YEAR 7 CURRICULUM SUMMARY

SUBJECT: Mathematics

When?	Chapter	Key Learning Objectives / Key Questions	Unit Assessments (End of Chapter Test)
HALF TERM 1	**CH 1: Working with numbers**	- how to multiply and divide negative numbers - how to find the highest common factor and the lowest common multiple of sets of numbers - how to use powers and find roots - how to find the prime factors of a number	**EOC Test 1** covering - Add, subtract, times, divide with negative numbers - HCF - LCM - Powers & roots - Prime factors
	CH 2: Geometry	- how to identify parallel and perpendicular lines - how to work out angles in triangles and quadrilaterals - how to translate a shape - how to rotate a shape	**EOC Test 2** covering - Parallel & perpendicular lines - Angles in triangles and quadrilaterals - Translation & rotations
HALF TERM 2	**CH 3: Probability**	- how to work with a probability scale - how to work with the probability of an event not happening - how to work out probabilities using sample spaces where necessary - how to collect data from a simple experiment and record it in a frequency table	**EOC Test 3** covering - Probability scales - Frequency tables - Sample spaces - Experimental probability

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	CH 4: Percentages	- how to write one value as a percentage of another value - how to calculate a percentage increase or decrease - how to write a change of value as a percentage increase or decrease	**EOC Test 4** covering - Percentage of a number - Percentage increase & decrease - Percentage change
	CH 5: Sequences	- how to use the special sequence of Fibonacci numbers - how to use algebra to represent function machines - how to use the nth term for sequences	**EOC Test 5** covering - Flow diagrams - N-th term of a sequence - Fibonacci sequence
	CH 6: Area	- how to use a formula to work out the area of a rectangle - how to work out the area of a compound shape - how to use a formula to work out the area of a triangle - how to use a formula to work out the area of a parallelogram	**EOC Test 6** covering Area of rectangles, compound shapes, triangles and parallelograms

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HALF TERM 3	**CH 7: Graphs**	- how to draw graphs of linear equations - how to draw graphs of simple quadratic equations - how to draw graphs to illustrate real-life situations	**EOC Test 7** covering - Plot coordinates - Graphs from a table - Graph quadratics - Distance- time graphs
	CH 8: Simplifying Numbers	- how to multiply and divide by 10, 100 and 1000 - how to round numbers to one significant figure - how to estimate answers to problems - how to solve problems involving decimals	**EOC Test 8** covering - Powers of 10 - Rounding - Significant figures - Std form - Problems using std form
HALF TERM 4	**CH 9: Interpreting data**	- how to interpret pie charts - how to create simple pie charts - how to read information from different charts and diagrams	**EOC Test 9** covering Drawing and interpreting pie charts

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HALF TERM 5	CH 10: Algebra	• how to write and simplify expressions involving all four operations • how to simplify expressions that have a number of terms • how to multiply out brackets in algebraic expressions • how to identify equivalent expressions • how to write simple algebraic expressions involving powers	**EOC 10 Test** covering • like terms • expand brackets • use powers
	CH 11: Congruence and Scaling	• how to recognise congruent shapes • how to use shape and ratio • how to use scale diagrams	**EOC 11 Test** covering • congruent shapes • ratio of length • map scales
	CH 12: Fractions and decimals	• how to multiply a fraction by an integer • how to divide with unit fractions and integers • how to multiply by powers of ten • how to divide by powers of ten	**EOC 12 Test** covering • add, subtract, times, divide fractions • long multiplication & division
	CH 13: Proportion	• how to solve problems involving direct proportion • graphical and algebraic representations	

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HALF TERM 6		of direct proportion • how to solve problems involving inverse proportion • graphical and algebraic representations of inverse proportion	**EOC 13 Test** covering • direct proportion • inverse proportion
	CH 14: Circles	• the names of the parts of a circle • how to work out the circumference of a circle by measuring • how to use a formula to work out the approximate length of the circumference	**EOC 14 Test** covering • area and circumference of a circle • labels eg radius,
	CH 15: Equations and Formulae	• how to solve equations • how to substitute values into a variety of formulae	**EOC 15 Test** covering • solve equations with brackets • equations with the variable on both sides • substitute into formulae
	CH 16: Comparing data	• how to construct grouped frequency tables for data • how to calculate a mean for discrete data • how to construct frequency diagrams for discrete data • how to compare two distributions by	**EOC 16 Test** covering • Grouped frequency tables • Draw frequency diagrams • Comparing sets of data • Which average is best

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		using an average and the range	