Assessment Criteria **Aiming For Grade 1**

Name:		**Class:**	**Year:**	**Aut 1**	**Aut 2**	**Spr 1**	**Spri 2**	**Sum 1**	**Sum 2**
Start score:	Target Score:	End Score:							
Place Value	1. Read, write, order & compare numbers to at least 1 000 000 and determine the value of each digit.								
	2. Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000. Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000								
	3. Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.								
	4. Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.								
Add and Sub	5. Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).								
	6. Add and subtract numbers mentally with increasingly large numbers. Use rounding to check answers to calculations and levels of accuracy.								
	7. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.								
Mult and Div	8. Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.								
	9. Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. Establish whether a number up to 100 is prime and recall prime numbers up to 19.								
	10. Multiply numbers up to 4 digits by a 1- or 2-digit number using a formal written method. Divide numbers up to 4 digits by a 1-digit number using the formal written method of short division.								
	11. Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.								
	12. Recognise and use square numbers and cube numbers, and the notation for squared and cubed.								
Fractions	13. Compare and order fractions whose denominators are all multiples of the same number. Add and subtract fractions with the same denominator and multiples of the same number.								
	14. Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.								
	15. Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number.								
	16. Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.								
	17. Round decimals with two decimal places to the nearest whole number and to one decimal place. Read and write decimal numbers as fractions (e.g. 0.72 = $^{72}/_{100}$).								
	18. Read, write, order and compare numbers with up to three decimal places. Solve problems involving number up to three decimal places.								
	19. Write percentages as a fraction. Solve problems which require knowing percentage and decimal equivalents of ½, ¼, ⅕, ⅖, ⅘ and those with a denominator of a multiple of 10 or 25.								
MEASURE	20. Convert between different units of metric measure (e.g. km & m; cm & m; cm & mm; g & kg; l & ml). Use approx. equivalences between metric and imperial units (e.g. inches, pounds & pints).								
	21. Measure & calculate the perimeter of composite rectilinear shapes in cm/m. Calculate the area of squares/rectangles using standard units, square cm/m and estimate the area of irregular shapes.								
	22. Estimate volume (e.g. using 1 cm blocks to build cubes/cuboids) and capacity (e.g. using water).								
	23. Solve probs involving converting between units of time. Use all four operations to solve probs involving measure (e.g. length, mass, volume, money) using decimal notation including scaling.								
GEOMETRY	24. Identify 3D shapes, including cubes and other cuboids, from 2D representations.								
	25. Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. Draw given angles, and measure them in degrees.								
	26. Identify: angles at a point and one whole turn (total 360^o); angles at a point on a straight line and ½ a turn (total 180^o); other multiples of 90^o.								
	27. Use the properties of rectangles to deduce related facts and find missing lengths and angles.								
	28. Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.								
STATS	29. Solve comparison, sum and difference problems using information presented in a line graph.								
	30. Complete, read and interpret information in tables, including timetables.								
1-8: Gr 1 emerging	9-16: Gr 1 developing	17-24: Gr 1 securing	25-30: Gr 1 ready						

