

YEAR 9					
HIGHER +		HIGHER		FOUNDATION +	
AUTUMN 1		AUTUMN 1		AUTUMN 1	
N1	Integers, powers and roots	N1	Integers and decimals	N1	Integers and decimals
N1.1	Powers of 10	N1.1	Place value and ordering numbers	N1.1	Place value
N1.2	Standard form for large numbers	N1.2	Adding and subtracting negative numbers	N1.2	Reading scales
N1.3	Standard form for small numbers	N1.3	Multiplying and dividing negative numbers	N1.3	Adding and subtracting negative numbers
N1.4	Prime numbers and factorisation	N1.4	Factors and primes	N1.4	Multiplying and dividing negative numbers
N1.5	Using prime factors: HCF and LCM	N1.5	Using prime factors: HCF and LCM	N1.5	Factors and multiples
	Exam review		Exam review		Exam review
N2	Number operations	N2	Decimal calculations	N2	Decimal calculations
N2.1	Rounding	N2.1	Approximation and rounding	N2.1	Rounding
N2.2	Upper and lower bounds	N2.2	Mental methods for adding and subtracting decimals	N2.2	Mental addition and subtraction
N2.3	Multiplying and dividing	N2.3	Written methods for adding and subtracting decimals	N2.3	Written addition and subtraction
N2.4	Mental calculations	N2.4	Mental methods for multiplying and dividing decimals	N2.4	Mental multiplication and division
N2.5	Written calculations	N2.5	Written methods for multiplying and dividing decimals	N2.5	Written multiplication and division
	Exam review		Exam review		Exam review
A1	Expressions	A1	Expressions	A1	Expressions
A1.1	Simplifying using index laws	A1.1	Writing and simplifying expressions in algebra	A1.1	Algebraic expressions
A1.2	Expanding single and double brackets	A1.2	Expanding single brackets	A1.2	Indices
A1.3	Factorisation	A1.3	Expanding double brackets	A1.3	Brackets in algebra
A1.4	More factorisation	A1.4	Factorising single brackets	A1.4	Simplifying expressions
A1.5	The difference of two squares	A1.5	Factorising double brackets	A1.5	Factorising
	Exam review		Exam review		Exam review

GCSE MATHS

HIGHER +		HIGHER		FOUNDATION +	
AUTUMN 2		AUTUMN 2		AUTUMN 2	
A2	Equations	A2	Equations and inequalities	A2	Equations and inequalities
A2.1	Solving equations	A2.1	Working with inverse operations	A2.1	Solving equations using function machines
A2.2	Solving equations involving fractions	A2.2	Solving one-sided equations	A2.2	Solving two-step equations
A2.3	Dealing with algebraic fractions	A2.3	Solving double-sided equations	A2.3	Solving equations using the balance method
A2.4	Adding and subtracting algebraic fractions	A2.4	Solving equations with fractions	A2.4	Inequalities
A2.5	More equations involving fractions	A2.5	Inequalities	A2.5	Two-sided inequalities
	Exam review		Exam review		Exam review
D1	Sampling methods	D1	Collecting data	D1	Collecting data
D1.1	Random and systematic sampling	D1.1	Designing a survey	D1.1	Frequency tables
D1.2	Stratified sampling	D1.2	Collecting data - choosing a sample	D1.2	Observation, controlled experiment and sampling
D1.3	Averages and spread	D1.3	Designing a data collection sheet - two way table	D1.3	Surveys and questionnaires
D1.4	Mean of combined data sets	D1.4	Averages and spread	D1.4	Grouped data
D1.5	Averages and spread for grouped data	D1.5	Mean of two combined data sets	D1.5	Two-way tables
	Exam review		Exam review		Exam review
D2	Displaying and interpreting data	D2	Displaying and interpreting data	D2	Displaying data
D2.1	Box plots	D2.1	Scatter diagrams	D2.1	Diagrams and charts
D2.2	Cumulative frequency diagrams	D2.2	Using scatter diagrams	D2.2	Grouped frequency diagrams
D2.3	Using a cumulative frequency diagram	D2.3	Stem-and-leaf diagrams	D2.3	Stem-and-leaf diagrams
D2.4	Box plots for large data sets	D2.4	Interpreting stem-and-leaf diagrams	D2.4	Time series graphs
D2.5	Comparing data sets	D2.5	Box plots	D2.5	Scatter graphs
	Exam review		Exam review		Exam review

