

Curriculum Overview

	Focus	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 11 Foundation	Topic						
	Key concepts/ideas	<p>Checking Solutions to Calculations. Scatter Diagrams. Pythagoras and Trigonometry. Quadratic Graphs. Calculate the mean from grouped continuous data. Inequalities.</p>	<p>Compound Measures. Reciprocals, Factors and Multiples. Changing the subject of a formula. Loci. Accuracy. Sequences. Mock Exam</p>	<p>Prisms and Units. Solving two linear simultaneous equations. Fractions. Transformations. Algebra.</p>	<p>Mock Exam Practice exam-style questions. Practice papers. General revision. Numeracy.</p>	<p>Practice exam-style questions. Practice papers. General revision. Numeracy. GCSE Exams</p>	<p>Absent GCSE Exams</p>
	Key skills	<p>Check solutions to calculations by approximating or by using inverse operations. Recognise the effect of multiplying and dividing by numbers less than one and greater than one. Convert between ordinary numbers and standard index form. Draw and interpret scatter graphs for discrete and continuous variables. Understand the types of correlation. Use and understand lines of best fit. Understand, recall and use Pythagoras theorem in 2D contexts. Understand trigonometric ratios and know exact values of 0, 30, 45, 60 and 90. Use trig relationships in right-angled triangles and use these to solve problems, including those involving bearings. Generate points and plot graphs of simple quadratic functions. Use these to find approximate solutions, turning points and lines of symmetry of simple related equations. Generate points and plot graphs of simple cubic and reciprocal functions. Use these to find approximate solutions of simple related equations. Calculate the mean from grouped continuous data. Solve simple linear inequalities in one variable and represent the solution set on a number line, using the convention for distinguishing \leq and \geq from $<$ and $>$.</p>	<p>Understand and use rates and compound measures, for example speed, density, pressure and rate of flow. Use and understand the terms reciprocal, highest common factor, lowest common multiple, prime number. Find the prime factor decomposition of positive integers. Evaluate algebraic formulae, substituting fractions, decimals and negative numbers. Change the subject of a formula in cases where the subject only appears once. Include powers and the subject on both sides. Construct loci to show paths and shapes. Use straight edge and a pair of compasses to produce standard constructions, including the midpoint and perpendicular bisector of a line segment and the bisector of an angle. Know that perpendicular distance from a point to a line is the shortest distance. Recognise that a measurement given to the nearest whole unit may be inaccurate by up to half a unit in either direction. Generate integer sequences using a rule for the nth term. Use linear expressions to describe the nth term of an arithmetic sequence. Find the next term of a quadratic sequence and functions and explore their properties.</p>	<p>Calculate the surface area and volume of right prisms including cylinders. Convert between measures for area or for volume. Know the properties of and calculate volume and surface area of pyramids, spheres and cones. Solve simultaneous equations graphically and interpret the equations as lines and their common solution as the point the lines intersect. Solve two simultaneous equations by adding or subtracting them. Solve two simultaneous equations where one or both equations have to be multiplied. Set up two linear simultaneous equations from a problem. Use the four operations on fractions, including mixed numbers. Transform simple 2D shapes by simple combinations of transformations. Square a linear expression and expand and simplify the product of two linear expressions and simplify the resulting quadratic. Factorise quadratic expressions including the difference for two squares. Solve quadratics by factorising. Argue mathematically to show equivalence of algebraic expressions. Sketch, interpret and identify graphs of linear, quadratic, cubic and reciprocal functions, and graphs that model real situations.</p>			

Key terms/vocab	Positive and negative correlation. Sine, Cosine and Tangent. Average, Mean, Mode, Modal, Median and Range. Discrete and Continuous. Grouped Data Less than and More than.	Length, Area and Volume. Density, Pressure, Force, Mass, Speed, and Distance. Reciprocal, Prime number, Factor, HCF, Multiple, LCM, Product. Subject, Formula, Solve. Midpoint, Perpendicular, Bisect. Nth Term.	2d Shapes: types of triangles and quadrilaterals. 3d Shapes: Prism, Cuboid, Sphere, Cylinder. Numerator, Denominator. Improper and Mixed Number. Factorise and Expand Solve Similar and congruent			
Independent learning / wider reading	For more support and lots of practice questions go to www.mymaths.co.uk or https://corbettmaths.com/contents/	For more support and lots of practice questions go to www.mymaths.co.uk or https://corbettmaths.com/contents/	For more support and lots of practice questions go to www.mymaths.co.uk or https://corbettmaths.com/contents/	For more support and lots of practice questions go to www.mymaths.co.uk or https://corbettmaths.com/contents/	For more support and lots of practice questions go to www.mymaths.co.uk or https://corbettmaths.com/contents/	For more support and lots of practice questions go to www.mymaths.co.uk or https://corbettmaths.com/contents/
Assessment	September	November mock		March mock	GCSE	GCSE
Careers links	Architecture Business analyst Computer programming Data analyst Early Years Practitioner And more...	Accountant Baker CAD technician Digital marketer Economist And more...	Admin assistant Bank Manager/cashier Care home manager Doctor Electrician And more...	Advertising exec Beauty Consultant Cartographer Drilling Engineer Engineer And more...	Aerospace engineer Biochemist Catering manager Driving instructor Environmental Health Officer And more...	Agricultural consultant Builder Charity Fundraiser Dentist Events Organiser And all others!

	Focus	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 7 – Teacher 1	Topic						
	Key concepts/ideas						
	Key skills						
	Key terms/vocab						
	Independent learning / wider reading						
	Assessment						
	Careers links						
	Focus	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 7 – Teacher 2	Topic						
	Key concepts/ideas						
	Key skills						
	Key terms/vocab						
	Independent learning / wider reading						
	Assessment						
	Careers links						

By term

	Focus	Autumn	Spring	Summer
Year 7	Topic			
	Key concepts/ideas			
	Key skills			
	Key terms/vocab			
	Independent learning / wider reading			
	Assessment			
	Careers links			