## Curriculum Map Year 7 MATHEMATICS

Topic Name	Term	Skills developed with link to NC Subject content	Reflection on previous link in the	F
Number systems and the axioms	Autumn HT1	<ul> <li>Place value systems including base 10 and other bases</li> <li>Commutativity, associativity and distributivity</li> </ul>		
Factors and multiples and order of operations	Autumn HT1	<ul> <li>Factors, primes and multiples</li> <li>Square and cube numbers</li> <li>Representing the structure of number</li> <li>Establishing the order of operations</li> </ul>	Year 6: Factors, primes and multiples.	)
Positive and negative numbers	Autumn HT2	<ul> <li>Negative numbers in context</li> <li>Using negative numbers with all four operations</li> </ul>	Year 6: Order of operations introduced.	   /
Expressions, equations and sequences	Autumn HT2	<ul> <li>Finding missing terms in sequences</li> <li>Finding the nth term</li> <li>Writing expressions</li> <li>Recognising equivalent expressions</li> </ul>	Year 6: Sequences: finding the next term.	(
Angles	Spring HT3	<ul> <li>Measuring and drawing angles</li> <li>Angles on a straight line and around a point</li> <li>Angles in parallel lines</li> <li>Creating expressions from angle facts</li> </ul>	Year 6: Introduction to Angle properties.	}
Classifying 2-D shapes	Spring HT3	<ul> <li>Classifying polygons according to their properties</li> <li>Rotational and line symmetry</li> </ul>	Year 6: Translation and Reflection Introduced	)
Constructing triangles and quadrilaterals	Spring HT3	<ul> <li>Using a ruler, protractor and compasses to construct 2D shapes</li> <li>Using properties of quadrilaterals and triangles to explore standard constructions.</li> </ul>	Year 5: Drawing Angles	(
Coordinates	Spring HT4	<ul> <li>Plotting points in all four quadrants</li> <li>Horizontal and vertical lines</li> <li>Midpoints of line segments</li> <li>Problem solving on a coordinate grid</li> </ul>	Year 6: Plotting Coordinates	}
Area of 2-D shapes	Spring HT4	<ul> <li>Area of triangles and quadrilaterals</li> <li>Formulae and solving equations</li> </ul>	Year 6: Introduction to Area of Rectangles, Triangles and Parallelograms	)
Prime factor decomposition	Summer HT5	<ul> <li>Prime factor decomposition</li> <li>LCM and HCF</li> <li>Square roots and cube roots</li> </ul>	Year 7: Autumn 1- Factors and Multiples	0
Fractions	Summer HT5	<ul> <li>Equivalent fractions</li> <li>Converting between fractions and decimals</li> <li>Multiply and divide fractions</li> <li>Fractions of amounts</li> </ul>	Year 6: Introduction to operations on fractions	0

## Progress to future link in the curriculum

These are key skills which develop deeper knowledge of our decimal number system.

Y7 Summer HT5 Prime factor decomposition

Key skills applied to subsequent Number and Algebra topics

GCSE: nth term of quadratic sequences.

Year 8: Angles in polygons

Year 8: Transformations

GCSE: Loci and Constructions

Year 8: Transformations/Linear Graphs

Year 8: Area of Circles and Composite Shapes.

GCSE: Further application questions

GCSE: Algebraic Fractions

		<ul> <li>Mixed numbers and improper fractions</li> </ul>		
Ratio	Summer HT6	<ul> <li>Ratio notation</li> <li>Understand the relationship between ratio and fractions</li> <li>Working with ratios and quantities</li> </ul>	Year 6: Introduced to unequal sharing of a quantity.	Ya aj
Percentages	Summer HT6	<ul> <li>Equivalence to fractions and decimal fractions</li> <li>Percentage of an amount</li> <li>Percentage increase and decrease</li> <li>Finding the original amount</li> <li>Using percentages, fractions and decimals in different contexts including probability</li> </ul>	Year 6: Introduction to fraction, decimal and percentage conversion. Percentages of amounts.	G

Year 8: Review of ratio with further application questions

GCSE: Compound /Reverse Percentages