GCSE MATHS

HIGHER +		HIGHER		FOUNDATION +	
SPRING 1		SPRING 1		SPRING 1	
S3	Congruence and similarity	S3	Transformations and congruence	S3	Transformations
S3.1	Congruence	S3.1	Reflection	S3.1	Reflection
S3.2	Congruence and proof	S3.2	Rotation	S3.2	Rotation
S3.3	Enlargement	S3.3	Translation	S3.3	Translation
S3.4	Similar shapes	S3.4	Describing transformations	S3.4	Congruence
S3.5	Similar shapes – area and volume	S3.5	Combining transformations	S3.5	Symmetry
	Exam review		Exam review		Exam review
S4	Pythagoras' and trigonometry	S4	Properties of shapes	S4	2-D and 3-D shapes
S4.1	Pythagoras' theorem and coordinates	S4.1	Congruence and symmetry	S4.1	Properties of triangles
S4.2	Tangent ratio	S4.2	Quadrilaterals	S4.2	Properties of quadrilaterals
S4.3	Sine and cosine ratios	S4.3	Triangles and Pythagoras' theorem	S4.3	2-D and 3-D shapes
S4.4	Finding angles in right-angled triangles	S4.4	Problem solving using Pythagoras' theorem	S4.4	Plans and elevations
S4.5	Pythagoras' theorem and trigonometry	S4.5	Pythagoras' theorem and coordinates	S4.5	3-D coordinates
	Exam review		Exam review		Exam review
N3	Fractions, decimals and percentages	N3	Fractions, decimals and percentages	N3	Fractions, decimals and percentages
N3.1	Fraction calculations	N3.1	Ordering fractions	N3.1	Equivalent fractions
N3.2	Fractions and decimals	N3.2	Adding and subtracting fractions	N3.2	Adding and subtracting fractions
N3.3	Fractions, decimals and percentages	N3.3	Multiplying and dividing fractions	N3.3	Multiplying and dividing fractions
N3.4	Percentage problems	N3.4	Converting fractions to decimals	N3.4	Fractions, decimals and percentages
N3.5	Reverse percentage problems	N3.5	Converting decimals and percentages to fractions	N3.5	Ordering fractions, decimals and percentages
	Exam review		Exam review		Exam review

GCSE MATHS

HIGHER + SPRING 2		HIGHER SPRING 2		FOUNDATION + SPRING 2	
N4	Proportion	N4	Proportionality	N4	Proportionality
N4.1	Proportion problems	N4.1	Introducing proportion	N4.1	Proportion
N4.2	Direct proportion	N4.2	Direct proportion	N4.2	Unitary method
N4.3	Inverse proportion	N4.3	Exchange rates	N4.3	Direct proportion
N4.4	Repeated proportional change	N4.4	Compound measures	N4.4	Exchange rates
N4.5	Ratio problems	N4.5	Proportional change	N4.5	Compound measures and speed
	Exam review		Exam review		Exam review
A3	Sequence and quadratic equations	A3	Sequences	A3	Sequences
A3.1	Generating sequences	A3.1	Number patterns	A3.1	Term-to-term rules
A3.2	The n th term of a linear sequence	A3.2	Generating sequences	A3.2	The general term
A3.3	The n th term of a quadratic sequence	A3.3	Finding the n th term	A3.3	Finding the n th term
A3.4	Solving quadratic equations	A3.4	Describing patterns	A3.4	Pattern sequences
A3.5	The quadratic formula	A3.5	Quadratic sequences	A3.5	More pattern sequences
	Exam review		Exam review		Exam review
A4	Linear graphs	A4	Straight line graphs	A4	Straight line graphs
A4.1	Line graphs	A4.1	Straight line graphs	A4.1	Functions
A4.2	Finding the equation of a straight line	A4.2	More straight line graphs	A4.2	Drawing linear graphs
A4.3	Perpendicular lines	A4.3	Gradients and expectation	A4.3	More linear graphs
A4.4	Regions	A4.4	The equation $y = mx + c$	A4.4	Horizontal and vertical graphs
A4.5	Inequalities in two variables	A4.5	Finding the equation of a straight line graph	A4.5	Equations of straight lines
	Exam review		Exam review		Exam review

