UNDERSTANDING PICTURES

Word allows you to not only insert images from clip art or the internet, but also to insert images you have created yourself. These kinds of images are digital images you have stored on your computer or on a computer you are connected to. They may be photographs, scans or various forms of digital art.

Inserting a Picture

Pictures are digital images which can be inserted into a document using the *Pictures* command on the *Insert* tab.

Picture Positioning

Pictures are positioned as either *inline* or *floating*. An *inline* picture is one that is embedded into the text itself, as shown in the second example directly below. A floating picture can be placed anywhere, even in *front* or *behind* the text (as in the first example directly below). Floating pictures can be positioned anywhere on the page and can even have text wrap around them as shown immediately below.

This is an example of an image which has as floating picture. text wrapped around it. It is classified

*This is an example of a floating picture.*

This is an example of an inline picture as the picture is in the same line as the text and cannot be moved to the same kind of positions as the floating picture.
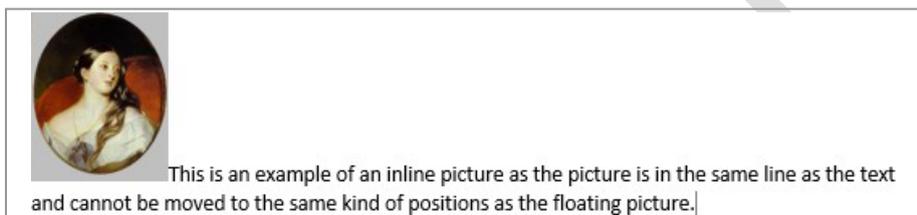
This is an example of an inline picture.

Picture Tools – A Picture Editing Application

After a picture is inserted it can be edited by clicking on it to select it. When a picture is selected, the *Picture Tools: Format* tab appears on the ribbon to reveal a range of editing commands and options – in many ways you are provided with a range of tools previously only found in more sophisticated picture editing applications.
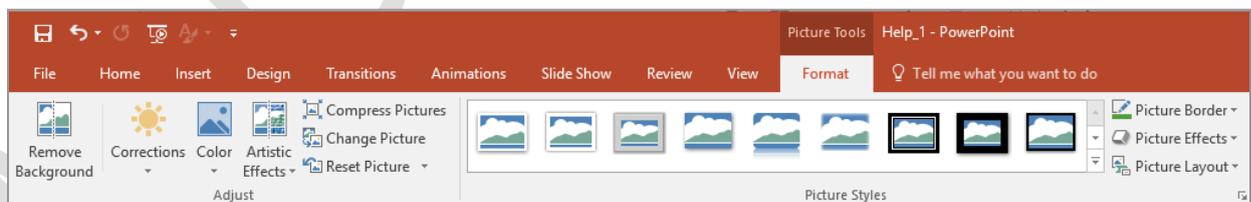
This is the left half of the ribbon displaying the *Adjust* and *Picture Styles* groups on the *Picture Tools: Format* tab.

This is the right half of the ribbon displaying the *Arrange* and *Size* groups on the *Picture Tools: Format* tab.
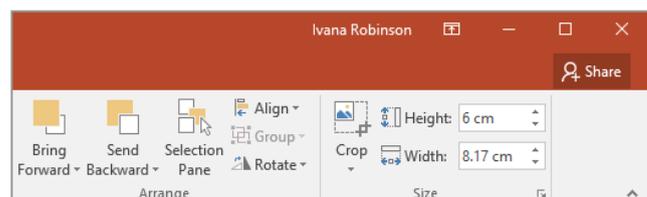
UNDERSTANDING ONLINE PICTURES

If you want to insert images into your presentation, you have three options. You can choose to download and insert clip art (these include photographs, cartoons and other kinds of graphics), your own images which have been saved to your computer or online images from the *Bing* search engine. You can then edit these images using the *Picture Tools: Format* tab.

What Is An Online Picture?

You can access clip art by clicking on the *Insert* tab then clicking on *Online Pictures* in the *Images* group. To search for online pictures, type your search term in the search box next to *Bing Image Search* and press Enter.

The difference between inserting an image via the *Pictures* function and the *Online Pictures* function is that *Pictures* directs you to images stored on your device, whereas *Online Pictures* directs you to images stored online. Both *Pictures* and *Online Pictures* can be photographic images.

or vector artwork. If you are using *Online Pictures* to specifically search for either vector or photographic images, you will not be able to specify using the *Insert Pictures* pane. Instead you must open *Bing* in a browser window, click on the *Images* tab and select the required options to specify the type of image you wish to search for. You can then download the image, save it and insert it into Word using the *Insert Picture* function (as it is now saved to your PC).

If you are signed in with your Microsoft account you can link certain social media accounts such as Facebook and Flickr in order access photos stored in these accounts.

Copy Right And Online Images

Copyright is the legal right (automatically given to the creator of the content) to print, publish, perform or film the content. Images found on the internet are usually protected by some kind of copyright that means it is illegal to reproduce or use the image in certain contexts or quantities. Sometimes you have the ability to purchase copyright for an image which may allow you to use an image with a number of conditions such as for a fixed amount of time, or a number of times. When you search for an image using the *Online Picture* function, the search results displayed will automatically be those that are licensed under Creative Commons copyright. *Creative Commons* allows copyright owners to obtain free licenses that mean they can share reuse and remix their material legally. This means that most images under Creative Commons can be used in documents for your own personal use or even in some publications. If you don't require a Creative Commons license you can click on **[Show all web results]** in the *Insert Pictures* pane. This displays images that have all different kinds of copyright licenses.

WORKING WITH POWERPOINT DESIGNER

PowerPoint Designer provides users with a range of design options to improve the appearance of your slides. When you insert a picture, PowerPoint Designer automatically generates *Design Ideas* that you can choose from. Note that *PowerPoint Designer* is only available if you have an Office 365 subscription.

Using Design Ideas

If you have not used *Design Ideas* before, the first time you insert a picture, a message will appear asking if you wish to try the service. Click on **[Let's Go]** to generate *Design Ideas* specific to your slide.

Once you have allowed access to Design Ideas, a pane will automatically appear on the right side of your screen every time you insert a picture with a range of thumbnail options for alternative layouts. To select a layout simply click on the thumbnail.

Troubleshooting

If you are having difficulties with PowerPoint Designer and you are not receiving any design suggestions, here are a few tips that could help.

- Ensure you are connected to the internet as PowerPoint Designer does not work offline

- Use only one photo per slide rather than inserting multiple at a time

- Use a default PowerPoint theme for your slides rather than a custom theme or one you have downloaded.
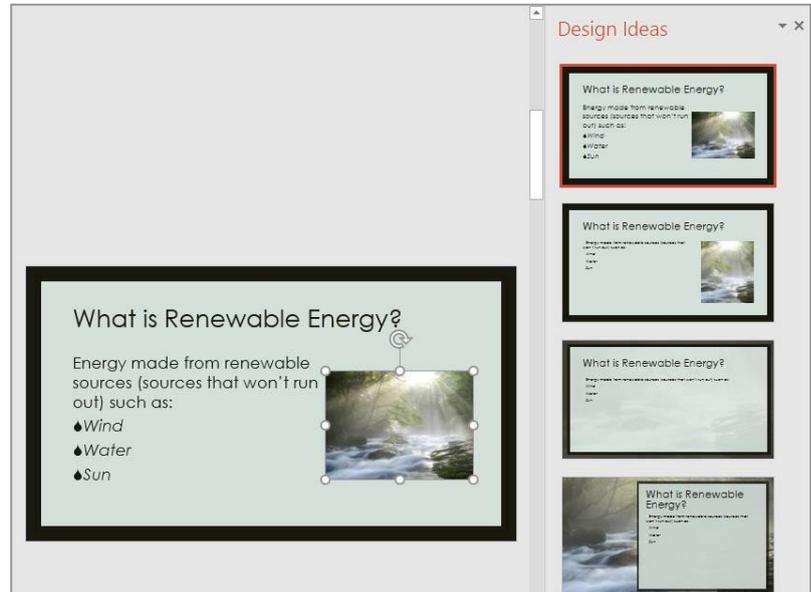
This is how the image appeared when inserted and on the right side of the screen is the available design idea.
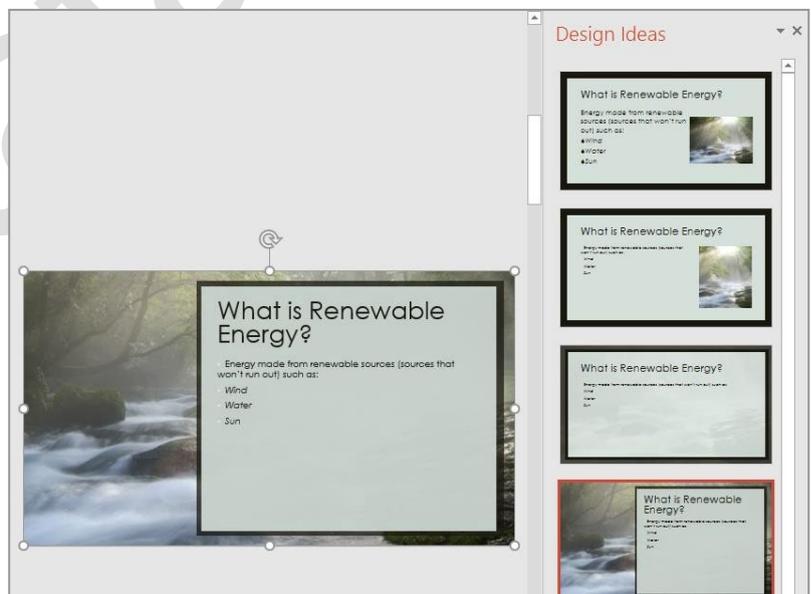
This is one of the Design Ideas applied to the slide above.

