

# Position and Direction

## Year 1

- Describe position, direction and movement, including whole, half, quarter and three-quarter turns.
- Compare, describe and solve practical problems for lengths and heights e.g. long/short, longer/shorter, tall/short, double/half.
- Compare, describe and solve practical problems for mass/weight e.g. heavy/light, heavier than, lighter than.
- Compare, describe and solve practical problems for capacity and volume e.g. full/empty, more than, less than, half, half full, quarter.
- Measure and begin to record mass/weight.
- Measure and begin to record capacity and volume.  
Measure and begin to record length/height

## Year 2

- Order and arrange combinations of mathematical objects in patterns and sequences. (Position and Direction)
- Use mathematical vocabulary to describe position, direction 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). (Position and Direction)

## Year 3

- Recognise angles as a property of shape or a description of a turn
- Identify right angles and identify whether other angles are greater or less than a right angle
- Recognise that two right angles make a half turn, three make three quarters of a turn and four a complete turn
- Identify horizontal and vertical lines and pairs of perpendicular and parallel lines

#### Year 4

- Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.
- Identify acute and obtuse angles and compare and order angles up to two right angles by size.
- Identify lines of symmetry in 2-D shapes presented in different orientations.
- Complete a simple symmetric figure with respect to a specific line of symmetry.
- Begin to recognise where angles are greater than two right angles. Know the term straight angle referring to two right angles together.
- Describe positions on a 2-D grid as coordinates in the first quadrant.
- Describe movements between positions as translations of a given unit to the left/right and up/down.  
Plot specified points and draw sides to complete a given polygon.

#### Year 5

- Use the properties of rectangles to deduce related facts and find missing lengths and angles.
- Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.  
Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.

#### Year 6

- Draw 2-D shapes using given dimensions and angles. Recognise, describe and build simple 3-D shapes, including making nets.
- Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons.
- Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.
- Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.)
- Describe positions on the full coordinate grid (all four quadrants).
- Draw and translate simple shapes on the coordinate plane, and reflect them in the axis