



Year 8 set 4 Maths Learning Journey

When ?	Chapter	Key Learning Objectives Key Questions	Unit Assessments (End of Chapter tests)
HALF TERM 1	CH 1: Percentages	<ul style="list-style-type: none"> • 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 	<p>EOC 1: Percentages</p> <ul style="list-style-type: none"> • Simple interest • Percentage increases and decreases • Calculating the original value • Using percentages
	CH 2: Equations and formulae	<ul style="list-style-type: none"> • how to expand brackets and factorise algebraic expressions • how to solve equations • how to use formulae 	<p>EOC 2: Equations and formulae</p> <ul style="list-style-type: none"> • Multiplying out brackets • Factorising algebraic expressions • Equations with brackets • Equations with fractions
HALF TERM 2	CH 3: Polygons	<ul style="list-style-type: none"> • the names of different polygons • the difference between an irregular polygon and a regular polygon • how to work out the sum of the interior angles of a polygon • how to work out the size of each interior angle in regular polygons 	<p>EOC 3: Polygons</p> <ul style="list-style-type: none"> • Polygons • Angles in polygons • Interior angles of regular polygons
	CH 4: Using data	<ul style="list-style-type: none"> • how to recognise correlation from scatter 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 	<p>EOC 4: Using data</p> <ul style="list-style-type: none"> • Scatter graphs and correlation • interpreting graphs and diagrams • Two-way tables • Comparing two or more sets of data
	CH 5: Circles	<ul style="list-style-type: none"> • how to use π 	<p>EOC 5: Circles</p>

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HALF TERM 3	CH 6: Enlargements	<ul style="list-style-type: none"> • how to use π to calculate the circumference of a circle • how to use π to calculate the area of a circle 	<ul style="list-style-type: none"> • The formula for the circumference of a circle • The formula for the area of a circle • Mixed problems
	CH 7: Fractions	<ul style="list-style-type: none"> • how to use a scale factor to show an enlargement • how to use rays to enlarge a shape about a centre of enlargement • how to enlarge a shape about a centre of enlargement on a coordinate grid 	<p>EOC 6: Enlargements</p> <ul style="list-style-type: none"> • Scale factors and enlargements • The centre of enlargement • Enlargements on grids
	CH 8: Algebra	<ul style="list-style-type: none"> • how to subtract any two fractions • how to multiply any two fractions • how to divide any two fractions 	<p>EOC 7: Fractions</p> <ul style="list-style-type: none"> • Adding and subtracting fractions • Multiplying fractions • Dividing fractions
	CH 9: Decimal Numbers	<ul style="list-style-type: none"> • more about expanding brackets and factorising algebraic expressions • how to simplify more complicated expressions 	<p>EOC 8: Algebra</p> <ul style="list-style-type: none"> • Expanding brackets • Factorising algebraic expressions • Expanding and simplify
HALF TERM 4	CH 10: Surface area and volume of 3D shapes	<ul style="list-style-type: none"> • how to extend your ability to work with powers of 10 • how to know when to make suitable rounding and to use rounded numbers to estimate the results of calculations 	<p>EOC 9: Decimal Numbers</p> <ul style="list-style-type: none"> • Multiplication of decimals • Powers of 10 • Rounding appropriately • Dividing decimals • Solving problems
		<ul style="list-style-type: none"> • how to work out the surface areas of cubes and cuboids 	<p>EOC 10: Surface area and volume of 3D shapes</p> <ul style="list-style-type: none"> • Surface area of cubes and cuboids

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HALF TERM 5	<p>CH 11: Solving equations graphically</p> <p>CH 12: Distance, Speed and time</p>	<ul style="list-style-type: none"> • how to work out the volumes of cubes and cuboids • how to work out the volumes of triangular prisms • how to solve linear equations graphically • how to use straight-line graphs to solve problems • how to solve simple quadratic equations • how to use quadratic graphs to solve problems • how to solve problems involving distance, speed and time 	<ul style="list-style-type: none"> • Volume of cubes and cuboids • Volume of triangular prisms EOC 11: Solving equations graphically <ul style="list-style-type: none"> • Graphs from equations in the form $ay \pm bx = c$ • Problems involving straight-line graphs • Solving simple quadratic equations by drawing graphs • Problems involving quadratic graphs EOC 12: Distance, Speed and time <ul style="list-style-type: none"> • Distance • Speed • Time
HALF TERM 6	<p>CH 13: Right-angled triangles</p> <p>CH 14: Revision</p>	<ul style="list-style-type: none"> • what similar triangles are • patterns you can find in similar and right-angled triangles • how to use these patterns to solve some problems • help you to practise and revise topics covered in your current course • get you started on your GCSE course 	<p>EOC 13: Right-angled triangles</p> <ul style="list-style-type: none"> • Similar triangles • A summary of similar triangles • Using triangles to solve problems <p>EOC 14: Revision</p> <ul style="list-style-type: none"> • GCSE-type question