Assessment Criteria **Aiming For Grade 2**

Name:		**Class:**	**Year:**	**Aut 1**	**Aut 2**	**Spr 1**	**Spri 2**	**Sum 1**	**Sum 2**
Start score:	Target Score:	End Score:							
P. V.	1. Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit. Round any whole number to a required degree of accuracy.								
	2. Use negative numbers in context, and calculate intervals across zero. Solve number and practical problems that involve all of the above.								
Add, Sub, Mult, Div	3. Multiply and divide numbers up to 4 digits by a 2-digit whole number using the formal written methods and interpret remainders as whole number remainders, fractions, or by rounding.								
	4. Identify common factors, common multiples and prime numbers.								
	5. Use their knowledge of the order of operations to carry out calculations involving the four operations.								
	6. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.								
Fractions	7. Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.								
	8. Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.								
	9. Multiply simple proper fractions and simplify the answer (e.g. ¼ x ½ = ⅛). Divide proper fractions by whole numbers (e.g. ⅓ ÷ 2 = ⅙).								
	10. Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places.								
	11. Multiply one-digit numbers with up to two decimal places by whole numbers. Use written division methods in cases where the answer has up to two decimal places.								
	12. Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.								
R & P	13. Solve problems involving the calculation of percentages (e.g. of measures) such as 15% of 360 and the use of percentages for comparison.								
	14. Solve problems involving similar shapes where the scale factor is known or can be found. Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.								
ALGEBRA	15. Express missing number problems algebraically. Use simple formulae expressed in words.								
	16. Generate and describe linear number sequences.								
	17. Find pairs of numbers that satisfy number sentences involving two unknowns. Enumerate all possibilities of combinations of two variables.								
MEASURE	18. Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate. Convert between miles and km.								
	19. Use, read, write & convert between standard units of measure, converting length, mass, volume & time from smaller to larger units, and vice versa, using decimal notation to up to 3 dec places.								
	20. Recognise that shapes with the same areas can have different perimeters and vice versa.								
	21. Calculate the area of parallelograms and triangles. Recognise when it is possible to use formulae for area and volume of shapes.								
	22. Calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm^2) and cubic metres (m^3), and extending to other units.								
GEOMETRY	23. Draw 2-D shapes using given dimensions and angles. Recognise, describe and build simple 3-D shapes, including making nets.								
	24. Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons.								
	25. Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.								
	26. Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.								
P & D	27. Describe positions on the full coordinate grid (all four quadrants).								
	28. Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.								
STATS	29. Interpret and construct pie charts and line graphs and use these to solve problems.								
	30. Calculate and interpret the mean as an average.								
1-8: Gr 2 emerging	9-16: Gr 2 developing	17-24: Gr 2 securing	25-30: Gr 3 ready						

Assessment Criteria **Aiming For Grade 3**

Name:		**Class:**	**Year:**	**Aut 1**	**Aut 2**	**Spr 1**	**Spr 2**	**Sum 1**	**Sum 2**
Start score:	Target Score:	End Score:							
NUMBER	1. Order positive & negative positive and negative integers, decimals & fractions. Use the number line as a model for ordering real numbers. Use the symbols = ≠ < > ≤ ≥ **(2)**								
	2. Define percentage as 'number of parts out of 100'; Compare two quantities using percentages **(2)**								
	3. Use the concepts and vocabulary of Highest Common Factor & Lowest Common Multiple **(3)**								
	4. Use integer powers & associated real roots (square & cube; recognise powers of 2 and 3 and distinguish between exact representations of roots and their decimal approximations. **(3)**								
	5. Use the four operations applied to integers, positive & negative **(2)**								
	6. Use the four operations, including formal methods applied to proper & improper fractions (Multiply and divide) **(4)**								
	7. Use conventional notation for the priority of operations including brackets, powers, roots and reciprocals **(2)**								
	8. Round numbers and measures to an appropriate degree of accuracy such as decimal places **(3)**								
ALGEBRA	9. Use/ interpret algebraic notation: ab(axb), 3y(y+y+y/ 3xy), a^2 axa), a^3(axaxa), a/b (a÷b), brackets. Model situations or procedures by translating them into algebraic expressions or formulae **(4)**								
	10. Simplify & manipulate algebraic expressions to maintain equivalence by collecting like terms and multiplying a single term over a bracket including proofs **(3)**								
	11. Understand & use the concept & vocabulary of expressions, equation, term **(3)** Substitute numerical values positive & negative into formulae & expressions, inc scientific formulae Where appropriate interpret expressions as functions with inputs and outputs. **(4)**								
	12. Recognise, sketch & produce graphs of linear functions (parallel to the axes, y=x and y = -x) **(3)**								
	13. Use algebraic method to solve linear equations in one variable : 1 step & 2-step inc brackets **(4)**								
	14. Generate terms of a sequence from a term to term rule. Recognise sequences inc Fibonacci, geometric **(3)**								
RATIO, PROPORTION &	15.Use ratio notation, including reduction to simplest form **(2)** Understand & use proportion as equality of ratios **(3)**								
	16. Divide a given quantity into two parts in a given part : part or part : whole ratio. Express division into two parts as a ratio. **(4)**								
	17. Express one quantity as fraction/percentage of another where fraction is , < or >1 **(3)**								
GEOMETY & MEASURE	18. Derive and illustrate properties of triangles, quadrilaterals, and other plane figures inc regular polygons. **(2)**								
	19.Identify, describe & construct similar & congruent shapes by considering translation rotation, reflection and enlargement (whole number scale factor) **(4)**								
	20. Describe sketch & draw using conventional terms & notations: points, lines, parallel, perpendicular lines, right angles, , regular polygons, & other polygons that are reflectively and rotationally symmetric. Use standard conventions for labelling the sides & angles of triangle ABC **(2)**								
	21. Construct and interpret plans & elevations of 3D shapes **(3)**								
	22. Derive and apply formulae to calculate and solve problems involving area of trapeziums. **(2)**								
	23. Identify properties (faces, surfaces, edges vertices) of cubes, cuboids, prisms, cylinders, pyramids, cones and spheres **(2)**								
	24. Derive and apply formulae to calculate and solve problems involving volume and surface area of cuboids (including cubes) **(2)**								
	25. Understand & use the relationship between parallel lines & alternate & corresponding angles. **(3)**								
PROB	26. Use appropriate language to describe probability, including fairness, randomness, equally and unequally likely outcomes. **(3)**								
	27.Record & describe the frequency of outcomes on the 0-1 probability scale **(3)**								
	28. Enumerate sets and unions/intersections of sets systematically using Venn diagrams **(3)**								
STATS	29. Construct & interpret pie charts **(2)**								
	30.Describe, Interpret & compare observed distributions of a single variable through appropriate measures of central tendency (mean, median, mode)and spread(range) including from a table of ungrouped data **(3)**								

