

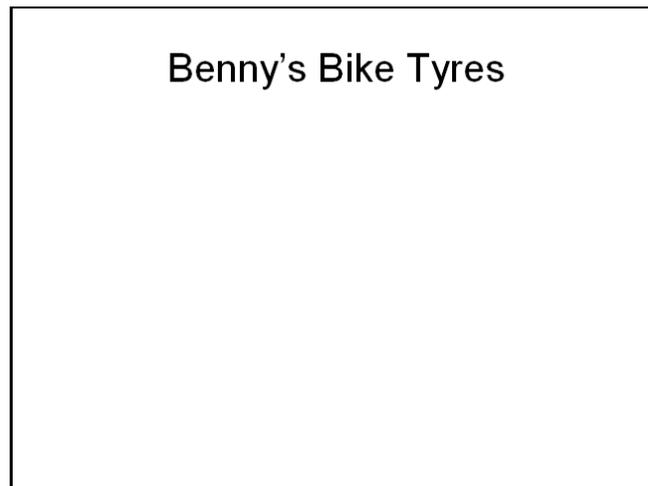
PowerPoint Exercises 3 – Drawing

In these exercises we will become more familiar with the drawing tools available in PowerPoint (and other office programs too for that matter!). The drawing tools are all available from the Drawing toolbar at the bottom of the screen and are shown below.

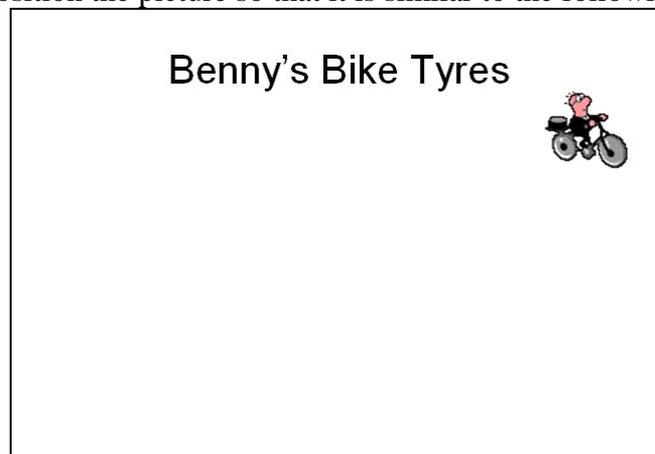


Note In the 2003 version of PowerPoint some icons may look slightly different but still perform the same function.

1. Begin by opening PowerPoint if you haven't already. You should have a blank presentation to begin with. If there is no blank presentation, then press **[Ctrl][N]** or click the new Presentation icon. 
2. A blank slide will be created already but we will change the layout of this slide.
From the **Format** menu click  Slide Layout...
3. Select a **Title Only** slide layout. 
4. Now add change the text in the slide title so that it looks like the slide below.



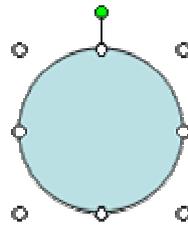
5. Choose **I**nsert, **P**icture **C**lipart or click the Clip art icon from the drawing toolbar. 
6. Choose a clipart picture of a bike or something related and insert it.
7. Resize and position the picture so that it is similar to the following.



8. Click the oval icon on the drawing toolbar. ○
 9. Drag on your page to create a circle.
- It may be quite difficult to get a perfect circle but there is an easier way.
10. Make sure your oval is selected and press the **[Delete]** key to remove it.
 11. Create another circle, this time holding down the **[Shift]** key to make sure it's a perfect circle.

Tip You can use this same method to create squares, stars and any other shape that you want to have an even height and width.

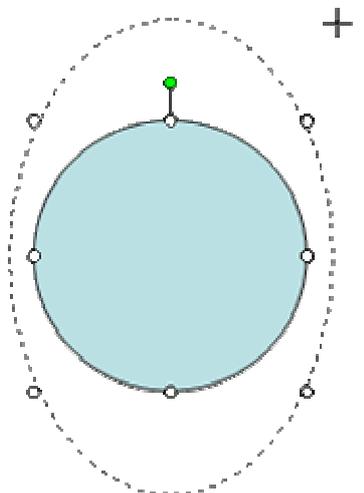
When an object is selected, it will have various symbols around it as shown below.



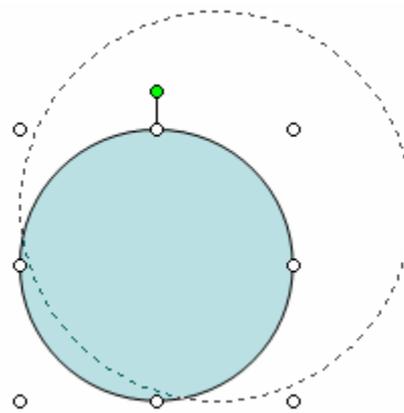
The 9 empty circles around the shape are selection handles. These can be used to resize a shape. The side ones adjust the width. The top and bottom ones adjust the height. The corner ones can be used to adjust both height and width.

The coloured circle above the shape is used to rotate an object.