GCSE MATHS

HIGHER + SUMMER 1		HIGHER SUMMER 1		FOUNDATION + SUMMER 1	
S5	Sine and cosine rule	S5	Constructions and loci	S5	Constructions and loci
S5.1	More Pythagoras' theorem and trigonometry	S5.1	Bearings and scale drawings	S5.1	Bearings
S5.2	The sine rule	S5.2	Constructing triangles	S5.2	Constructing triangles
S5.3	The cosine rule	S5.3	Constructing bisectors	S5.3	Perpendicular lines
S5.4	Solving problems using the sine and cosine rules	S5.4	Further constructions	S5.4	Angle bisectors
S5.5	Pythagoras' theorem and trigonometry in 3-D	S5.5	Loci	S5.5	Loci
	Exam review		Exam review		Exam review
S7	Vectors	S7	Enlargement and similarity	S7	Enlargement and similarity
S7.1	Vector notation	S7.1	Enlargement and similarity	S7.1	Maps and scale drawings
S7.2	Combining vectors	S7.2	Fractional scale factors	S7.2	Enlargements
S7.3	Parallel vectors	S7.3	Describing an enlargement	S7.3	More enlargements
S7.4	Using vectors	S7.4	Similar shapes	S7.4	Similar shapes
S7.5	Proof using vectors	S7.5	Similar triangles	S7.5	Relationships
	Exam review		Exam review		Exam review
N5	Index laws	N5	Integers, powers and roots	N5	Integers, powers and roots
N5.1	Index laws	N5.1	Powers and indices	N5.1	Squares and square roots
N5.2	More index laws	N5.2	Index laws	N5.2	Cubes and cube roots
N5.3	Irrational numbers	N5.3	More index laws	N5.3	Powers and reciprocals
N5.4	Calculations with surds	N5.4	Standard index form for large numbers	N5.4	Standard index form for large numbers
N5.5	Number and algebra	N5.5	Standard form for small numbers	N5.5	Prime factor decomposition
	Exam review		Exam review		Exam review

GCSE MATHS

HIGHER +		HIGHER		FOUNDATION +	
SUMMER 2		SUMMER 2		SUMMER 2	
N6	Estimating and calculating	N6	Estimating and calculating	N6	Estimating and calculating
N6.1	Estimation	N6.1	Order of operations	N6.1	Order of operations
N6.2	Exact calculations	N6.2	Exact calculations	N6.2	Estimation
N6.3	Limits of accuracy	N6.3	Mental calculations	N6.3	Mental methods
N6.4	Written calculation methods	N6.4	Written calculations	N6.4	Written methods
N6.5	Efficient use of a calculator	N6.5	Calculator methods	N6.5	Calculator methods
	Exam review		Exam review		Exam review
A7	Quadratic equations	N7	Fraction and percentage calculations	N7	Fraction and percentage calculations
A7.1	More quadratic equations	N7.1	Finding fractions of quantities	N7.1	Fraction of a quantity
A7.2	Completing the square	N7.2	Finding a percentage of a quantity	N7.2	Percentage of a quantity
A7.3	Solving quadratics by completing the square	N7.3	Percentage increase and decrease	N7.3	Percentage increase and decrease
A7.4	Sketching quadratic graphs	N7.4	Simple and compound interest	N7.4	Percentage problems
A7.5	Solving problems involving quadratics	N7.5	More percentage techniques	N7.5	Interest
	Exam review		Exam review		Exam review
S1	Length, area and volume	S1	Length, area and volume	S1	Length, area and volume
S1.1	Arc length and sector area	S1.1	Area of a rectangle and a triangle	S1.1	Metric and imperial measures
S1.2	Volume of a pyramid and a cone	S1.2	Area of a parallelogram and a trapezium	S1.2	Perimeter and area of a rectangle and a triangle
S1.3	Surface area of a pyramid	S1.3	Area and circumference of a circle	S1.3	Area of a parallelogram and a trapezium
S1.4	Curved surface area of a cone	S1.4	Area and perimeter of a semicircle	S1.4	Circumference and area of a circle
S1.5	Volume and surface area of a sphere	S1.5	Surface area of 3-D shapes	S1.5	Volume of a cuboid
	Exam review		Exam review		Exam review

GCSE MATHS

HIGHER +		HIGHER		FOUNDATION +	
AUTUMN 2		AUTUMN 2		AUTUMN 2	
D3	Probability	D3	Relative frequency	D3	Probability
D3.1	Probability and mutually exclusive events	D3.1	Probability	D3.1	Probability
D3.2	Theoretical and experimental probability	D3.2	Mutually exclusive outcomes	D3.2	Probability scale
D3.3	Relative frequency and best estimate	D3.3	Probability and expectation	D3.3	Two-way tables
D3.4	Independent events	D3.4	Theoretical and experimental probability	D3.4	Expected frequency
D3.5	Probability of two events	D3.5	Relative frequency	D3.5	Relative frequency
	Exam review		Exam review		Exam review
D4	Representing data	D4	Averages and box plots	D4	Averages and range
D4.1	Stem-and-leaf diagrams	D4.1	Large data sets - averages and range	D4.1	Types of data and the range
D4.2	Frequency polygons	D4.2	Averages of grouped data	D4.2	Averages
D4.3	Time series	D4.3	Frequency polygons	D4.3	Charts and tables
D4.4	Predictions using time series	D4.4	Time series	D4.4	Comparing data
D4.5	Scatter graphs	D4.5	Time series and moving averages	D4.5	Grouped data
	Exam review		Exam review		Exam review
D5	Histograms	D5	Cumulative frequency	D5	Interpreting diagrams and charts
D5.1	Histograms	D5.1	Cumulative frequency diagrams	D5.1	Diagrams and charts
D5.2	Interpreting histograms	D5.2	More cumulative frequency diagrams	D5.2	More diagrams and charts
D5.3	More histograms	D5.3	Comparing data sets	D5.3	Stem-and-leaf diagrams
D5.4	Using histograms to compare data sets	D5.4	Box plots - large data sets	D5.4	Time series graphs
D5.5	Statistical reports	D5.5	Using box plots to compare data sets	D5.5	Scatter graphs
	Exam review		Exam review		Exam review

