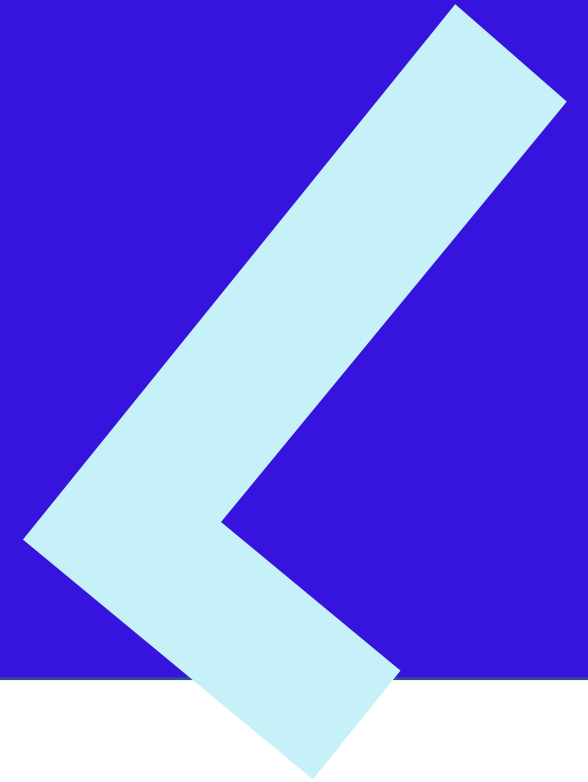




BOOST YOUR SKILLS IN **Microsoft Excel 365/2021**



Excel Chapter 4: Data Visualization and Images

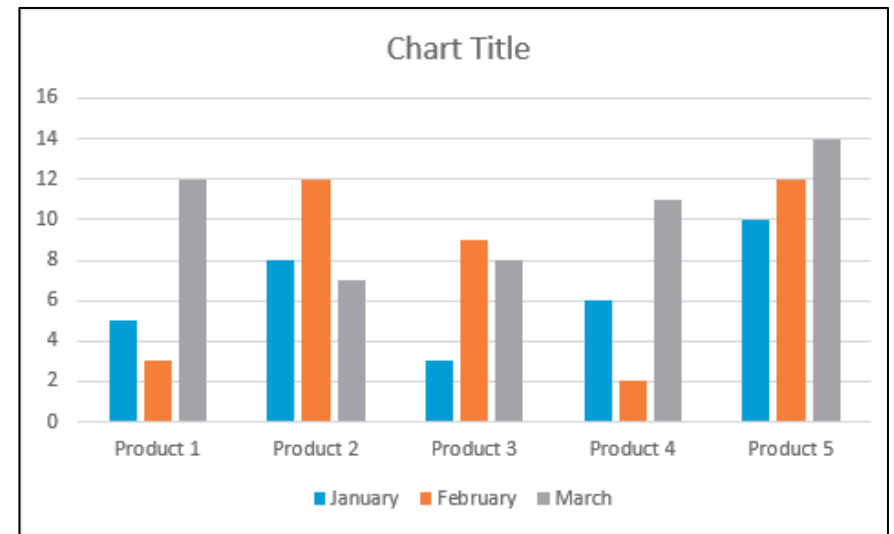
Learning Objectives

After studying this chapter, you will be able to:

- Insert charts
- Use chart tools to modify charts
- Move and size charts
- Edit chart data
- Add images to a worksheet
- Apply conditional formatting

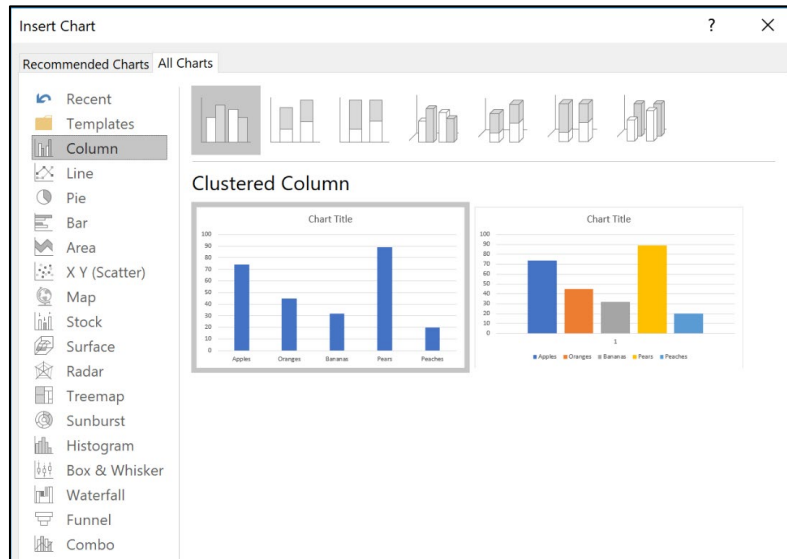
Create Charts to Compare Data

- Charts add a visual component to your data.
- Charts are linked to the data on which they are based.
- Like formulas, a chart automatically updates when the data on which it is based changes.



