

Whitehill Junior School – Mathematics Curriculum Map 2021-2022

Geometry

(properties of shapes/position and direction)

Year Three

Draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them.

Recognise that angles are a property of a shape or a description of a turn.

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

Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.

Year Four

Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.

Complete a simple symmetrical figure with respect to a specific line of symmetry.

Identify acute and obtuse angles and compare and order angles up to two right angles by size.

Year Five

Plot specified points and draw sides to complete a given polygon.

Complete a simple symmetrical figure with respect to a specific line of symmetry.

Identify acute and obtuse angles and compare and order angles up to two right angles by size.

Identify 3D shapes, including cubes and cuboids, from 2D shapes.

Describe movements between positions as translations of a given unit to the right/left and up/down.

Describe positions on a 2D grid as coordinates in the first quadrant.

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

Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.

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

Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.

Draw given angles, and measure them in degrees.

Use the properties of rectangles to deduce related facts and find missing lengths 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 Six

Draw 2D shapes using given dimensions and angles.

Describe positions on the full coordinate grid (all four quadrants).

Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.

Recognise, describe and build simple 3D shapes, including making nets.

KS3

Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.

Recognise angles where they meet at a point, are on a straight line, are vertically opposite and find missing angles.

Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons.