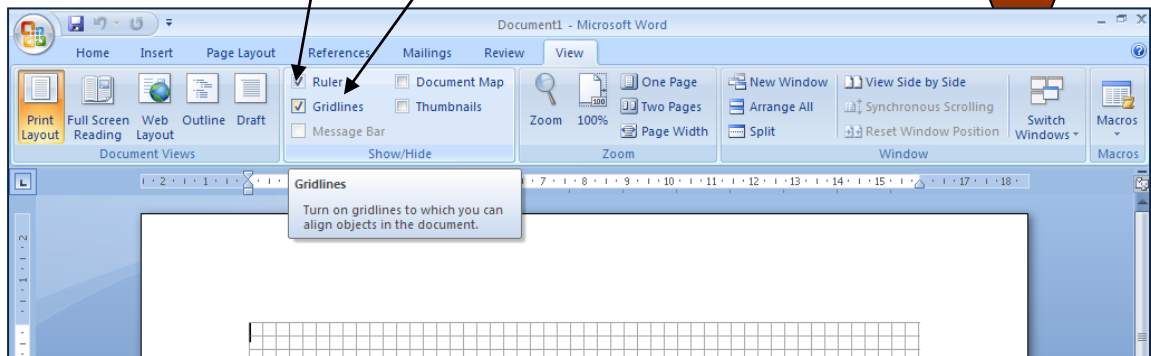


Make your own shapes in Word

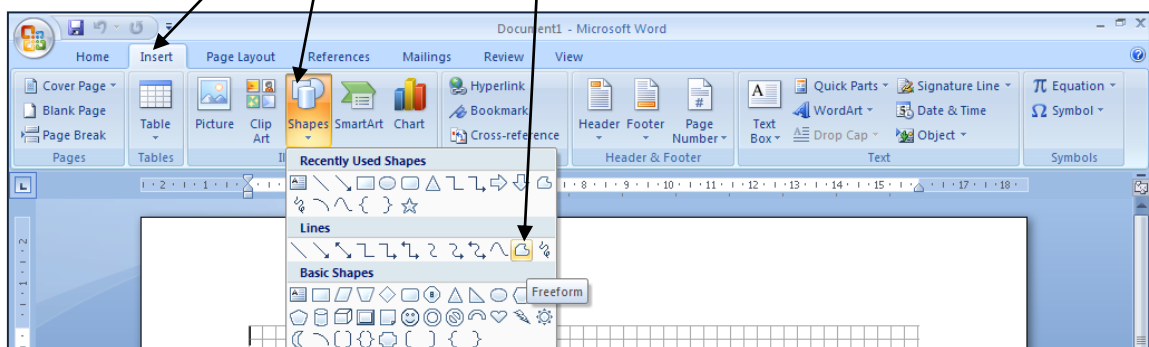
This activity shows how to draw all sorts of shapes in Word.
The ruler and gridlines make it easy to draw shapes the size you want.



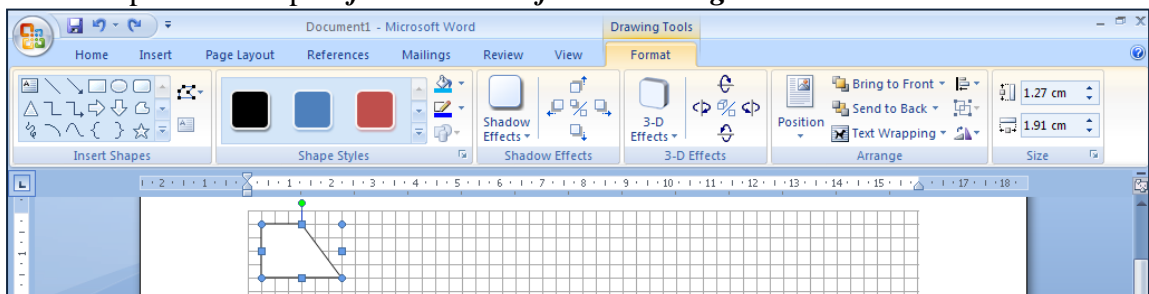
- Left click **View** then **Ruler** and **Gridlines** (if necessary), so that both are ticked.



- Left click on **Insert**, **Shapes**, then **Freeform** (this draws straight-sided shapes).



- To draw a trapezium *left click where you want each corner to be.*
To complete the shape *left click on the first corner again.*



- You can change the appearance of the trapezium in many ways. Experiment with the options in the **Format** menu (shown above). If you don't like any effect, use the **Undo** button to remove it.

