

Maths - Year 5

Geometry 2: Transformations

Key Vocabulary

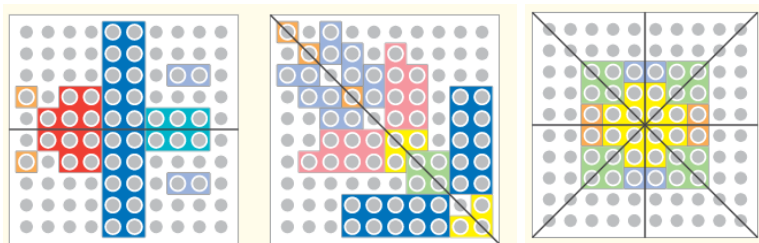
Transformation	A way of describing the changes that can be made to the size and/or position of a shape or object .
Translation	A transformation involving sliding a shape or object to a different position in a specific direction.
coordinates	Pairs of numbers describing a position on a grid, e.g. (2,3).
Angle	An amount of turn or rotation.
Axis/axes	The lines that frame a coordinate grid. The x-axis is the horizontal axis and the y-axis is vertical.
Asymmetry	No symmetry is present.
Symmetry	Objects or images with halves that mirror each other are symmetrical, e.g. butterflies, tennis courts.
Equidistant	At equal distances.
Quadrant	One of the four equal areas made when a grid, or a shape, is divided into four.

Mathematical Skills

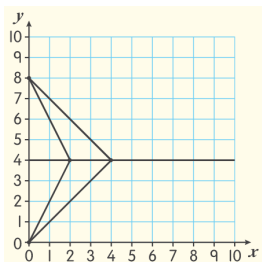
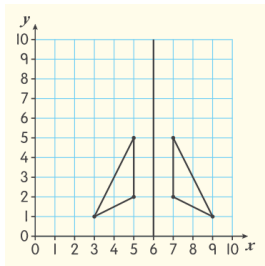
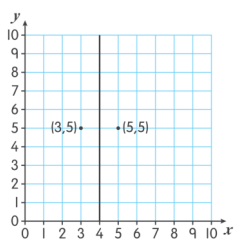
- Locate the mirror line accurately.
- Make or draw a symmetrical pattern or shape with a vertical, horizontal or sloping line of symmetry.
- Accurately plot points using coordinates in the first quadrant.
- Give the coordinates of a point of points on a grid.
- Locate the image of a shape under a translation or reflection.
- Explain a translation or reflection of a point on a coordinate grid in terms of the changes in its x- and y- coordinates.
- Identify the transformation that maps one shape to another.

Mathematical Methods

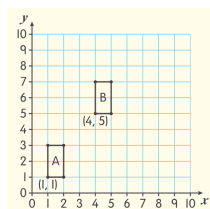
- Exploring reflective symmetry.



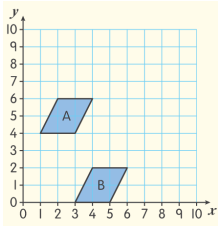
- Exploring reflections on a coordinate grid.



- Describing translations using coordinates.

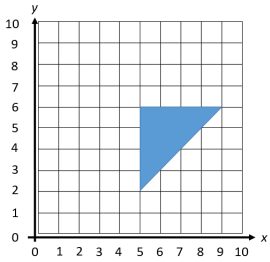


- Exploring translations on a coordinate grid e.g. translating the shape from position A to B.



Can you..?

- Can you reflect the angle in three different ways?



- Translate the shape to the coordinates (1,8), (1,10), (4,10) and (4,8).