1-7: Gr 3 emerging	8-15: Gr 3 developing	16-23: Gr 3 securing **GCSE Grade 3**	24-30: Gr 4 ready						

Assessment Criteria **Aiming For Grade 4**

Name:		**Class:**	**Year:**	Aut 1	Aut 2	Spr 1	Spr 2	Sum 1	Sum 2
Start score:	Target Score:	End Score:							
NUMBER	1.Use the four operations , including formal written methods applied to decimals (Multiply & divide) . Recognise & use relationships between operations inc inverses. **(3)**								
	2. Use the concepts and vocabulary of prime factorisation including product notation and extend to find HCF & LCM **(4)**								
	3. Round numbers and measures to a given number of significant figures Use approximation through rounding to one significant figure to estimate answers **(4)**								
	4.Use integer powers greater than 3 and their real roots **(3)**								
	5. Work interchangeably with terminating decimals and their corresponding fractions **(3)**								
ALGEBRA	6. Simply & manipulate algebraic expressions by taking out common factors **(3)**								
	7. Simplify expressions involving sums and products, including the laws of indices. Calculate with zero and negative indices. **(5)**								
	8. Rearrange simple formulae to change the subject – 1 step & 2-step **(4)**								
	9. Substitute positive values into expression/formulae involving powers **(4)**								
	10. Solve linear equations with the unknown on both sides of the equation, inc brackets. Know the difference between an equation & an identity **(5)**								
	11. Plot graphs of linear equations. Find approximate solutions to linear equations using a graph **(5)**								
	12. Identify and interpret gradients(rate of change) and intercepts of linear functions graphically and algebraically inc reducing a given equation to form: y=mx+c **(5)**								
	13. Plot & interpret graphs of functions in real contexts such as simple kinematic problems involving distance /time **(5)**								
	14. Recognise, sketch and interpret graphs of simple quadratic functions inc roots & turning point **(5)**								
	15. Generate sequence from position-to-term rule. Recognise arithmetic sequences & find nth term **(4)**								
RATIO, PROPORTION & RATES OF CHANGE	16. Simplify & manipulate algebraic expressions to maintain equivalence by expanding products of two binomials **(5)**								
	17. Understand and use proportion as equality of ratios . Apply ratio to real contexts and problems such as conversion, comparison, scaling, mixing, maps **(4)**								
	18. Solve problems involving percentage change(increase/decrease) – including the use of the multiplier **(5)**								
	19. Use compound units such as speed, rates of pay. Change between compound units **(5)**								
GEOMETY & MEASURE	20. Use sum of angles of triangle to deduce the angle sum of any polygon. Derive properties of regular polygons. **(4)**								
	21. Calculate circumference & area of circles including composite shapes inc in terms of π **(4)**								
	22. Know & apply formulae to calculate volume of right prisms(including cylinders) **(3)**								
	23. Identify, describe & construct similar shapes by considering enlargement with a fractional scale factor **(4)**								
	24. Construct & interpret plans and elevations of 3D shapes **(3)**								
	25. Measure line segments and angles when interpreting maps/ scale drawings/use of bearings **(3)**								
PROB	26. Understand that the probability of all possible outcomes sum to 1 **(4)**								
	27. Record & analyse the frequency of outcomes using two-way tables & frequency trees **(3)**								
	28. Generate theoretical sample spaces for combined events and use to calculate probabilities **(4)**								
STATS	29. Estimate the mean and work out the modal/median class interval from a grouped frequency table **(3)**								
	30. Describe simple mathematical relationships between two variables & illustrate using scatter graphs. Recognise correlation (and know it does not indicate causation). Consider outliers. Draw estimated lines of best fit in scatter graphs and make predictions. Interpolate & extrapolate trends while knowing the dangers of doing so. **(4)**								

