

Converting National Curriculum Levels in to GCSE Grades

Level (KS3)	Grade (KS4)	Number & Algebra	Shape, Space & Measures	Handling Data
2	G	Count sets of objects and use mental recall of addition and subtraction facts to 10 Begin to order numbers up to 100 Use mental calculation methods to solve number problems involving money and measures	Use mathematical names for common two-dimensional and three-dimensional shapes and describe their properties Understand angle as a measurement of turn and recognise right angles in a turn Use standard units of length and mass	Record results in simple lists and tables.
3	G	Show understanding of place value in numbers up to 1000 Use decimal notation and recognise negative numbers Add and subtract numbers with two digits mentally and numbers with three digits using written methods Use mental recall of the 2, 3, 4, 5 & 10 times tables Use simple fractions that are several parts of a whole & recognise when two fractions are equivalent	Use non-standard units, standard metric units of length, capacity and mass, and standard units of time, in context	Construct bar charts and pictograms
4	F	Multiply and divide whole numbers by 10 & 100 Use mental methods of computation with the four operations, +, -, × & ÷ including tables up to 10 x 10 Add & subtract decimals to 2 d.p. and order decimals to 3 d.p. Recognise and describe number patterns, and relationships including multiple, factor & square Use simple formulae expressed in words	Use and interpret co-ordinates in the first quadrant Make three-dimensional shapes (cubes and cuboids) by linking given faces or edges and drawing two-dimensional shapes and find areas by counting squares Reflect simple shapes in a mirror line Find perimeters of simple shapes and find areas by counting squares	Record data and record them using a frequency table Understand and use the mode and range to describe sets of data Construct and interpret simple line graphs
5	E/D	Multiply decimals by 10, 100, 1000 Use four operations with decimals to 2 d.p. Order, add and subtract negative numbers Calculate fractions and percentages of a quantity Multiply and divide 3-digit number by a 2-digit number without a calculator Estimate using approximations Construct and use simple formulas	Draw and measure angles Use language associated with angles Symmetry of 2-dimensional shapes Metric and Imperial units Estimation of measures in everyday situations	Averages of discrete data and range Interpretation of pie charts Use of probability scale from 0 to 1 Find probabilities using methods based on equally likely outcomes and experimental evidence
6	D/C	Express one number as a fraction/percentage of another Equivalences between fractions, decimals & percentages Calculating ratios Trial & improvement Describe, in words, the rule for the next term, or n^{th} term in a linear sequence Solve linear equations with whole number coefficients Represent mappings using four quadrants	2-dimensional representation of 3-dimensional objects Classification of quadrilaterals Find angles using symmetry properties of polygons Find angles using properties of intersecting and parallel lines Circumference and area of the circle Areas of linear rectilinear figures Volume of a cuboid Enlargement by a positive whole number scale factor Devise instructions for a computer to transform shapes and paths	Create class intervals in a frequency table Construct pie charts Draw conclusions from scatter diagrams (understanding correlation) Identify all possible outcomes of two events Know that the total probability of mutually exclusive events is 1
7	C	Round to 1 s.f. to give approximation Understanding the effect of multiplying/dividing a number by a number between 0 and 1 Solving numerical problems using a calculator efficiently and appropriately Understanding of proportional change Describe in symbols the next term or n^{th} term in a quadratic sequence Simultaneous linear equations using algebraic and graphical methods Simple inequalities	Pythagoras' theorem Calculate length, area and volume in plane shapes and right prisms Locus of an object Enlargement by a fractional scale factor Recognise that a measurement given to the nearest whole number may be inaccurate by up to half in either direction Understand compound measures e.g. speed	Specify hypotheses and test them by designing and using appropriate methods that take account of bias Determine modal class and estimate mean/median for grouped data Frequency polygons to compare distributions Drawing of line of best fit by inspection Understanding of relative frequency
8	B	Calculations with powers, roots and numbers in standard form Use of fractions or percentages in repeated proportional change or finding the original quantity Substitution into formula of fractions, decimals or negative values Manipulation of algebraic formula. Finding common factors. Multiplying two linear expressions Inequalities with two variables Graphs of quadratic, cubic and reciprocal functions	Mathematical similarity Trigonometry in two dimensions Formula for perimeter, area and volume by considering dimensions	Cumulative frequency curves Estimation of median and interquartile range Calculating probability of compound events given probabilities of either independent events or mutually exclusive events