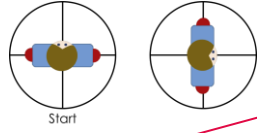




Geometry – Position and direction: Overview

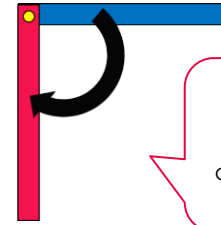
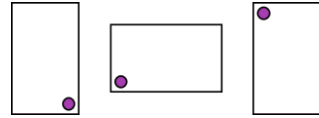
Concepts: Describing position, Describing turn/movement, Pattern

Finish the pattern...



The man has turned a one quarter turn clockwise

Finish the pattern.
Describe what is happening.



I have used my angle maker and the top piece of card has made a quarter turn. It has made a right angle.

Reception

- To use mathematical language to describe position
- Select, rotate and manipulate shapes to develop spatial reasoning skills.
- Continue, copy and create repeating patterns

Year 1

- Describing position and direction using mathematical language including left and right.
- Describing movement, including half, quarter and three-quarter turns.
- Recognise and create repeating patterns

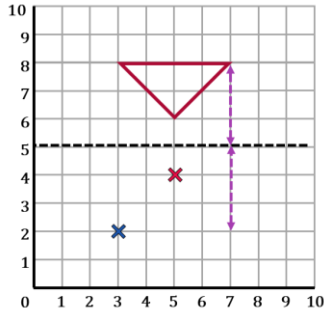
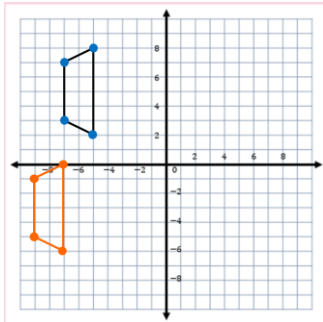
Year 2

- Continue to describe position and direction using mathematical language
- Describe movement using mathematical language including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise)
- Order and arrange combinations of mathematical objects in patterns and sequences

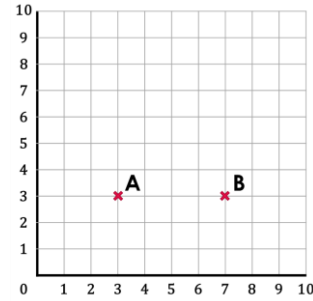
Year 3

- Make connections between quarter turns and half turns to right angles.

Describe the translation. Identify the new coordinates



Reflect the shape through the mirror lined



Point __ is translated __ units up/down/left/right to point __.

Year 6

- Describe positions on the full coordinate grid (all 4 quadrants)
- Draw and translate simple shapes on the coordinate plane, and reflect them in the axes

Year 5

- Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language
- Understand that the size and shape of an object does not change under translation and reflection

Year 4

- Describe positions on a 2-D grid as coordinates in the first quadrant
- Plot specified points and draw sides to complete a given polygon
- Describe movements between positions as translations of a given unit to the left/right and up/down
- Solve problems involving patterns



Geometry – Position and direction : Concept breakdown

Reception →

Year 1 →

Year 2 →

Year 3 →

Year 4 →

Year 5 →

Year 6

Position, direction and movement

Describing position

Use mathematical language to describe position e.g. next to, in front, behind, between
[Unit 6](#)

Pupils use the language of position, direction, including: left and right, top, middle and bottom, on top of, in front of, above, between, around, near, close and far, up and down, forwards and backwards, inside and outside.
[Unit 3](#)

Use mathematical vocabulary to describe position and direction
[Unit 11](#)

Pupils should continue to consolidate describing position and direction in Maths Meetings

Describe positions on a 2-D grid as coordinates in the first quadrant
[Unit 12](#)

Plot specified points and draw sides to complete a given polygon
[Unit 12](#)

Pupils continue to consolidate describing coordinates in the first quadrant and are introduced to other quadrants on the coordinates grid
[Unit 9](#)

Describe positions on the full coordinate grid (all 4 quadrants)
[Unit 8](#)

Describing movements/transformations

Select, rotate and manipulate shapes to develop spatial reasoning skills
[Unit 6](#)
[Unit 13](#)

Describe position, direction and movement, including half, quarter and three-quarter turns.
[Unit 3](#)
[Unit 10](#)

Use mathematical vocabulary to describe and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise)
[Unit 11](#)

Recognise angles as a property of shape or a description of a turn (Properties of Shape NC strand)
[Unit 10](#)

Describe movements between positions as translations of a given unit to the left/right and up/down
[Unit 12](#)

Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language
[Unit 9](#)
Understand that the size and shape of an object does not change under translation and reflection
[Unit 9](#)

Draw and translate simple shapes on the coordinate plane, and reflect them in the axes
[Unit 8](#)

Pattern

Describing pattern

Continue, copy and create repeating patterns
[Unit 2](#)

Recognise and create repeating patterns
[Unit 3](#)

Order and arrange combinations of mathematical objects in patterns and sequences
[Unit 11](#)

Pupils should continue to consolidate describing and creating patterns Maths Meetings

Solve problems involving patterns
[Unit 13](#)

Pupils should continue to consolidate solving problems involving patterns in Maths Meetings

Generate and describe linear number sequences
[Unit 3](#)