



Year 7 set 4 Maths Learning Journey

When ?	Chapter	Key Learning Objectives Key Questions	Unit Assessments (End of Chapter Test)
HALF TERM 1	CH 1: Working with numbers	<ul style="list-style-type: none"> • 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 	<p>EOC Test 1 covering</p> <ul style="list-style-type: none"> • Add, subtract, times, divide with negative numbers • HCF • LCM • Powers & roots • Prime factors
	CH 2: Geometry	<ul style="list-style-type: none"> • 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 	<p>EOC Test 2 covering</p> <ul style="list-style-type: none"> • Parallel & perpendicular lines • Angles in triangles and quadrilaterals • Translation & rotations
HALF TERM 2	CH 3: Probability	<ul style="list-style-type: none"> • 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 	<p>EOC Test 3 covering</p> <ul style="list-style-type: none"> • Probability scales • Frequency tables • Sample spaces • Experimental probability
	CH 4: Percentages	<ul style="list-style-type: none"> • how to write one value as a percentage of another value 	<p>EOC Test 4 covering</p>

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HALF TERM 3	CH 5: Sequences	<ul style="list-style-type: none"> • how to calculate a percentage increase or decrease • how to write a change of value as a percentage increase or decrease • 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 	<ul style="list-style-type: none"> • Percentage of a number • Percentage increase & decrease • Percentage change EOC Test 5 covering <ul style="list-style-type: none"> • Flow diagrams • N-th term of a sequence • Fibonacci sequence
	CH 6: Area	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> EOC Test 6 covering <ul style="list-style-type: none"> • Area of rectangles, compound shapes, triangles and parallelograms
	CH 7: Graphs	<ul style="list-style-type: none"> • how to draw graphs of linear equations • how to draw graphs of simple quadratic 	<ul style="list-style-type: none"> EOC Test 7 covering <ul style="list-style-type: none"> • Plot coordinates

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HALF TERM 4	CH 8: Simplifying Numbers	equations <ul style="list-style-type: none"> • how to draw graphs to illustrate real-life situations 	<ul style="list-style-type: none"> • Graphs from a table • Graph quadratics • Distance- time graphs
	CH 9: Interpreting data	<ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • Powers of 10 • Rounding • Significant figures • Std form • Problems using std form
	CH 10: Algebra	<ul style="list-style-type: none"> • how to interpret pie charts • how to create simple pie charts • how to read information from different charts and diagrams 	EOC Test 9 covering <ul style="list-style-type: none"> • Drawing and interpreting pie charts
	CH 11: Congruence and Scaling	<ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • like terms • expand brackets • use powers
		<ul style="list-style-type: none"> • how to recognise congruent shapes • how to use shape and ratio 	EOC 11 Test covering <ul style="list-style-type: none"> • congruent shapes

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HALF TERM 5	CH 12: Fractions and decimals	<ul style="list-style-type: none"> • how to use scale diagrams • 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 	<ul style="list-style-type: none"> • ratio of length • map scales <p>EOC 12 Test covering</p> <ul style="list-style-type: none"> • add, subtract, times, divide fractions • long multiplication & division
	CH 13: Proportion	<ul style="list-style-type: none"> • how to solve problems involving direct proportion • graphical and algebraic representations of direct proportion • how to solve problems involving inverse proportion • graphical and algebraic representations of inverse proportion 	<p>EOC 13 Test covering</p> <ul style="list-style-type: none"> • direct proportion • inverse proportion
HALF TERM 6	CH 14: Circles	<ul style="list-style-type: none"> • 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 	<p>EOC 14 Test covering</p> <ul style="list-style-type: none"> • area and circumference of a circle • labels eg radius,
	CH 15: Equations and Formulae	<ul style="list-style-type: none"> • how to solve equations • how to substitute values into a variety 	<p>EOC 15 Test covering</p> <ul style="list-style-type: none"> • solve equations with brackets

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	<p>CH 16: Comparing data</p>	<p>of formulae</p> <ul style="list-style-type: none"> • 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 using an average and the range 	<ul style="list-style-type: none"> • equations with the variable on both sides • substitute into formulae <p>EOC 16 Test covering</p> <ul style="list-style-type: none"> • Grouped frequency tables • Draw frequency diagrams • Comparing sets of data • Which average is best