Introduction

It can often be difficult to interpret Excel workbooks that contain a lot of data. **Charts**allow you to illustrate your workbook data **graphically,** which makes it easy to visualize **comparisons** and **trends**.
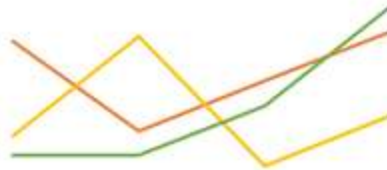
Download and open "Excel Charts Activity.xls".

Understanding charts

Excel has several different **types of charts**, allowing you to choose the one that best fits your data. In order to use charts effectively, you'll need to understand how different charts are used.

Click the arrows in the slideshow below to learn more about the types of charts in Excel.
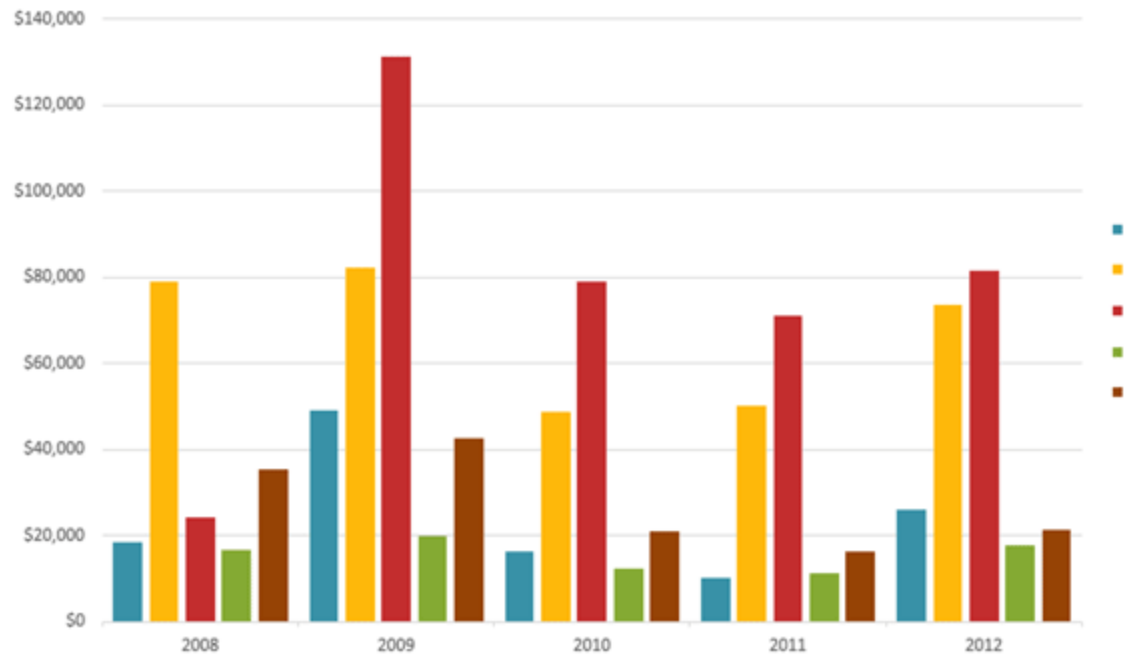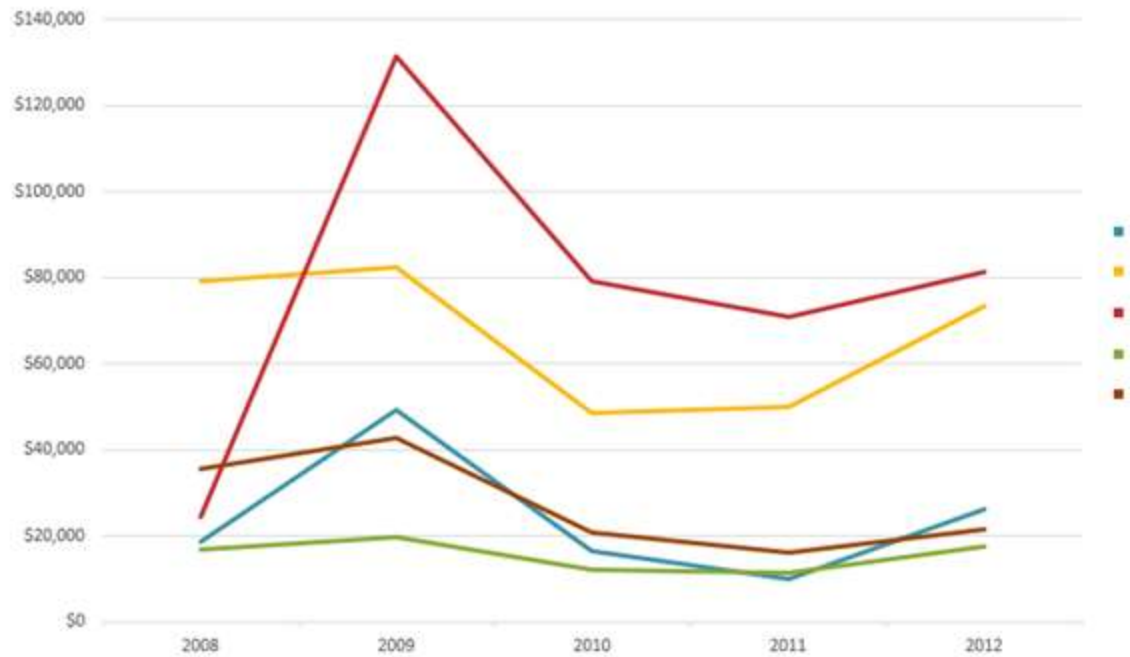
Types of Charts

