Castlefield School- Maths

Topic: Angles, 2D shapes, Position and Direction | Year: Four | Theme: Geometry

Key concepts and questions

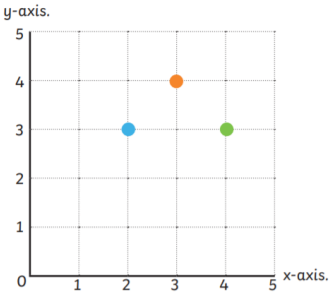
What are the properties of shapes?

- Length of sides
- Size of angles
- Lines of symmetry

Regular shapes have equal length sides and equal sized angles.

How are coordinates read?

Go along the horizontal axis, then up the vertical axis.
In this example, the orange point is at (3,4).
Always write coordinates as (_,_)



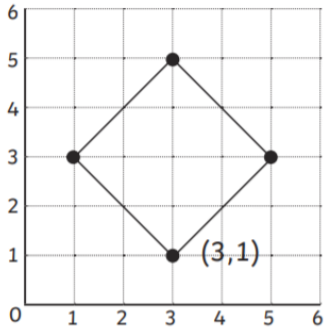
How can movement on a grid be described?

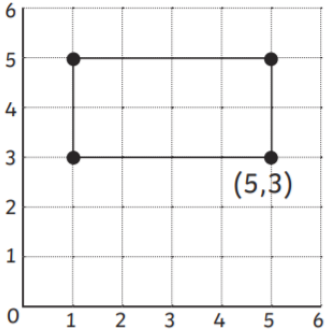
Moving points or a shape on a grid is called translation.
The key words are: up, down, left and right.

Making connections

2d shapes and coordinates

Coordinates can be used to plot 2D shapes on a grid.



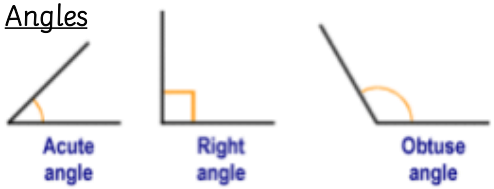


Key Vocabulary

vertical	horizontal	2D	3D
parallel	perpendicular	angle	Measurement of a turn. Acute, obtuse or a right angle.
Symmetrical	When two or more parts are identical when reflected.	quadrilateral	4 sided 2D shape
		parallelogram	shape with parallel lines
		coordinates	set of values to show an exact position on a grid e.g. (2,3)
position	location of a point		
x-axis	The horizontal axis.	y-axis	The vertical axis.

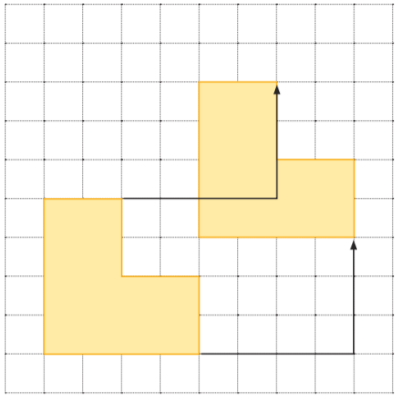
Representations

Angles



Translation

This shape has been translated 4 squares right and 3 squares up.



Symmetry

Using a mirror can help find the lines of symmetry in a shape.