1-7: Gr 4 emerging	8-15: Gr 4 developing	16-23: Gr 4 securing **GCSE Grade 4/4+⁻**	24-30: Gr 5 ready						

Assessment Criteria **Aiming For Grade 5**

Name:		**Class:**	**Year:**	**Aut 1**	**Aut 2**	**Spr 1**	**Spr 2**	**Sum 1**	**Sum 2**
Start score:	Target Score:	End Score:							
NUMBER	1.Interpret & compare numbers in standard form Ax10^n (1$\leq A < 10$ & n is an integer) Use a calculator to calculate results & interpret them appropriately. **(5)**								
	2. Calculate resulting errors expressed using inequality notation a$< x \leq b$ **(5)**								
ALGEBRA	3.Solve two linear simultaneous equations , algebraically & graphically **(5)**								
	4.Simplify & manipulate algebraic expressions by factorising expressions of form x^2+bx+c Solve quadratic equations algebraically by factorising. **(5)**								
	5.Understand & use the concept of inequalities to linear inequalities in one variable; represent the solution set to an inequality on a number line **(5)**								
	6.Rearrange more complex formulae to change the subject including reduce a given linear equation in two variables to the standard form y=mx+c **(5)**								
	7.Use algebraic methods to solve linear equations involving fractions **(5)**								
	8.Use the form y=mx+c to identify parallel lines **(4)**								
	9.Calculate & interpret gradients (as a rate of change) and intercepts of graphs numerically, graphically and algebraically **(5)**								
	10.Plot & use quadratics graphs to estimate values of y when for given values of x and vv Find approximate solutions to quadratic equations using a graph **(5)**								
	11.Recognise, sketch and interpret graphs of simple cubic functions and the reciprocal function y=1/x where x$\neq 0$ **(5)**								
	12.Substitute positive and negative integers into linear expressions and expressions involving powers **(4)**								
RATIO, PROPORTION & RATES OF CHANGE	13.Solve problems involving simple and compound interest in financial mathematics **(5)**								
	14.Solve original value problems involving percentage change (interpret percentage change as a decimal) **(5)**								
	15.Understand & use compound measures (density, speed, pressure) including real graphs **(5)**								
	16.Solve problems involving direct and inverse proportion, including graphical & algebraic representations. Know the difference between direct and inverse proportion. **(5)**								
	17.Calculate missing lengths in similar shapes **(5)**								
GEOMETRY & MEASURE	18. Calculate & solve problems involving arc lengths of ¼ / ½ circles, inc multiples of π **(5)**								
	19. Calculate & solve problems involving areas of sectors of ¼ / ½ circles, inc multiples of π **(5)**								
	20. Derive and apply the formula to calculate surface area of cylinder **(5)**								
	21. Know & use the criteria for congruence of triangles (SSS, SAS, ASA, AAS, RHS) **(5)**								
	22. Know the formula for Pythagoras' Theorem and apply it to find lengths in right angles triangles **(5)**								
	23. Know the Trigonometric ratios & apply to find lengths & angles in right angles triangles **(5)**								
	24. Know the exact values of sinΘ, cosΘ for Θ= 0, 30,45, 60, 90^0 & tanΘ for Θ=0,30,45, 60^0 **(5)**								
	25.Derive & use the standard ruler & compass constructions: construct perpendicular bisector of a line segment; construct perpendicular bisector of an angle **(5)**								
	26. Derive & use the standard ruler & compass constructions: construct the perpendicular from or to a point on a line segment. Recognise & use the perpendicular distance from a point to a line as the shortest distance to the line. **(5)**								
PROB	27.Enumerate sets and unions/intersections using Venn diagrams and use to calculate theoretical probabilities **(5)**								
	28.Calculate the probabilities of independent combined events including tree diagrams **(5)**								
STATS	29. Infer properties of a population from a sample, while knowing the limitations of sampling **(5)**								
	30. Interpret & construct line graphs for time series data **(5)**								