GCSE MATHS

HIGHER +		HIGHER		FOUNDATION +	
SPRING 1		SPRING 1		SPRING 1	
A6	Simultaneous and quadratic equations	A6	Simultaneous and quadratic equations	A6	More equations
A6.1	Using quadratic equations	A6.1	Solving harder equations	A6.1	Solving equations with brackets
A6.2	Solving simultaneous linear equations	A6.2	Introducing quadratic equations	A6.2	Equations with the unknown on both sides
A6.3	Simultaneous linear and quadratic equations	A6.3	Solving equation using trial and improvement	A6.3	More equations with brackets
A6.4	The equation of a circle	A6.4	Simultaneous equations	A6.4	Equations with fractions
A6.5	Solving inequalities	A6.5	Further simultaneous equations	A6.5	Trial and improvement
	Exam review		Exam review		Exam review
A8	Graphical solutions	A7	Graphical solutions	A7	Graphical solutions
A8.1	Graphs of quadratic and cubic functions	A7.1	Plotting curves	A7.1	Drawing linear graphs
A8.2	Graphs of exponential and reciprocal functions	A7.2	Further curve plotting	A7.2	The equation of a straight line
A8.3	Solving equations using graphs	A7.3	Solving linear simultaneous equations graphically	A7.3	Finding solutions from graphs
A8.4	Further graphical solutions	A7.4	Solving quadratic and cubic equations graphically	A7.4	Solutions of more than one equation
A8.5	More equations of circles	A7.5	Solving quadratic and linear simultaneous equations	A7.5	Graphs of quadratic functions
	Exam review		Exam review		Exam review
A9	Modelling	N8	Ratio and proportion	N8	Ratio and proportion
A9.1	Direct proportion	N8.1	Introducing ratio	N8.1	Introducing ratio
A9.2	More direct proportion	N8.2	More ratio	N8.2	calculating with ratio
A9.3	Inverse proportion	N8.3	Ratio and proportion	N8.3	More ratio problems
A9.4	More inverse proportion	N8.4	Ratio, proportion and percentages	N8.4	Ratio and rates
A9.5	Modelling real situations	N8.5	Reverse percentages	N8.5	Proportional problems
	Exam review		Exam review		Exam review

GCSE MATHS

HIGHER + SPRING 2		HIGHER SPRING 2		FOUNDATION + SPRING 2	
D6	Independent events	D6	Independent events	D6	Listing outcomes
D6.1	Drawing tree diagrams	D6.1	Probability revision	D6.1	Probability revision
D6.2	Using tree diagrams to find probabilities	D6.2	Independent events	D6.2	Mutually exclusive outcomes
D6.3	Sampling without replacement	D6.3	Drawing tree diagrams	D6.3	Databases and random sampling
D6.4	Tree diagrams - conditional probability	D6.4	Using tree diagrams to find probability	D6.4	Two events
D6.5	More conditional probability	D6.5	Using tree diagrams to find harder probabilities	D6.5	Two events again
	Exam review		Exam review		Exam review
A10	Transforming graphs	A8	Using graphs	A8	Real-life graphs
A10.1	Translating graphs vertically	A8.1	Distance-time graphs	A8.1	Conversion graphs
A10.2	Translating graphs horizontally	A8.2	Other real-life graphs	A8.2	Drawing conversion graphs
A10.3	Stretching graphs	A8.3	Linear graphs in real life	A8.3	Distance-time graphs
A10.4	More stretching graphs	A8.4	Further linear graphs in real life	A8.4	Average speed
A10.5	Combining transformations	A8.5	Using quadratic graphs	A8.5	Real-life graphs
	Exam review		Exam review		Exam review
S8	Trigonometric graphs	S8	Pythagoras and trigonometry	S8	Polygons and Pythagoras
S8.1	Sine graph	S8.1	Tangent ratio	S8.1	Tessellations
S8.2	Cosine graph	S8.2	Sine and cosine ratios	S8.2	Using parallel lines
S8.3	Tangent graph	S8.3	Finding angles in right-angled triangles	S8.3	Pythagoras' theorem
S8.4	Solving trigonometric equations	S8.4	Pythagoras' theorem and trigonometry	S8.4	More Pythagoras' theorem
S8.5	Transformations of trigonometric	S8.5	Trigonometry in problem solving	S8.5	Coordinates and Pythagoras'
	Exam review		Exam review		Exam review