Choosing a Chart Type

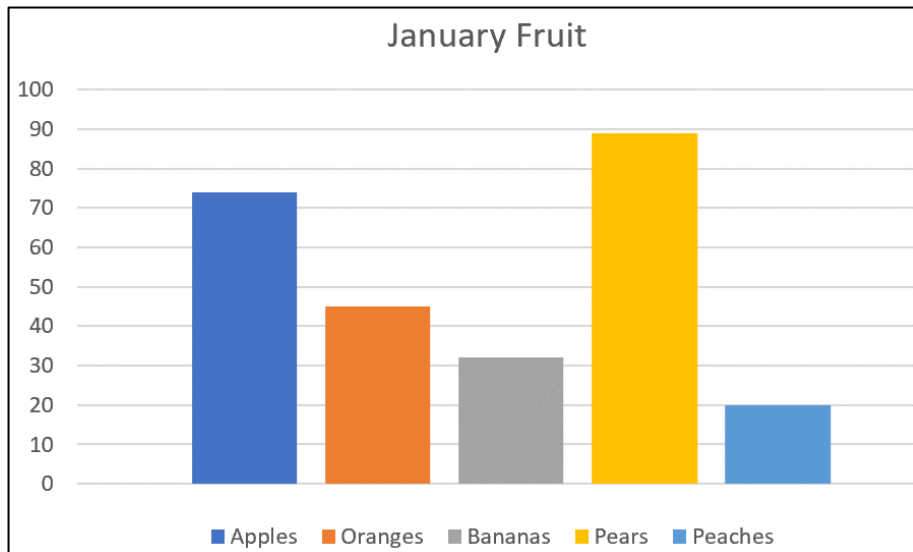
- Excel has many chart types with multiple variations.
- The purpose of a chart is to simplify data.
- The most common chart types are column/bar, line, and pie.



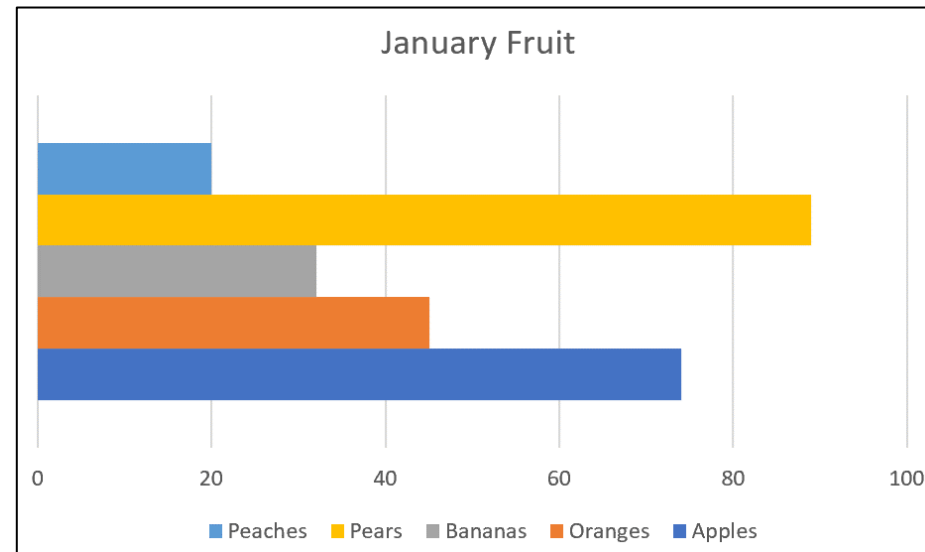
The Insert Chart dialog box will provide a recommendation based on your data or allow you to choose from all charts available.

Column Charts and Bar Charts

A column chart displays data in columns across the horizontal axis.

