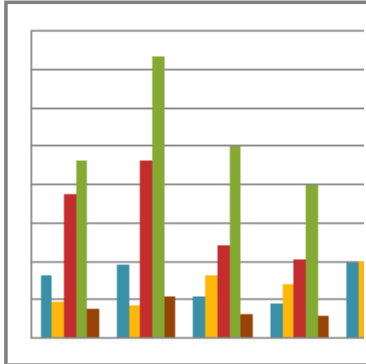# Introduction

A **chart** is a tool you can use in Excel to **communicate your data graphically**. Charts allow your audience to see the **meaning behind the numbers**, and they make showing **comparisons** and **trends** a lot easier. In this lesson, you will learn how to **insert** charts and **modify** them so that they communicate information effectively.

Charts

Excel workbooks can contain **a lot of data**, and that data can often be difficult to interpret. For example, where are the highest and lowest values? Are the numbers increasing or decreasing?

The answers to questions like these can become much clearer when the data is represented as a **chart**. Excel has many different types of charts, so you can choose one that most effectively represents the data.

>>> Watch the video to learn about creating and modifying a chart.

Watch the video (4:31). Need help?

Types of Charts

>>> Use the interactive below to view examples of some of the types of charts that are available in Excel.

Identifying the Parts of a Chart

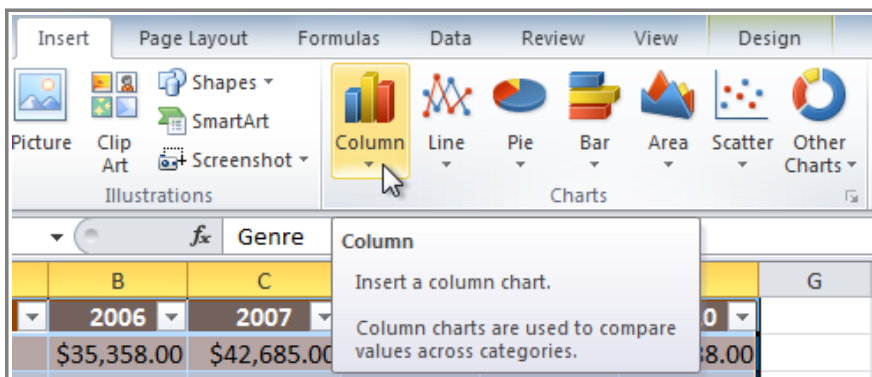>>> Use the interactive below to learn about the different parts of a chart.

To Create a Chart:

1. Select the **cells** that you want to chart, including the **column titles** and the **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						

Selecting cells

2. Click the **Insert** tab.
3. In the **Charts** group, select the desired **chart category** (Column, for example).

Insert	Page Layout	Formulas	Data	Review	View	Design

Picture Clip Art Shapes SmartArt Screenshot

Illustrations

Column Line Pie Bar Area Scatter Other Charts

Charts

fx Genre

Column

Insert a column chart.

Column charts are used to compare values across categories.

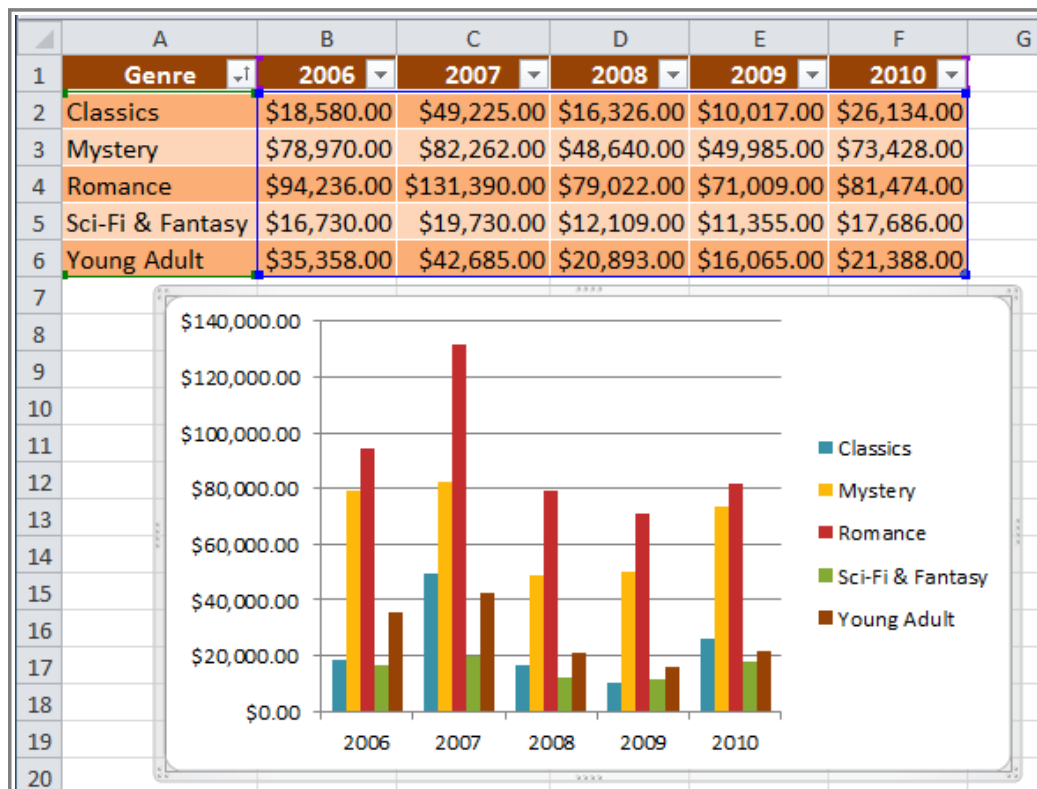|	B	C		G
	2006	2007	0	
	$35,358.00	$42,685.00	8.00	