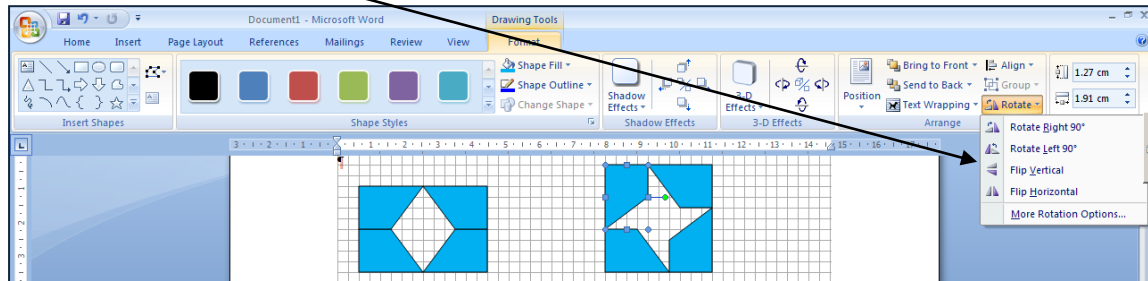


Undo button



You can make all sorts of patterns with your trapezium.

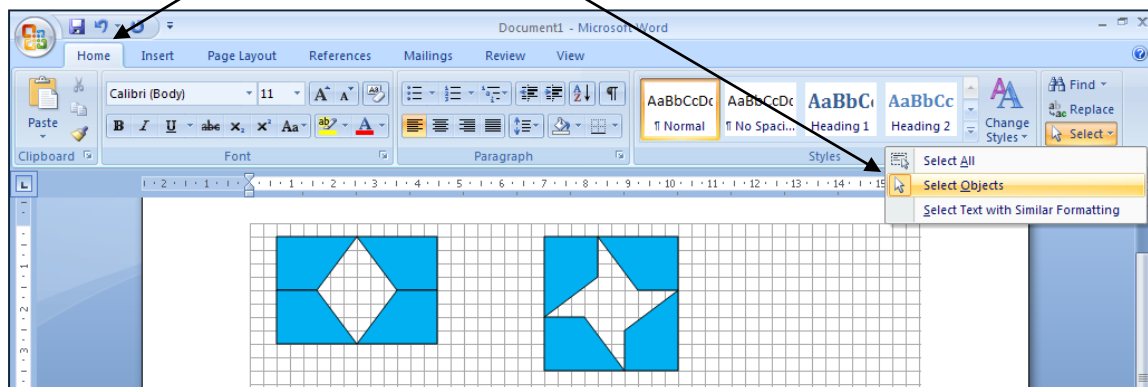
- To copy the trapezium, press the **Control** key and drag the mouse.
- Use **Rotate** or **Flip** to make patterns.



- Two examples of 'tiles' made with 4 shapes are shown above. See if you can make these tiles with your shape.

You can make more complex patterns by treating each tile as a single object. To do this, follow these steps:

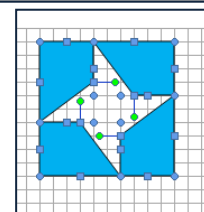
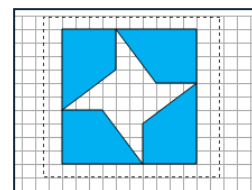
- Left click **Home**, **Select** then **Select Objects** so that the cursor becomes an arrow.



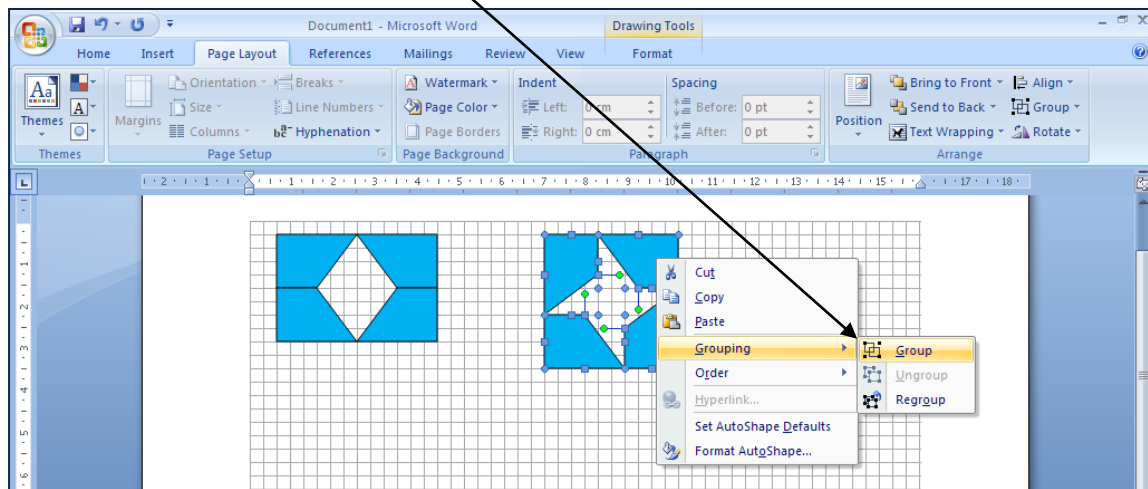
- *Move the arrow to a point above left of one tile.*
- *Left click and at the same time drag the mouse down and to the right.* A dotted box will appear. Make it big enough to surround the tile, then release the mouse.