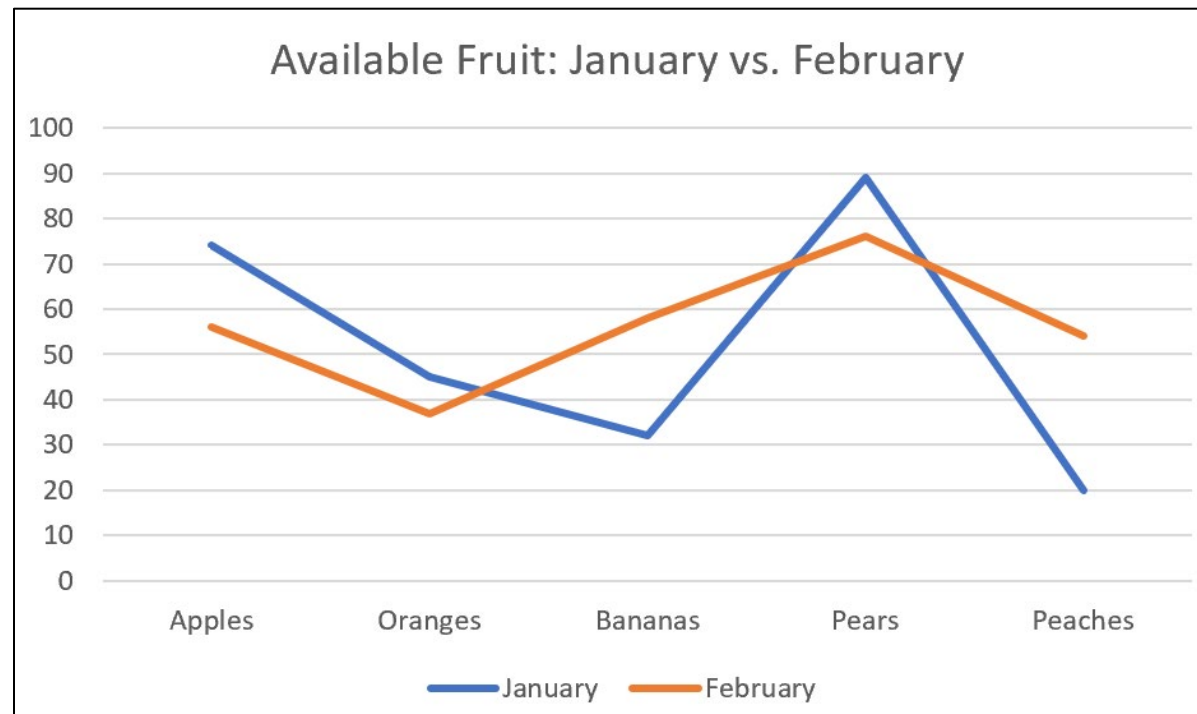


A bar chart displays data in bars across the vertical axis.



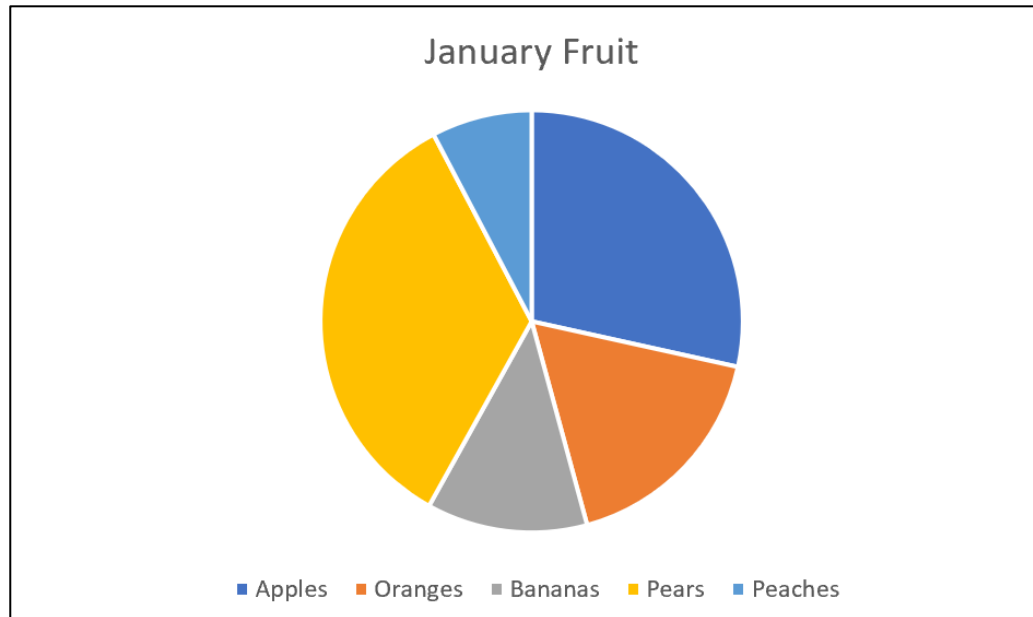
Line Charts

Line charts compare trends over a period of time.



Pie Charts

- Pie charts graphically display how parts contribute to a whole.
- Each pie wedge represents one of the categories that collectively make up the total.

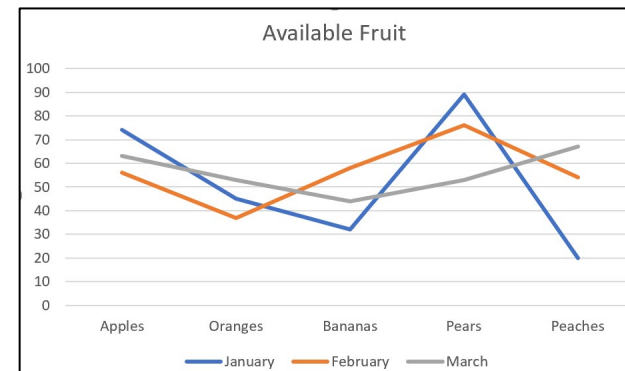


Selecting Chart Data

IMPORTANT! Select the correct data, including row and column headings, as the source for the chart.

