Islip Manor High School
Scheme of Learning Overview

Islip Manor
HIGH SCHOOL

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: 9 (Higher)	**Term**: Summer	**Unit duration:** 3 weeks	**Unit title:** **Unit 5a - Polygons, Angles and Parallel Lines**
Unit assessment: End of Unit Assessment			

Fertile question: How can we be sure that angles in a triangle add up to 180 degrees?

Key skills/concepts/knowledge that students should cover	**Start RAG**	**End RAG**
• Classify quadrilaterals by their geometric properties and distinguish between scalene, isosceles and equilateral triangles • Find missing angles in a triangle using the angle sum in a triangle and the properties of an isosceles triangle • Understand and use the angle properties of quadrilaterals and the fact that the angle sum of a quadrilateral is 360° • Understand and use the angle properties of parallel lines and find missing angles using the properties of corresponding and alternate angles, giving reasons • Understand 'regular' and 'irregular' as applied to polygons • Calculate and use the sums of the interior angles of regular and irregular polygons • Use that the sum of the exterior angles of any polygon is 360° • Use that the sum of the interior angle and the exterior angle is 180° • Use the side/angle properties of compound shapes made up of triangles, lines and quadrilaterals to solve more complex problems including those using algebra • Use angle facts to demonstrate how shapes would 'fit together', and work out interior angles of shapes in a pattern		
Stretch. Key skills/concepts/knowledge that students should cover Apply knowledge and skills to exam-style questions.		

Literacy. Key vocabulary/subject terminology that students should cover:

Geometric
Quadrilateral
Parallelogram
Kite
Equilateral
Parallel
Alternate
Polygon
regular
Irregular
Exterior Angle
Interior Angle
Properties
Trapezium
Rhombus
Scalene
Isosceles
Corresponding

Suggested materials teachers could/should use:
Mathsbox, corbettmaths, mathsgenie, DrAustinMaths
Mini whiteboards

Key home learning tasks students should complete:
SPARX Maths