Selecting the Column category

4. Select the desired **chart type** from the drop-down menu (Clustered Column, for example).
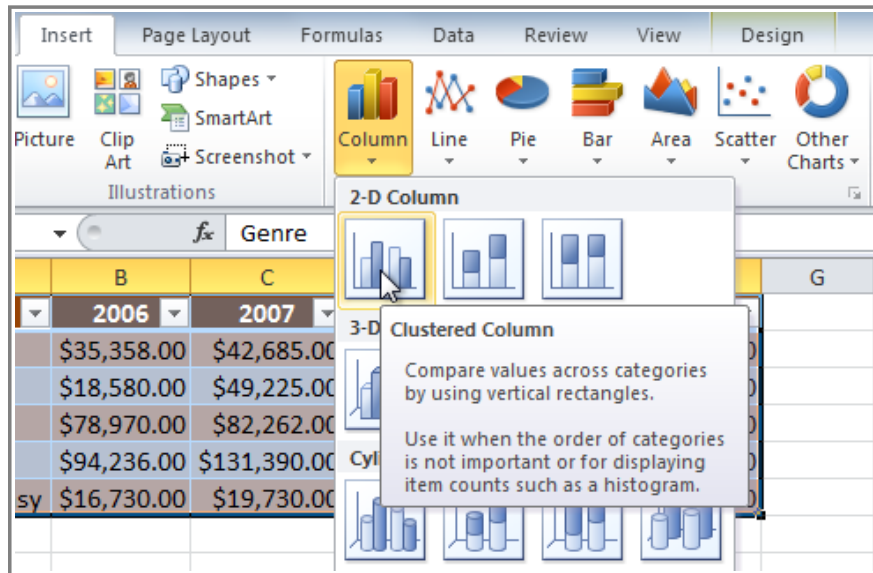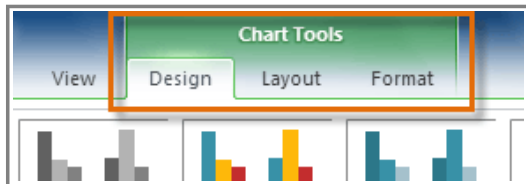
Selecting a chart type