Do not select the totals if you are comparing individual amounts.

Available Fruit			
	January	February	March
Apples	74	56	63
Oranges	45	37	53
Bananas	32	58	44
Pears	89	76	53
Peaches	20	54	67
Total	260	281	280



Note how skewed your data is when you select your totals as well.

Available Fruit			
	January	February	March
Apples	74	56	63
Oranges	45	37	53
Bananas	32	58	44
Pears	89	76	53
Peaches	20	54	67
Total	260	281	280

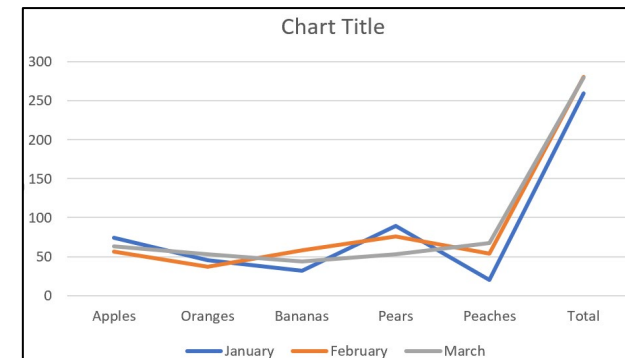
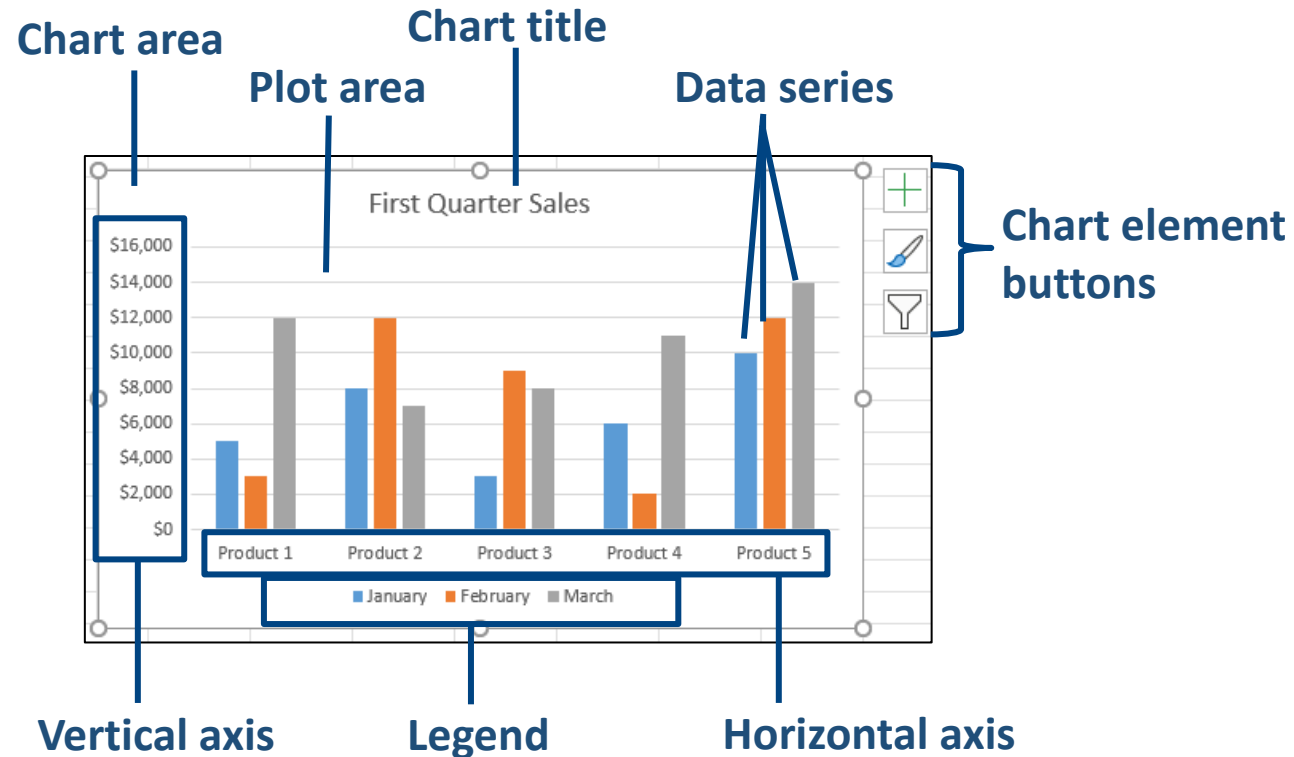


Chart Elements

You must first select an element before making changes.