All the shapes in the tile will be highlighted.

(Another way to highlight all the shapes is to hold down the SHIFT key while you left click on each shape.)

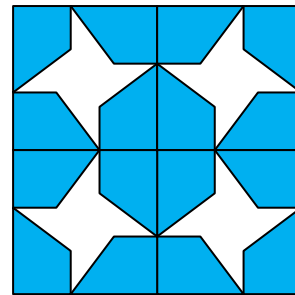


- Right click then select **Group** from the **Grouping** menu (as shown).



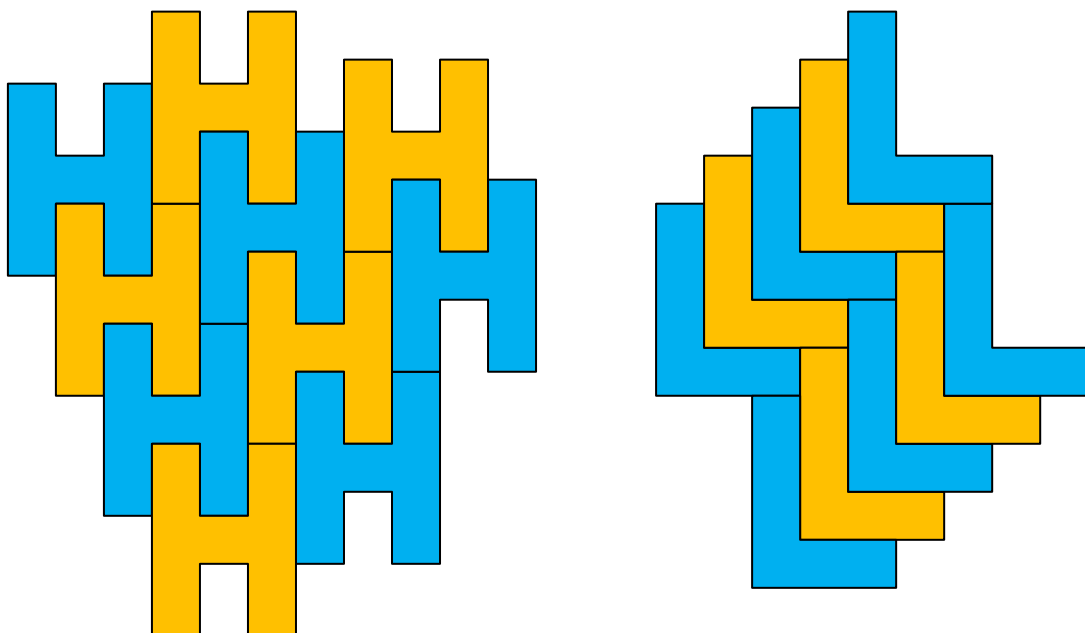
The shapes become a single tile.

- Copy the tile to give patterns like this:



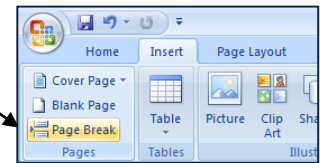
- Use your tiles to *draw some other patterns*.
- *Draw other shapes and make patterns with them.*

Tessellations are patterns where the shapes fit together without leaving any gaps. Use Word to draw these or other tessellations if you have time.