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Excel has a variety of chart types, each with its own advantages. Click the arrows to see some of the different types of charts available in Excel.
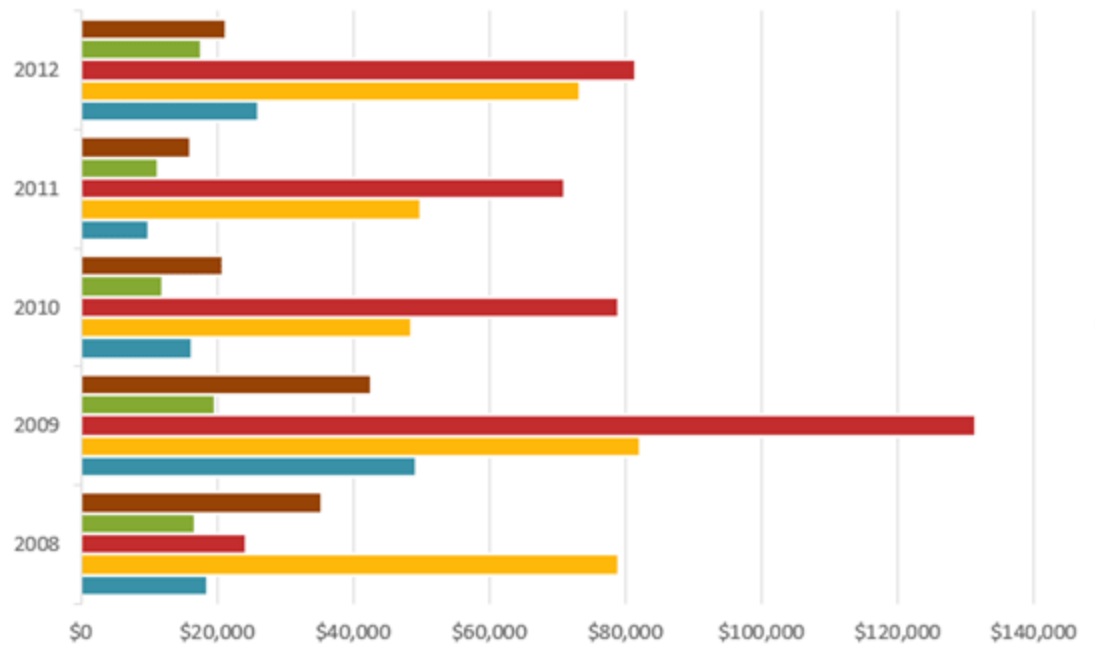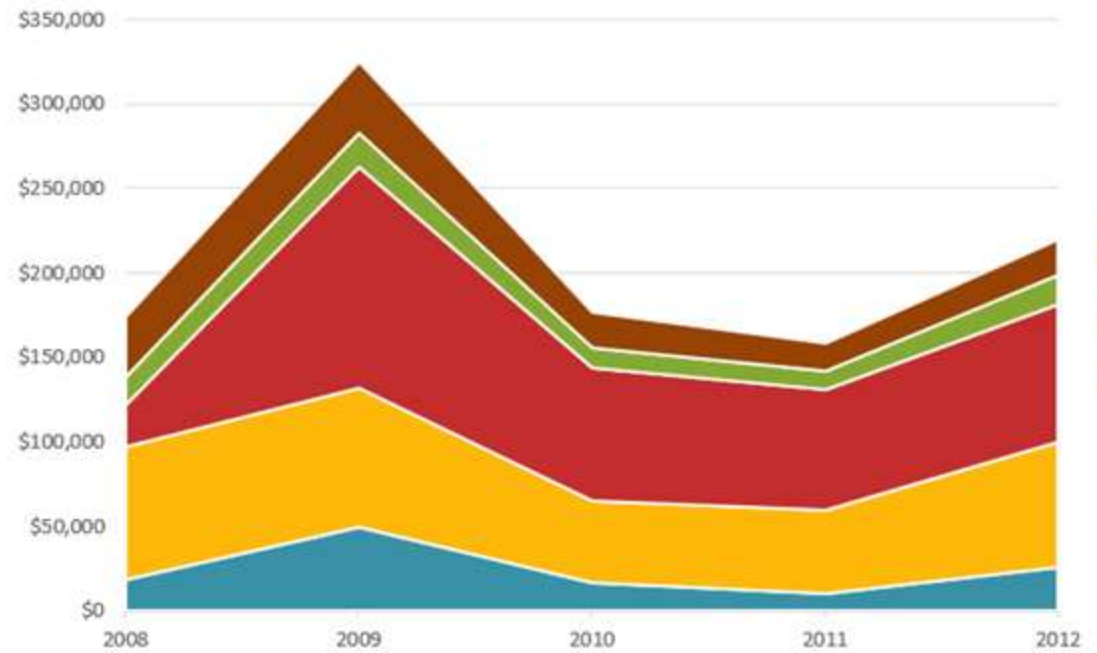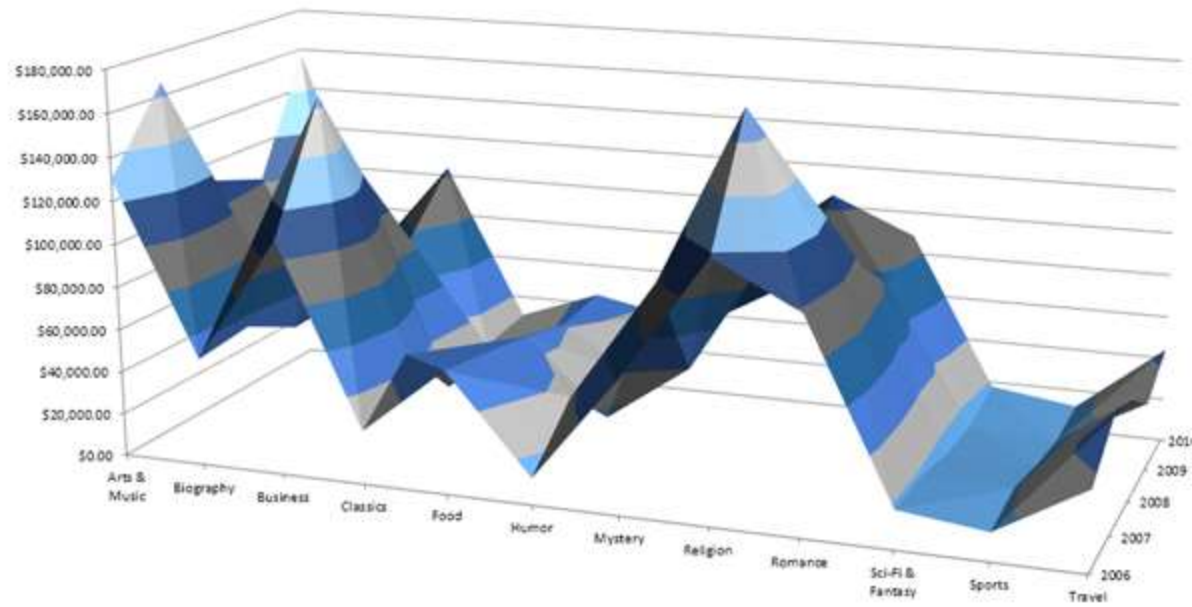
Column

Line

Pie

- Classics, $18,580
- Mystery, $78,970
- Romance, $24,236
- Sci-Fi & Fantasy, $16,730
- Young Adult, $35,358