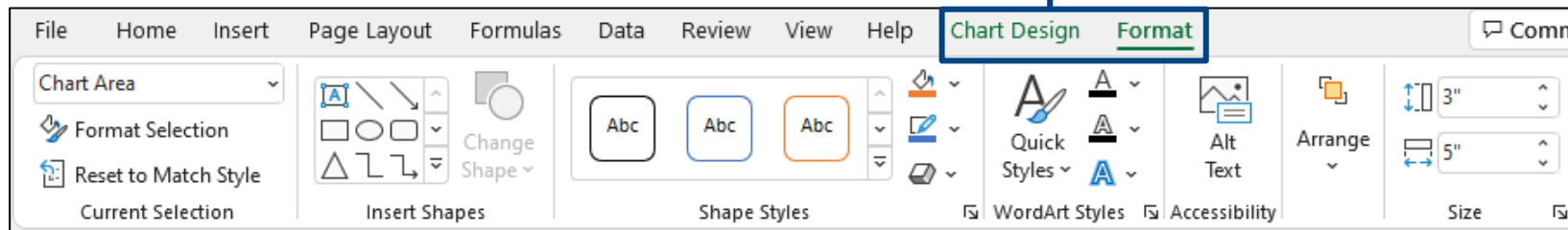


Working with Chart Tools

Chart tools appear on contextual tabs of the Ribbon, which only appear when a chart is selected.



The two contextual tabs that display chart tools.



Formatting Pane

What is displayed changes based on the element selected.

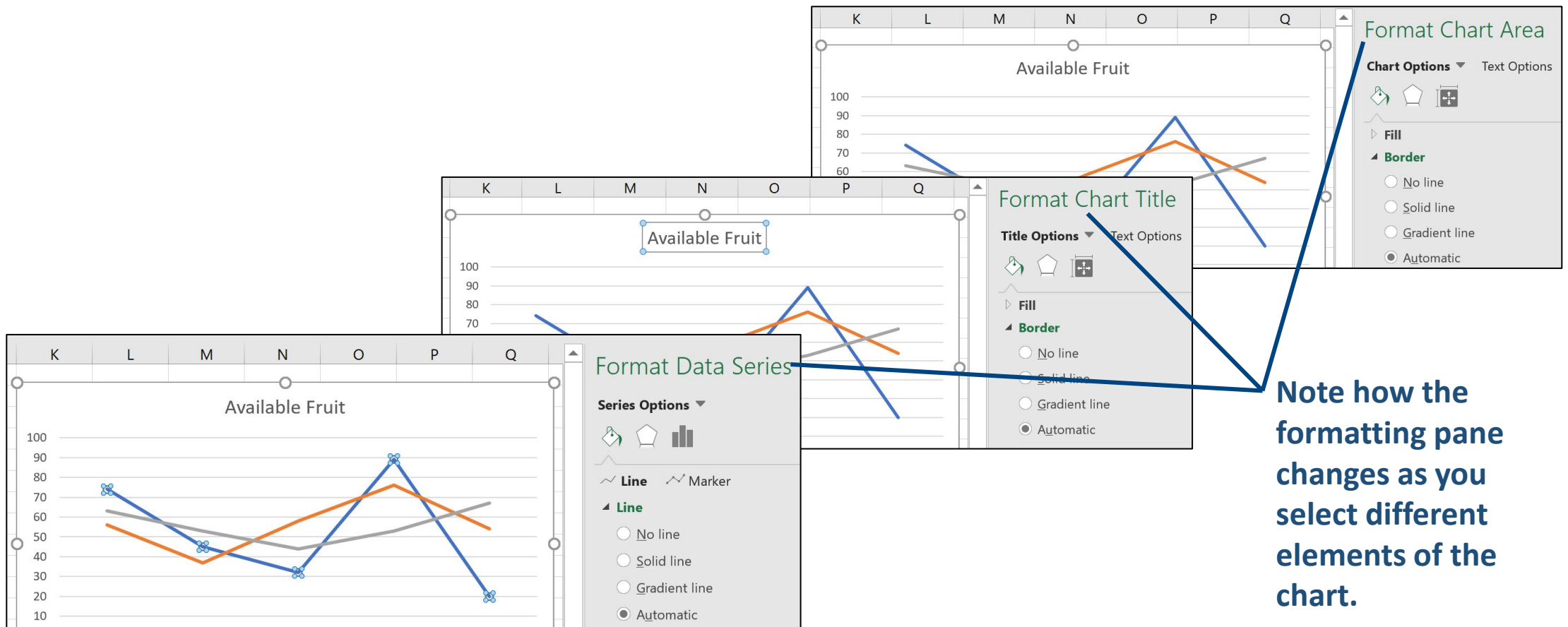
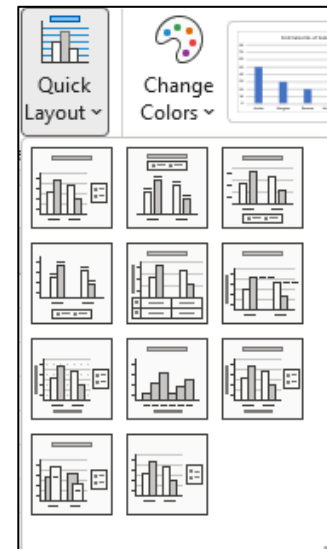


Chart Design Tools

- Chart Styles allow you to quickly change a chart's formatting.