5. The chart will appear in the worksheet.

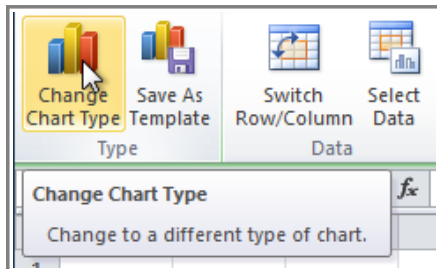*The new chart*

Chart Tools

Once you insert a chart, a set of **Chart Tools**, arranged into three tabs, will appear on the Ribbon. These are only visible when the chart is selected. You can use these three tabs to **modify** your chart.
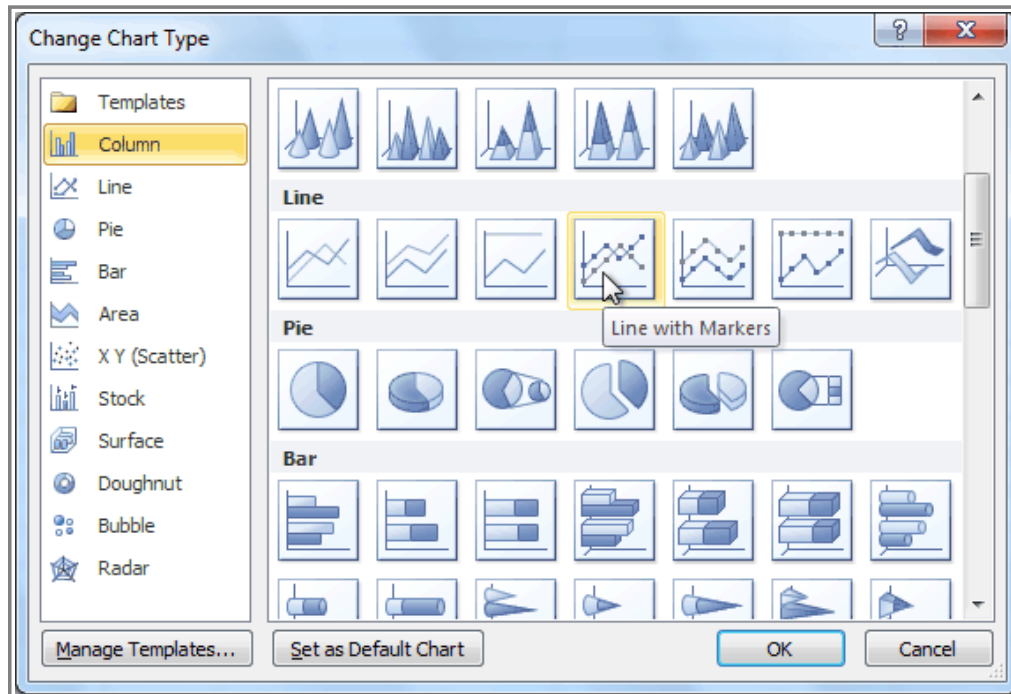

The Design, Layout and Format tabs

To Change the Chart Type:

1. From the **Design** tab, click the **Change Chart Type** command. A dialog box appears.

The Change Chart Type command

2. Select the desired **chart type** and click **OK**.

Selecting a chart type

To Switch Row and Column Data:

Sometimes when you create a chart, the data may not be grouped the way you want it to be. In the **clustered column chart** below, the Book Sales statistics are grouped **by Fiction/Non-Fiction**, with a column for each year. However, you can also **switch the row and column data** so that the chart will group the statistics **by year**, with columns for Fiction and Non-Fiction. In both cases, the chart contains the **same data**; it's just organized differently.
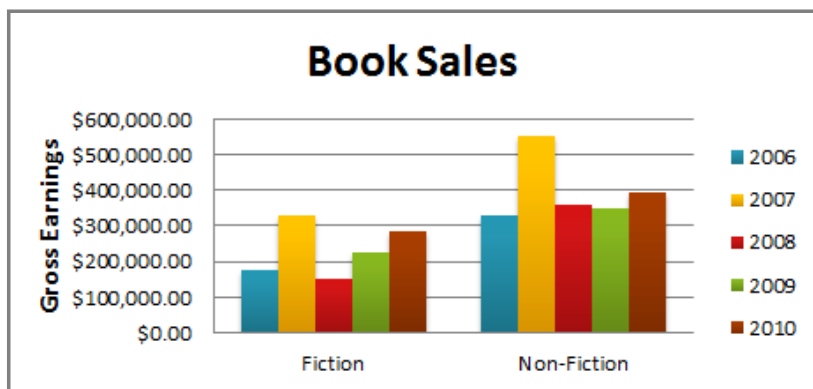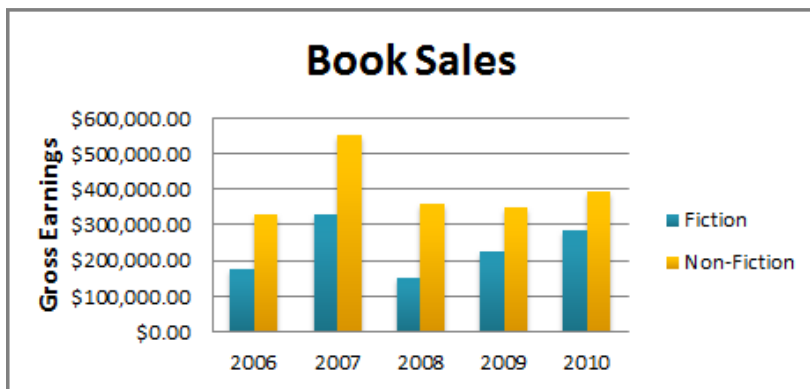

