

Curriculum Map Year 7: Mathematics

	Topic	Key Knowledge <i>What will students know by the end of this topic?</i>	Key Skills <i>What skills will students have developed by the end of this topic?</i>	Assessment Opportunities <i>How will student progress be measured? What are the key assessment pieces?</i>
Half Term 1 and Half Term 2	Types of Number	Students will learn: - History of Numeration - How to recognise and work interchangeably with the different types of number - Understand and use the concept of a unit	Students will be able to: - Understand the key components of our number system, including place value - Understand how our number system was developed - Use number bonds fluently	Topic Reviews Sparx maths homework Weekly Sparx maths homework Half Termly Assessment
	Addition	- All aspects of the operation of addition, including formal and informal written and mental methods applied to natural numbers, decimal fractions, vulgar fractions, mixed numbers and negative numbers - Perimeter	- Use the Associative and Commutative Laws of Addition - Understand the concept of perimeter - Add natural numbers - Add decimal fractions - Add fractions, both vulgar and mixed numbers - Add all types of number, including negatives	Topic Reviews Sparx maths homework Weekly Sparx maths homework Half Termly Assessment
Half Term 3	Angles and Bearings Subtraction	- How to understand and use the standard conventions for angles, including labelling the sides and angles of triangle ABC. - How to apply the properties of angles at a point, angles at a point on a straight line, vertically opposite angles - How to understand and use the relationship between parallel lines and angles. - All aspects of the operation of subtraction, including formal and informal, written and mental methods applied to natural numbers, decimal fractions, vulgar fractions, mixed numbers and negative numbers.	- Construct triangles and quadrilaterals, given angles and lengths - Understand and use angle properties, including parallel lines - Understand and use angle properties associated with triangles and quadrilaterals	Topic Reviews Sparx maths homework Weekly Sparx maths homework Half Termly Assessment

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Half Term 4	Multiplication	- All aspects of the operation of multiplication, including formal and informal, written and mental methods applied to natural numbers, decimal fractions, vulgar fractions, mixed numbers and negative numbers	- Use the Associative, Commutative and Distributive Laws as they apply to Multiplication - Understand the concepts of area and volume - Perform Prime Factor Decomposition - Multiply natural numbers - Multiply fractions, both vulgar and mixed - Multiply decimal fractions - Multiply all types of number, including negatives	Topic Reviews Sparx maths homework Weekly Sparx maths homework Half Termly Assessment
Half Term 5	Area and Volume	- Area of rectangles, triangles, trapezia, parallelograms. - Volume of Prisms.	Using multiplication to calculate areas and volumes.	Topic Reviews Sparx maths homework Weekly Sparx maths homework Half Termly Assessment
Half Term 6	Algebraic introduction and Coordinates	- Simplification of algebra - Expanding brackets - Plotting coordinates in four quadrants - Coordinate problems - Plotting coordinates that follow pattern	- Applying the laws of arithmetic to algebra. - The coordinate system.	Topic Reviews Sparx maths homework Weekly Sparx maths homework Half Termly Assessment