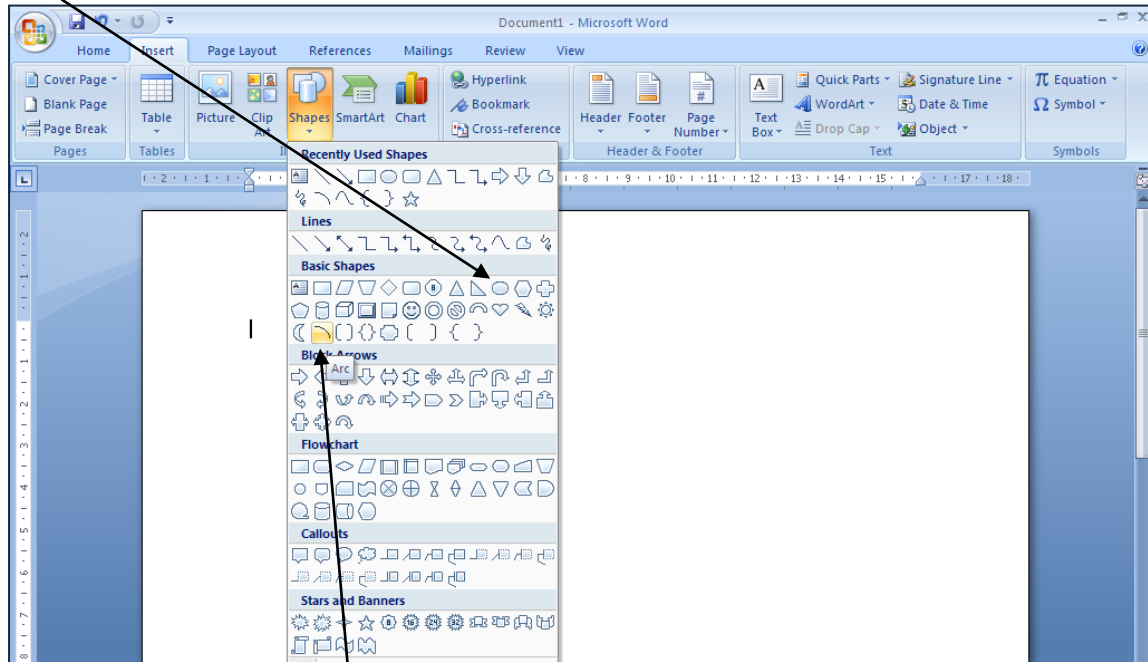


Drawing Curved Shapes

- To start a new page, left click **Insert** then **Page Break**.

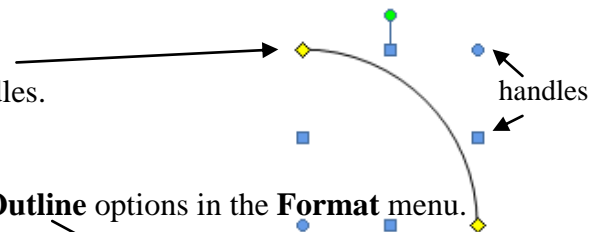


There are a variety of curved shapes in the shape menu. For example, you can use the **Oval** button to draw ovals and circles. (Hold down the SHIFT key for a circle.)

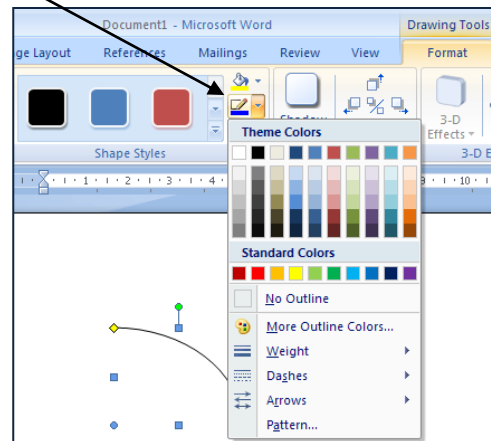
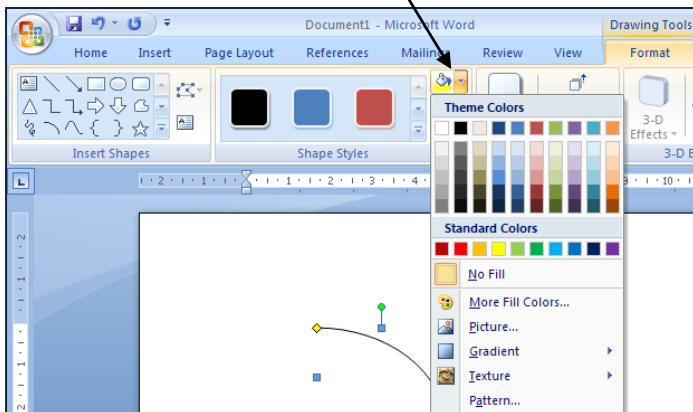


- Experiment** with the **Arc** button – this allows you to draw part of an oval or circle. Try **holding down the SHIFT key** as you draw. What difference does it make?

