

Maths - Year 2

Geometry 3: Investigating symmetry

Key Vocabulary

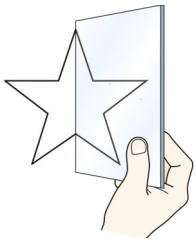
Reflection/reflect/reflecting	Transformation of a shape or point about a line of symmetry.
Flipped	Turned over.
Opposite	Completely different or on the other side.
Side	Straight line joining the vertices of a polygon.
Half/halves	One part of a whole, split into 2 equal parts.
Mirror image	An image that is reflected.
Mirror line, line of symmetry	A line that divides a symmetrical object in half.
Symmetry, symmetrical	Objects or images with halves that mirror each other are symmetrical, e.g. butterflies, tennis courts.
Horizontal	A straight line parallel to the horizon.
Vertical	A straight line at right angles to the horizon.

Mathematical Skills

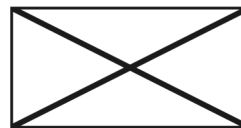
- Cut out and match or fold halves of pictures, shapes or patterns to identify which are symmetrical.
- Use a mirror to identify pictures, shapes and patterns which are symmetrical.
- Make or complete a symmetrical pattern or picture without using a mirror.
- Visualise or predict the result of a reflection.
- Fold shapes to identify which are symmetrical, and, where appropriate, to show the line of symmetry.
- Visualise or predict which shapes are symmetrical, and the position of the line or lines of symmetry.

Mathematical Methods

- Exploring symmetry in the world around us.

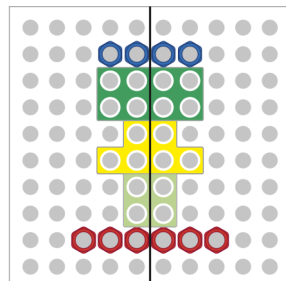
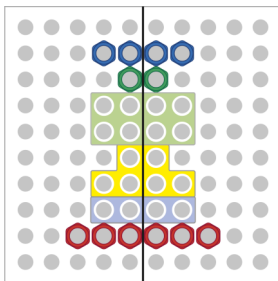


not symmetrical

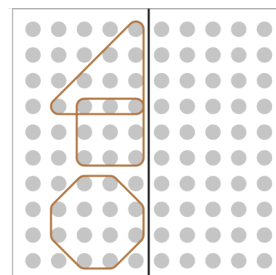


symmetrical

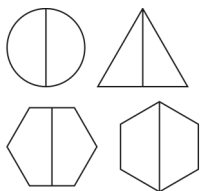
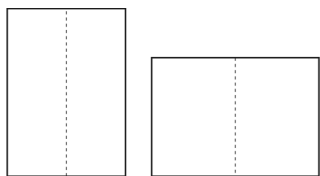
- Making symmetrical patterns with Numicon apparatus.



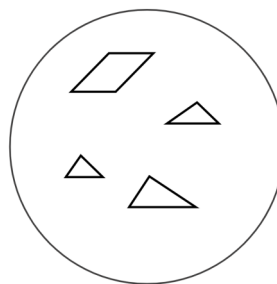
- Making symmetrical patterns with other apparatus.



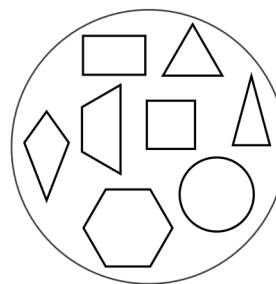
- Folding to find lines of symmetry.



non-symmetrical



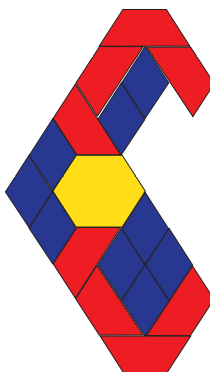
symmetrical



Can you..?

- Can you use the Numicon Shapes to make a symmetrical pattern on the baseboard?

- Can you finish this symmetrical design?



- Look at these 2D shapes. Do you think they have any lines of symmetry? Use the mirror to check your thinking.

