

Mathematics

Year 7

Term	Topic	Content/Assessments	Home learning opportunities
1a	Number skills and facts	<ul style="list-style-type: none"> Addition, subtraction, multiplication and division skills, including BIDMAS Properties of numbers and terminology Highest common factor and lowest common multiple Rounding and estimating to decimal places and significant figures 	<p>Weekly common homework to develop a range of mathematical skills, same 10 topics per each half term</p> <p>Corbett Maths contains a range of videos to support students</p>
1b	Algebra	<ul style="list-style-type: none"> Understand and use algebraic rules and simplify expressions using these Substitution into expressions and equations Re-arrange formulae Expand single brackets 	
Christmas Holidays			
2a	Shapes Units	<ul style="list-style-type: none"> Find the perimeter and area of a range of shapes, including compound shapes Calculate the volume of prisms and composite prisms Use metric and imperial units and their conversions 	<p>Weekly common homework to develop a range of mathematical skills, same 10 topics per each half term</p> <p>Corbett Maths contains a range of videos to support students</p>
2b	Further number skills	<ul style="list-style-type: none"> Read and write numbers in words and figures Develop mental arithmetic abilities Use known facts to derive solutions to calculations Complete calculations involving decimals 	
Easter Holidays			
3a	Probability	<ul style="list-style-type: none"> Understand and use the sum of probabilities is 1 Express probabilities as fractions and decimals Work with scenarios with two outcomes that are not equally likely Understand mutually exclusive events Record all outcomes from an experiment Estimate outcomes based on theoretical probabilities 	<p>Weekly common homework to develop a range of mathematical skills, same 10 topics per each half term</p> <p>Corbett Maths contains a range of videos to support students</p>
3b	Further shapes Time	<ul style="list-style-type: none"> Understand and use symmetrical properties of shapes Complete transformations of shapes Calculate time within the context of a question Convert between time expressed as hours and minutes into time expressed as decimals Use time zones 	

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Year 8

Term	Topic	Content/Assessments	Home learning opportunities
1a	Algebra	<ul style="list-style-type: none"> Solve two step equations Express numbers using inequality symbols and on a number line Solve inequalities 	<p>Weekly common homework to develop a range of mathematical skills, same 10 topics per each half term</p> <p>Corbett Maths contains a range of videos to support students</p>
	Number skills	<ul style="list-style-type: none"> Complete mathematical operations using fractions Convert between mixed numbers and improper fractions Calculate a percentage or fraction of a value Calculate percentage increase and decrease 	
1b	Shape	<ul style="list-style-type: none"> Work with nets, prisms and pyramids and use correct terminology Understand congruent shapes Classify quadrilaterals Explore tessellating shapes and draw tessellations Construct circles and triangles Use isometric paper 	
Christmas Holidays			
2a	Money	<ul style="list-style-type: none"> Use mathematical knowledge when applied to money situations Solve problems which include the use of bank accounts, budgeting, interest and borrowing 	<p>Weekly common homework to develop a range of mathematical skills, same 10 topics per each half term</p> <p>Corbett Maths contains a range of videos to support students</p>
	Algebra	<ul style="list-style-type: none"> Find the output from a function machine Find and describe patterns in a sequence of numbers Determine the formula which describes a sequence of numbers 	
2b	Geometry	<ul style="list-style-type: none"> Accurately draw angles and triangles using suitable mathematical equipment Read and write bearings correctly and describe a location using them Calculate angles in a range of situations 	
Easter Holidays			
3a	Further number skills	<ul style="list-style-type: none"> Use equivalences between fractions, decimals, percentages and ratio Share a quantity into a ratio 	<p>Weekly common homework to develop a range of mathematical skills, same 10 topics per each half term</p> <p>Corbett Maths contains a range of videos to support students</p>
	Further algebra	<ul style="list-style-type: none"> Use coordinates in all 4 quadrants Generate coordinates and plot them for linear functions Find horizontal and vertical distances using coordinates Complete and interpret a distance time graph 	

3b	Statistics	<ul style="list-style-type: none"> Construct and interpret a wide range of mathematical graphs which represent discrete and continuous data Use mean, mode, median and range to compare data sets Collect and interpret own data through designing and completing a survey 	
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Mathematics

Year 9 GCSE Year 1

Content in written text is Foundation Tier

Content which is underlined in Intermediate Tier, along with the Foundation Tier work

Content in bold is Higher Tier only, alongside all other content

Note: some topics will appear in written text only, but are covered in greater detail as the tier of study increases.

Term	Topic	Content/Assessments	Home learning opportunities
1a	Number skills	<ul style="list-style-type: none"> Work with fractions, decimals, percentages and integers <u>Determine upper and lower bounds of numbers and use these in calculations</u> 	Weekly homework activity to further develop and secure knowledge of topics covered Corbett Maths contains a range of videos to support students
	Geometry	<ul style="list-style-type: none"> Use mathematical terminology with shapes correctly Draw nets of shapes and use isometric paper <u>Complete dimensional analysis on a formula</u> Construct 2D and 3D shapes Calculate perimeter, area, volume and surface area for a range of shapes 	
1b	Shape	<ul style="list-style-type: none"> Calculate the size of different parts of a circles Calculate the surface area and volume of a range of 3D shapes <u>Classify shapes by their geometrical properties</u> Use mathematical terminology with shapes correctly 	
	Algebra	<ul style="list-style-type: none"> Use coordinates in all 4 quadrants Draw and interpret linear graphs, <u>including an understanding of gradient</u> Calculate missing angles in a variety of situations 	
Christmas Holidays			
2a	Money	<ul style="list-style-type: none"> Use mathematical knowledge when applied to money situations Solve problems which include the use of different types of interest Use exchange rates 	Weekly homework activity to further develop and secure knowledge of topics covered

	Algebra	<ul style="list-style-type: none"> Use interest rates, including the use of AER and APR Understand the basics of algebra Form and simplify algebraic expressions Expand simple brackets 	<p>Corbett Maths contains a range of videos to support students</p>
2b	Data	<ul style="list-style-type: none"> Solve statistical problems and test hypotheses Create a sample from a population using different methods Critique questionnaires <u>Determine factors which affect the reliability of data</u> <u>Sort and tabulate discrete and continuous data</u> 	
Easter Holidays			
3a	Number skills	<ul style="list-style-type: none"> Use ratio in a range of situations <u>Direct and inverse proportion</u> Use the correct terminology related to number <u>Find the lowest common multiple and highest common factor of a pair of numbers</u> Know and use the laws of indices 	<p>Weekly homework activity to further develop and secure knowledge of topics covered</p> <p>Corbett Maths contains a range of videos to support students</p>
3b	Number skills Algebra	<ul style="list-style-type: none"> Understand standard form <u>Use standard form in a range of calculations</u> Find patterns in numbers and describe them accurately Define rational and irrational numbers Work with surds and rationalise the denominator of a fraction Substitute into expressions <u>Transpose a formula</u> 	