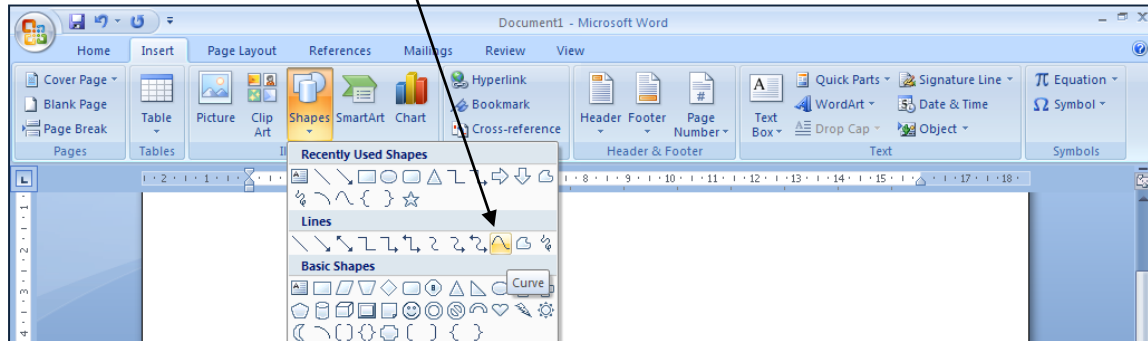
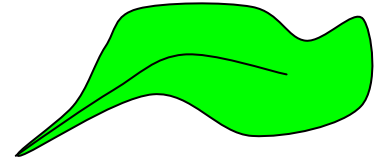
- The arc has **yellow handles** at each end. **Experiment** with these and the other handles.



- Experiment** with **Shape Fill** and **Shape Outline** options in the **Format** menu.



This leaf was drawn using **Curve** in the **Shapes** menu.



- *Try drawing some curves.* Some notes are given below:

Notes

Left click on each point that you want your curve to pass through.

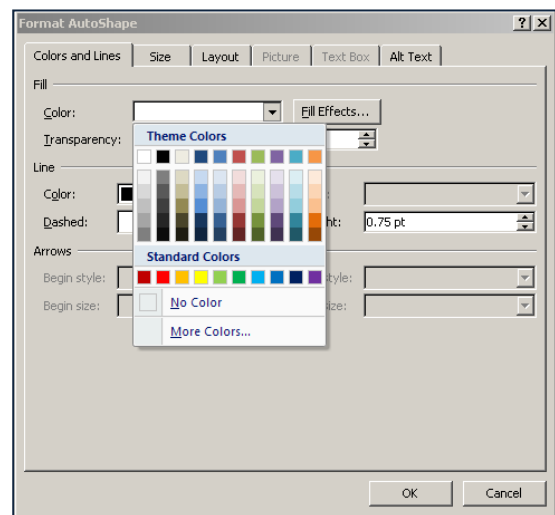
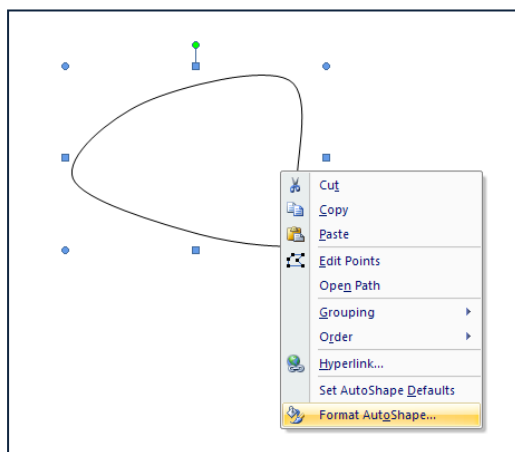
To finish a **curved line**, double left click where you want it to end.

To complete a **curved shape**, left click on the starting point.

Use **Shape Fill** in the **Format** menu (see previous page) to colour your shapes.

Experiment with the other options.

Alternatively right click on the shape then left click on **Format AutoShape** (as shown below). This gives another way to colour or change the appearance of shapes. Explore this way if you have time.



- *Experiment* with **Scribble**, the button at the end of the **Lines** menu. You need to hold down the left mouse button when you use this option. Can you use Scribble to write your name?



Teacher Notes**Skills used in this activity:**

- drawing shapes in Word

Preparation

Students will need to have some previous experience of the drawing options in Word.

Ideally they should have worked through the **Drawing Shapes in Word**, **Tessellations in Word** and **Symmetry in Word** activities.

Notes

This activity shows students how to draw shapes other than those available in the Shapes menu. This will enable them to work with transformations and symmetry using more varied shapes and also draw more varied patterns and tessellations.

The activity can be shortened by using just the first 3 pages (i.e. omitting the sections dealing with curved lines and shapes).