12. Move your mouse over one of the corner of the shape. Hold your mouse down and begin dragging to resize the circle. If you want the shape to stay in proportion then make sure you hold down the **[Shift]** key as you drag. Drag until the size of the circle is equal to approximately half the height of the slide.

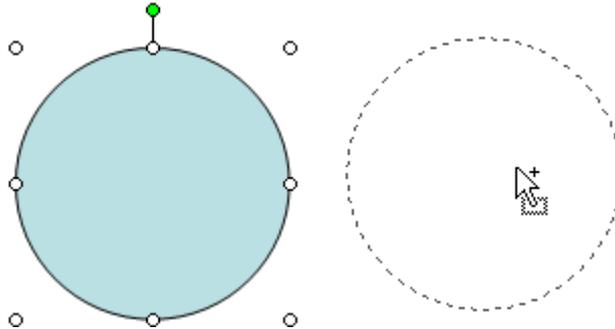


Resizing without the shift key

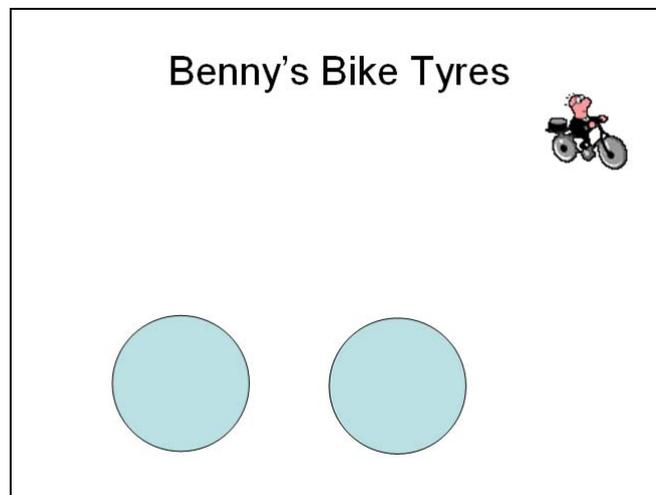


Resizing with the shift key

13. We need a second circle but rather than creating another one, we will copy the existing one. Drag the circle while holding the **[Ctrl]** key. A plus sign will appear next to your mouse as you hold the **[Ctrl]** key to indicate copying. Dragging without holding down any key means you will only be moving the shape.



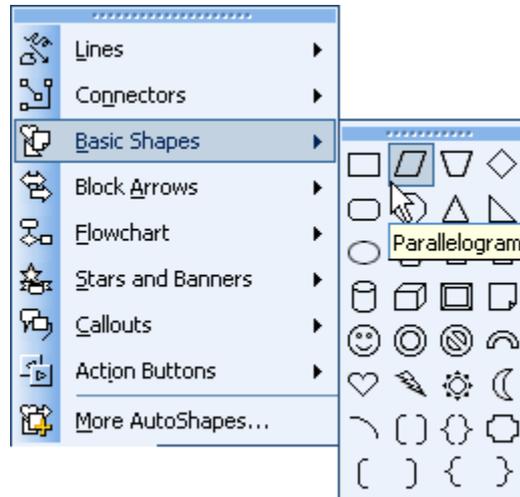
14. Resize and reposition both circles so that they are similar to the example below.



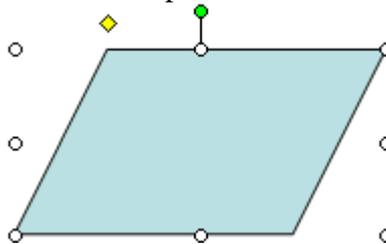
Hint You can move a selected object by pressing the arrow keys on the keyboard. This can help with precise positioning since each time you press the key, the object will move only a small amount. Holding down the **[Ctrl]** key at the same time will move in even smaller amounts.

Creating Additional Objects

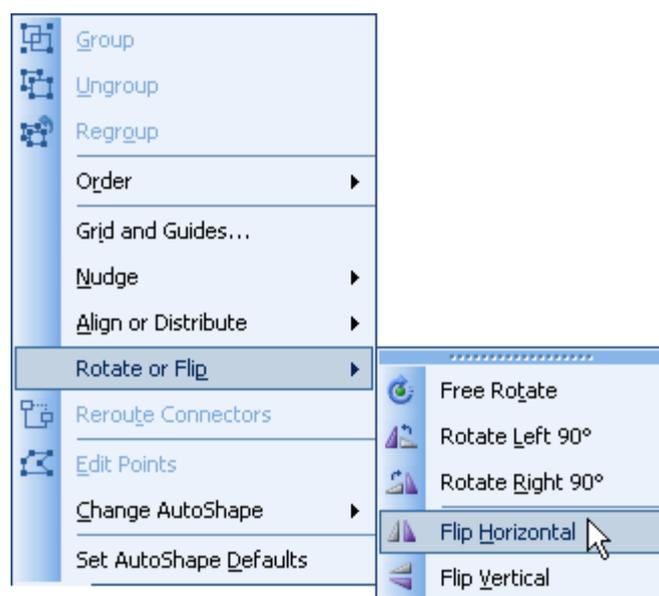
1. On the drawing toolbar, click the **AutoShapes** button to show the **AutoShapes** menu.
2. Click **Basic Shapes** and then click on the **Parallelogram** icon as shown below.



