

Year	Term	Week	Unit	Ref	Lesson	GCSE Ref	GCSE Objective statement	MyMaths
Year 3	Autumn Term	1-2	18 Graphs 2 (Algebra)	18.1	Properties of quadratic functions	A11 [d, e] A12 [c, d, e, f] A18 [a, b - d]	Identify and interpret roots, intercepts, turning points of quadratic functions graphically; deduce roots algebraically. Recognise, sketch and interpret graphs of linear functions, quadratic functions, simple cubic functions, the reciprocal function $y = 1/x$ with $x \neq 0$. Solve quadratic equations algebraically by factorising; find approximate solutions using a graph.	1168 1169
				18.2	Sketching functions	A12 [a, e, f]	Recognise, sketch and interpret graphs of linear functions, quadratic functions, simple cubic functions, the reciprocal function $y = 1/x$ with $x \neq 0$.	1071 1172 1180 1316
				18.3	Real-life graphs	A14 [c]	Plot and interpret graphs (including reciprocal graphs) and graphs of non-standard functions in real contexts, to find approximate solutions to problems such as simple kinematic problems involving distance, speed and acceleration.	1184 1322
				Review				
				Assessment 18				
		5-6		19 Pythagoras and trigonometry (Geometry)	19.1	Pythagoras' theorem	G6 [a - d, f] G20 [b - d, f, g]	Apply angle facts, triangle congruence, similarity and properties of quadrilaterals to conjecture and derive results about angles and sides, including Pythagoras' Theorem and the fact that the base angles of an isosceles triangle are equal, and use known results to obtain simple proofs. Know the formulae for: Pythagoras' theorem, $a^2 + b^2 = c^2$, and the trigonometric ratios, $\sin \theta = \text{opposite/hypotenuse}$, $\cos \theta = \text{adjacent/hypotenuse}$ and $\tan \theta = \text{opposite/adjacent}$; apply them to find angles and lengths in right-angled triangles in two dimensional figures.
	19.2		Trigonometry 1		R12 [a, c] G19 [b] G20 [a, b, f, g] G21 [a]	Compare lengths, areas and volumes using ratio notation; make links to similarity (including trigonometric ratios) and scale factors. Apply the concepts of congruence and similarity, including the relationships between lengths, in similar figures. Know the formulae for: Pythagoras' theorem, $a^2 + b^2 = c^2$, and the trigonometric ratios, $\sin \theta = \text{opposite/hypotenuse}$, $\cos \theta = \text{adjacent/hypotenuse}$ and $\tan \theta = \text{opposite/adjacent}$; apply them to find angles and lengths in right-angled triangles in two dimensional figures. Know the exact values of $\sin \theta$ and $\cos \theta$ for $\theta = 0^\circ, 30^\circ, 45^\circ, 60^\circ$ and 90° ; know the exact value of $\tan \theta$ for $\theta = 0^\circ, 30^\circ, 45^\circ$ and 60° .	1133 1145	
	19.3		Trigonometry 2		R12 [a, c] G19 [b] G20 [a, c, f, g] G21 [b]	Compare lengths, areas and volumes using ratio notation; make links to similarity (including trigonometric ratios) and scale factors. Apply the concepts of congruence and similarity, including the relationships between lengths, in similar figures. Know the formulae for: Pythagoras' theorem, $a^2 + b^2 = c^2$, and the trigonometric ratios, $\sin \theta = \text{opposite/hypotenuse}$, $\cos \theta = \text{adjacent/hypotenuse}$ and $\tan \theta = \text{opposite/adjacent}$; apply them to find angles and lengths in right-angled triangles in two dimensional figures. Know the exact values of $\sin \theta$ and $\cos \theta$ for $\theta = 0^\circ, 30^\circ, 45^\circ, 60^\circ$ and 90° ; know the exact value of $\tan \theta$ for $\theta = 0^\circ, 30^\circ, 45^\circ$ and 60° .	1131 1133 1145	
	7-8							

Year 3

Autumn Term

Year 3	Autumn Term	9-10		19.4	Vectors	G25 [e]	Apply addition and subtraction of vectors, multiplication of vectors by a scalar, and diagrammatic and column representations of vectors.	1134 1135
					Review			
					Assessment 19			
		11-12	20 Combined events (Probability)	20.1	Sets	P6 [a, c] P7 [b]	Enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams and tree diagrams. Construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities.	1262 1921 1922
				20.2	Possibility spaces	N5 [b] P6 [b, c] P7	Apply systematic listing strategies. Enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams and tree diagrams. Construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities.	1199 1263
				20.3	Tree diagrams	P1 [a] P6 [a, b] P8	Record, describe and analyse the frequency of outcomes of probability experiments using tables and frequency trees. Enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams and tree diagrams. Calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions.	1208 1334 1935
		13-14			Review			
					Assessment 20			
			Lifeskills		The launch party			
		15-16	21 Sequences (Algebra)	21.1	Sequence rules	A23 [b]	Generate terms of a sequence from either a term-to-term or a position-to-term rule.	1173
				21.2	Finding the n th term	A23 [a] A25 [b]	Generate terms of a sequence from either a term-to-term or a position-to-term rule. Deduce expressions to calculate the n th term of linear sequences.	1165
				21.3	Special sequences	A24 [h, i]	Recognise and use sequences of triangular, square and cube numbers, simple arithmetic progressions, Fibonacci type sequences, quadratic sequences, and simple geometric progressions (r^n where n is an integer, and r is a rational number > 0).	1053 1054 1920
		17-18			Review			
					Assessment 21			
				22.1	Compound units	R1 [c, d] R11	Change freely between related standard units (e.g. time, length, area, volume/capacity, mass) and compound units (e.g. speed, rates of pay, prices) in numerical and algebraic contexts. Use compound units such as speed, rates of pay, unit pricing density and pressure.	1061 1121 1246

Year 3	Year 3 Spring Term Spring Term	19-20	22 Units and proportionality (Ratio and proportion)	22.2	Direct proportion	R1 R6 [a] R7 R8 [a] R10 [b] R13 [a, b, d] R14 [c]	Change freely between related standard units (e.g. time, length, area, volume/capacity, mass) and compound units (e.g. speed, rates of pay, prices) in numerical and algebraic contexts. Express a multiplicative relationship between two quantities as a ratio or a fraction. Understand and use proportion as equality of ratios. Relate ratios to fractions and to linear functions. Solve problems involving direct and inverse proportion, including graphical and algebraic representations. Understand that X is inversely proportional to Y is equivalent to X is proportional to $1/Y$; interpret equations that describe direct and inverse proportion. Interpret the gradient of a straight line graph as a rate of change; recognise and interpret graphs that illustrate direct and inverse proportion.	1036 1048 1059
				22.3	Inverse proportion	R1 R10 [a] R13 [b] R14 [a, b]	Change freely between related standard units (e.g. time, length, area, volume/capacity, mass) and compound units (e.g. speed, rates of pay, prices) in numerical and algebraic contexts. Solve problems involving direct and inverse proportion, including graphical and algebraic representations. Understand that X is inversely proportional to Y is equivalent to X is proportional to $1/Y$; interpret equations that describe direct and inverse proportion. Interpret the gradient of a straight line graph as a rate of change; recognise and interpret graphs that illustrate direct and inverse proportion.	1048
				22.4	Growth and decay	R16 [e]	Set up, solve and interpret the answers in growth and decay problems, including compound interest.	1070 1238
					Review			
					Assessment 22			
		Summer Term	26-38	<h1>Revision</h1>				