INSERTING A PICTURE FROM FILE

A *picture* is a photo or other kind of image file, such as a *.jpeg* or *.png* file. Pictures can be used to reinforce your message, highlight a point, or to supplement text. When inserting a picture, ask yourself whether it adds to your presentation, or whether it may distract the audience from receiving your message. Pictures can be inserted into placeholders or anywhere on the slide.

Try This Yourself:

Open File

Before starting this exercise you MUST open the file Images_1.pptx…

1 Click on slide **2** in the **Slides** pane to display it in the **Slide** window

Let's insert a picture saved on the computer previously…

2 Click on the **Insert** tab, then click on **Pictures** in the **Images** group to open the **Insert Picture** dialog box

3 Navigate to the course files folder, then click on **Images Picture_1.jpg** to select it

4 Click on **[Insert]** to insert the picture onto the slide

The image will be automatically inserted into the existing placeholder

2
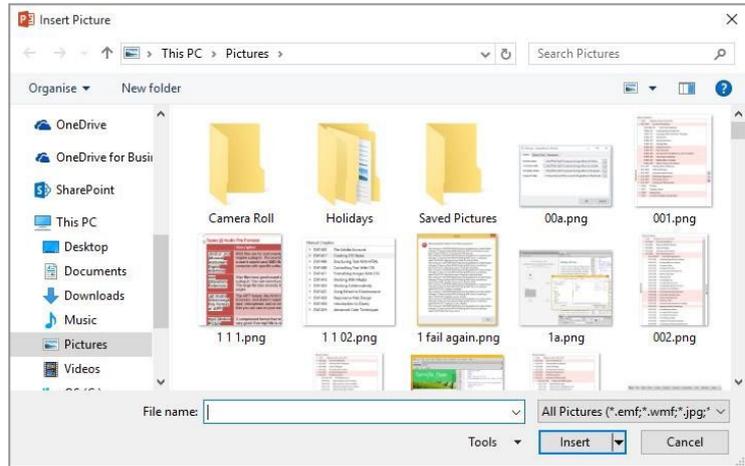
3
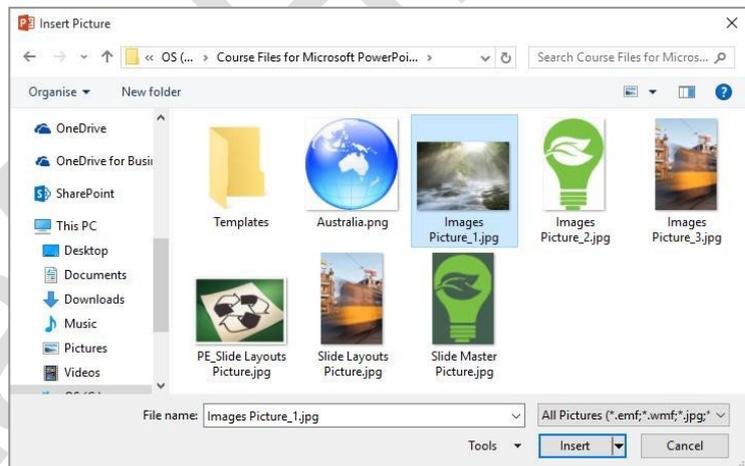
4
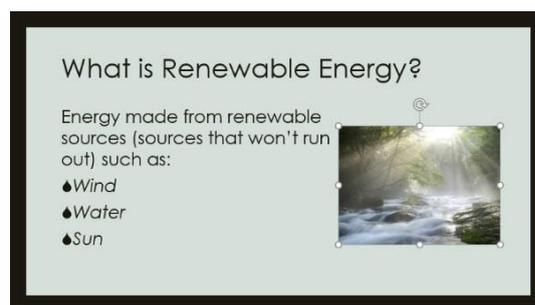
For Your Reference…

To *insert* a *picture*:
1. Click on the **Insert** tab, then click on **Picture** in the **Images** group
2. Navigate to and select the image file, then click on **[Insert]**

Handy to Know…

- If you have inserted the wrong picture you can easily replace it. To do this, click on the picture to select it, then click on **Change Picture** on the **Picture Tools: Format** tab and select another picture.

INSERTING AN ONLINE PICTURE

As well as being able to insert pictures from your local computer, PowerPoint also lets you insert pictures from various online services without having to save them to your computer first. The online options for inserting pictures include the *Office.com* clip art collection, via a *Bing* search, or from your own OneDrive or *Flickr* account.

Try This Yourself:

Same File

Continue using the previous file with this exercise, or open the file Images_2.pptx...

1 Navigate to and click on slide *3* so it appears in the *Slide* window

2 Click on the *Insert* tab then click on *Online Pictures* in the *Images* group to display the *Insert Pictures* pane

3 Click in the *Bing Image Search* box, type *renewable energy* and press [Enter]

The Bing search will return thousands of images related to renewable energy, plus a reminder that images may be protected by copyright…

4 Click on an image, then click on **[Insert]** to download the image and insert it onto the slide

5 Ensure the image is selected then press [Del] to delete it
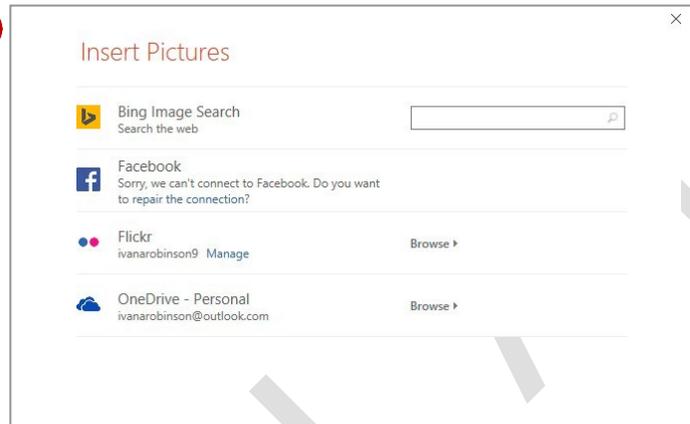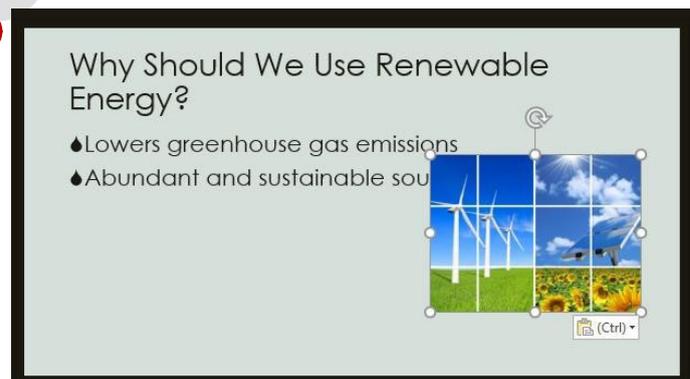
For Your Reference…

To *insert* an *online picture*:

1. Click on the *Insert* tab then click on *Online Pictures* in the *Illustrations* group
2. Type a search term into the *Bing Image Search* box and press [Enter]
3. Locate and click on the desired picture and click on **[Insert]**

Handy to Know…

- If you sign into OneDrive, your account will appear as an online pictures option in the *Insert Pictures* pane.

RESIZING AN IMAGE

When you insert an image onto a slide, you might need to resize the image to make it better fit the slide. If you have inserted a bitmap image, such as a photo (*.jpeg* or *.png*, for example), increasing its size might deteriorate the picture clarity. You can resize an image proportionately (both width and height at the same time), or you can resize just the width or the height.

Try This Yourself:

Same File

Continue using the previous file with this exercise, or open the file Images_3.pptx...

1 Display slide **2** in the **Slide** window

Let's reduce the image size…

2 Click on the image to select it

The placeholder handles appear so you can resize it…

3 Point to the top-left corner of the image until a double-headed arrow appears, as shown

4 Click and drag towards the centre of the image, then release the mouse button to apply the changes

As you drag you will notice the image becomes smaller.

Let's resize the image using a different method…

5 With the image selected, click on the **Picture Tools: Format** tab, then click on the up or down spinner arrow for **Height** in the **Size** group until the **Height** is **6**

The width and the height will be resized proportionately
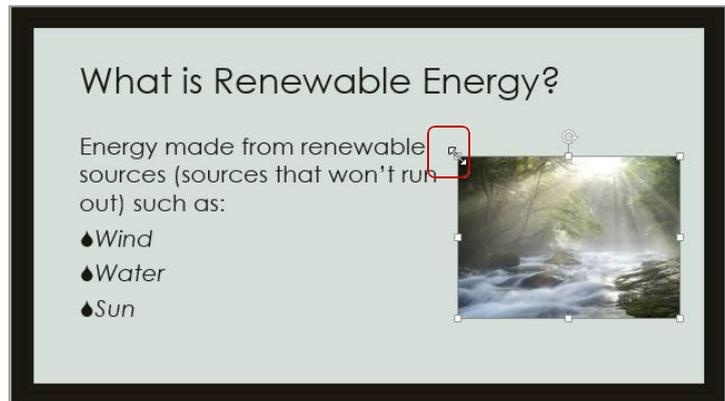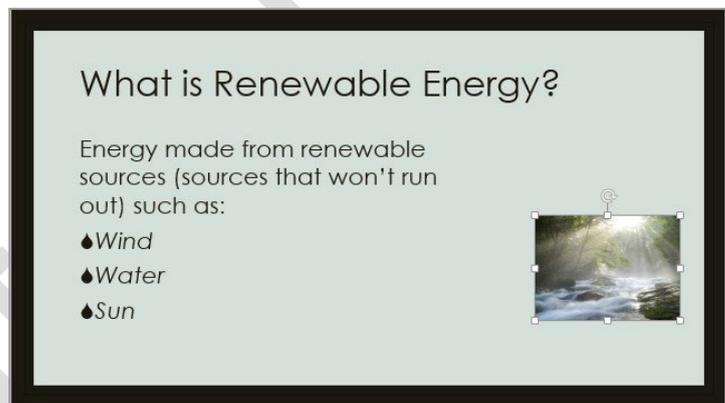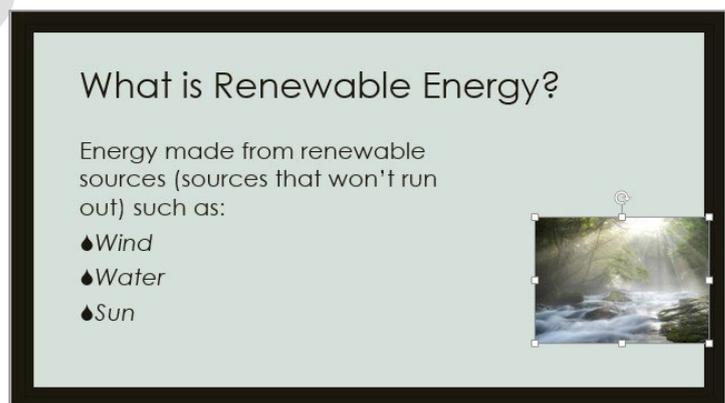
For Your Reference…

