

Maths has 7 Attainment Objectives
A Algebra
GM Geometry and Measure
N Number
P Probability
R Ratio
S Statistics
UA Using and Applying

This list indicates the topics studied for each level

Level 8&9	
All level 7 objectives and :	
Algebraic proof	AO
Circle functions	A
Completing the square	A
Equations (completing the square)	A
Exponential functions	A
Sine & Cosine graphs	A
Transformations of Functions	A
Trigonometric equations	A
Exploring exponential growth and decay	N

Level 7	
All level 5-6 objectives and :	
Equations (quadratic)	A
Equations and Fractions (manipulate)	A
Equations and fractions (solving)	A
Sine and Cosine Rule	A
Trigonometry - Area of Triangle	A
3D Pythagoras and Trig	GM
Arc length area of sector	GM
Area and volume of pyramid	GM
Area and volume of sphere	GM
Area and volume problems	GM
Congruence proof	GM
Vectors journeys	GM
Vectors proof	GM
Recurring decimals	N
Surds	N
Surds and geometrical problems	N
Probability conditional	P
Probability successive events	P
Ratio and proportion	R
Averages and spread	S
Comparing data sets	S
Histograms draw and interpret	S
Histograms frequency density	S
Stratified sample	S

level 5-6	
All level 3-4 objectives and :	
Algebraic Inequalities	AO
Change the subject	A
Cubic Graphs	A
Equation of a line	A
Expand Quadratics	A
Factorise quadratic expressions	A
Graphical inequalities	A
Real life graphs	A
Reciprocal Graphs	A
Simplify	A
Simultaneous equations	A
Solving quadratic equations by factorisation	A
3D Coordinates	GM
Circle Theorems	GM
Combining Transformations	GM
Coordinates and midpoints of lines	GM
Density	GM
Drawing enlargements	GM
Similar shapes	GM
The effect of enlargements	GM
Trigonometry	GM
Compound Interest	N
Index Notation	N
Reverse percentages	N
Standard Form	N
Standard Form Calculations	N
Tree Diagrams	P
Boxplots	S
Comparing data	S
Cumulative Frequency	S
Moving Averages	S
Time Series	S

level 4-5	
All level 1-3 objectives and :	
Alternate and corresponding Angles	AO
Angles in polygons	GM
Average Speed	GM
Combined transformations	N
Constructing enlargements	GM
Constructions	GM
Converting metric units	GM
Correlation	S
Draw and interpret graphs	A
Formulae written in words	A
Four Rules Decimals	N
Four Rules of Fractions	N
Fractions to Decimals	N
Frequency polygons	N
HCF-LCM-Reciprocals	S
Identifying enlargements	N
Inequalities number lines	GM
Loci	A
Mean from a frequency table	GM
Mean from grouped data	S
Percentage Change	S
Percentages and proportion	N
Powers	R
Product of Prime Factors	A
Pythagoras Theorem	N
Quadratic graphs	GM
Relative frequency	A
Sample size	P
Scatter diagrams	S
Solve Inequalities	S
Substitution pos and neg	A
Surface area of prisms and cylinders	A
Terminating and Recurring Decimals	GM
Theoretical probability	N
Two way tables	P
Upper and Lower Bounds	P
Use trial and improvement	N
Volume and Surface Area of Prisms	A

level 1-3	
Basic inverse functions	AO
Changing the subject	A
Collecting like terms	A
Conversion graphs	A
Coordinates	A
Distance time graphs	A
Equations one stage	A
Expand brackets and simplify	A
Factorising simple expressions	A
Forming Equations	A
Formulae	A
Plotting linear graphs	A
Sequences	A
Sequences and Rules	GM
Simple sequences	A
Solving Equations	A
Two step equations	A
Words to formulas and expressions	A
3D drawing	GM
3D shapes	GM
Alternate & corresponding angles	GM
Angle rules	GM
Area and circumference of a circle	GM
Area and perimeter of compound shapes	GM
Area of a Rectangle	GM
Area of a triangle, parallelogram and trapezium	GM
Area of irregular shapes	GM
Bearings	GM
Calculate angles triangles and quads	GM
Circle Knowledge	GM
Circles knowledge	GM
Co-interior angles on parallel lines	GM
Congruency	GM
Congruent shapes	GM
Enlargements on a grid	GM
Equation of reflection lines	GM
Estimating measurements	GM
Grid references	GM
Identifying types of angles	GM
Maps and scale drawings	GM
Measuring and drawing angles	GM
Metric unit conversion	GM
Nets	GM
Nets of 3D shapes	GM
Perimeter	GM
Plans and elevations	GM
Quadrilaterals	GM
Reading scales	GM
Recognise rotations, reflections and translations	GM
Recognise triangles and polygons	GM
Reflection symmetry	GM
Reflections	GM
Rotational symmetry	GM
Rotations	GM
Scale drawing and areas	GM
Surface area of prisms & cylinders	GM
Translations	GM
continued	

continuation	
Add and subtract decimals	N
Add and Subtract Fractions	N
Add and subtract whole numbers	N
BIDMAS	N
Calculations with time	N
Comparing quantities using fractions and percentages	N
Converting FDP	N
Cube numbers	N
Decimal Calculations	N
Equivalent Fractions	N
Estimation	N
Four rule problems	N
Four rules with negative numbers	N
Fraction - decimal equivalents	N
Fraction diagrams	N
Fraction of a number	N
Mixed Numbers and Improper fractions	N
Multiply and divide by integers	N
Multiply and divide by powers of ten	N
Multiply and divide numbers less than 1000	N
Order decimals	N
Order directed numbers	N
Ordering fractions	N
Percentage of a number	N
Percentage of a quantity	N
Rounding	N
Rounding to significant figures	N
Simple Index notation	N
Squares and square roots	N
Types of numbers	N
Using a calculator	N
Basic probability	P
Comparing distributions	GM
List all outcomes for two events	P
Mutually exclusive Events	GM
Mutually exclusive sum	GM
Probability of equally likely outcomes	GM
Ratios and recipes	R
Ratio-sharing	R
Ratio-simplifying	R
Averages small data sets	R
Bar charts	R
Frequency tables	R
Interpreting real life graphs	R
Modal class	R
Pictograms	R
Pie charts	R
Stem and leaf	R
Surveys	R
Timetables	R
Using two way tables	R
Volume of cuboids	R