Bar

Area
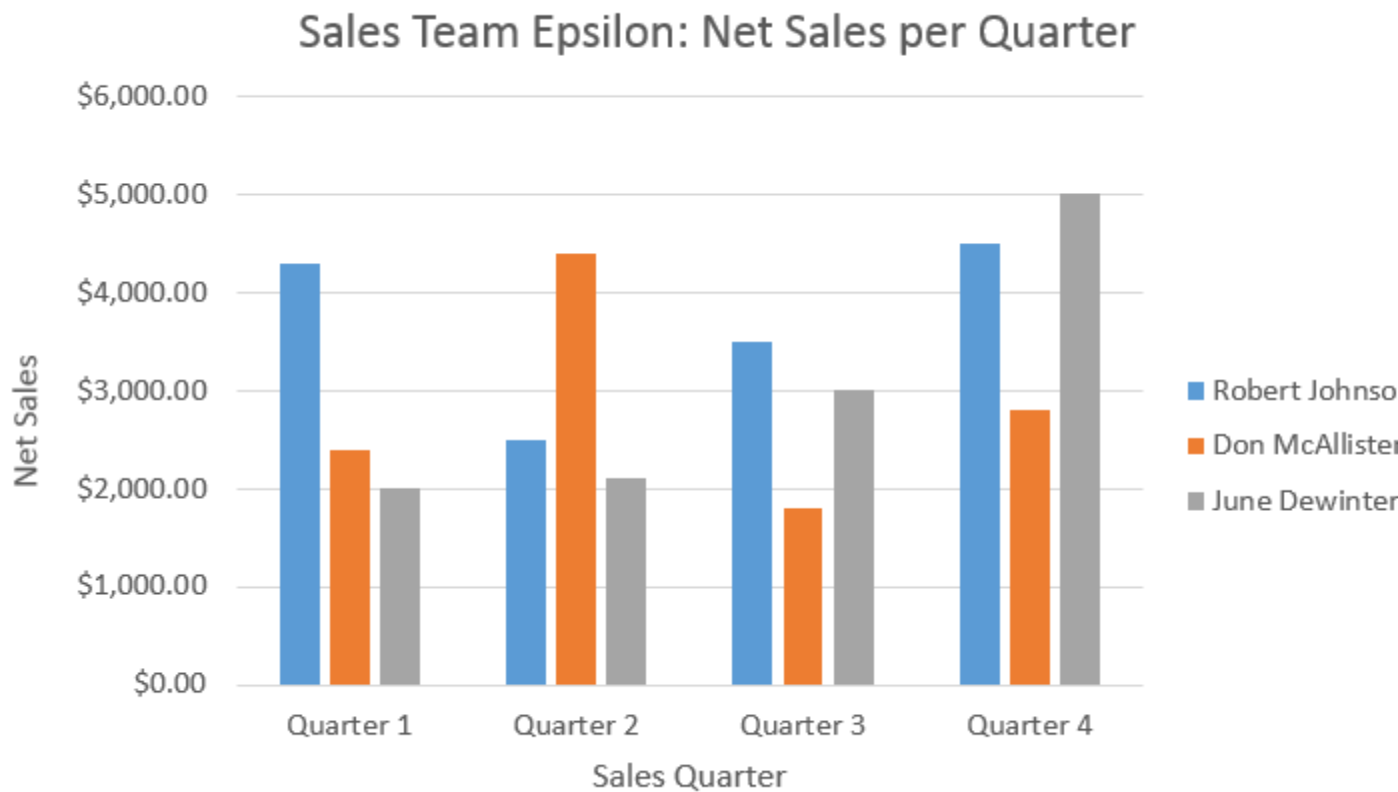
Surface

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- **1**
- **2**
- **3**
- **4**
- **5**
- **6**
- **7**
- **8**

In addition to chart types, you'll need to understand how to **read a chart**. Charts contain several different elements, or parts, that can help you interpret the data.

Click the buttons in the interactive below to learn about the different parts of a chart.

Sales Team Epsilon: Net Sales per Quarter
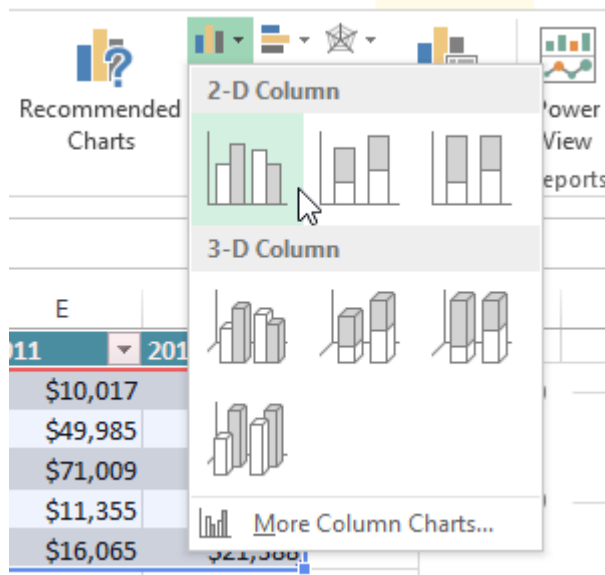
To insert a chart:

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. In our example, we'll select cells A1:F6.

|	A	B	C	D	E	F	G
1	Genre	2008	2009	2010	2011	2012	
2	Classics	$18,580	$49,225	$16,326	$10,017	$26,134	
3	Mystery	$78,970	$82,262	$48,640	$49,985	$73,428	
4	Romance	$24,236	$131,390	$79,022	$71,009	$81,474	
5	Sci-Fi & Fantasy	$16,730	$19,730	$12,109	$11,355	$17,686	
6	Young Adult	$35,358	$42,685	$20,893	$16,065	$21,388	
7							
8							

2. From the **Insert** tab, click the desired **Chart** command. In our example, we'll select **Column**.
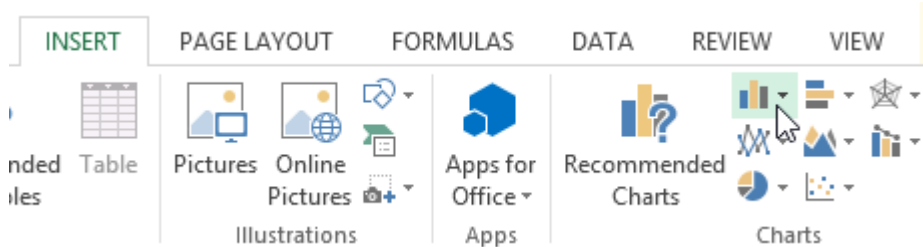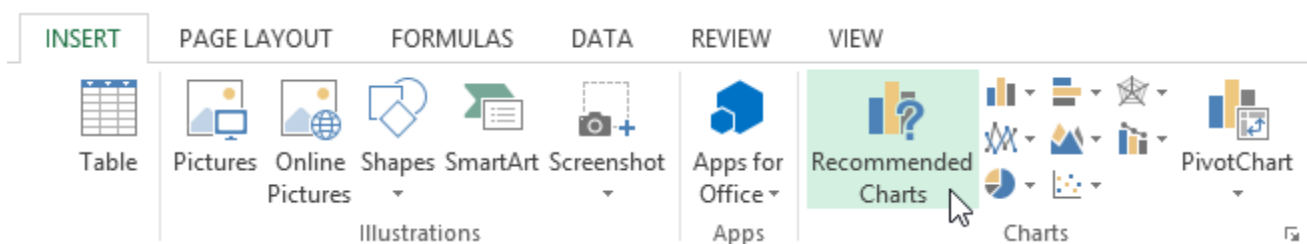
3. Choose the desired **chart type** from the drop-down menu.