To *resize* an *image*:

1. Click on the image
2. Click and drag on a placeholder handle, or Adjust the **Height** and/or **Width** in the **Size** group on the **Picture Tools: Format** tab

Handy to Know…

- Resizing an image on the slide does not impact on file size.

- To reset an adjusted image to its original form, select the image, then click on **Reset Picture** on the **Picture Tools: Format** tab.

POSITIONING AN IMAGE

When inserting images, there's a good chance you'll need to move the image into position. There are several ways to position images on a slide. You can use the arrow keys on the keyboard, or you can drag the image to its new location. For more precise positioning, you can also use the *Align* tools in the *Arrange* group on the *Picture Tools: Format* tab.

Try This Yourself:

Same File

Continue using the previous file with this exercise, or open the file Images_4.pptx...

1 Display slide *2* in the *Slide* window

2 Click on the image to select it, then click and drag the image until it is positioned as shown

Let's align the image with the other content placeholder…

3 With the image selected, hold down Shift and click on the other content placeholder to select both objects

4 Click on the *Picture Tools: Format* tab, then click on *Align* in the *Arrange* group and select *Align Top*

5 Click elsewhere to deselect the two placeholders, then click and drag the image slightly to the right until the alignment guides appear and align the image with the guides as shown

2

What is Renewable Energy?

Energy made from renewable sources (sources that won't run out) such as:
- Wind
- Water
- Sun

4

What is Renewable Energy?

Energy made from renewable sources (sources that won't run out) such as:
- Wind
- Water
- Sun

5

What is Renewable Energy?

Energy made from renewable sources (sources that won't run out) such as:
- Wind
- Water
- Sun

For Your Reference…

To *position* an *image*:
- Click and drag the image to its new location, or
- Click on the image, click on the *Picture Tools: Format* tab, then click on *Align* and select an alignment option

Handy to Know…

- When aligning objects, such as placeholders and images, the border of the placeholder determines the size of the object, not the object itself. So, if your text placeholder is bigger than is required, resize the placeholder first to fit the text so that the text aligns better with the other objects.

ROTATING AND FLIPPING IMAGES

To *rotate* an image is to adjust its *axes* so that it faces in a different direction. Images can be rotated to a specified angle from their current position. You can also *flip*, or reverse, an image.

There are several methods for rotating an image. You can rotate freely by dragging on the *rotate handle* that appears for the selected image, or you can specify an angle with the *Rotate* tool.

Try This Yourself:

Same File

Continue using the previous file with this exercise, or open the file Images_7.pptx...

1 Navigate to and display slide **8** in the *Slide* window, then click on the image to select it

Let's rotate the solar panel image...

2 Point to the rotate handle at the top of the clip art until the pointer changes to a rotate symbol as shown

The rotate handle lets you rotate the object in any direction...

3 Click and drag the rotate handle down and slightly to the right, as shown

4 Release the mouse button to reposition the image

You can also flip, or reverse, the image...

5 With the image selected, click on the *Picture Tools: Format* tab, then click on *Rotate* in the *Arrange* group and select *Flip Horizontal*

6 Deselect the image to view the result

2

3

4

5

Solar Power

◆ Install solar panels

6
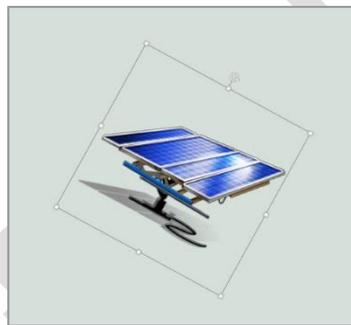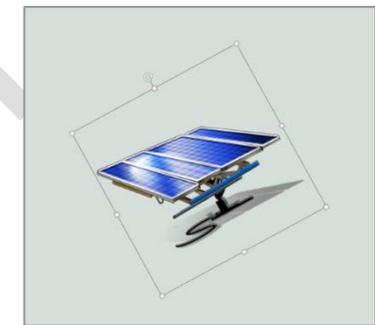
For Your Reference…

To *rotate* an *image*:
1. Select the image, then click and drag the *rotate handle* as required

To *flip* an *image*:
1. Select the image, click on the *Picture Tools: Format* tab, click on *Rotate,* then click on *Flip Horizontal* or *Flip Vertical*

Handy to Know…

- You can rotate placeholders or any other object in PowerPoint by dragging the rotation handle.

- To rotate an object 90° to the right or left, select the object, click on the *Picture Tools: Format* tab, click on *Rotate* and select **Rotate Right 90°** or **Rotate Left 90°**.

INSERTING A SCREENSHOT

PowerPoint provides you with the ability to capture images on a computer screen and insert them into a presentation. Computer screen images are usually referred to as *screenshots* and can be used for a variety of purposes ranging from training people in the use of a particular piece of software to quickly grabbing a shot of the screen to email someone or present at a meeting.

Try This Yourself:

Same File

Continue using the previous file with this exercise, or open the file Images_10.pptx...

1. Ensure **Images_10.pptx** is displayed at full screen size (if necessary, click on **Maximise** next to **Close** at the top of the screen), then display slide *4* in the **Slide** window

   We want to insert a screenshot of this slide into P1307 Images_8.pptx so we will have to switch to that presentation…

2. Click on the **View** tab, then click on **Switch Windows** in the **Window** group and select **Images_8.pptx** to switch to this presentation

3. Click on slide *4*, then click on the **Insert** tab and click on **Screenshot** in the **Images** group

4. Click on the thumbnail image of the **Images_10.pptx** window to insert the screenshot into the slide

   Notice the screenshot is automatically cropped to fit this slide. As we already have the content contained in this screenshot, let's delete it…

5. With the screenshot selected, press Del to delete it
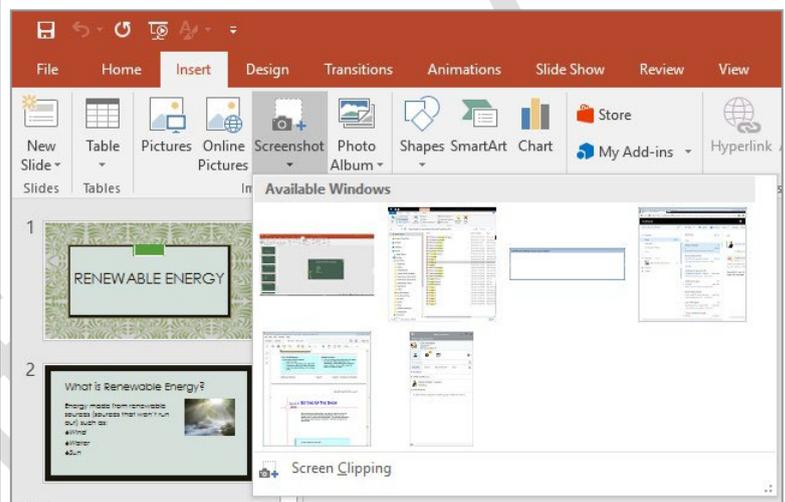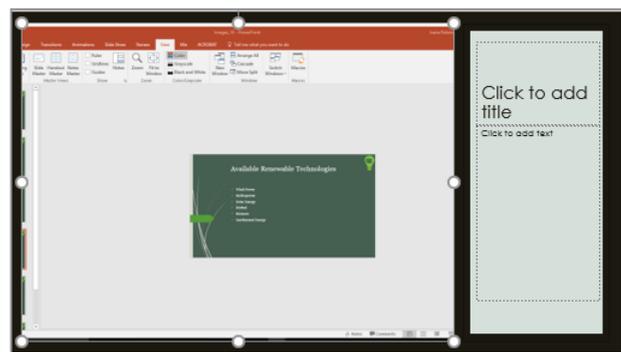
For Your Reference…

To *insert* a *screenshot*:

1. Display the window or screen that you want to capture
2. Click on the **Insert** tab, then click on **Screenshot** and select the screenshot to insert

Handy to Know…

- *Screenshots* can be formatted and edited the same as other image types.

- To save a screenshot for future use, right-click on it in the presentation and select **Save as Picture**. Type a file name, select a location, then click on **[Save]**. Microsoft will save the image as a *PNG* file by default.

INSERTING A SCREEN CLIP

If you don't necessarily want to insert a full screen shot you can actually create a *clip*. A clip is a smaller area of the screen that you define by dragging a cross pointer to create a rectangle around the area to use as the clip. Operationally, things work much the same as a full screenshot capture except that you manually click and drag to select the area to clip.

Try This Yourself:

Same File

Continue using the previous file with this exercise, or open the file Images_9.pptx...

