

**Long-term planning  
Maths – Year 8**

<b>YEAR 8</b>	<b>Term 1 (September – December)</b>	<b>Term 2 (January – March)</b>	<b>Term 3 (April – July)</b>
<b>Themes</b>	<b>Number Ratio, proportion and rates of change Algebra</b>	<b>Number Geometry and measures</b>	<b>Geometry and measures Algebra</b>
<p>Build on prior knowledge gained in Year 7</p> <p>Develop reasoning skills across Algebra and Geometry and measures</p> <p>Develop confidence and fluency across all disciplines</p> <p>Problem solving in real life contexts</p>	<p><b><u>Unit 11: Properties of Number and Accuracy</u></b> Basic properties of numbers, rounding, BIDMAS, factors and multiples, reciprocals, square and cube numbers, standard form</p> <p><b><u>Unit 12: Graphs</u></b> Coordinates and labelling, parallel and perpendicular lines, horizontal and vertical lines, plotting and applying <math>y=mx+c</math>, sketching graphs, quadratic, cubic and reciprocal graphs</p> <p><b><u>Unit 13: Solving Equations and Inequalities</u></b> Language of algebra, linear equations, inequalities, simultaneous equations, quadratics</p> <p><b><u>Unit 14: Ratio, Proportion and Percentages</u></b> Ratio, proportion, finding percentages, percentage increase/decrease, compound interest, reverse percentages, percentage change</p>	<p><b><u>Unit 15: Measures</u></b> Time, metric and imperial units of measure, converting between metric units, converting between imperial units, converting between metric and imperial units, compound measures</p> <p><b><u>Unit 16: Constructions</u></b> Loci, drawing 3D shapes, constructing angle bisectors, constructing perpendicular bisectors, constructing triangles</p> <p><b><u>Unit 17: Transformations</u></b> Reflections, rotations, translations, enlargements, describing transformations, combined transformations</p>	<p><b><u>*Unit 21: Averages</u></b> <i>Simple charts, calculating averages, analysing the use of different measures of average, using grouped data</i></p> <p><b><u>Unit 18: Pythagoras and Trigonometry</u></b> Rounding, Pythagoras theorem, line segments and midpoints, introduction to trigonometry</p> <p><b><u>Unit 19: Distance-Time Graphs</u></b> Compound measures, interpreting and drawing distance-time graphs, interpreting velocity-time graphs</p> <p><b><u>Unit 20: Proof</u></b> Deciding if something is true or false, demonstration versus proof, algebraic explanations</p>
<b>Assessment</b>	4 end of unit checkpoints End of term assessment (units 11 to 14)	3 end of unit checkpoints End of term assessment (units 15 to 17)	3 end of unit checkpoints End of term assessment (units 18 to 20)

*\*Revisiting from Year 7 Unit 10*