1-8 Gr 5 emerging	9-16 Gr 5 developing	17-23 Gr 5 securing **GCSE Grade 4$^+$/5**	24-30 Gr 6 ready						

Assessment Criteria **Aiming For Grade 6**

Name:		**Class:**	**Year:**	**Aut 1**	**Aut 2**	**Spr 1**	**Spr 2**	**Sum 1**	**Sum 2**
Start score:	Target Score:	End Score:							
NUMBER	1.Calculate in standard form Ax10^n ($1 \leq A < 10$ & n is an integer) (5)								
	2.**Estimate powers and roots of any given positive number** **(6)**								
	3.**Calculate with fractional indices** **(6)**								
	4.**Change recurring decimals into their corresponding fractions and vv** **(6)**								
	5.**Apply the product rule for counting** **(6)**								
ALGEBRA	6. **Expand more than 2 binomials** **(6)**								
	7. **Factorise quadratic expressions of form ax² + bx + c including difference of two squares . Solve quadratic equations by factorising** **(6)**								
	8.**Use the form y=mx + c to identify perpendicular lines** **(6)**								
	9.Find the equation of a line given two points (5)								
	10.Find the equation of a line given the gradient and one point (5)								
	11.Identify and interpret roots, intercepts and turning points of quadratic functions graphically (5)								
	12.Deduce the roots of quadratic functions algebraically (5)								
	13.Plot & interpret graphs involving distance, speed and acceleration (5)								
	14. **Solve linear inequalities in two variable using set notation and graph** **(6)**								
	15.**Calculate the nth term of a quadratic sequence** **(6)**								
	16. Recognise and use sequences of geometric progressions (r^n) **inc surds** **(6)**								
RATIO, PROP & RATE OF CHANGE	17.Set up, solve & interpret the answers to growth and decay problems, including compound interest (5)								
	18. **Construct & interpret equations that describe direct & inverse proportion**. **(6)** Understand that X is inversely proportional to Y is equivalent to X is proportional to 1/Y (5)								
GEOMETRY & MEASURE	19. **Apply the standard circle theorems** **(6)**								
	20.**Interpret and use negative scale factors for enlargement** **(6)**								
	21.Calculate arc lengths, angles (5)								
	22 Calculate area of sectors of circle, angles (5)								
	23.Calculate SA of spheres , pyramids, cones and composite solids (5)								
	24. Calculate Volume of spheres , pyramids, cones and composite solids (5)								
	25. **Apply the concepts of similarity to area of similar figures** **(6)**								
	26. **Apply the concepts of similarity to area and volume of similar figures** **(6)**								
	27. Apply addition & subtraction of vectors, multiplication by a scalar, and diagrammatic and column representation of vectors. (5)								
PROB	28.**Calculate and interpret conditional probabilities through two-way tables, tree diagrams &Venn diagrams** **(6)**								
STATS	29.**Construct and interpret cumulative frequency graphs** **(6)**								
	30. **Construct, interpret & compare distributions using box plots & measures of central tendency and spread including quartiles and inter-quartile range** **(6)**								

1-7: Gr 6 emerging	8-14: Gr 6 developing	15-21: Gr 6 securing **GCSE Grade 5$^+$/6$^-$**	22-30: Gr 7 ready						