1 In *Images_10.pptx*, navigate to and display slide *4*

Ensure the window is displayed at full screen size (if necessary click on Maximise next to Close at the top of the screen).

We'll need to open the right window before we can take a screen clip…

2 Click on the *View* tab, then click on *Switch Windows* and select *Images_9.pptx*

3 Navigate to and display slide *4* in the *Slide* window

4 Click on the *Insert* tab, click on *Screenshot* in the *Images* group and select **Screen Clipping**

PowerPoint switches to the last active window. The cursor changes to a cross pointer, enabling you to select the area to capture, and the window is greyed out…

5 Click and drag to select the slide, as shown, then release the mouse

The screen clipping will be inserted into the slide…

6 Click away from the image to view the result, then reselect it and press `Del` to delete it

4

5

6
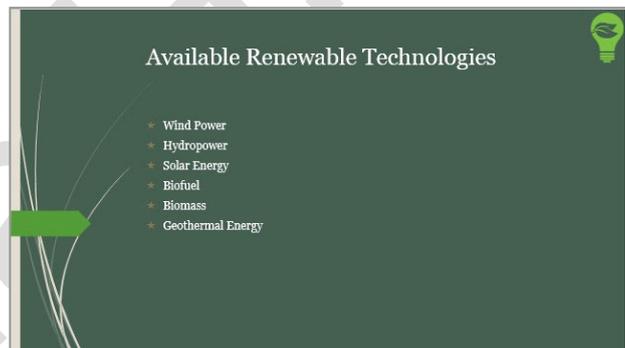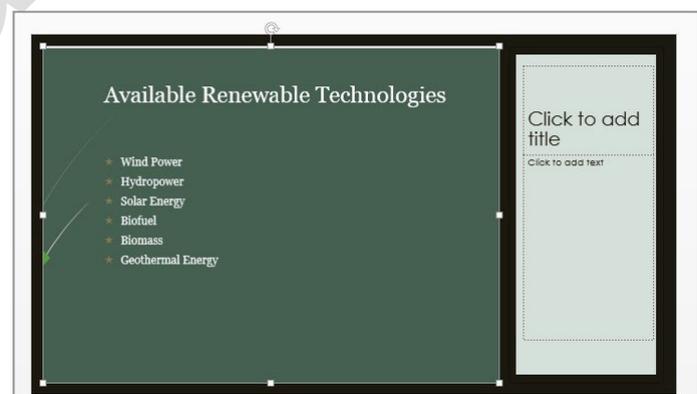
For Your Reference…

To *insert* a *screen clip*:

1. Click on the *Insert* tab, click on *Screenshot* and select **Screen clipping**
2. Click and drag to select the area that you want to include in the clipping

Handy to Know…

- Unlike a full screenshot, you can't specify which of the open windows to clip. Only the last active window can be used for clipping.

CREATING A PHOTO ALBUM

Photo Album is another image tool. Using **Photo Album**, you can choose the images you want to include in the album and within seconds PowerPoint will create a photo slideshow. Perfect for distributing your holiday pictures to friends and family. You can then insert captions on each photo, or set a musical accompaniment to the slide show.

Try This Yourself:

Before starting this exercise ensure there is a new, blank presentation open...

1 Click on the **Insert** tab, then click on the top half of **Photo Album** in the **Images** group to display the **Photo Album** dialog box

Here you can select the images that you want to include…

2 Click on **[File/Disk]**, then navigate to the course files folder, press and hold Ctrl and click on **Images Picture_1.jpg**, **Images Picture _2.jpg** and **Images Picture_3.jpg** to select the three images

3 Click on **[Insert]** to add the images to the photo album

4 Click on the drop arrow for **Picture layout** and select **1 picture**, then under **Picture Options**, tick **Captions below ALL pictures**

5 Click on **[Browse]** for **Theme**, locate and click on **Organic**, then click on **[Select]** to apply this theme to the album

6 Click on **[Create]** to create the album

7 Scroll through the album to view the result, then close without saving
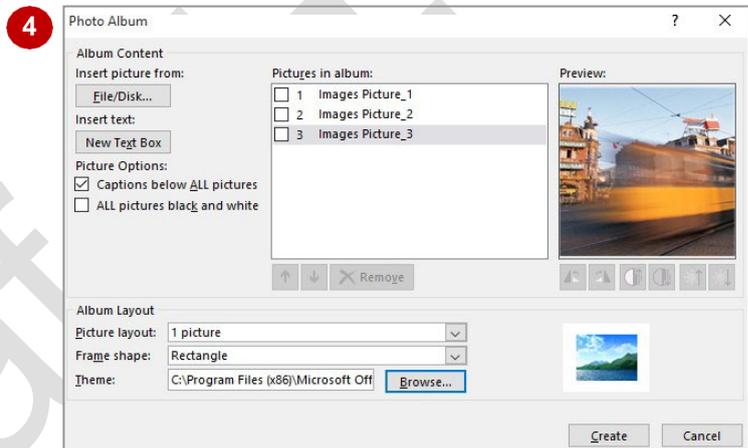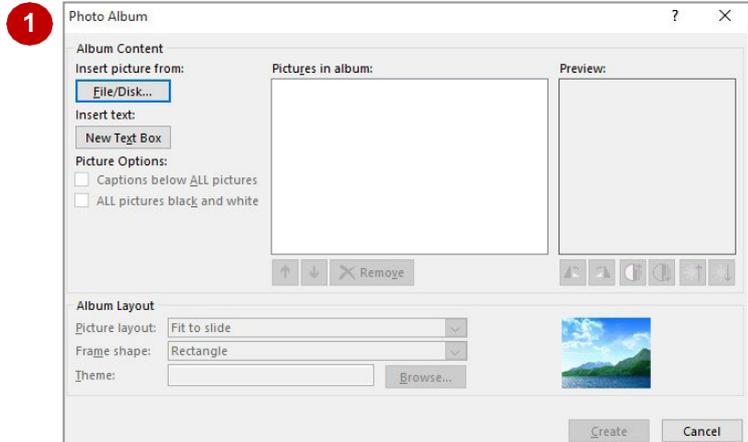
For Your Reference…

To *create* a *photo album*:

1. Click on the **Insert** tab, click on the top half of **Photo Album** in the **Images** group, then click on **[File/Disk]**
2. Navigate to and select the images to include
3. Apply settings as required, then click on **[Create]**

Handy to Know…

- Once you've created a photo album, you can format the album in the same way as a slide show, such as editing and formatting text, inserting shapes and the like.

- To edit a photo album, click on the bottom half of **Photo Album** in the **Images** group and select **Edit Photo Album**.

UNDERSTANDING CHARTS

Charts are used primarily to depict numerical data such as statistics or percentages in a graphical format that is easier to understand and quicker to digest than a list of numbers and figures. There are many different kinds of charts and some chart types suit certain purposes better than others.

Charts

Creating a chart in PowerPoint is easy. Simply click on the **Insert** tab, then click on **Chart** in the **Illustrations** group to display the **Insert Chart** dialog box. Click on a category in the left pane and select an option from the top of the right pane to display a thumbnail. If you point to the thumbnail in the right pane, it will zoom in so you can see it in greater detail. Once you have chosen a chart, click on **[OK]** and the chart will be inserted into the slide with the Excel worksheet open by default. The Excel worksheet contains the data to be displayed in the chart. Any data you add to the worksheet will be immediately reflected in the chart.
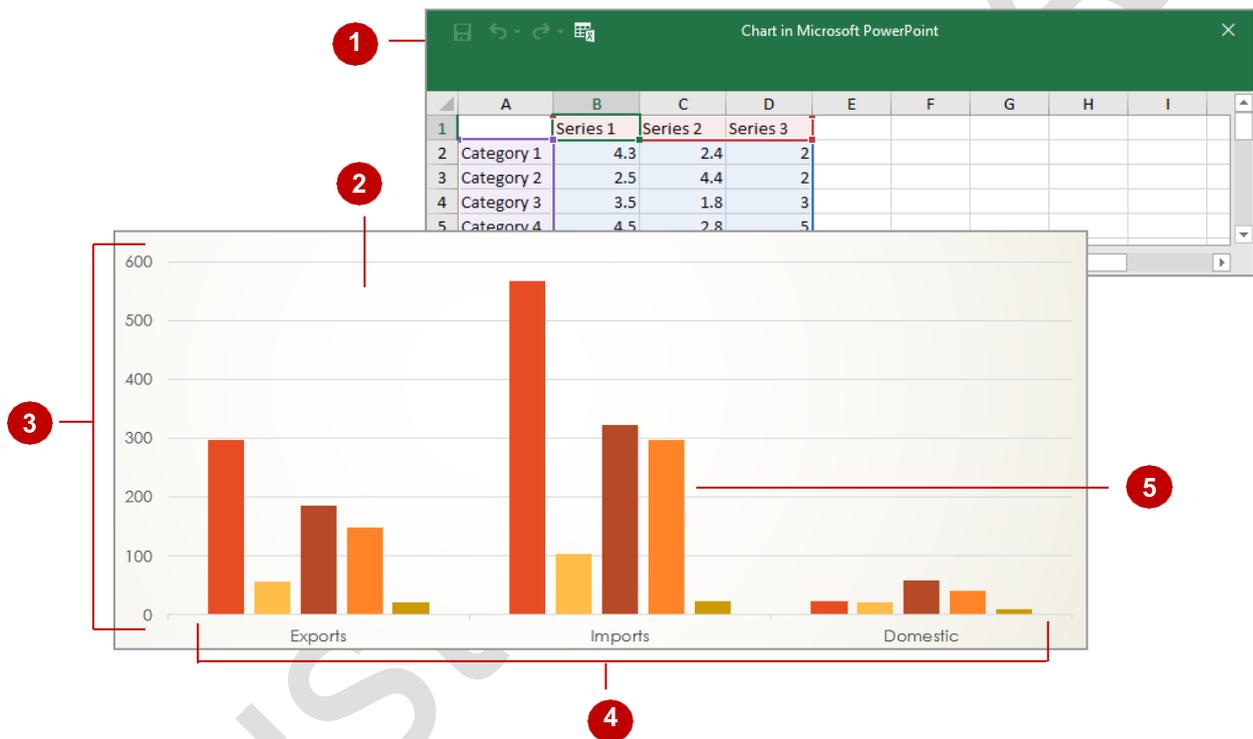
1	Excel Worksheet	When a chart is opened for editing, the data that is used to draw the chart is displayed in an **Excel worksheet**. Changes to the information in the Excel worksheet are immediately reflected in the chart.
2	Chart Area	The **chart area** contains the entire chart and all its elements.
3	Vertical (Value) Axis	An **axis** is a line that borders one side of the plot area providing a frame of reference for measurement or comparison in a chart. For most charts, data values are plotted along the **value axis**, which is usually vertical (the **Y** axis). In the example above, a **vertical (value) axis title** has not been included.
4	Horizontal (Category) Axis	Categories are usually plotted along the **category axis**, which is usually horizontal (the **X** axis).
5	Data Series	A **data series** is a collection of related data. Each data series relates to a column or row of data in the Excel worksheet and is usually represented in the chart by a colour, pattern or object depending on what kind of chart it is. For example, the yellow bars in the above chart represent a data series – in this case, the data in the column for Canada in the Excel worksheet.

