Unit 1: Probability T1 WK 1 to 3

Topic	Success Criteria	Maths Watch
Combined events	• Use the product rule for finding the number of outcomes for two or more events • List all the possible outcomes of two events in a sample space diagram	Clip 59
Mutually exclusive events	• Identify mutually exclusive outcomes and events. • Find the probabilities of mutually exclusive outcomes and events. • Find the probability of an event not happening.	
Experimental probability	• Work out the expected results for experimental and theoretical probabilities • Compare real values with theoretical expected values to decide if a game is fair	Clip 125
Independent events and tree diagrams	• Draw and use frequency trees • Calculate probabilities of repeated events • Draw and use probability tree diagrams	Clip 57 Clip 151 Clip 175
Conditional probability	• Decide if two events are independent • Draw and use tree diagrams to calculate without replacement • Use two-way tables to calculate conditional probability	
Combinations	• Work out the total number of ways of performing tasks	
Venn diagrams and set notation	• Use Venn diagrams to calculate conditional probability • Use set notation •	Clip 127a Clip 127b Clip 185
Keywords	Mutually exclusive, Experimental, Theoretical, Independent, Conditional, Factorial, Probability tree diagrams, Venn diagram, Set notation, Universal set, Elements, Intersection, Union, Universal set,	

Unit 2: Multiplicative Reasoning T1 WK 4 to 6

Topic	Success Criteria	Maths Watch
Growth and decay	• Find an amount after repeated percentage changes	Clip 164
Compound measures	• Calculate rates • Convert between metric speed measures • Use a formula to calculate speed and acceleration • Solve problems involving compound measures	Clip 142
Ratio and proportion	• Use relationships involving ratio • Use direct and inverse proportion	Clip 106 Clip 199
Keywords	Acceleration, Formula, Proportion, Pressure, Force, Newtons, Growth, decay, Multiplier, Compound, Metric, Kinematics	

Year 10 and 11 Higher

Unit 3: Similarity and Congruence T2 WK 1 to 2

Topic	Success Criteria	Maths Watch
Congruence	• Show that two triangles are congruent • Know the conditions of congruence	Clip 166
Geometric proof and congruence	• Prove shapes are congruent • Solve problems involving congruence	Clip 144
Similarity	• Use the ratio of corresponding sides to work out scale factor • Find missing lengths on similar shapes	Clip 200
Similarity 2	• Use similar triangles to work out lengths in real life • Use the link between linear scale factor and area scale factor to solve problems • Use the links between scale factors for length, area and volume to solve problems	Clip 200
Keywords	Congruent, Similar, Linear, Enlarged, Bisect, Scale factor	

Unit 4: Transformations and Constructions T2 WK 4 to 6

Topic	Success Criteria	Maths Watch
Translations	• Translate a shape on a coordinate grid • Translate a shape using a vector • Use a column vector to describe a translation	Clip 50 Clip 174
Reflections	• Draw a reflection in a mirror line • Draw a reflection on a coordinate grid • Describe reflections on a coordinate grid	Clip 48
Rotations	• Rotate a shape on a coordinate grid about a centre of rotation. • Describe a rotation	Clip 49
Enlargement	• Enlarge a shape by a scale factor • Enlarge a shape using a centre of enlargement • **Enlarge shapes by fractional and negative scale factors about a centre of enlargement** • Identify the scale factor of an enlargement • Find the centre of enlargement • Describe an enlargement	Clip 148 Clip 181a Clip 182
Combining Transformations	• Transform shapes using more than one transformation • Describe combined transformations of shapes on a grid	Clip 182
Keywords	Translation, vector, reflection, symmetry, rotation, enlargement, scale factor, centre, plans, elevation, bearings, bisect, loci	

Unit 5: Further Trigonometry T3 WK 1 to 3

Topic	Success Criteria	Maths Watch
Accuracy	• Understand upper and lower bounds in calculations involving trigonometry	
Graph of the sine function	• Understand how to find the sine of any angle • Know the graph of the sine function and use it to solve equations	Clip 195a
Graph of the cosine function	• Understand how to find the cosine of any angle • Know the graph of the cosine function and use it to solve equations	Clip 195a
The tangent function	• Understand how to find the tangent of any angle • Know the graph of the tangent function and use it to solve equations	Clip 195b
Area of triangles using the sine rule	• Find the area of a triangle and a segment of a circle • Use the sine rule to solve 2-D problems	Clip 201
The cosine rule	• Use the cosine rule to solve 2D problems • Solve bearings problems using trigonometry	Clip 202
Solving problems in 3D	• Use Pythagoras' theorem in 3D • Use trigonometry in 3D	Clip 150b Clip 217
Transforming trigonometric graphs	• Recognise how changes in a function affect trigonometric graphs	Clip 196b
Keywords	Trigonometry, Function, Sine, Cosine, Tangent, Segment, Pythagoras, Opposite, Hypotenuse, Adjacent, Diagonal, Horizontal plane, Vertical Plane	

