






Colour key

Number	
Algebra	
Shape	
Data	
Ratio and proportion	

Change the arrows and topic titles to the correct colour where possible

Year 11 Maths Term 1 Higher

1. Surds

- Calculating with Surds – Simplify, +, -, x, /
- Rationalising Denominators

Grade

3. Equations

- Solving Quadratic equations – factorise, completing the square, using the quadratic formula, graphically
- Solving Simultaneous equations Involving Quadratics

Grade

5. Circle Geometry

- Circle Theorems – applying circle theorems to calculate angles

Grade

1

2

3

4

5

- Simplifying Algebraic fractions
- +, -, x and / with algebraic fractions

Grade

7+

2. Algebraic Fractions

- Trigonometric ratios and graphs
- Non right-angled trigonometry – Sine rule, Cosine rule
- 3D Pythagoras and trigonometry

Grade

4. Pythagoras and Trigonometry

Year 11 Maths Term 2a Higher

1. Statistical Diagrams

- Histograms
- Drawing Histograms
- Interpreting Histograms
- Estimating median and Quartiles from Histograms

Grade

1

3. Inequalities

- Solving Linear Inequalities
- Graphing to identify regions
- Solving Quadratic Inequalities

Grade

3

5. Transformations

- Transformations of graphs
- Translation of graphs
- Reflection of graphs
- Multiple transformations

Grade

5

- Conditional Probability
- Calculating from tables, Venn diagrams, Tree diagrams and conditional formula
- Product rule for counting

Grade

2. Probability

- Substituting into functions
- Finding Composite functions
- Finding Inverse functions

Grade

4. Functions

Year 10 Maths Term 2b Higher

6. Iteration

- Using recurrence relations
- Substituting into iterative formulae
- Finding approximate solutions to equations using iteration
- Assessing appropriate degree of accuracy

Grade

8. Similarity

- Finding perimeters of similar shapes
- Finding areas of similar shapes
- Finding volume of similar shapes

Grade

10. Graphs

- Estimating gradients of non-linear graphs using tangents
- Calculating distances from velocity-time graphs by estimating areas
- Equations of circles and tangents

Grade

1

2

3

4

5

- Writing algebraic proofs through forming and manipulating algebraic expressions
- Using algebra to prove a given postulate

Grade

7. Algebraic Proof

- Solving geometric problems using vectors
- Writing Geometric Proofs including proof two vectors are parallel or co-linear

Grade

9. Geometric Proof

Year 11 Maths Term 1 Foundation

1. Factors, multiples and primes

- Finding the LCM and HCF
- Prime factor decomposition
- Finding HCF and LCM using Prime factors

Grade

1

3. Expressions and Equations

- Simplify expressions using index laws
- Simplify algebraic fractions by cancelling
- Solving equations with two or more steps
- Constructing and solving equations
- Solve quadratic equations
- Solve simultaneous equations

Grade

3

5. Right-angled Triangles

- Use Pythagoras's Theorem to find sides
- Use Trigonometry to find sides and angles
- Now and use exact trig values
- Calculating angles of elevation and depression
- Calculate bearings
- Trigonometry and bearings

Grade

5

- Ordering fractions and mixed numbers
- Adding and subtracting mixed numbers
- Multiplying and dividing mixed numbers

Grade

2. Fractions

- Combine angle facts to solve problems
- Angles in parallel lines
- Use properties of quadrilaterals to solve angle problems
- Angles in Polygons

Grade

4. Angles

Year 11 Maths Term 2a Foundation

1. Surface area and volume

- Surface area of Frustums
- Surface area of composite shapes
- Volume of cone and sphere
- Volume of frustrum
- Volume of composite shapes

Grade

3. Probability

- Mutually exclusive events
- Sample space diagrams
- Experimental probabilities and expectation
- Venn diagrams and set notation
- Tree diagrams for dependent events

Grade

5. Vectors

- Add and subtract column vectors
- Multiplying column vectors by a scalar
- Identifying parallel vectors
- Solving geometric problems using vectors

Grade

1

2

3

4

5

- Drawing and interpreting Pie charts
- Plotting and interpreting scatter graphs
- Using lines of best fit

Grade

2. Statistical diagrams

- Solving inequalities with unknowns on both sides
- Solving double inequalities
- Constructing and solving inequalities

Grade

4. Inequalities

Year 11 Maths Term 2b Foundation

1.1. Percentages

- Calculating a percentage change
- Finding original amounts
- Finding the percentage an amount has been changed by
- Compound interest calculations
- Growth and decay

Grade

3. Ratio and proportion

- Combining ratios
- Calculating with ratios and algebra
- Changing ratios
- Solving direct proportion word problems
- Solving inverse proportion word problems
- Currency conversion

Grade

5. Sequences

- Position to term rules for arithmetic sequences
- Position to term rules for sequences of patterns
- Position to term rule of geometric sequences
- Special sequences

Grade

1

2

3

4

5

- Calculating with speed
- Calculating with rates
- Calculating with density
- Calculating with pressure

Grade

2. Compound Measures

- Multiply and divide numbers in standard form
- Add and subtract numbers in standard form
- Using a calculator with numbers in standard form

Grade

4. Standard Form

Year 11 Maths Term 2c Foundation

1. Linear Graphs

- Plotting straight line graphs
- Find equations of straight line graphs
- Interpreting equations of straight line graphs
- Find the equation from a gradient and point
- Find equation from two points
- Equations of parallel lines

Grade

Grade

Grade

1

2

3

4

5

Grade

Grade