INSERTING A CHART USING THE RIBBON

There are several ways to insert a chart into PowerPoint. You can click on the **Insert Chart** icon in a content placeholder on a slide or click on **Insert Chart** in the **Illustrations** group on the **Insert** tab. After selecting the most appropriate chart type, an **Excel** window will open, into which you enter (or copy) the desired data. PowerPoint will then create the chart using the data.

Try This Yourself:

Open File

Before starting this exercise you MUST open the file Charts_1.pptx…

1 Navigate to and display slide **2** in the **Slide** window

2 Click on the **Insert** tab then click on **Chart** in the **Illustrations** group to open the **Insert Chart** dialog box

3 Ensure **Column** is selected under **All Charts** and ensure the first option is selected in the right pane, then click on **[OK]** to insert a chart

An Excel spreadsheet opens automatically. Let's enter the chart data into the Excel spreadsheet…

4 Click in cell **B1** and type the data as shown, pressing `Tab` to move to the next cell

The blue line shows the data that will be included in the chart, but we don't want to include the data in row 5…

5 Drag the bottom right corner of the blue range rectangle up until row **5** is excluded, then release the mouse button

6 Click on **Close** to close the worksheet and view the result

---
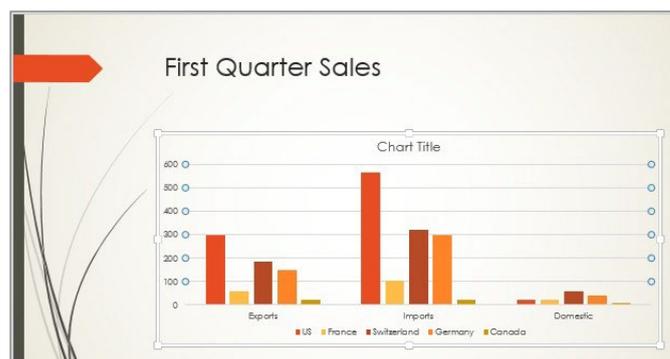
For Your Reference…

To **insert** a **chart**:

1. Click on the **Insert** tab, then click on **Chart** in the **Illustrations** group
2. Select the chart type and click on **[OK]**
3. Enter the data in the **Excel** spreadsheet

Handy to Know…

- When you are editing the data of a chart, if you click on **Edit Data in Microsoft Excel** in the **Quick Access Toolbar** of the Excel spreadsheet, the spreadsheet will be opened in Excel so you have access to all the editing and formatting options available in Excel.

CHANGING THE CHART TYPE

Sometimes you may use different types of charts to represent the same data. Or you may decide, for example, that your data would be better displayed in a pie chart rather than a column chart. You can easily convert an existing chart to a different chart type in PowerPoint. You can also use this feature to test different chart types to find the one that will best represent your data.

Try This Yourself:

Same File *Continue using the previous file with this exercise, or open the file Charts_2.pptx...*

1 Navigate to and display slide *2* in the *Slide* window if required, then click on the chart to activate it

The placeholder will display which means the chart can now be edited…

2 Click on the *Chart Tools: Design* tab, then click on *Change Chart Type* in the *Type* group to open the *Change Chart Type* dialog box

3 Click on *Line* in the left pane, then click on *Line with Markers* to select this chart type and click on **[OK]** to apply the change

4 Repeat steps *2* and *3* to change the chart to a *Stacked Area* chart (under *Area*)

Probably not the best way to represent our data…

5 Repeat steps *2* and *3* to change the chart to a *Clustered Bar* chart (under *Bar*)

Our data is represented clearly in this chart type

3
First Quarter Sales

4
First Quarter Sales

5
First Quarter Sales
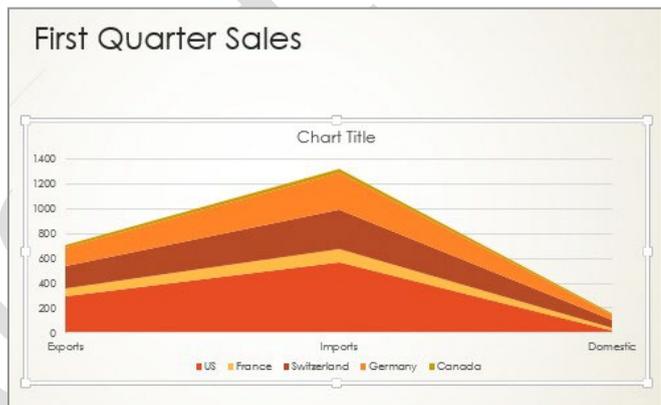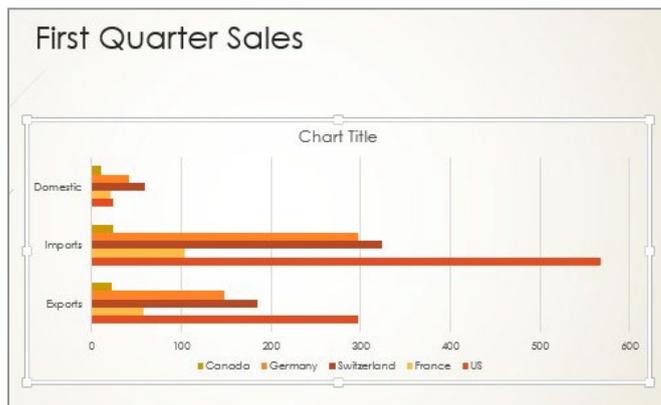
For Your Reference…

To *change* the *chart type*:

1. Click on the chart, then click on the *Chart Tools: Design* tab and click on *Change Chart Type* in the *Type* group
2. Select the chart type
3. Click on **[OK]**

Handy to Know…

- Some chart types will not be suitable for some data. For example, if you have defined five data series, you could not change the chart type to a *pie chart*, as pie charts represent data for only one data series.

CHART ELEMENTS

Charts are made up of many chart elements – the chart title, data labels, legend, and more. Each of these elements can be individually formatted, moved, and in some cases, hidden or shown, to create exactly the chart you want for your presentation. The following diagram and accompanying text describes some of the main elements in a chart.
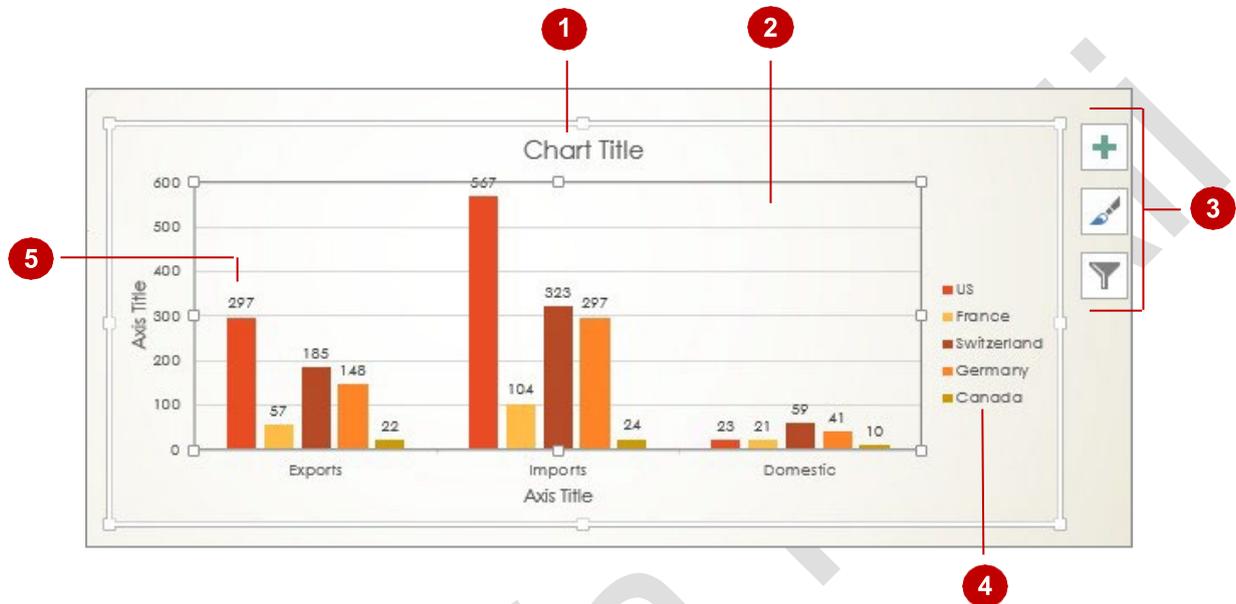
1	**Chart Title**	The name of the chart.
2	**Plot Area**	In a **2-D chart**, the **plot area** is the area bounded by the axes and includes the data series. In a **3-D chart** the **plot area** is the area bounded by the axes and includes the **data series**, **category names** and **axes titles**. In the example above, it also includes the horizontal **gridlines**.
3	**Chart Buttons**	There are three chart buttons and they are **chart elements**, **chart styles** and **chart filters**. These buttons only appear when a chart is selected and can be used to perform a range of basic functions.
4	**Legend**	The **legend** identifies the patterns or colours assigned to the data series or categories in a chart.
5	**Data Labels**	A **data label** is a label that provides additional information about a **data marker**, which represents a single data point or value that originates from a worksheet cell. Data labels can be applied to a single data marker, an entire data series or all data markers in a chart.