4. The selected chart will be inserted in the worksheet.
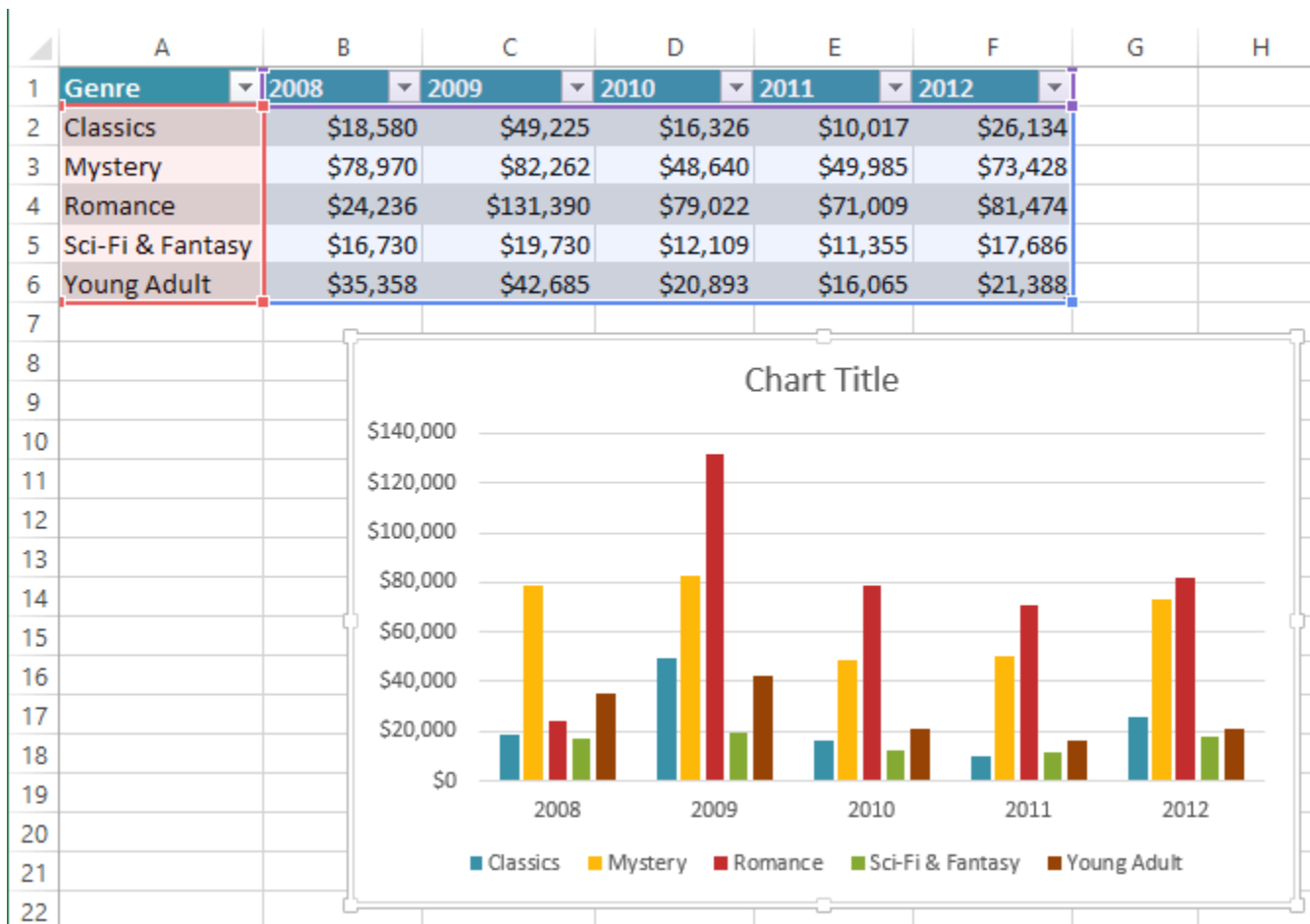
If you're not sure which type of chart to use, the **Recommended Charts** command will suggest several different charts based on the source data.


Chart layout and style

After inserting a chart, there are several things you may want to change about the way your data is displayed. It's easy to edit a chart's **layout** and **style** from the **Design** tab.

- Excel allows you to add **chart elements**—such as **chart titles**, **legends**, and **data labels**—to make your chart easier to read. To add a chart element, click the **Add Chart Element** command on the **Design** tab, then choose the **desired element** from the drop-down menu.
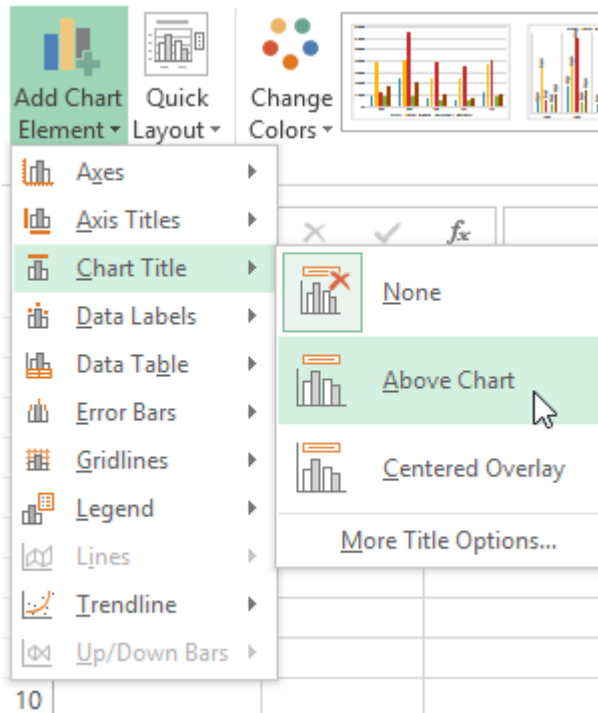

