settings in the **Timing** group, which you may not want to be the same throughout your presentation.

To preview a transition:

You can **preview** the transition for a selected slide at any time, using either of these two methods:

- Click the **Preview** command on the **Transitions** tab.

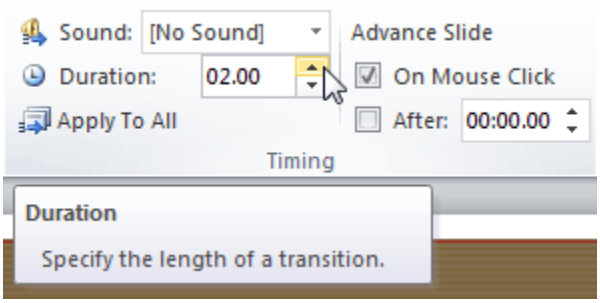


- Click the star **Play Animations** icon. The icon appears on the **Slides** tab in the **left pane** beside any slide that includes a transition.

Modifying transitions

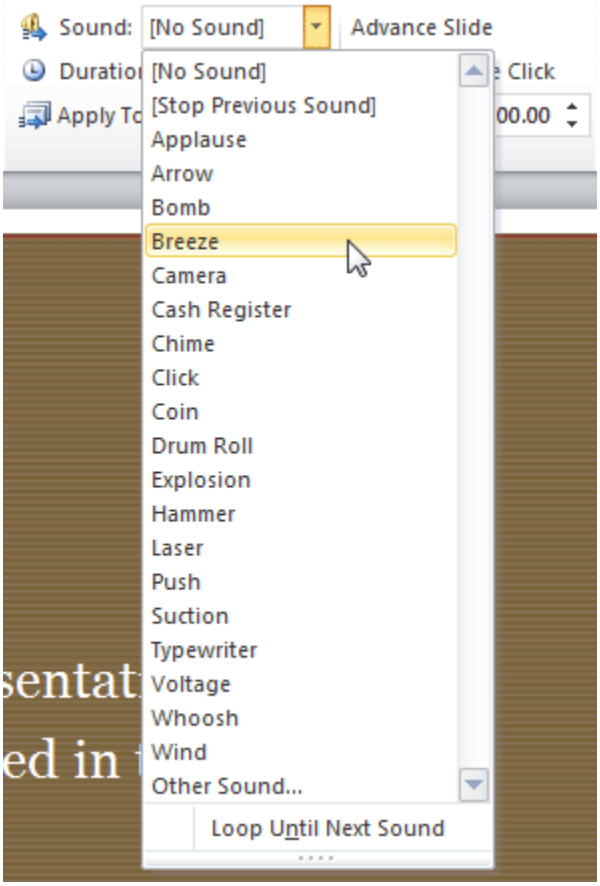
To modify the duration:

1. Select the slide that includes the **transition** you want to modify.
2. In the **Duration** field in the **Timing** group, enter the amount of time you want the transition to take. In this example, we will specify the length as 2 seconds, or 02.00.



To add sound:

1. Select the slide that includes the **transition** you want to modify.
2. Click the **Sound** drop-down menu in the **Timing** group.
3. You will hear the sound and see a live preview of the transition as you hover over each sound.



4. Click a **sound** to apply it to the selected slide.

To remove a transition:

1. Select the **slide** you want to modify.
2. Choose **None** from the gallery in the **Transition to This Slide** group.

3. Repeat this process for each slide you want to modify.

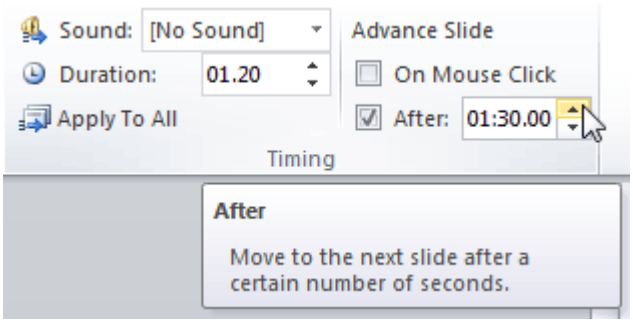
To remove transitions from **all slides**, select a slide that uses **None**, then click the **Apply to All** command.

Advancing slides

To advance slides automatically:

In Slide Show view, you would typically advance to the next slide by clicking your mouse or pressing Enter on your keyboard. Using the **Advance Slides** settings in the **Timing** group, you can set your presentation to advance on its own instead and display each slide for a specific amount of time. This is useful for unattended presentations, such as at a tradeshow booth.

1. Select the slide you want to modify.
2. Locate the **Timing** group on the **Transitions** tab.
3. Under **Advance Slide**, uncheck the box next to **On Mouse Click**.
4. In the **After** field, enter the amount of time you want to display the slide. In this example, we'll advance the slide automatically after 1 minute 30 seconds, or 01:30:00.



5. Select another slide, and repeat the process until all the desired slides have the appropriate timing.