- Quick Layout allows you to apply a new chart layout quickly.



The Chart Formatting Buttons

These allow you to add elements to your chart, change the style, or filter the chart's visible data.

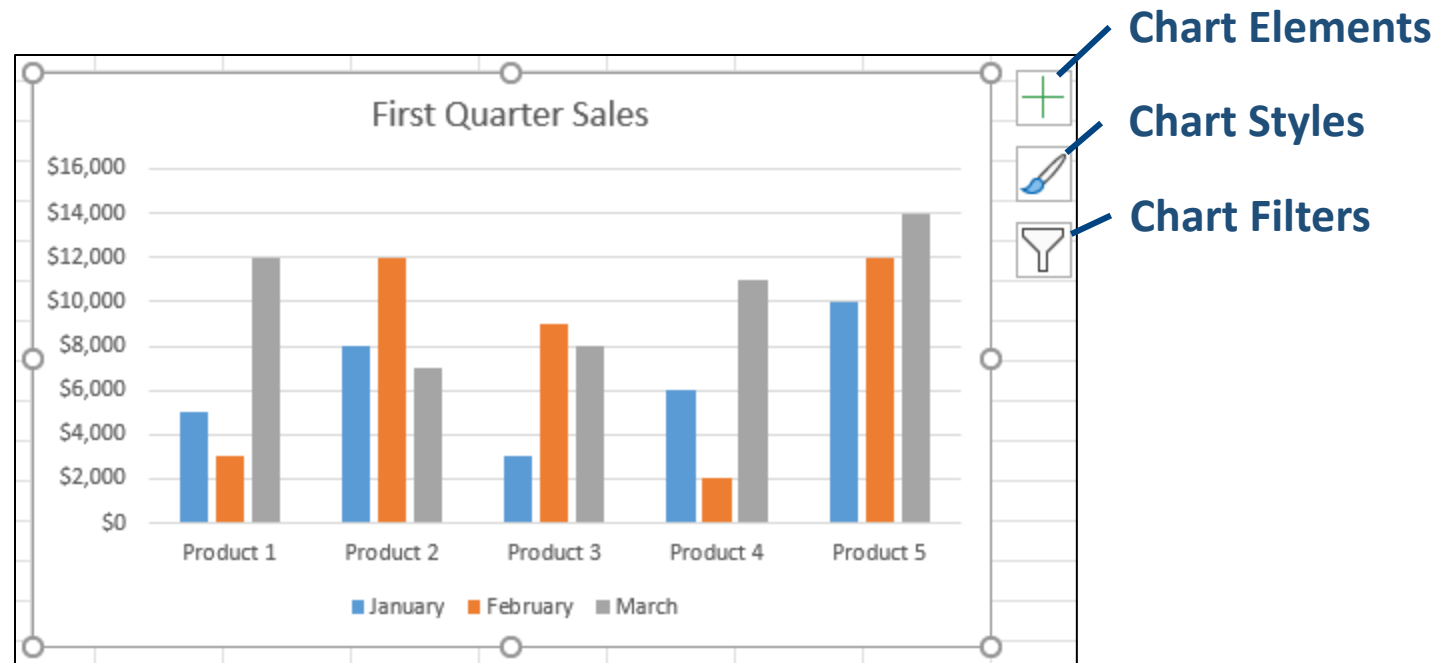
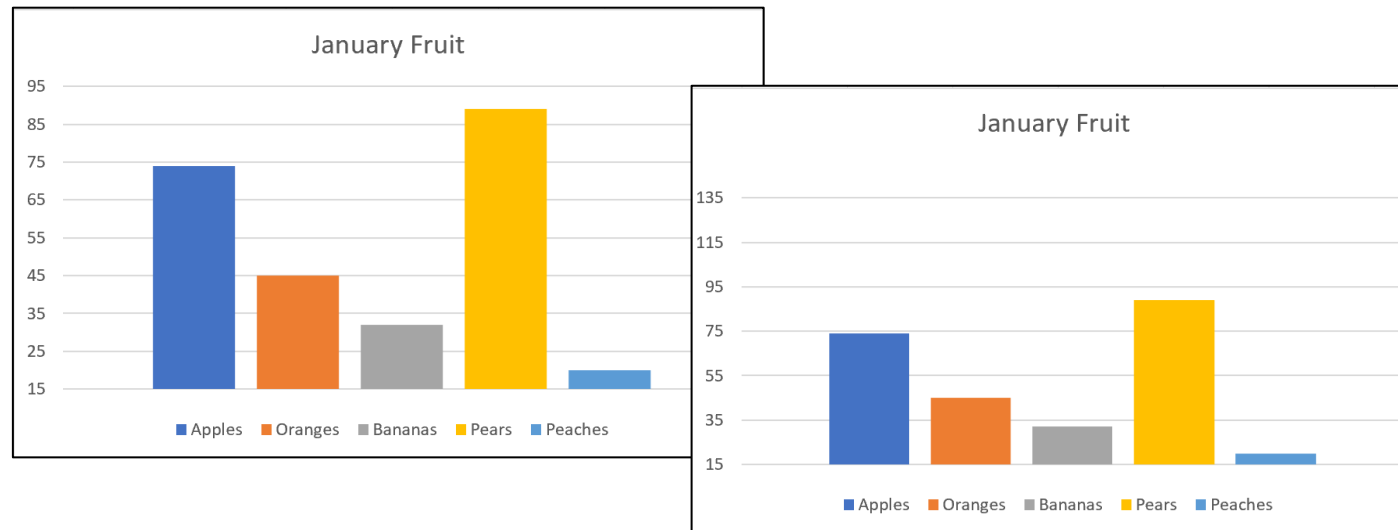