- To **edit** a chart element, like a **chart title,** simply double-click the **placeholder** and begin typing.
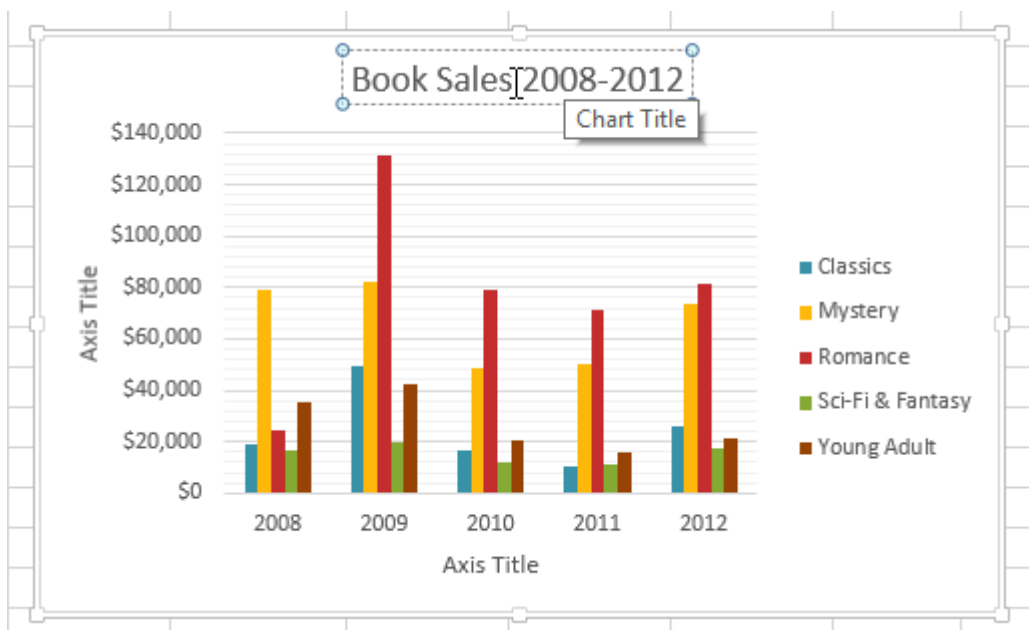
- If you don't want to add chart elements individually, you can use one of Excel's predefined layouts. Simply click the **Quick Layout** command, then choose the **desired layout** from the drop-down menu.
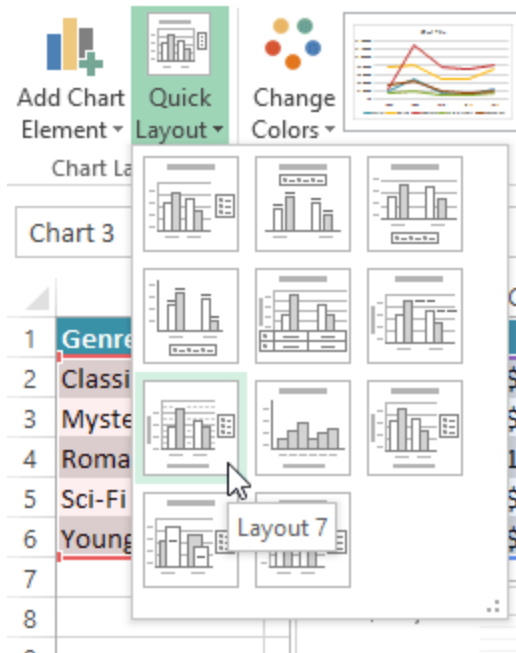
- Excel also includes several different **chart styles**, which allow you to quickly modify the look and feel of your chart. To change the chart style, select the **desired style** from the **Chart styles** group.
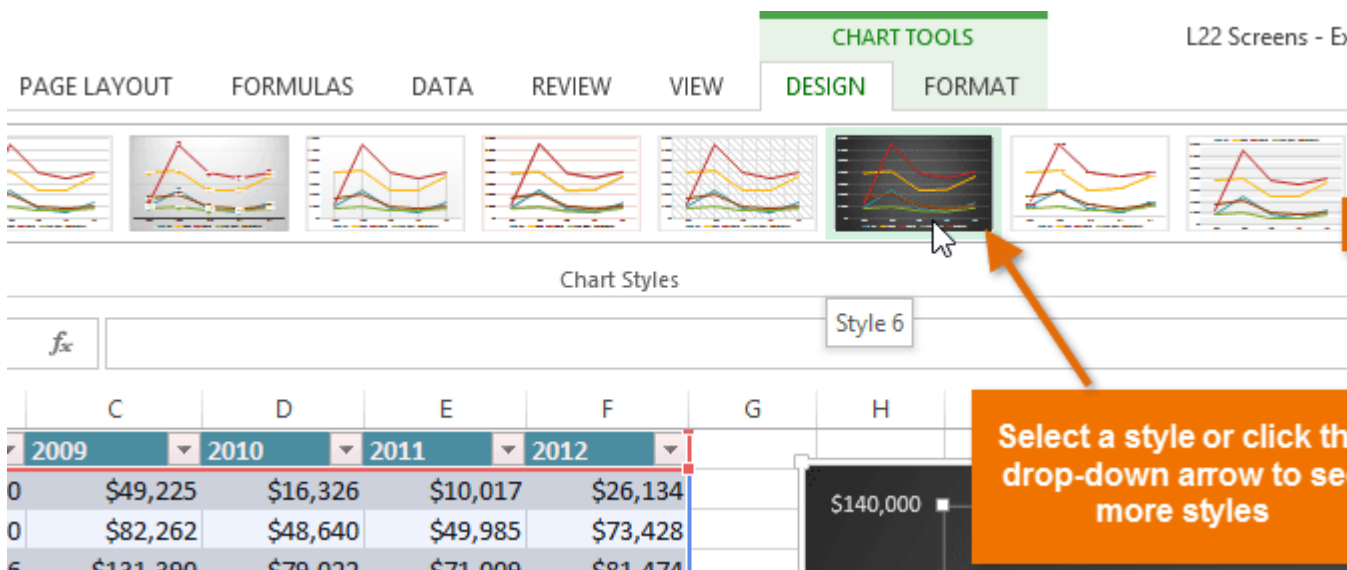
You can also use the chart formatting shortcut buttons to quickly **add chart elements**, change the **chart style**, and **filter** the chart data.
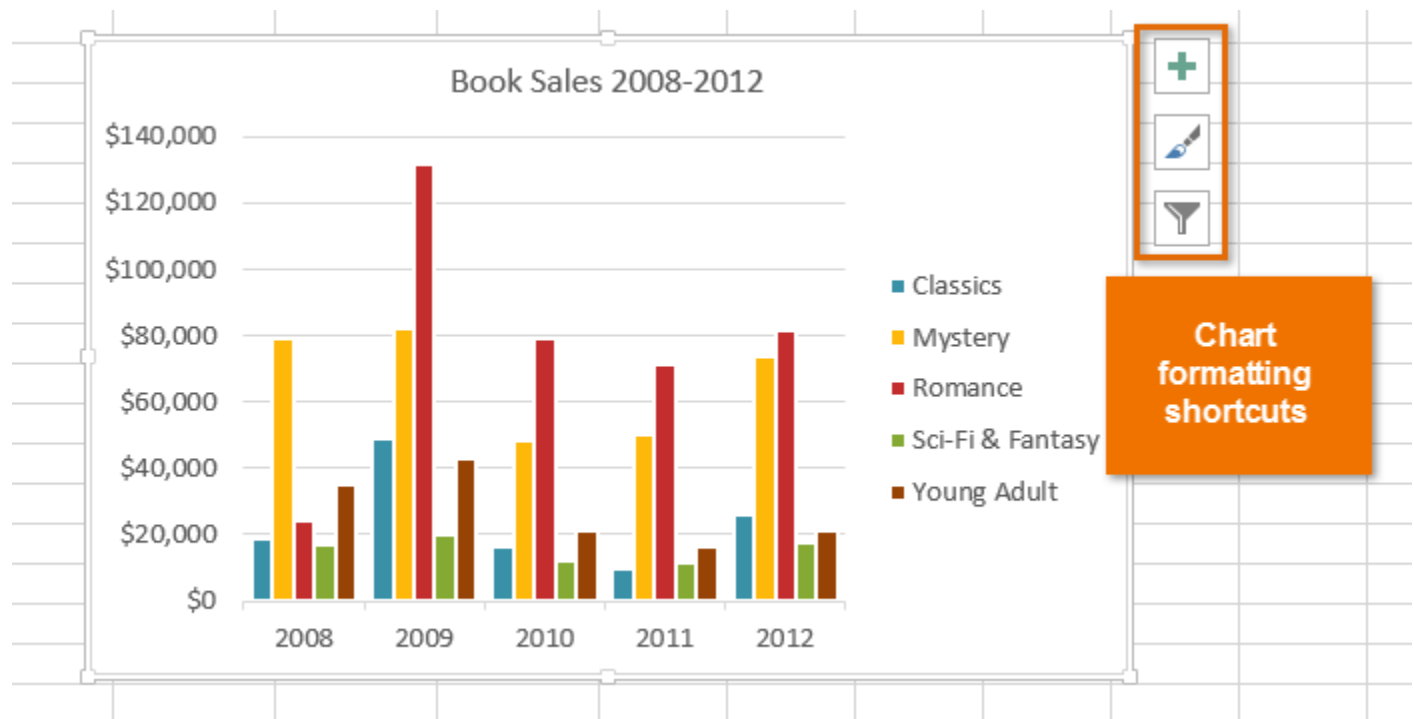