Assessment Criteria **Aiming For Grade 7/8/9**

Name:		**Class:**	**Year:**	**Aut 1**	**Aut 2**	**Spr 1**	**Spr 2**	**Sum 1**	**Sum 2**
Start score:	Target Score:	End Score:							
NUMBER	1. **Simplify surd expressions** **(7)**								
	2. **Manipulate expressions involving surds. Rationalise denominators** **(8)**								
	3.**Apply & interpret limits of accuracy inc. with upper & lower bounds** **(7)**								
ALGEBRA	4.**Simplify & manipulate expressions involving fractions** **(9)**								
	5. **Solve more complex equations with fractions** **(7)**								
	6. **Solve quadratic equations by factoring (including those that need rearranging)** **(7)**								
	7. **Interpret expressions as functions and the reverse process as inverse functions. Interpret the succession of two functions as a composite function.** **(9)**								
	8.**Deduce the turning points of quadratic functions by completing the square** **(7)**								
	9.**Solve quadratic equations by completing the square** **(9)**								
	10.**Solve quadratic equations by using the quadratic formula** **(7)**								
	11.**Solve quadratic inequalities in one variable using set notation and on a graph** **(9)**								
	12.**Rearrange more complex formulae where the new subject appears twice** **(8)**								
	13.**Recognise, sketch and interpret the exponential function $y = k^x$ for positive values of k** **(8)**								
	14.**Recognise, sketch & interpret the trigonometric functions for angles of any size** **(8)**								
	15.**Sketch translations and reflections of the graph of a given function** **(9)**								
	16.**Calculate or estimate the gradients of graphs and areas under graphs inc quadratic and other non-linear graphs** **(8)**								
	17. **Recognise & use the equation of a circle with centre at the origin.** **(9)**								
	18.**Find the equation of a tangent to a circle at a given point** **(9)**								
	19.**Solve two simultaneous equations in two variables algebraically –one linear, one quadratic** **(8)**								
RATIO, PROPORTIOIN & RATE OF CHANGE	20.**Interpret the gradient at a point on a curve as the instantaneous rate of change(gradient of tangents & chords) in numerical, algebraic & graphical contexts** **(8)**								
	21. **Find approximate solutions to equations numerically using iteration Work with the general iterative process** **(9)**								
GEOMETRY & MEASURE	22. **Know & apply Area = ½ absinC to calculate area, sides, angles of any triangle** **(7)**								
	23.**Prove the standard circle theorems concerning angles, radii, tangents & chords** **(8)**								
	24.**Use the standard circle theorems to prove related results** **(9)**								
	25. **Apply Pythagoras Theorem to 3D shapes** **(7)**								
	26. **Apply Trigonometry to 3D shapes** **(8)**								
	27.**Know & apply the Sine Rule to find unknown lengths & angles** **(7)**								
	28. **Know & apply the Cosine Rule to find unknown lengths & angles** **(7)**								
	29.**Use vectors to construct geometric arguments and proofs** **(7)**								
STATS	30.**Construct and interpret** histograms **(7)**								

1-8 Gr 7 Emerging	9-16 Gr 7 Developing	17-23 Gr 7/8 Securing	24-30 Gr 8/9 Ready						
GCSE 6+	**GCSE 7**	**GCSE 7+/8-**	**GCSE 8/9**						