Book Sales, grouped by Fiction/Non-Fiction

1. Select the **chart**.
2. From the **Design** tab, select the **Switch Row/Column** command.
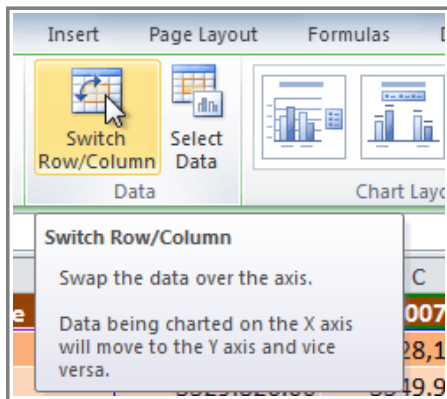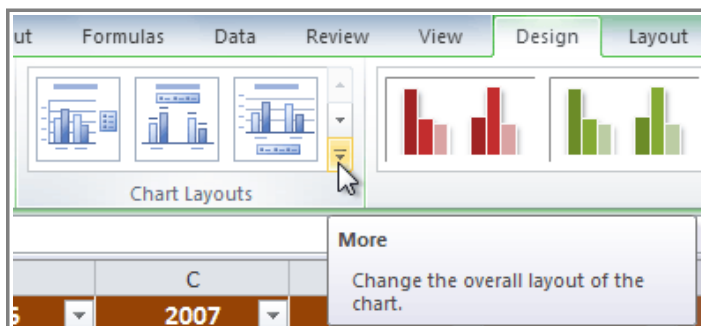
The Switch Row/Column command

3. The chart will then readjust.

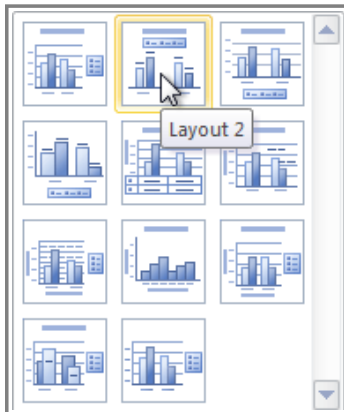

Book sales, grouped by year

To Change the Chart Layout:

1. Select the **Design** tab.
2. Click the **More** drop-down arrow in the **Chart Layouts** group to see all of the available layouts.
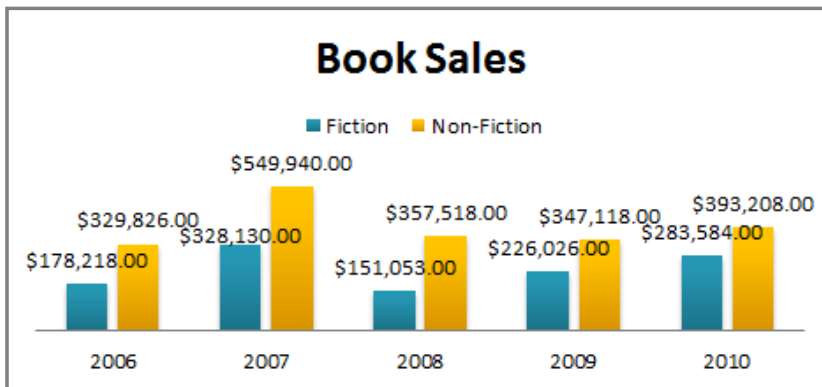

Viewing all of the chart layouts

3. Select the desired layout.

Selecting a chart layout

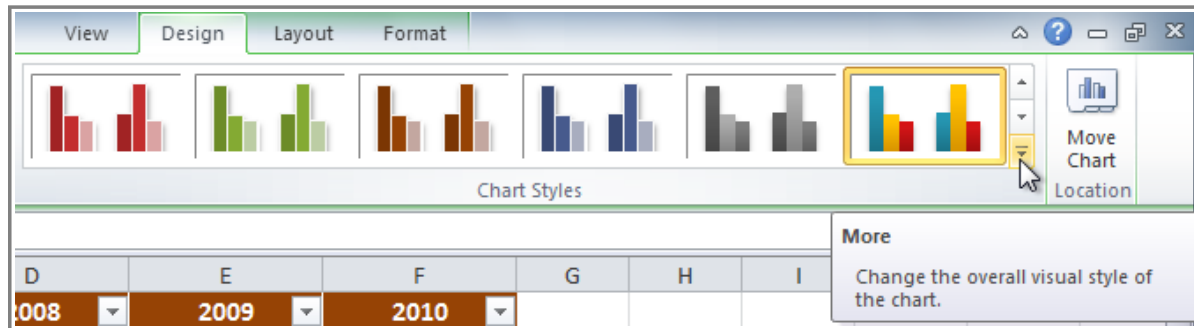4. The chart will update to reflect the new layout.