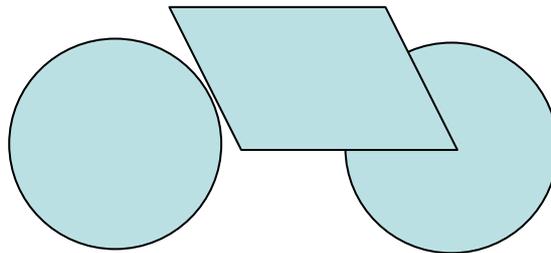
3. Drag on the slide to create a new shape as shown.



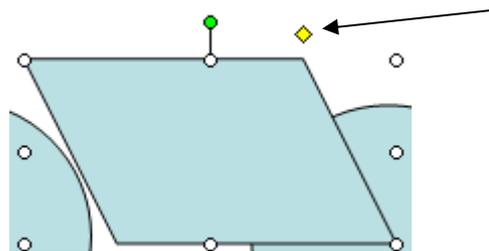
4. With the shape still selected, click the **Draw** icon to display the Drawing options.
5. Select **Rotate or Flip** and then select **Flip Horizontal**.



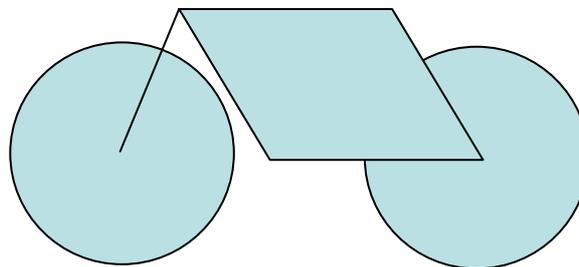
6. Resize and position the shape so that it is similar to the example below.



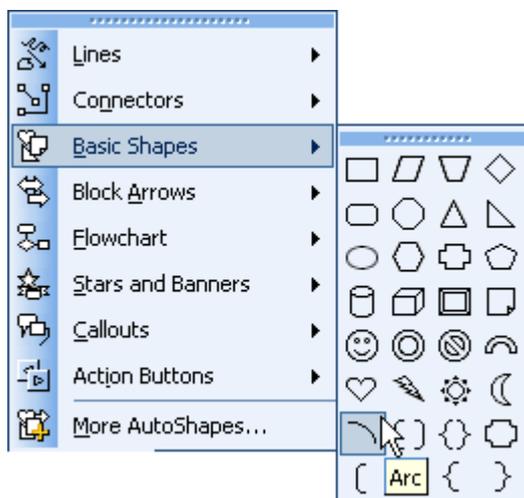
7. Select the Parallelogram and notice the small yellow mark on it.



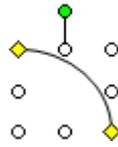
8. Drag this symbol to the left adjust the angle of the shape to slightly increase.
Many shapes have a similar selector for adjusting the shape.
9. Click the Line icon on the drawing toolbar.
10. Draw a line on your slide so that it looks like the example below.



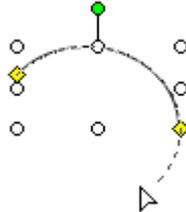
11. On the drawing toolbar, click the **AutoShapes** button to show the **AutoShapes** menu.
12. Click **Basic Shapes** and then click on the **Arc** icon as shown below.



13. Draw an arc in a blank area of your slide.



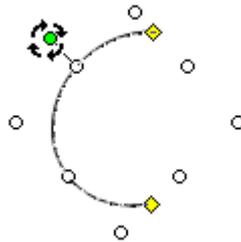
14. Notice that this shape has more than one yellow selection point. These are used to control how far each end of the arc will curve. Adjust each of them so that the arc looks similar to the following example.



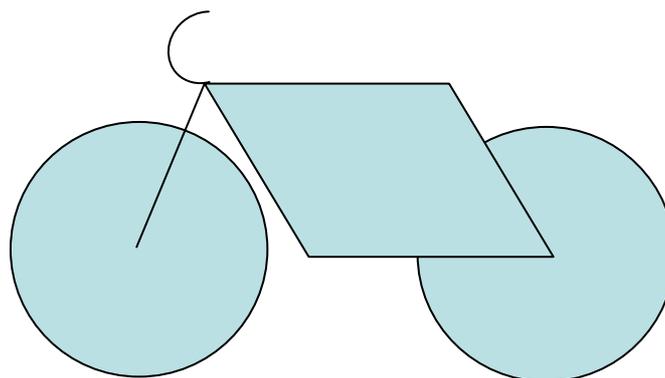
15. Flip the arc if necessary to make it match the example below.