Year 10 and 11 Higher

Unit 6: Further Statistics T3 WK 4 to 6

Topic	Success Criteria	Maths Watch
Cumulative Frequency	• Draw and interpret cumulative frequency tables and diagrams • Work out the median, quartiles and interquartile range from a cumulative frequency diagram	Clip 186
Box plots	• Find the quartiles and the interquartile range from stem-and-leaf diagrams • Draw and interpret box plots	Clip 187
Stem-and -leaf	• Find the quartiles and the interquartile range from stem-and-leaf diagrams	Clip 128b
Drawing histograms	• Understand frequency density • Draw histograms	Clip 205
Interpreting histograms	• Interpret histograms	Clip 205
Comparing and describing populations	• Compare two sets of data	Clip 152
Keywords	Cumulative Frequency, Median, Quartile, Interquartile, Upper quartile, lower quartile, Frequency Density, Histogram, Stratified Sample, Stata, Capture-recapture, Assumption, Box plot, Outliers, Bias, Census, Population.	

Unit 7: Equations and Graphs T4 WK 1 to 4

Topic	Success Criteria	Maths Watch
Solving Equations Graphically	• Solve simultaneous equations graphically	Clip 140
Solving Quadratics	• Solve simultaneous equations algebraically • Solve quadratic equations by factorising • Find roots of an equation by completing the square • And using the quadratic formula	
Representing inequalities graphically	• Represent inequalities on graphs • Interpret graphs of inequalities	Clip 138 Clip 198
Graphs of quadratic functions	• Recognise and draw quadratic functions • Sketch quadratics • Find coordinates of turning points	Clip 98
Solving quadratic equations graphically	• Find approximate solutions to quadratic equations graphically • Understand maximum and minimum points.	Clip 211 Clip 160
Graphs of cubic functions	• Find the roots of cubic equations • Sketch graphs of cubic functions • Solve cubic equations using an iterative process	Clip 161
Iteration	• Use iterative processes	
Graphs of reciprocal functions	• Plot and identify graphs of reciprocal functions • Sketch graphs of cubic functions	
Graph of a circle	• Know and draw graphs of circles • Equation of a circle • Find the equation of a tangent to a circle	
Keywords	Simultaneous, Inequalities, Roots, Cubic, Reciprocal, Tangent, Function,	

Unit 8: Construction, Loci and Bearings T4 WK 5 to 6 T5 WK 1

Topic	Success criteria	Maths Watch
3D Solids	• Recognise 3D shapes and their properties and be able to describe using correct mathematical words • Understand the 2D shapes that make up 3D objects	Clip 43
Plans and elevations	• Identify and sketch planes of symmetry of 3D shapes • Understand and draw plans and elevations of 3D shapes • Sketch 3D shapes based on their plans and elevations	Clip 51
Accurate drawings 1	• Make accurate drawings of triangles using a ruler, protractor and compass. • Identify SSS, ASA, SAS and RHS triangles as unique from a given description • Identify congruent triangles	Clip 166
Scale drawings and maps	• Draw diagrams to scale • Correctly interpret scales in real-life contexts • Use scales on maps and diagrams to work out lengths and distances • Know when to use exact measurements and estimations on scale drawings and maps • Draw lengths and distances correctly on given scale drawings	
Accurate drawings 2	• Accurately draw angles and 2D shapes using a ruler, protractor and compass • Construct a polygon inside a circle • Recognise nets and make accurate drawings of nets of common 3D objects	
Constructions	• Draw accurately using rulers and compasses • Bisect angles and lines using rulers and compasses	Clip 146a Clip 146b
Loci and regions	• Draw loci for the path of points that follow a given rule • Identify regions bounded by loci to solve practical problems	Clip 165
Bearings	• Find and use three-figure bearings • Use angles at parallel lines to work out bearings • Solve problems involving bearings and scale diagrams	Clip 124
Keywords	Cube, cuboid, triangular prism, prism, cone, pyramid, sphere, symmetry, plans, elevations, scale, congruent, bisect, regions, loci, bearings, protractor, pair of compasses	

