



Maths Department

Yr 8 Curriculum and Assessment Map

	Half Term 1	Half-Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
Year 8	Fractions and Percentages	Linear Equations	Geometry of Angle and Shape	Ratio	3D	Statistics
Fundamental Knowledge	- Interpret fractions and percentages as operators - Finding any fraction of any amount and express one quantity as a fraction of another, - Converting between fractions, decimals and percentages and using this appropriately; including in writing one number as a percentage of another. - Find any percentage of any amount using a variety of methods appropriately and increase and decrease by a percentage - Calculating reverse percentages.	- Identifying equations, inequalities and expressions. - Forming, solving and checking linear equations with unknowns on one side and two sides. - Using simple formulae - Represent and interpret simple inequalities involving one unknown	- Using the properties of shapes to derive and use pencil, ruler and compass constructions of 2D shapes - Use standard conventions for labelling sides and angles - Using angle facts to solve problems or make conclusions, including in missing angle problems, bearings problems and/or problems relating to parallel lines - Deriving, understanding and using properties of interior and exterior angles of polygons.	- Use ratio notation, including reduction to simplest form. - Divide a given quantity into two parts in a given part: part or part: whole ratio; express the division of a quantity into two parts as a ratio - Understand that a multiplicative relationship between two quantities can be expressed as a ratio or a fraction. - Apply this understanding to solve real-life problems such as exchange rates and recipe problems and using scale diagrams.	- Naming different 3D shapes and parts/properties of these. - Finding the volume and surface area of cubes, cuboids, triangular prisms, and other prisms, including compound shapes made up of a combination of these. - Drawing and interpreting plans and elevations of 3D shapes.	- Drawing and interpreting bar charts, line graphs, pie charts and pictograms; selecting the most appropriate diagram and critiquing misleading diagrams; understanding the difference between a frequency based chart and a proportion based chart. - Analysing bivariate data through drawing, interpreting and critiquing scatter graphs - Calculating and interpreting the mean, mode, median and range from a list, table, or chart; understanding the limitations of each and knowing which is the most appropriate to select.
Learning Checkpoint Tasks	Learning checks will take place after each unit.	Learning checks will take place after each unit.	Learning checks will take place after each unit.	Learning checks will take place after each unit.	Learning checks will take place after each unit.	Learning checks will take place after each unit.
Common Assessment Task	TA1 Trust Assessment		N/A		TA2 Trust Assessment	
Interleaved Knowledge	<i>Progression from Y7/KS2: Fractions and Percentages</i> Decimals beyond a thousandth. Square notation and negative numbers. Dividing proper fractions by an integer. Fraction as a number was studied in Y7. Fraction as a proportion was touched on in yr7 probability. In KS2 students find a fraction of a quantity, largely through division - we are linking back to multiplying by fractions in order to pave the way for decimal multipliers. Students have converted FDP and solved problems involving the calculation of percentages <i>Problems are included so all students will be stretched and challenged.</i> <i>Progression from Y7/KS2: Linear Equations</i> Re-cap of operations with negative numbers and zero pairs; numerically and algebraically. Yr 7 - Distributive law and expanding single brackets. Solving equations using priority of operations building on the meaning of equality and reading and writing expressions. Fact families and relationship between multiplication and division <i>Problems are included so all students will be stretched and challenged.</i>		<i>Progression from Y7/KS2: Geometry of Angle and Shape</i> Right angle as a quarter turn. Properties of a shape and a measure of a turn and vocab acute obtuse. Angles are measured in degrees. We can extend knowledge, deepen understanding and bring in proportional reasoning through alternative measures of angles (e.g. gradians). Classifying quads. Calculating angles and angles in a triangle <i>Problems are included so all students will be stretched and challenged.</i> <i>Progression from Y7/KS2: Ratio</i> Revisit fraction multiplied by an integer Sharing a quantity in a given ratio <i>Problems are included so all students will be stretched and challenged.</i>		<i>Progression from Y7/KS2: 3D</i> Area, formulae and Polygons. Vocab of face, edge, vertices. Identifying and drawing nets of solids. Counting cubes to identify volume. Volume of cuboids. Y7 squaring and square rooting. cube numbers KS1 and 2 ml and litres introduced and then Year 6- cm³ and m³ introduced <i>Problems are included so all students will be stretched and challenged.</i> <i>Progression from Y7/KS2: Statistics</i> Although data handling is part of the KS2 curriculum, the data handling cycle hasn't necessarily been covered or discussed. Single bar charts are part of KS2 but students may not have covered compound or double bar charts. The mean is introduced in Year 6. Interpreting pictograms. Extending through inclusion of averages Pie charts are covered in Year 6. <i>Problems are included so all students will be stretched and challenged.</i>	