USING QUICK LAYOUTS

After creating a chart, you can instantly change the layout of its various elements to one of the predefined layouts (known as *quick layouts*) provided by PowerPoint. Depending on the chart type, you can choose to display or hide the legend, chart titles, axes' titles, data labels, data tables and gridlines. You can also change the location of the legend.

Try This Yourself:

Same File

Continue using the previous file with this exercise, or open the file Charts_3.pptx...

1 Navigate to and display slide **2** in the **Slide** window if required, then click in the chart to activate it

2 Click on the **Chart Tools: Design** tab, then click on **Quick Layout** in the **Chart Layouts** group to open a gallery of options

Although no options are highlighted, Layout 3 is the default layout for this chart...

3 Click on **Layout 8**

Notice there are now Axis Titles…

This layout has also displayed the chart title, which in our case, is superfluous since the slide title is the same as the chart title. But that's ok, as you can quickly delete it using the Chart Tools: Layout tab or the Chart buttons as you'll see later in this chapter
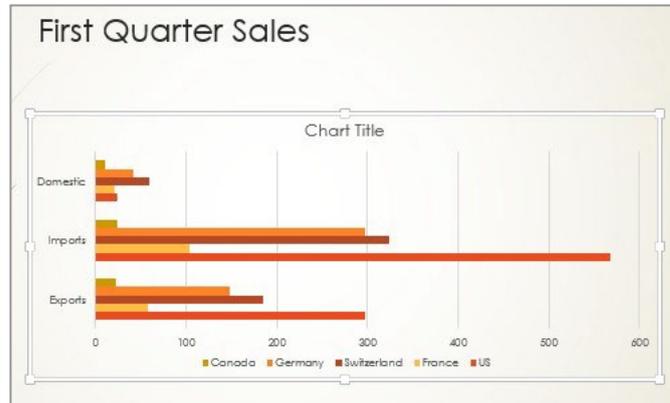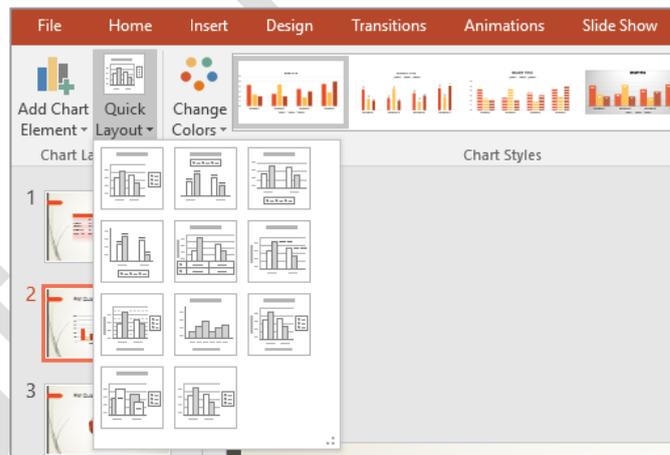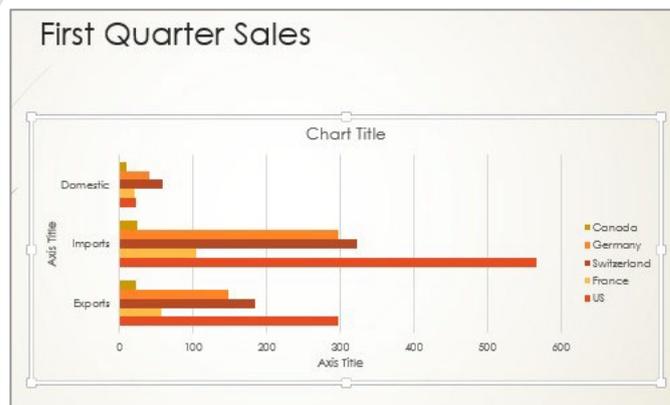
For Your Reference…

To *use* the *quick layouts*:

1. Click on the chart
2. Click on the **Chart Tools: Design** tab, then click on **Quick Layout** in the **Chart Layouts** group
3. Click on the desired layout

Handy to Know…

- The number and style of the quick layouts that appear in the **Chart Layouts** gallery will depend on the current chart type.

UNDERSTANDING CHART BUTTONS

Chart Buttons are a quick and handy way of accessing formatting and editing options for your chart. They contain the basic functions necessary for creating a chart such as chart styles, options for chart elements and data filtering. You can also access *Format* panes for the chart elements via the *chart elements* button.

Chart Buttons

In addition to a comprehensive ribbon and shortcut menu from which you can access chart tools and options, PowerPoint also provides a quicker way to access certain chart options.

Whenever you select a chart, three buttons appear next to the top right corner of a chart. These three buttons are called *chart elements*, *chart styles* and *chart filters*. When you click on one of these three buttons, a fly-out menu of options/commands appears for you to work with, as shown.


Chart Elements Button

The *chart elements* button provides you with options for how to label the data in a chart. To show/hide a chart element, simply click on the checkbox for that element so it appears *with* or *without* a tick.

Pointing to an element will display a small grey arrow. Clicking on this arrow will open an additional fly-out menu that contains options specific to that element, such as where you would like the element placed on the chart. You can access even more formatting options for a chart element by selecting **More Options** from this menu which will open the *Format* pane specific to that chart element.

Chart Styles Button

The *chart styles* button provides you with options for working with the appearance of a chart. You can select a style or colour from the gallery of *Style* or *Colour* options to immediately apply it to the chart.

Chart Filters Button

Chart filters provides you with several options for working with the data in a chart. You have the ability to show or hide *Series* and *Category* values or names by checking or unchecking the specific checkboxes. Clicking on **[Apply]** will then apply this option to the chart.

Clicking on **Select Data** will open the *Select Data Source* dialog box as well as the Excel spreadsheet. Using this dialog box you can select options for hiding or adding data series.

CHANGING THE LAYOUT OF CHART ELEMENTS

PowerPoint provides numerous standard layouts for the selected chart type. While these may be fine for some situations, you can manually alter the layout of the various chart elements until you achieve the desired result. For example, you can add, remove or position labels including axis titles and legends. You can also display or hide trendlines, turn the plot area on or off, and more.

Try This Yourself:

Same File *Continue using the previous file with this exercise, or open the file Charts_4.pptx...*

1 On slide **2**, click on the chart to select it, then click on the **chart elements** button to display a fly-out menu

Let's remove the chart title...

2 Click on the **Chart Title** checkbox so it appears *without* a tick

The chart will expand to occupy the extra space.

Because the bars are fairly small, let's add data labels to clarify the figures...

3 If necessary, repeat step **1**, then point to **Data Labels** until a small black arrow appears to the right, then click on the arrow to display a fly-out menu

4 Click on **Outside End** to apply these data labels

Data labels will appear to the right of each bar showing their actual value

1 First Quarter Sales

Chart Title

Chart Elements
- ☑ Axes
- ☑ Axis Titles
- ☑ Chart Title
- ☐ Data Labels
- ☐ Data Table
- ☐ Error Bars
- ☑ Gridlines
- ☑ Legend
- ☐ Trendline

2 First Quarter Sales

3 Chart Elements
- ☑ Axes
- ☑ Axis Titles
- ☐ Chart Title
- ☐ Data Labels ▸
- ☐ Data Table
- ☐ Error Bars
- ☑ Gridlines
- ☑ Legend
- ☐ Trendline

  - Center
  - Inside End
  - Inside Base
  - Outside End
  - Data Callout
  - More Options...
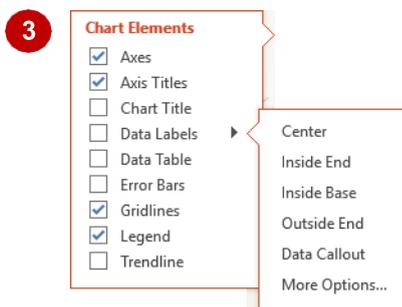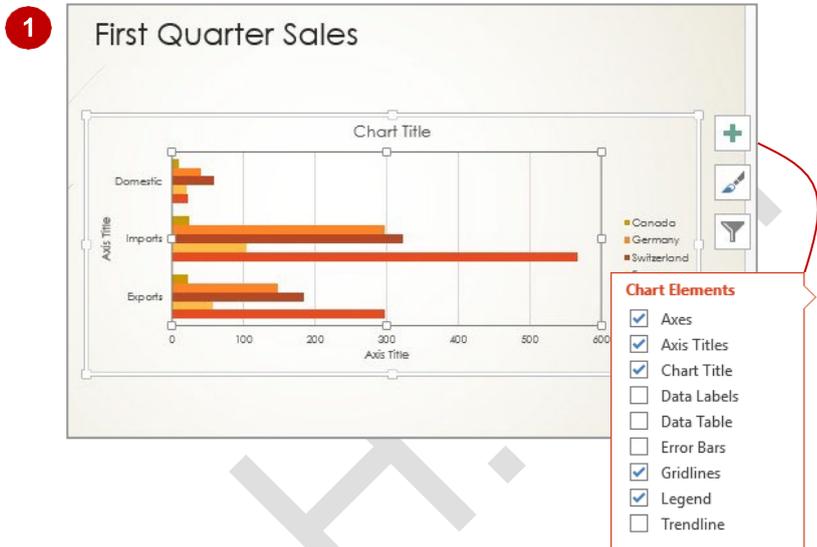
For Your Reference…

To **manually change** the **layout** of **chart elements**:

1. Click on the chart
2. Click on the **Chart Tools: Design** tab
3. Make the desired changes

Handy to Know…

- You can use the ribbon to change the layout of chart elements by clicking on the **Chart Tools: Design** tab and applying the options in the **Chart Layouts** group.