The updated layout

Some layouts include **chart titles**, **axes**, or **legend labels**. To change them, just place the **insertion point** in the text and begin typing.
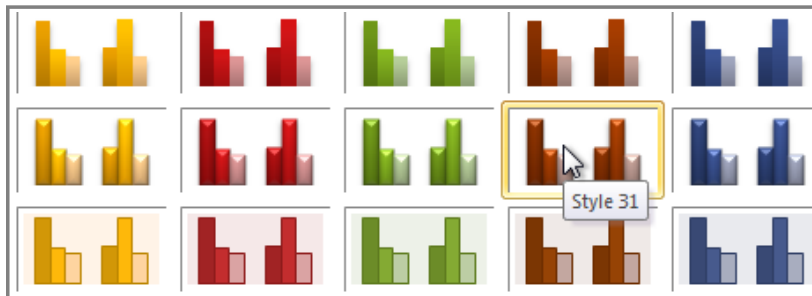
To Change the Chart Style:

1. Select the **Design** tab.
2. Click the **More** drop-down arrow in the **Chart Styles** group to see all of the available styles.
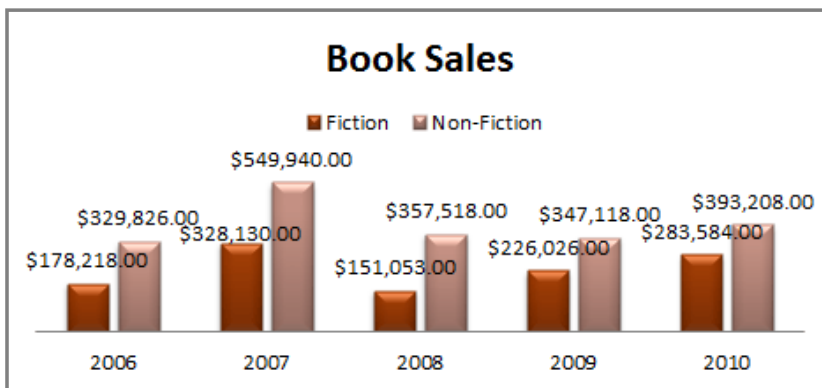
Viewing all of the Chart Styles

3. Select the desired style.

Style 31

Selecting a chart style
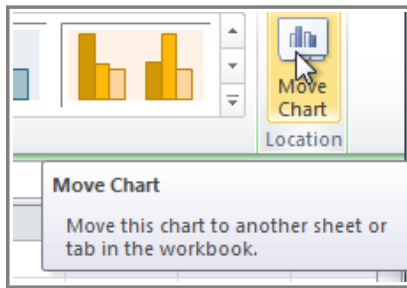
4. The chart will update to reflect the new style.

The updated chart
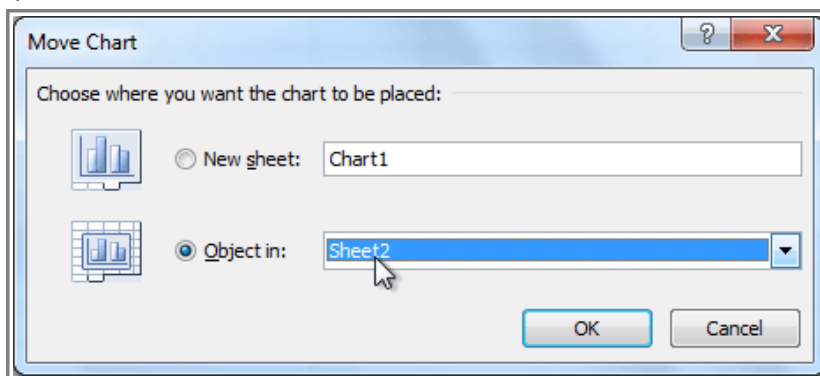
To Move the Chart to a Different Worksheet:

1. Select the **Design** tab.
2. Click the **Move Chart** command. A dialog box appears. The current location of the chart is selected.

The Move Chart command

3. Select the desired location for the chart (i.e., choose an existing worksheet, or select New Sheet and name it).

Selecting a different worksheet for the chart

4. Click **OK**. The chart will appear in the new location.

Challenge!

1. Open an **existing Excel workbook**. If you want, you can use this example.
2. Use worksheet data to create a **chart**.
3. Change the **chart layout**.
4. Apply a **chart style**.
5. Move the chart to a **different worksheet**.