Mandurah High School

Workcard

Number

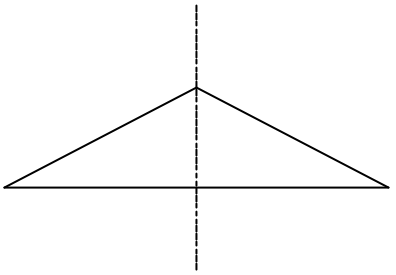
S63w3

Strand: **Space** **Substrand:** **Represent transformation**

Symmetry

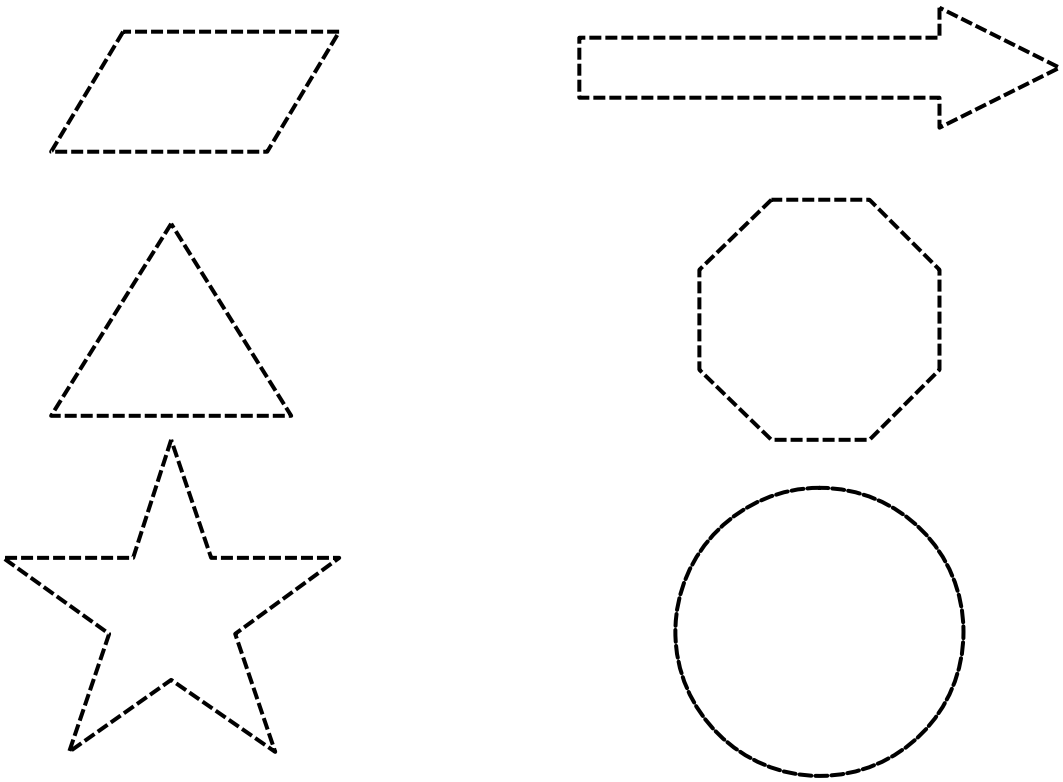
Lines of Symmetry (2-dimensional)

The dotted line is a line of symmetry for this 2 dimensional shape.



1 line of symmetry

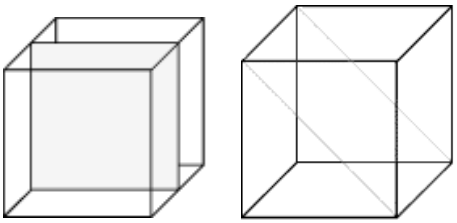
Draw the following shapes on a piece of paper and determine all their lines of symmetry (if they exist). Write down the number of lines of symmetry as you go along



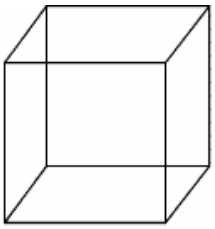
Draw 2 of your own shapes and find their lines of symmetry

Planes of Symmetry (3-dimensional)

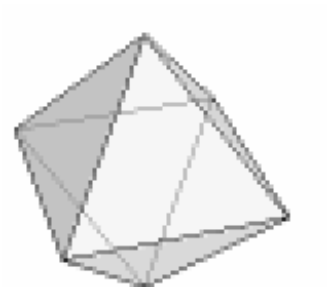
The grey shaded plane is one of the planes of symmetry for a cube



A cube has nine planes of symmetry. Copy this diagram onto a piece of paper and draw all the planes of symmetry.



Take a regular octahedron and examine it carefully. Imagine cutting the model with a knife. Outline and shade in the planes of reflectional symmetry on the models like this. Copy several of them and shade the planes of symmetry.



Reflection

1. Which is the easiest type of symmetry to draw
2. What is the most difficult part of this task?
3. Why is symmetry important?