16. Use the rotation handle to change the angle of the arc to match the example below.

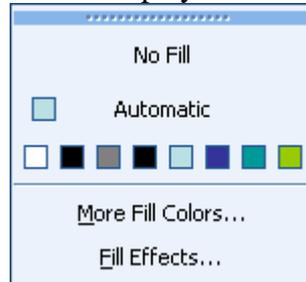


17. Lastly, resize and position the arc with the rest of the shapes to that they all look like the following example.

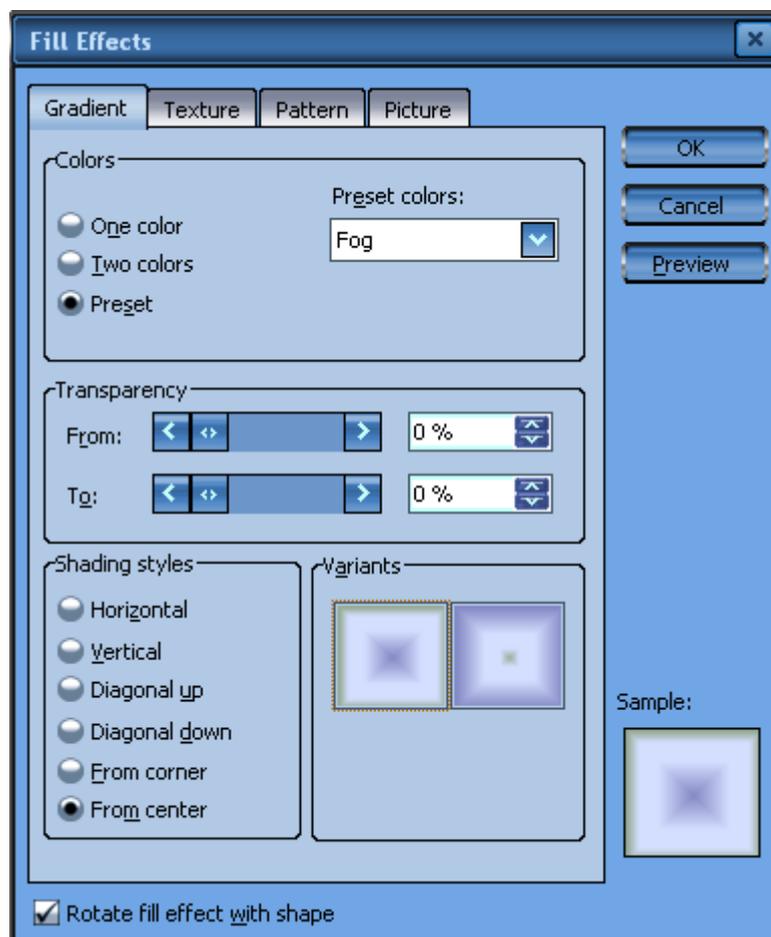


Formatting Shapes

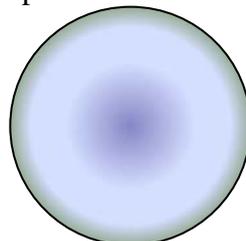
1. Click on the right circle (wheel) to select it.
2. Locate the **Fill Color** icon on the drawing toolbar. 
3. Click the arrow next to the icon to display the fill colour palette.



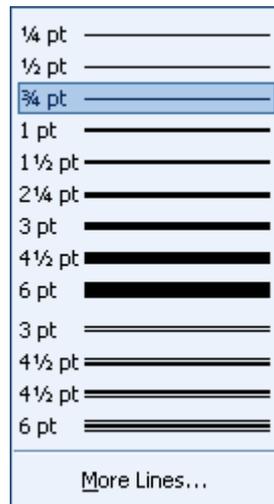
4. Click the **Fill Effects** option.



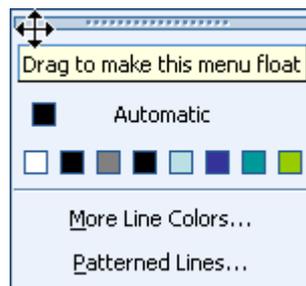
5. Make sure the **Gradient** tab is selected along the top and select **From center** under **Shading styles**. Choose other options similar to the ones above and click **OK**.



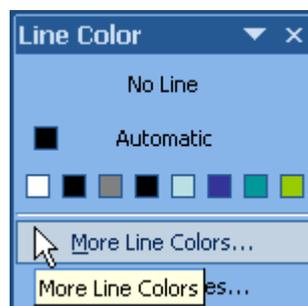
6. Click the **Line Style** icon on the Drawing toolbar. ☰



7. Select the **6 pt** line option.
 8. Click the arrow next to the line colour icon. 🖱️
 9. When the line colour options appear, move your mouse over the bar at the top of the options as shown below.



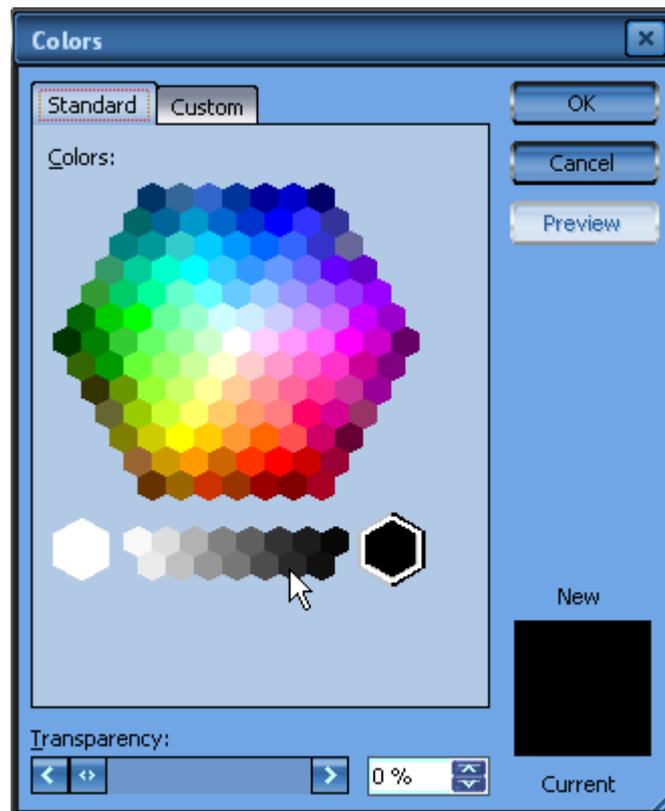
10. Drag this bar upward to separate the options from the toolbar and make it a floating palette.