Other chart options

There are many other ways to customize and organize your charts. For example, Excel allows you to **rearrange** a chart's data, change the **chart type**, and even **move** the chart to a different location in the workbook.

To switch row and column data:

Sometimes you may want to change the way charts **group** your data. For example, in the chart below, the Book Sales data are grouped **by year**, with columns for **each genre**. However, we could switch the rows and columns so the chart will group the data **by genre**, with columns for **each year**. In both cases, the chart contains the same data—it's just organized differently.

Book Sales 2008-2012
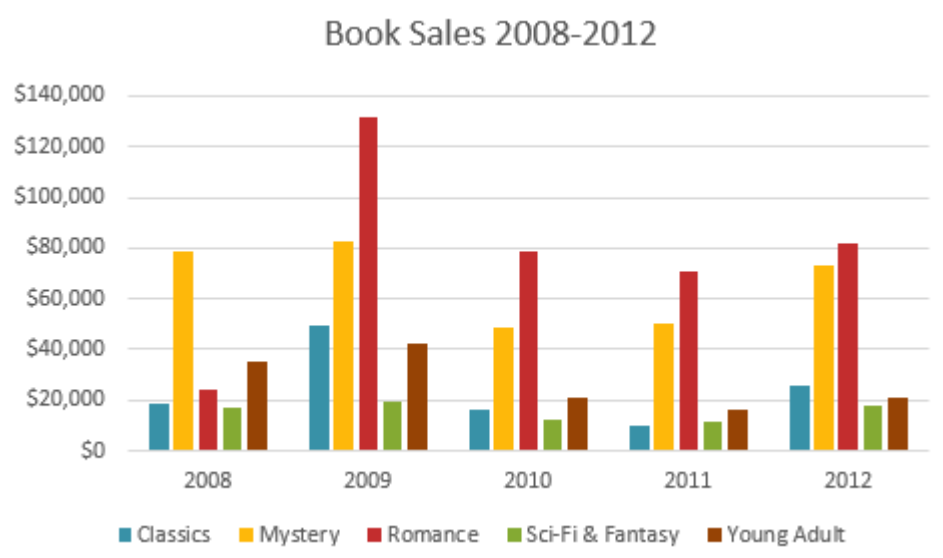
1. Select the **chart** you want to modify.

2. From the **Design** tab, select the **Switch Row/Column** command.

3. The rows and columns will be **switched**. In our example, the data is now grouped by genre, with columns for each year.