Unit 9: Further Algebra T5 WK 2 to 6

Topic	Success Criteria	Maths Watch
Rearranging	• Change the subject of a formula where the power of the subject appears	Clip 136 Clip 190
Algebraic fractions	• Add and subtract algebraic fractions • Multiply and divide algebraic fractions • Change the subject of a formula involving fractions where all the variables are in denominators	Clip 210a
Simplifying algebraic fractions	• Simplify algebraic fractions	Clip 210a
More algebraic fractions	• Add and subtract more complex algebraic fractions • Multiply and divide more complex algebraic fractions	Clip 210a
Surds	• Simplify expressions involving surds • Expand expressions involving surds • Rationalise the denominator of a fraction	Clip 207a Clip 207b Clip 207c
Solving algebraic fraction equations	• Solve equations that involve algebraic fractions	Clip 210b
Functions	• Use function notation • Find composite functions Find inverse functions	Clip 215 Clip 214a Clip 214b
Proof	• Prove a result using algebra	Clip 193
Keywords	Rearrange, Variables, Surd, Function, Composite, Rational, Irrational, Rationalise the denominator, Proof, Counter-example,	

Unit 10: Circle Theorems T6 WK 1 to 3

Topic	Success Criteria	Maths Watch
Radii and chords	• Solve problems involving angles, triangles and circles • Understand and use facts about chords and their distance from the centre of a circle • Solve problems involving chords and radii	Clip 183
Tangents	• Understand and use facts about tangents at a point and from a point • Give reasons for angles and length calculations involving tangents	Clip 183
Angles in circles 1	• Understand, prove and use facts about angles subtended at the centre and the circumference of circles • Understand, prove and use facts about the angle in a semicircle being a right angle • Find missing angles using these theorems and give reasons for answers	Clip 183
Angles in circles 2	• Understand, prove and use facts about angles subtended at the circumference of a circle • Understand, prove and use facts about cyclic quadrilaterals • Prove the alternate segment theorem	Clip 183
Applying the circle theorems	• Solve angle problems using circle theorems • Give reasons for angle sizes using mathematical language • Find the equations of the tangent to a circle at a given point	Clip 183
Keywords	Chord, Subtend, Cyclic Quadrilateral, Alternate Segment Theorem, Radii, Tangent	

Unit 11: Vectors and Geometric Proof T6 WK 4 to 6

Topic	Success Criteria	Maths Watch
Vectors and vector notation	• Understand and use vector notation • Work out the magnitude of a vector	Clip 174
Vector arithmetic	• Calculate using vectors and represent the solutions graphically • Calculate the resultant of two vectors • Solve problems using vectors • Use the resultant of two vectors to solve vector problems	Clip 219
Parallel vectors and collinear points	• Express points as position vectors • Prove lines are parallel • Prove points are collinear	
Solving geometric problems	• Solve geometric problems in two dimensions using vector methods • Apply vector methods for simple geometric proofs	
Keywords	Vector, Magnitude, Displacement, Scalar, Column vector, Collinear,	

Unit 12: Proportion and graphs YR 11 T1 WK 1 to 4

Topic	Success Criteria	Maths Watch
Direct proportion	• Write and use equations to solve problems involving direct proportion • Write and use equations to solve problems involving direct proportion • Solve problems involving square and cubic proportionality	Clip 199
Inverse proportion	• Write and use equations to solve problems involving inverse proportion • Use and recognise graphs showing inverse proportion	Clip 199
Exponential functions	• Recognise graphs of exponential functions • Sketch graphs of exponential functions • Solve Equations of exponential functions	Clip 194
Non-linear graphs	• Calculate the gradient of a tangent at a point • Estimate the area under a non-linear graph	Clip 216a Clip 159b
Translating graphs of functions	• Understand the relationship between translating a graph and the change in its function notation	Clip 196b
Reflecting and stretching graphs of functions	• Understand the effect stretching a curve parallel to one of the axes has on its function form	Clip 196b
Keywords	Exponential, Growth, Decay, Proportionality, directly and inversely proportional, Acceleration, Constant of proportionality,	