APPLYING A CHART STYLE

One advantage of applying a *theme* to a presentation is that each object you insert – be it a table, shape or chart – will be formatted with a default style that reflects the theme elements,

such as the theme colours. In addition to the default chart style, you can apply one of many other built-in styles to your charts to ensure they complement your presentation.

Try This Yourself:

Same File

Continue using the previous file with this exercise, or open the file Charts_5.pptx...

1. On slide *2*, click on the chart to activate it

2. Click on the *Chart Tools: Design* tab, then click on the *More* arrow in the *Chart Styles* group to display the *Chart Styles* gallery

   The gallery displays a range of complementary styles for the current chart. The current style is highlighted in orange...

3. Point to the options to display a tooltip with the style name, then click on *Style 7* to apply this style

   Let's try a quicker method…

4. Click on the *chart styles* button to the right of the chart to display a gallery of style options

5. Ensure the *Styles* tab is selected, then click on *Style 5* to apply this style

   Notice this style overrides the Quick Layout applied previously

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For Your Reference…

To *apply* a *chart style*:

1. Click on the chart
2. Click on the *Chart Tools: Design* tab, click on the *More* arrow in the *Chart Styles* group and select a style, or
   Click on the chart styles button and select a style

Handy to Know…

- You can save a chart as a template by right-clicking on the chart and selecting **Save as Template**. You can then type a name in the *Save Chart Template* dialog box and click on **[Save]**.
- Templates are listed under *Templates* in the *Chart Type* dialog box.

UNDERSTANDING THE CHART FORMAT PANES

The chart *Format* panes allow you to edit the elements of a chart with greater control than simply using the tools available on the *Chart Tools* tab. Currently the only downside is that

Live Preview is not available with this feature. However as changes you make in the chart *Format* panes update live in the presentation, this is not too much of an inconvenience.

Accessing Chart Format Panes

There is a *Format* pane for every element in the *Chart Elements* menu (accessible via the *chart elements* button), as well as for some aspects of the chart not included in the *Chart Elements* menu such as the *chart area*. These *Format* panes contain advanced options for a particular chart element.

You can access these *Format* panes using several different methods. You can access them via the *chart elements* button by pointing to the desired chart element until a black arrow appears, then clicking on the arrow and selecting *More Options*, as shown to the right.

For instance, clicking on *More Options* for *Chart Title* will open the *Format Chart Title* pane, as shown below to the right.

Alternatively, you can access the *Format* panes by clicking on the dialog box launchers on the *Chart Tools: Format* tab. Or you may choose to open a *Format* pane by selecting certain options from some of the menus on the *Chart Tools: Format* tab. For instance, if you click on *Shape Outline* in the *Shape Styles* group, point to **Weight** and select **More Lines**, a *Format* pane will open.

When you choose to open a *Format* pane using these methods, the particular *Format* pane that opens will depend on what section of the chart is currently selected.

Using The Chart Format Panes

Though many of the options available in the *Format* panes are also available on the ribbon, there are many advantages to using the *Format* pane. For instance, many of the *Format* panes offer greater control over certain formatting options. One example is if you want to apply a *gradient shape fill* to your chart. Using the ribbon, you can select from a range of preset gradient options. However, using the *Format* pane, you can modify the gradient in a number of ways including deciding the *type*, *direction*, *angle*, *transparency* and *brightness* of the gradient.

You can also move *Format* panes around the screen as required, by pointing to the top of the *Format* pane until a four-headed arrow appears then clicking and dragging it to wherever you require. This can be handy when you are working on a complex chart, or a number of charts and are going to be frequently using the formatting tools.

Another advantage of using *Format* panes is that once one is open, you don't have to close it in order to open another. You can open the specific *Format* panes for the other elements by simply double-clicking on the desired element within the chart. For example, once the *Format Chart Title* pane is open, you can double-click on the plot area to open the *Format Plot Area* pane or double-click on the data labels to open the *Format Data Labels* pane etc.
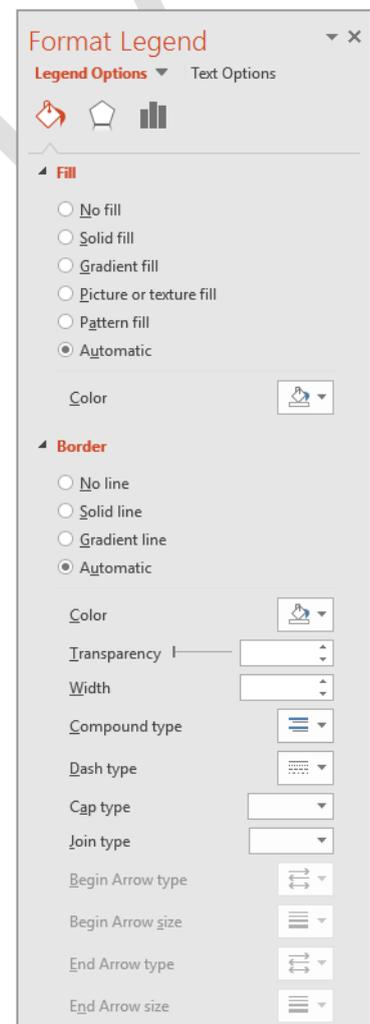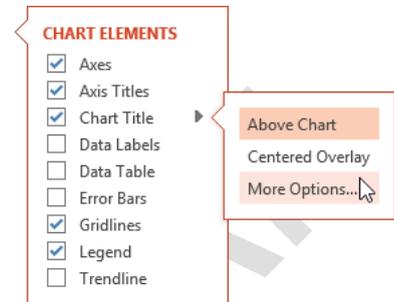
FORMATTING CHART ELEMENTS

You can format individual chart elements such as the chart area, plot area, data series, axes, titles, data labels and legend. For example, you can format the text in a selected chart element using WordArt; applying a different style; or selecting a specific text fill, text outline or text effect. You can also apply other formatting options as desired.

Try This Yourself:

Same File

Continue using the previous file with this exercise, or open the file Charts_6.pptx...

1 On slide **2**, click on the first data label (**10**) in the chart

The other data labels for that series will also be selected…

2 Click on the **Home** tab, then click on the drop arrow for **Font Size** in the **Font** group and select **10**, then click on **Bold**

3 Repeat steps **1** and **2** to reformat the other data labels

4 Click on the chart plot area, then right-click to display a shortcut menu and select **Format Plot Area** to open the **Format Plot Area** pane

5 Under **Fill** click on **Gradient fill**, then click on the drop arrow for **Preset gradients**

6 Click on **Light Gradient, Accent 2** to apply this

7 Click on the slider for **Brightness** and drag it to the left until it reduces to **40%**

8 Close the **Format Plot Area** pane and view the result
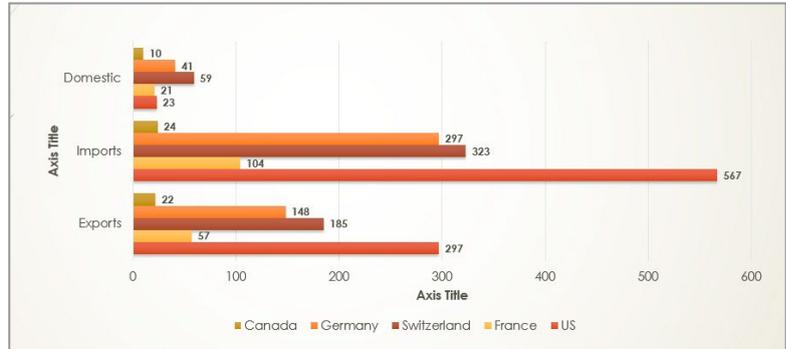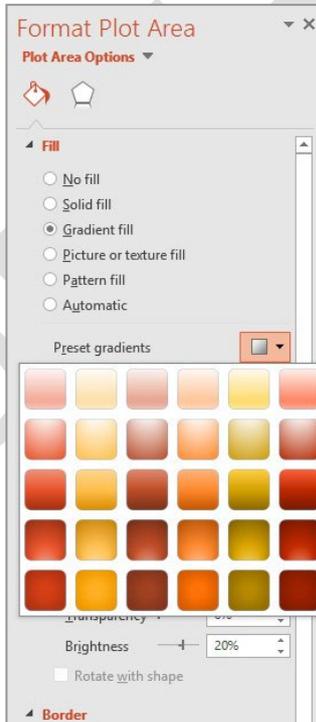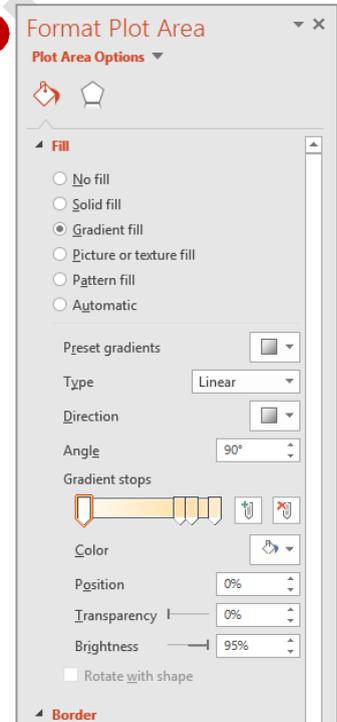
For Your Reference…

To **manually format chart elements**:
1. Click on the chart
2. Click on the **Chart Tools: Format** tab
3. Select the element to be formatted in **Chart Elements** in the **Current Selection** group
4. Make the desired changes

Handy to Know…

- Grouped elements, such as data series and data labels, contain individual elements that can be selected after you've selected the group. For example, to select a single data label, select the series data labels from the chart element list or by clicking on one of the labels, then click on the required data label.