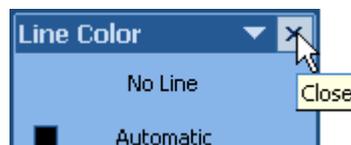
11. Click on **More Line Colors**.

Note Many toolbar menus in PowerPoint and other programs have detachable palettes. Simply look for the bar at the top. Floating toolbars save you having to keep on returning to the toolbar for frequently used options and can be closed whenever you like.

12. Click on a dark grey colour as shown below and click on **OK**.



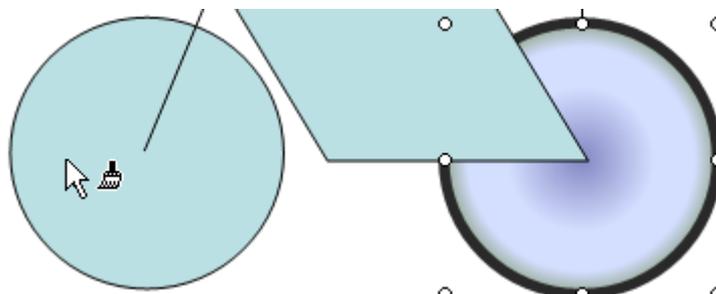
13. Close the floating palette.



14. Instead of repeating all of the above to format the left wheel, we will use the format painter to copy the formatting. Make sure the right wheel is still selected.

15. Click the **Format Painter** icon on the main Formatting toolbar. 🖌️

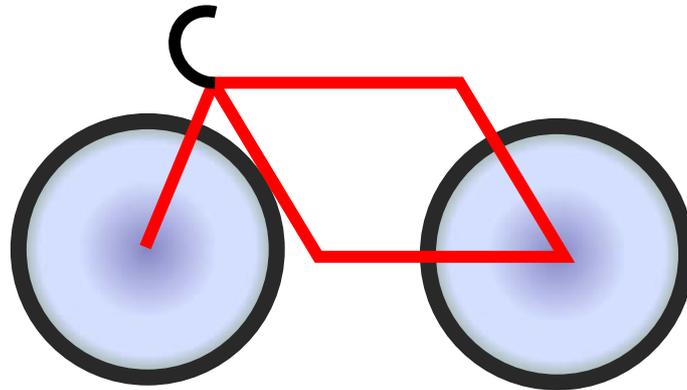
16. Click on the left wheel to apply the copied formatting.



17. Click the parallelogram to select it.
18. Change the border style to **4½ pt** and change the line colour.
19. For **Fill Color** choose **No Fill**.



20. Make sure the parallelogram is still selected and double click on the **Format Painter** icon. Double clicking allows us to copy the formatting more than once. 
21. Click on the line and then the curve to copy the formatting to both of those objects.
22. When the formatting is taken care of you can click once on the **Format Painter** icon to turn it off.
23. Lastly, change the line colour of the curve to black (or **Automatic**). The finished 'bike' should look like the example below.

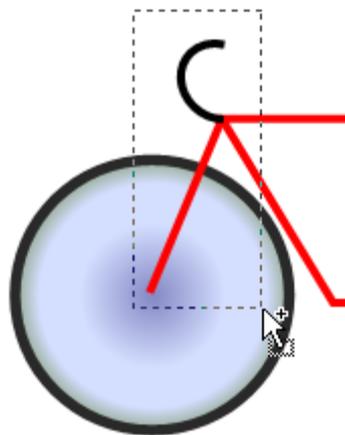


Selecting and Grouping

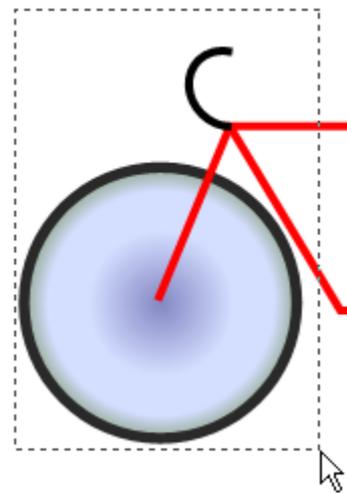
There are several ways of selecting objects on a slide. One method we have seen is to select objects by clicking on them with the mouse. In the following steps we will look at some other methods.