Book Sales 2008-2012
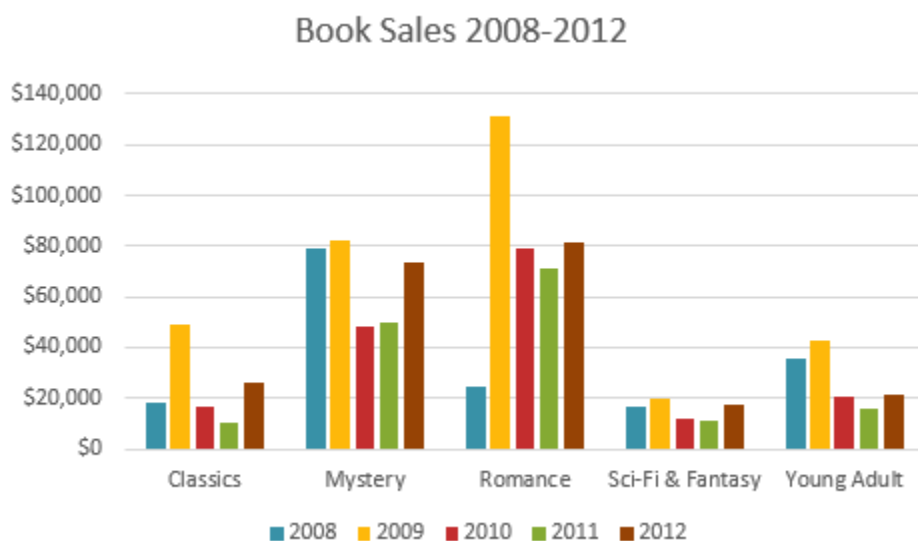
To change the chart type:

If you find that your data isn't well suited to a certain chart, it's easy to switch to a new **chart type**. In our example, we'll change our chart from a **Column** chart to a **Line** chart.
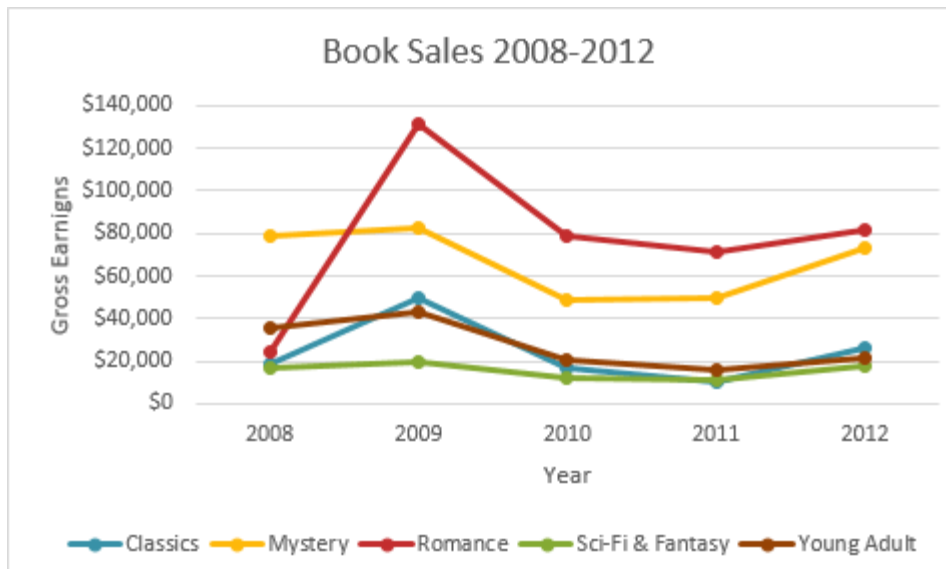
1. From the **Design** tab, click the **Change Chart Type** command.

2. The **Change Chart Type** dialog box will appear. Select a new chart **type** and **layout**, then click **OK**. In our example, we'll choose a **Line** chart.
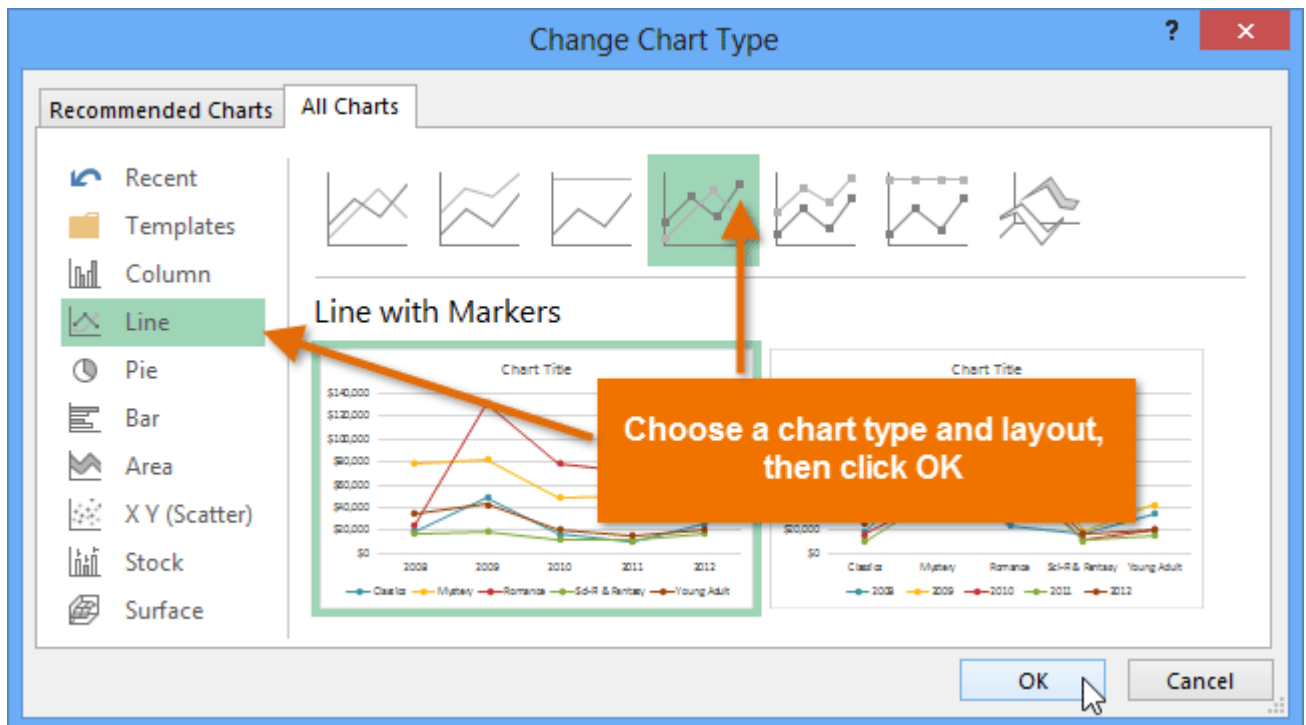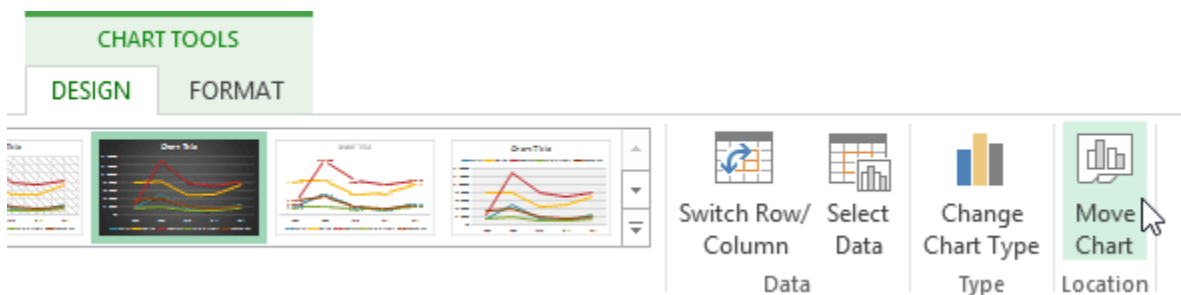

3. The selected chart type will appear. In our example, the line chart makes it easier to see trends in the sales data over time.