EDITING A DATA SERIES

A big advantage of using an application like PowerPoint to make visual presentations of numeric data is that when the data changes you can easily reflect those changes in a PowerPoint chart. By displaying the underlying data, you can delete an unwanted *data series* using the standard Excel functions.

Try This Yourself:

Same File

Continue using the previous file with this exercise, or open the file Charts_7.pptx...

1 On slide **2**, click on the chart to select it

2 Click on the *Chart Tools: Design* tab then click on the bottom half of *Edit Data* in the *Data* group

3 Select *Edit Data* to display the spreadsheet

4 In the *Canada* column, edit the data as shown, then press Enter or click in another cell to apply the change

Notice the chart updates automatically…

5 Close the spreadsheet to view the changes in the chart

3

	A	B	C	D	E	F	G
1		US	France	Switzerland	Germany	Canada	
2	Exports	297	57	185	148	22	
3	Imports	567	104	323	297	24	
4	Domestic	23	21	59	41	10	
5	Category 4	4.5	2.8	5			
6							

4

	A	B	C	D	E	F	G
1		US	France	Switzerland	Germany	Canada	
2	Exports	297	57	185	148	30	
3	Imports	567	104	323	297	40	
4	Domestic	23	21	59	41	50	
5	Category 4	4.5	2.8	5			
6							

First Quarter Sales
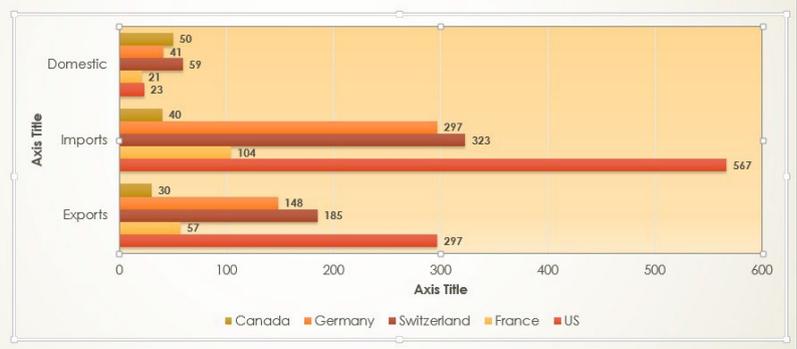
5

For Your Reference…

To *edit* a *data series*:

1. Select the chart, then click on the *Chart Tools: Design* tab
2. Click on *Edit Data* in the *Data* group
3. Edit the data as required

Handy to Know…

- If you want to add another data series to your chart, open the Excel worksheet and drag the blue line out to include however many additional columns you wish to add (each column is a data series). Then simply enter the data as required and the chart will update automatically.

HIDING DATA SERIES

The data on which a chart is based is stored in an Excel worksheet. When you click on the *Edit Data* tool, the worksheet will open in Excel allowing you to modify it just like other Excel worksheets. To change chart data, simply click in the cell containing the data that you want to change and type the new information. PowerPoint will then update the chart to reflect the changes.

Try This Yourself:

Same File

Continue using the previous file with this exercise, or open the file Charts_8.pptx...

1   On slide **2**, ensure the chart is selected, then click on the *chart filters* button to display a fly-out menu of options

2   Under *Series*, point to *Canada* – this greys out the other data series in the chart so you can clearly see the *Canada* data series

Notice that an Edit Series button appears. Clicking on this button will open the Excel spreadsheet and an Edit Series dialog box.

Let's hide the Canada data series…

3   Click on the checkbox for *Canada* so it appears *without* a tick, then click on **[Apply]** to apply this change and close the fly out-menu of options

The bars representing the Canada data series no longer appear in the chart…

4   Repeat step **1**, then click on the checkbox for *Canada* so it appears *with* a tick and click on **[Apply]** so that the data series is shown in the chart again

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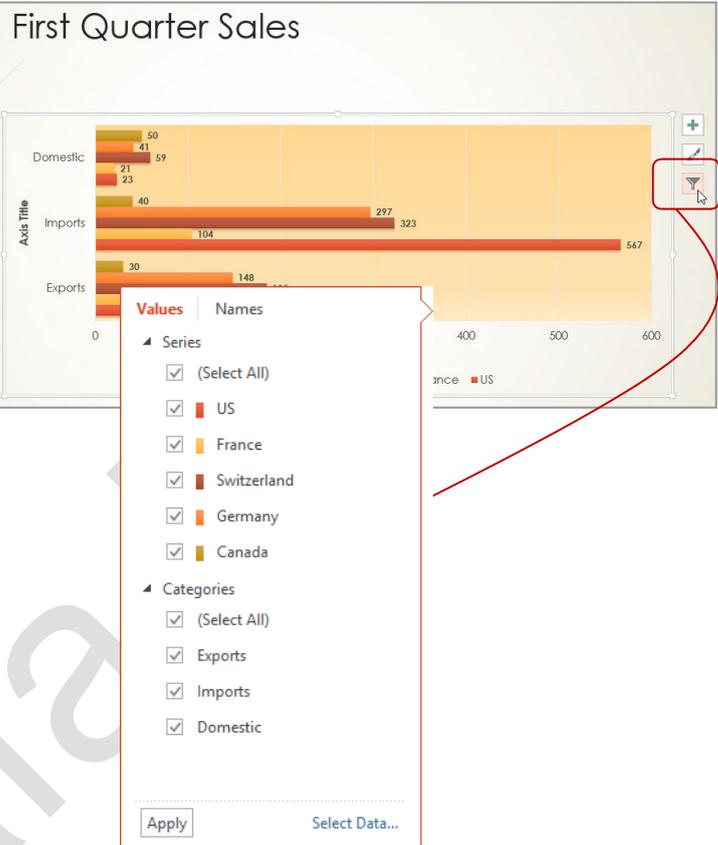
For Your Reference…

To *filter data*:

1. Select the chart
2. Click on the *chart filters* button
3. Select the *Series* or *Categories* you wish to hide/show and click on **[Apply]**

Handy to Know…

- You can click on *NAMES* at the top of the *chart filters* fly-out menu to specify whether you want the names for the series and categories displayed.

WORKING WITH PIE CHARTS

Pie charts are one of the best ways to graphically represent a single series of data. You can do some pretty fancy things with pie charts, especially 3-D pie charts. For example, you can move various pie wedges, or slices, around the screen individually placing them for emphasis. You can explode the chart to show individual portions and rotate it to place a slice in a specific position.

Try This Yourself:

Same File

Continue using the previous file with this exercise, or open the file Charts_9.pptx...

1. On slide **3**, click on a pie slice to select the chart

2. Click on the **US** pie slice to select it only

3. Click on the **Chart Tools: Format** tab, then click on **Shape Fill** in the **Shape Styles** group and select **Dark Red, Accent 6, Darker 50%**, as shown

4. Click off the chart, then click on a pie slice to select all slices of the pie chart

5. Right-click on a pie slice to display a shortcut menu and select **Format Data Series** to display the **Format Data Series** pane

6. Drag the **Angle of first slice** slider to see how the chart rotates, then set it to **195°**

7. Drag the **Pie Explosion** slider to see how the slices move, then set it to **18** and close the **Format Data Series** pane
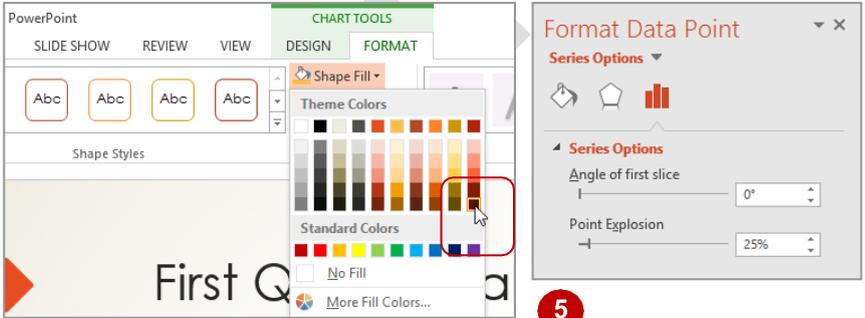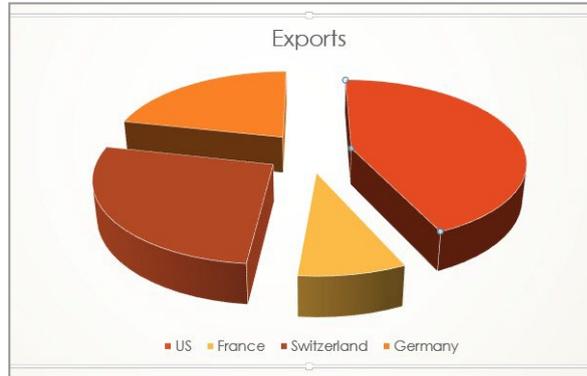
For Your Reference…

To *rotate* a *pie chart*:

1. Click on the chart
2. Right-click on the chart to display a shortcut menu and select **Format Data Series**
3. Change the **Angle of first slice**

Handy to Know…

- An *exploded* pie chart (that is, one in which the wedges are displayed apart from each other) can be easily re-joined by displaying the **Format Data Series** pane and setting the **Pie Explosion** to **0%**.