1. Press the **[Tab]** key on your keyboard. Each time you press the key, a different object on the slide will become selected. The objects are selected in the order they were placed on the slide. This can be handy for selecting an object that is hidden behind other objects. If you hold down the **[Shift]** key while pressing **[Tab]** the objects will be selected in the reverse order.
2. Move your mouse to a blank position above and to the left of the bike you have created.
3. Drag the mouse over objects to select them. Unlike some programs, Objects in PowerPoint will only become selected if they are completely covered by the selection area.

Example



Only the line and curve will be selected in this example.



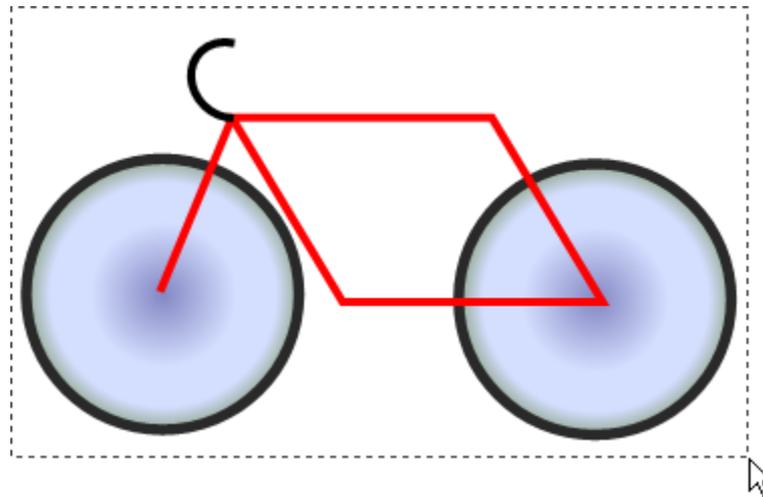
The line, curve and left circle will all become selected

You can also select objects more selectively using the mouse and the **[Shift]** key.

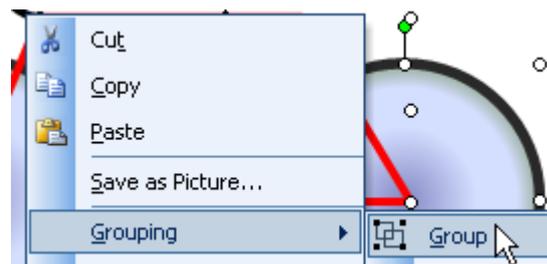
4. Click on the left wheel to select it.
5. Hold down **[Shift]** and click on the right wheel.
6. Hold down **[Shift]** and click on the parallelogram.
7. Hold down **[Shift]** and click again on the parallelogram. Since it was already selected, **[Shift]** clicking it again deselects it.
8. Press **[Ctrl] [A]** to select all objects on the slide,
9. Press **[Esc]** or click on a blank part of the slide to deselect all objects.

Note Selecting with the mouse only works with the selection tool enabled which is indicated by your mouse pointer appearing as an arrow. If you have clicked on one of the other drawing tools then you may need to click the **Select Objects** icon on the drawing toolbar before you can use the mouse to select.

10. Draw a selection rectangle that encloses the whole bike so that all the shapes it's made of will be selected.

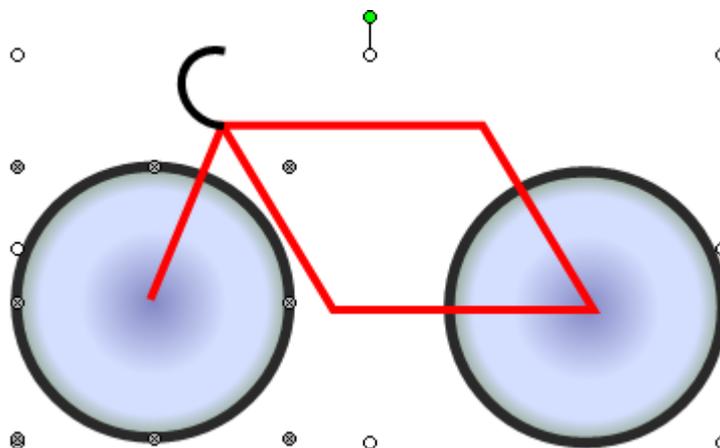


11. Click the **Draw ▾** on the drawing toolbar and then select **GROUP**. This option is also available by right clicking on the selected objects and then selecting Grouping as shown below.



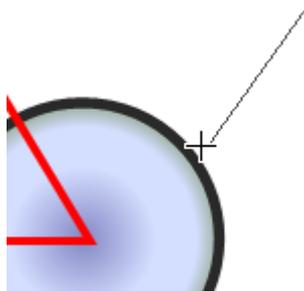
When objects have been grouped, they can be resized or moved as though they were all one object, though you can still modify individual objects within the group if you wish.

12. Make sure the grouped objects are still selected and click on the left circle. Notice that it has different selection handles around it. These indicate that you can format an object that is currently part of a larger group.



Additional Shapes

1. Click the arrow icon on the drawing toolbar. 
2. Drag an arrow on your slide as shown (you drag in the direction that the arrow will point in).



3. You can use the selection handles on the arrow to move the start and end point of the arrow. Position it so it looks like the arrow is pointing at the tyre of the bike. If you hold down the **[Alt]** key while dragging selection handles you can be more precise.



