YEAR 8 CURRICULUM SUMMARY





Maths Curriculum Summary



When ?	Chapter	Key Learning Objectives Key Questions	Unit Assessments (End of Chapter tests)
HALF TERM 1	CH 1: Percentages	 how to calculate simple interest how to use a multiplier to calculate percentage increases and decreases how to calculate the original value after a percentage change 	 EOC 1: Percentages Simple interest Percentage increases and decreases Calculating the original value Using percentages
	CH 2: Equations and formulae	 how to expand brackets and factorise algebraic expressions how to solve more complex equations how to rearrange formulae 	 EOC 2: Equations and formulae Multiplying out brackets Factorising algebraic expressions Equations with brackets Equations with fractions
	CH 3: Polygons	 how to calculate the interior and exterior angles of polygons how to calculate the interior and exterior angles of regular polygons how regular polygons tessellate how to make accurate geometric constructions 	 EOC 3: Polygons Angles in polygons Construction Angles in regular polygons Tessellations and regular polygons
	CH 4: Using data	 how to interpret correlation from two scatter graphs how to interpret time-series graphs how to construct and interpret two-way tables how to compare two sets of data from statistical diagrams how to plan a statistical investigation 	 EOC 4: Using data Scatter graphs and correlation Time series graphs Two-way tables Comparing two or more sets of data Statistical investigations



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HALF TERM 2	CH 5: Application of graphs	 how to interpret and draw step graphs how to interpret and draw time graphs how to interpret and draw exponential growth graphs 	 EOC 5: Application of graphs Step graphs Time graphs Exponential growth graphs
	CH 6: Pythagoras' theorem	 how to use Pythagoras' theorem to calculate the lengths of sides in right-angled triangles how to use Pythagoras' theorem to solve problems 	 EOC 6: Pythagoras' theorem Introducing Pythagoras' theorem Calculating the length of the hypotenuse Calculating the length of a shorter side Using Pythagoras' theorem to solve problems
	CH 7: Fractions	 how to multiply any two fractions or mixed numbers how to divide any two fractions or mixed numbers 	 EOC 7: Fractions Adding and subtracting fractions Multiplying fractions Multiplying mixed numbers Dividing fractions and mixed numbers
HALF TERM 3	CH 8: Algebra	 how to expand a bracket when powers are involved how to factorise an expression when powers are involved how to expand the product of two brackets 	 EOC 8: Algebra More about brackets Factorising expressions containing powers Expanding the product of two brackets
	CH 9: Decimal Numbers	 how to extend your ability to work with powers of 10 when to make suitable rounding and how to use rounded numbers to estimate the results of 	 EOC 9: Decimal Numbers Powers of 10 Standard form Rounding appropriately



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		calculationshow to use your calculator efficiently	Mental CalculationsSolving problems
HALF TERM 4	CH 10: Prisms and cylinders	 how to convert from one metric unit to another for area and volume how to calculate the surface area and the volume of a prism how to calculate the surface area and the volume of a cylinder 	 EOC 10: Prisms and cylinders Metric units for area and volume Volume of a prism Surface area of a prism Volume of a cylinder Surface area of a cylinder
	CH 11: Solving equations graphically	 how to solve linear equations graphically how to draw a quadratic graph how to solve quadratic equations graphically how to solve simultaneous equations graphically 	 EOC 11: Solving equations graphically Graphs from equations in the form ay ± bx = c Graphs from quadratic equations Solving quadratic equations by drawing graphs Solving simultaneous equations by drawing graphs
	CH 12: Compound units	 how to solve problems involving speed how to calculate and use density how to solve problems involving compound units how to calculate unit prices and use them to find value for money 	 EOC 12: Compound units Speed More compound units Unit costs
HALF TERM 5	CH 13: Right-angled triangles	 what trigonometric ratios are and how to recognise them in right-angled triangles 	 EOC 13: Right-angled triangles Introduction to trigonometric ratios How to find trigonometric ratios of angles Using trigonometric ratios to find angles



When ?	Chapter	Key Learning Objectives Key Questions	Unit Assessments (End of Chapter tests)
		 how to use trigonometry to calculate angles from two known sides in a right-angled triangle how to find an unknown length in a right-angled triangle where all angles and one other length are known 	• Using trigonometric ratios to find lengths
HALF TERM 6	CH 14: Revision	 help you to practise and revise topics covered in your current course get you started on your GCSE course 	 EOC 14: Revision Practice Revision GCSE-type question