



Mathematics Progression- Geometry



3-D shapes:
Recognise, describe & build simple 3-D shapes, including making nets.

Angles & lines:
Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, & find missing angles.

Angles & lines:
Find unknown angles in any triangles, quadrilaterals & regular polygons.

Position & direction:
Describe positions on the full coordinate grid (all four quadrants).

Position & direction:
Identify, describe & represent the position of a shape following a reflection or translation, using the appropriate language, & know that the shape has not changed.

2-D shapes:
Distinguish between regular & irregular polygons based on reasoning about equal sides & angles.

2-D shapes:
Use the properties of rectangles to deduce related facts & find missing lengths & angles.

3-D shapes:
Identify 3-D shapes, including cubes & other cuboids, from 2-D representations.

Angles & lines:
Identify:
- angles at a point & one whole turn (total 360°)
- angles at a point on a straight line & $\frac{1}{2}$ a turn (total 180°)
- other multiples of 90°

Year 6

Year 5

2-D shapes:
Draw 2-D shapes using given dimensions & angles.

2-D shapes:
Compare & classify geometric shapes based on their properties & sizes.

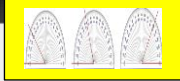
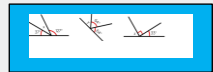
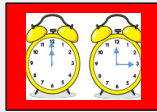
2-D shapes:
Illustrate & name parts of circles, including radius, diameter & circumference & know that the diameter is twice the radius.

Position & direction:
Draw & translate simple shapes on the coordinate plane, & reflect them in the axes.

Position & direction:
Describe positions on a 2-D grid as coordinates in the first quadrant.

Angles & lines:
Know angles are measured in degrees; estimate & compare acute, obtuse & reflex angles.

Angles & lines:
Draw given angles & measure them in degrees.



Position & direction:
Describe movements between positions as translations of a given unit to the left/right & up/down.

Position & direction:
Plot specified points & draw sides to complete a given polygon.

Angles & lines:
Complete a simple symmetric figure with respect to a specific line of symmetry.

Angles & lines:
Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn & four a complete turn; identify whether angles are greater than or less than a right angle.

Angles & lines:
Identify horizontal & vertical lines & pairs of perpendicular & parallel lines.

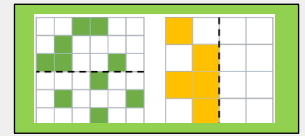
Year 3

Year 4

Angles & lines:
Recognise angles as a property of shape or a description of a turn.

2-D shapes:
Draw 2-D shapes.

3-D shapes:
Make 3-D shapes using modelling material; recognise 3-D shapes in different orientations & describe them.



2-D shapes:
Compare & classify geometric shapes, including quadrilaterals & triangles, based on their properties & sizes.

2-D shapes:
Identify lines of symmetry in 2-D shapes presented in different orientations.

Angles & lines:
Identify lines of symmetry in 2-D shapes presented in different orientations.

Position & direction:
Use mathematical vocabulary to describe position, direction & movement, including movement in a straight line & distinguishing between rotation as a turn and in terms of right angles for quarter, half & three-quarter turns (clockwise & anti-clockwise).



Year 2

Year 1

EYFS

3-D shapes:
Compare & sort common 3-D shapes & everyday objects.

Position & direction:
Order & arrange combinations of mathematical objects in patterns.

3-D shapes:
Recognise & name common 3-D shapes [e.g., cuboids (including cubes), pyramids & spheres].

2-D shapes:
Compare & sort common 2-D shapes & everyday objects.

2-D shapes:
Identify 2-D shapes on the surface of 3-D shapes, [e.g., a circle on a cylinder & a triangle on a pyramid].

2-D shapes:
Identify & describe the properties of 2-D shapes, including the number of sides & line symmetry in a vertical line.

Position & direction:
Describe position, direction & movement, including whole, half, quarter & three-quarter turns.

2-D shapes:
Recognise & name common 2-D shapes [for example, rectangles (including squares), circles & triangles].



3-D shapes:
Recognise & name common 3-D shapes [e.g., cuboids (including cubes), pyramids & spheres].