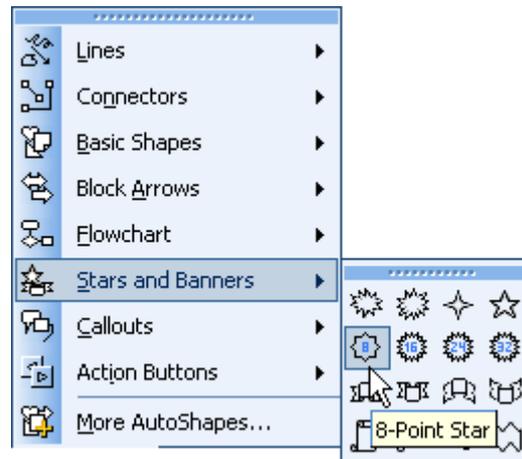
4. With the arrow still selected, click the arrow styles icon on the drawing toolbar. 
5. When the list of arrow styles appears, click on the second option.



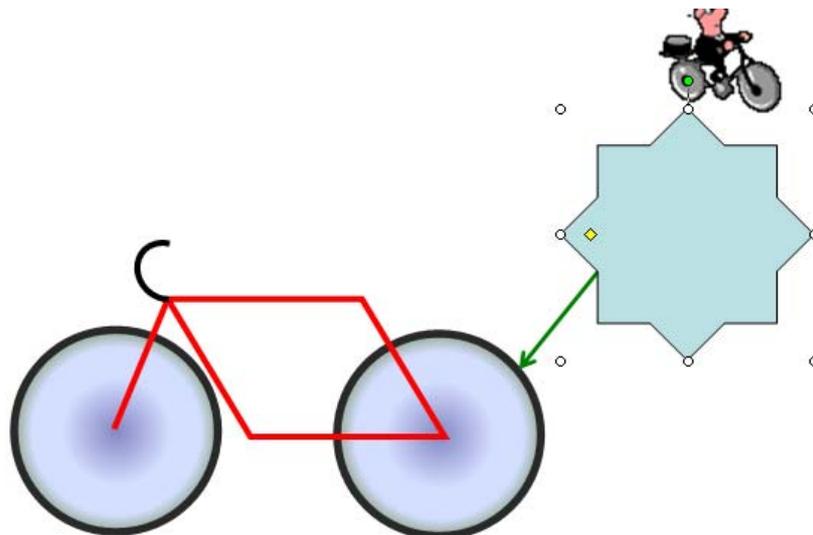
6. Use the methods shown in the previous section to format the arrow using a thicker line style and change it to a colour of your choice.



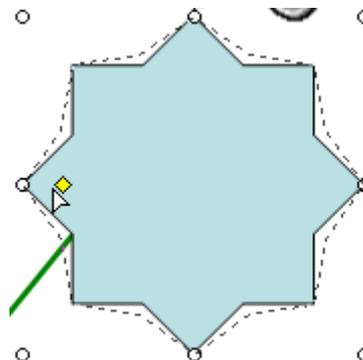
7. Click the **AutoShapes** ▾ button on the drawing toolbar to show the **AutoShapes** menu.
8. When the menu appears, select the **8-Point Star** option shown below.



9. Hold down **[Shift]** (to make sure height and width are equal) and draw a star that is the size and position shown below.



10. Use the yellow selection point on the selected star to reduce the sharpness of the points as shown below.



11. Format the star with a fill and line style/colour of your choice.

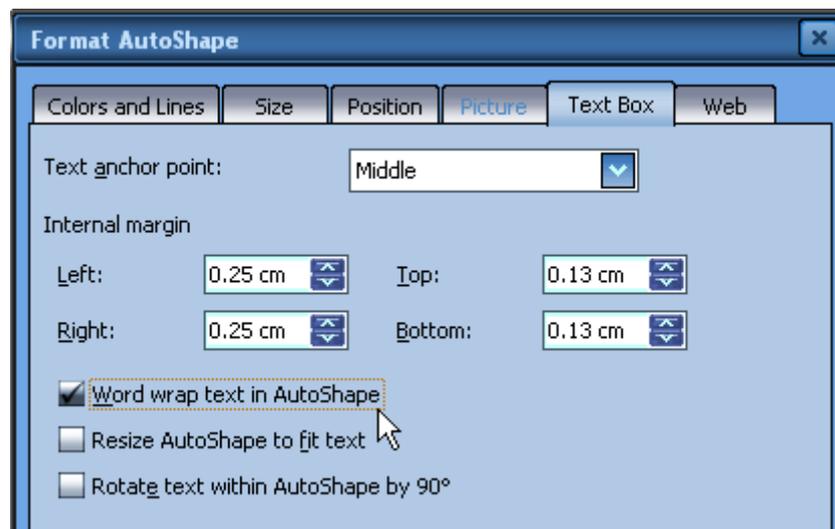
12. Right click on the star and choose **Add Text**. The shape will now allow you to add text just as you would with a text box.



1. Enter the text *Extra Durable Rubber*.
2. Format the text to be 20pt font size with bold formatting and a colour of your choice.
3. Right click inside the shape (or select the **Format** menu) and choose  **Format AutoShape...**
4. Click the **Text Box** tab.



