

Islip Manor High School

Scheme of Learning Overview



This scheme of learning has been designed to ensure that you make progress, develop, and master key knowledge, skills, and ideas through academically rich content that reflects, values, and celebrates the diverse experiences, identities, and contributions of our school community.

Year group: 8	Term: Spring	Unit duration: 4 weeks	Unit title: GEOMETRY 2 Angles and Constructions								
Unit assessment: End of Unit Assessment											
Fertile question: How are ratios and fractions linked?											
Key skills/concepts/knowledge that students should cover			Start RAG	End RAG	Literacy. Key vocabulary/subject terminology that students should cover:						
- Find unknown angles in any triangles, quadrilaterals, and regular polygons - Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles - Draw and measure line segments and angles in geometric figures - Derive and use the standard ruler and compass constructions (perpendicular bisector of a line segment, constructing a perpendicular to a given line from/at a given point, bisecting a given angle); recognise and use the perpendicular distance from a point to a line as the shortest distance to the line - Use the standard conventions for labelling the sides and angles of triangle ABC, and know and use the criteria for congruence of triangles - Apply the properties of angles at a point, angles at a point on a straight line, vertically opposite angles - Understand and use the relationship between parallel lines and alternate and corresponding angles					<table><tr><th>Revision</th><th>Core</th><th>Enhanced</th></tr><tr><td>Angle Degrees Triangle Quadrilateral</td><td>Polygon Vertically Opposite Perpendicular Bisector Parallel</td><td>Congruent Alternate Corresponding</td></tr></table>	Revision	Core	Enhanced	Angle Degrees Triangle Quadrilateral	Polygon Vertically Opposite Perpendicular Bisector Parallel	Congruent Alternate Corresponding
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Stretch. Key skills/concepts/knowledge that students should cover Interpret and use bearings			Suggested materials teachers could/should use: Mathsbox, corbettmaths, mathsgenie, DrAustinMaths Mini whiteboards								
			Key home learning tasks students should complete: SPARX Maths								

Keyword definitions

- **Polygon**

A polygon is a flat, closed shape made up of straight lines. The lines are called sides, and they join up to make a shape.

Examples of polygons:

- Triangle – 3 sides
- Square – 4 equal sides
- Rectangle – 4 sides (opposite sides are equal)
- Pentagon – 5 sides
- Hexagon – 6 sides

A circle is not a polygon because it has no straight sides.

So, a polygon is just a shape with straight sides that all connect to make a closed figure.