Chart Format Tools

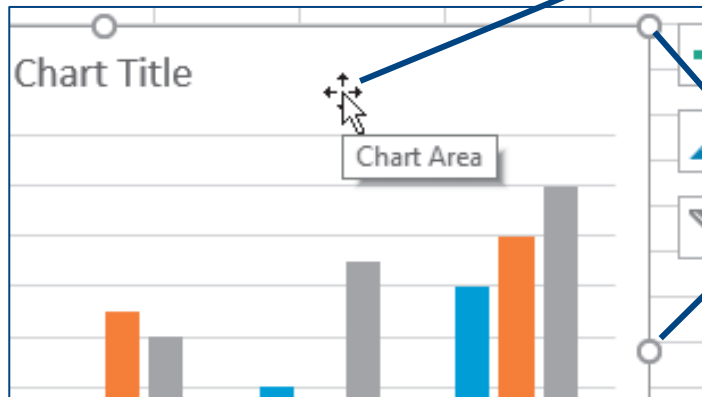
- You can modify specific chart elements with fill or outline colors, shapes, or WordArt.
- Axis Options
 - You can adjust minimum and maximum values.
 - You can change number formatting.



Move and Size Charts

Embedded charts can be moved around the worksheet and resized.

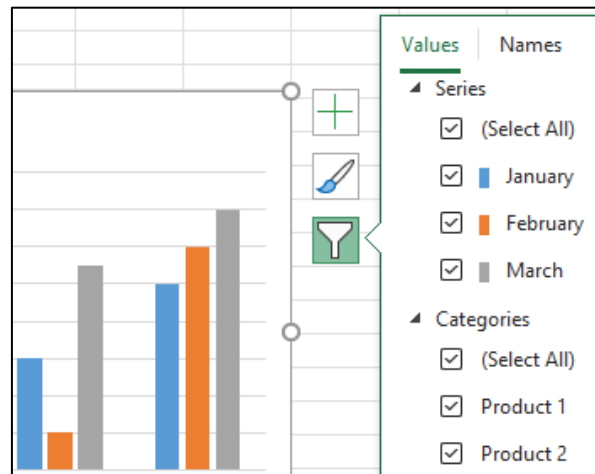
A mouse pointer in a chart area becomes a four-way arrow; drag it to move the chart.



Sizing handles are used to increase or decrease the chart size.

Edit Chart Data

- Charts update when the source data is changed.
- You can add or remove data series, points, or labels.
- You can swap Horizontal Axis and Legend categories.
- The Chart Filter feature controls what is displayed.



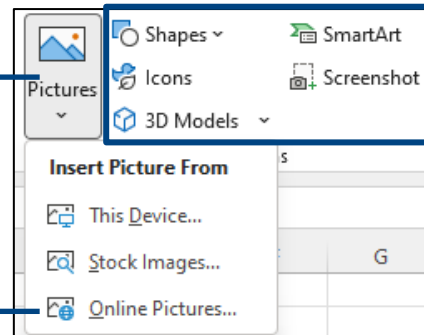
Check or uncheck series or categories to choose whether to show or hide them.

Add Images to a Worksheet

- You can draw a shape or add a picture from your computer or search online.