5. Click the **Word wrap text in AutoShape** option to tick it and click **OK**.

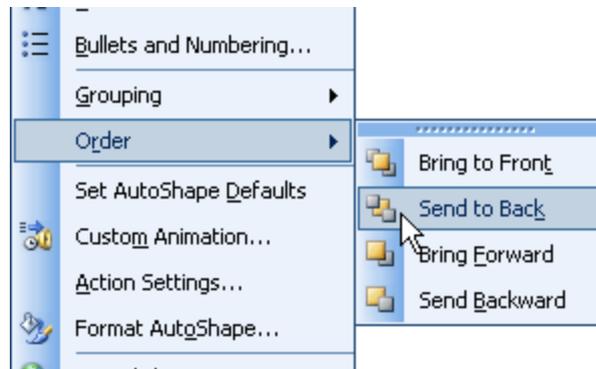


The text should now wrap to fit within the borders of the shape.

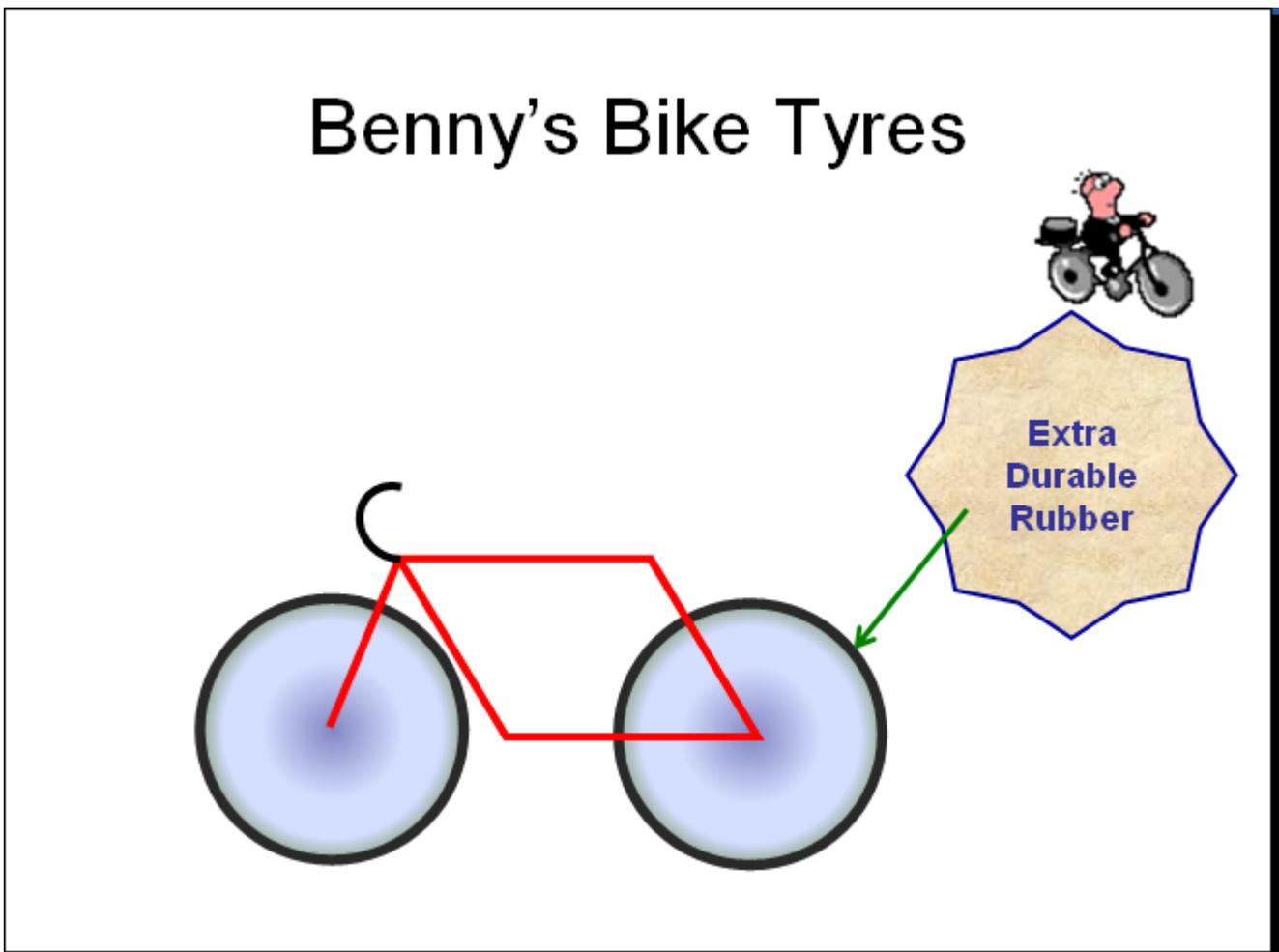


Currently the star is overlapping the arrow. We want the arrow to be on top of the star.

6. Click the **Draw** * on the drawing toolbar or right click on the star.
7. From the menu that appears select **Order** and then **Send to Back** as shown below.



The arrow will now appear in front of the overlapping part of the star. The completed slide should appear like the example below.



8. Save the presentation as *Shapes* and close the file.