To move a chart:

Whenever you insert a new chart, it will appear as an object on the same worksheet that contains its source data. Alternatively, you can **move** the chart to a **new worksheet** to help keep your data organized.

1. Select the **chart** you want to move.

2. Click the **Design** tab, then select the **Move Chart** command.

3. The **Move Chart** dialog box will appear. Select the **desired location** for the chart. In our example, we'll choose to move it to a **New sheet**, which will create a new worksheet.

4. Click **OK**.
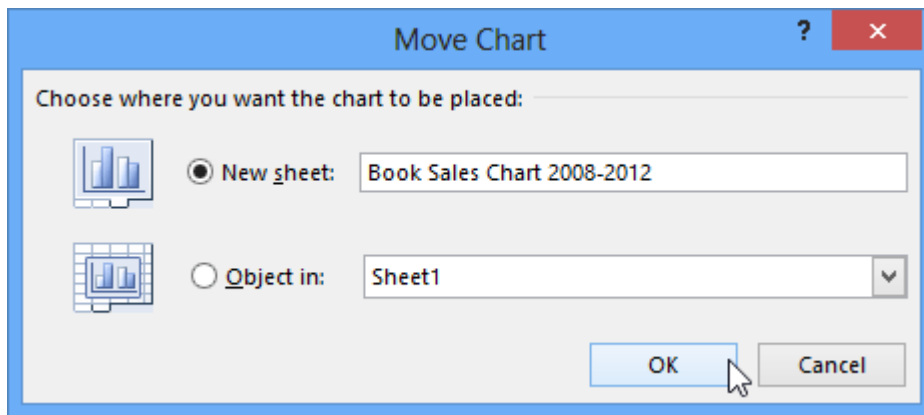
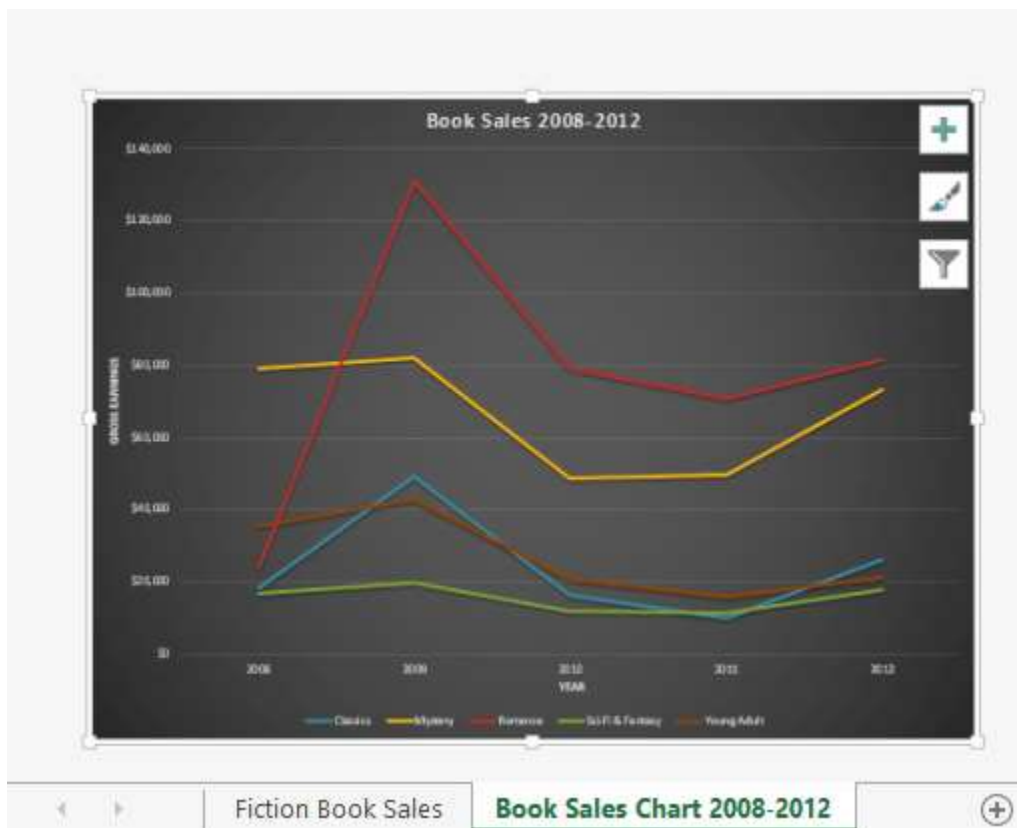5. The chart will appear in the selected location. In our example, the chart now appears on a new worksheet.

Keeping charts up to date

By default, when you add more data to your spreadsheet, the chart may not include the new data. To fix this, you can adjust the **data range**. Simply click the chart, and it will highlight the data range in your spreadsheet. You can then click and drag the **handle** in the lower-right corner to change the data range.

	B	C	D	E	F
	January	February	March	April	May
	$18,580	$49,225	$16,326	$10,017	$26,134
	$78,970	$82,262	$48,640	$49,985	$73,428
	$24,236	$131,390	$79,022	$71,009	$81,474
	$16,730	$19,730	$12,109	$11,355	$17,686
	$35,358	$42,685	$20,893	$16,065	$21,388

If you frequently add more data to your spreadsheet, it may become tedious to update the data range. Luckily, there is an easier way. Simply format your source data as a **table**, then create a **chart based on that table**. When you add more data below the table, it will automatically be included in both the table and the chart, keeping everything consistent and up to date.

Watch the video below to learn how to use tables to keep charts up to date.

Challenge!

1. Open an **existing Excel workbook**. If you want, you can use our " Excel Charts Activity.xls".
2. Use worksheet data to create a **chart**. If you are using the example, use the cell range **A1:F6** as the source data for the chart.
3. Change the **chart layout**. If you are using the example, select **Layout 8**.
4. Apply a **chart style**.
5. **Move** the chart. If you are using the example, move the chart to a **newworksheet** named **Book Sales Data: 2008-2012**.