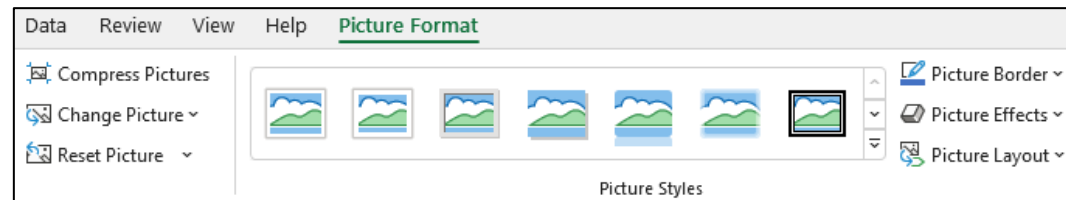
Add a picture saved on a computer

Browse for pictures online



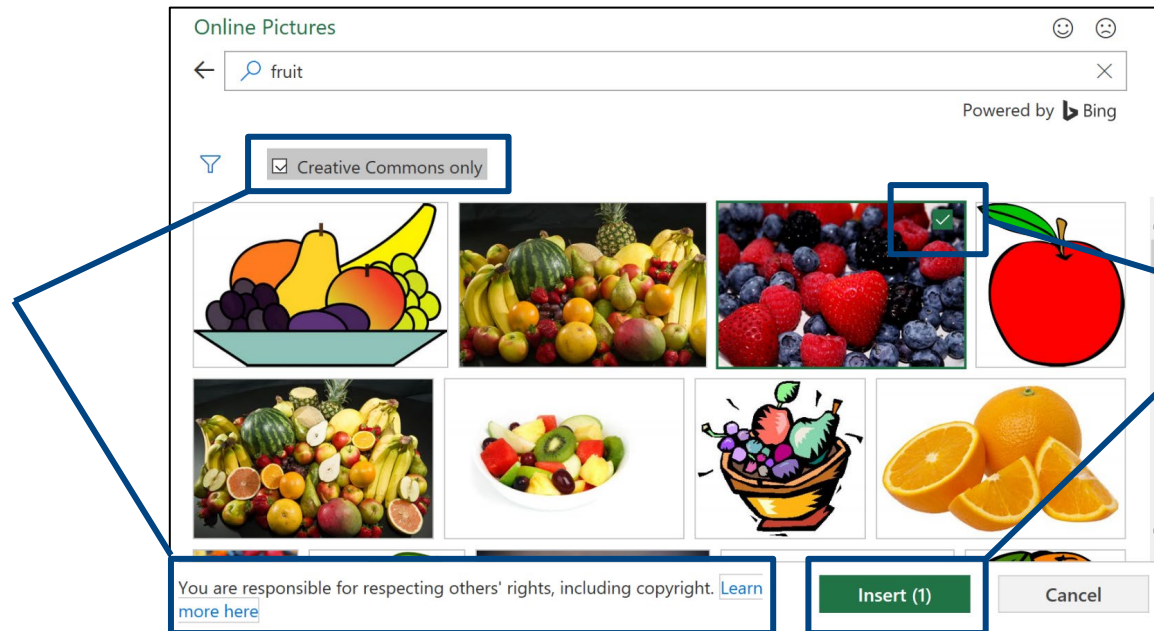
Add a shape, icon, 3-D object, SmartArt, or a screenshot

- When a picture or shape is selected, the Picture or Shape Format contextual tab appears.



Adding Online Pictures

When you use online images, you must make sure you are not violating another's copyright.



When you find an image to insert, click it and then click Insert.

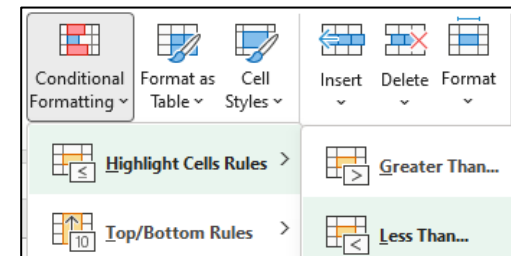
Conditional Formatting

Conditional formatting applies formatting based on set criteria so you can better visualize your data.

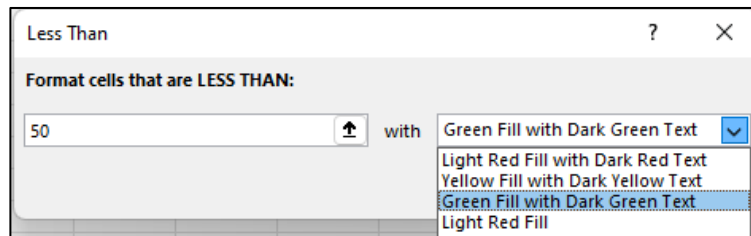
1. Select the data you wish to analyze.

	Available Fruit		
	January	February	March
Apples	74	56	63
Oranges	45	37	53
Bananas	32	58	44
Pears	89	76	53
Peaches	20	54	67
Total	260	281	280

2. Choose the rule to apply.



3. Set the rule specifics.



4. View the result.

	Available Fruit		
	January	February	March
Apples	74	56	63
Oranges	45	37	53
Bananas	32	58	44
Pears	89	76	53
Peaches	20	54	67
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