Assessment Criteria **Aiming For WA**

Name:		**Class:**	**Year:**	**Aut 1**	**Aut 2**	**Spr 1**	**Spri 2**	**Sum 1**	**Sum 2**
Start score:	Target Score:	End Score:							
Place Value	1. Count from 0 in multiples of 4, 8, 50 and 100. Find 10 or 100 more or less than a given number.								
	2. Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).								
	3. Compare and order nos up to 1000. Read and write nos up to 1000 in numerals and in words.								
	4. Identify, represent and estimate numbers using different representations.								
	5. Solve number problems and practical problems involving these ideas.								
Add and Sub	6. Add and subtract numbers mentally, including: a 3-digit no and 1s, 10s, 100s.								
	7. Add and sub numbers with up to 3 digits, using formal written methods of columnar add and sub.								
	8. Estimate the answer to a calculation and use inverse operations to check answers.								
	9. Solve probs, inc missing no probs, using number facts, place value, and more complex add/sub.								
Mult and Div	10. Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.								
	11. Write and calc math statements for x and ÷ using the tables they know, including 2-digit numbers times 1-digit numbers, using mental and formal written methods.								
	12. Solve probs and missing number probs, involving x and ÷, including integer scaling probs and correspondence probs in which n objects are connected to m objects.								
Fractions	13. Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10.								
	14. Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.								
	15. Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.								
	16. Recognise and show, using diagrams, equivalent fractions with small denominators.								
	17. Add and sub fractions with the same denominator within one whole (e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$).								
	18. Compare and order unit fractions, and fractions with the same denominators.								
MEASURE	19. Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).								
	20. Measure the perimeter of simple 2-D shapes.								
	21. Add and subtract amounts of money to give change, using both £ and p in practical contexts.								
	22. Tell/write the time from an analogue clock, inc Roman numerals from I to XII, and 12-hr/24-hr clocks.								
	23. Estimate and read time with increasing accuracy to nearest min; record/compare time in secs, mins, hrs. Use vocab such as o'clock, a.m./p.m., morning, afternoon, noon and midnight.								
	24. Know the no of seconds in a minute and the number of days in each month, year and leap year.								
GEOMETRY	25. Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them.								
	26. Recognise that angles are a property of shape or a description of a turn.								
	27. Identify right angles, recognise that 2 right angles make a half-turn, 3 make three quarters of a turn and 4 a complete turn. Identify whether angles are greater than or less than a right angle.								
	28. Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.								
STATS	29. Interpret and present data using bar charts, pictograms and tables.								
	30. Solve one-step and two-step questions such as 'How many more?' and 'How many fewer?' using information presented in scaled bar charts and pictograms and tables.								
1-8: WA emerging	9-16: WA developing	17-24: WA securing	25-30: WB ready						

Assessment Criteria **Aiming For WB**

Name:		**Class:**	**Year:**	**Aut 1**	**Aut 2**	**Spr 1**	**Spri 2**	**Sum 1**	**Sum 2**
Start score:	Target Score:	End Score:							
Place Value	1. Count in multiples of 6, 7, 9, 25 and 1000.								
	2. Find 1000 more or less than a given number. Round any number to the nearest 10, 100 or 1000.								
	3. Count backwards through zero to include negative numbers.								
	4. Recognise the place value of each digit in a 4-digit number (thousands, hundreds, tens, and ones). Order and compare numbers beyond 1000.								
	5. Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.								
Add and Sub	6. Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.								
	7. Estimate and use inverse operations to check answers to a calculation.								
	8. Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.								
Mult and Divide	9. Recall multiplication and division facts for multiplication tables up to 12 × 12.								
	10. Recognise and use factor pairs and commutativity in mental calculations.								
	11. Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.								
	12. Solve probs involving x and +, inc. using the distributive law to mult 2 digit nos by 1 digit, integer scaling probs and harder correspondence probs such as n objects are connected to m objects.								
Fractions	13. Recognise and show, using diagrams, families of common equivalent fractions.								
	14. Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten.								
	15. Add and subtract fractions with the same denominator.								
	16. Recognise and write decimal equivalents of any number of tenths or hundredths; and the decimal equivalents to ¼, ½ and three quarters.								
	17. Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths.								
	18. Round decimals with one decimal place to the nearest whole number. Solve simple measure and money problems involving fractions and decimals to 2 decimal places.								
MEASURE	19. Convert between different units of measure (e.g. kilometre to metre). Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days).								
	20. Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. Find the area of rectilinear shapes by counting squares.								
	21. Estimate, compare and calculate different measures, including money in pounds and pence.								
	22. Read, write and convert time between analogue and digital 12 and 24-hour clocks.								
GEOMETRY	23. Compare and classify geometric shapes, including quadrilaterals and triangles**,** based on their properties and sizes.								
	24. Identify acute and obtuse angles and compare and order angles up to two right angles by size.								
	25. Identify lines of symmetry in 2-D shapes presented in different orientations.								
	26. Complete a simple symmetric figure with respect to a specific line of symmetry.								
	27. Describe positions on a 2-D grid as coordinates in the first quadrant. Describe movements between positions as translations of a given unit to the left/right and up/down.								
	28. Plot specified points and draw sides to complete a given polygon.								
STATS	29. Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.								
	30. Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.								
1-8: WB emerging	9-16: WB developing	17-24: WB securing	25-30: Gr 1 ready						