

Key Stage 3 Level 4

Algebra

- Collect like terms (single powers).
- Write algebraic expressions.
- To draw graphs parallel to the axes ($x=4$).
- To find distances and times from a travel graph.
- To solve equations like $x/6=5$.
- Solve equations using inverse operations/number machines.
- Generate sequences from a given rule.
- Substitute positive integers into formulae.

Number

- To round off measurements.
- Estimate answer to a calculation by rounding numbers in question (to 1s.f.).
- To recognise the value of a digit in a decimal number.
- To order decimals.
- To calculate fractions and percentages of an amount.
- To understand what 'squared' means.
- To show single inequalities on a number line.
- To list possible solutions to a single inequality.
- Add and subtract negative numbers.
- To write and simplify ratios.
- To do long multiplication and division without a calculator.
- To add and subtract decimals without a calculator.
- Mentally multiply and divide whole numbers and decimals by 10, 100 and 1000.

Shape

- To draw and measure angles.
- To estimate amounts (length etc).
- To find area of triangle.
- To find area and perimeter of 'L' and 'T' shapes.
- Reflect shapes in any mirror line.
- Rotate through right angles about origin.
- To identify symmetries of 2D and 3D shapes.
- To be familiar with units for weight and capacity.
- To convert between metric units.
- To construct 90° and 60° angles.
- To construct perpendicular bisector.
- To bisect an angle.
- Read scales.
- To be able to recognise regular and irregular shapes.

Handling Data

- To interpret pie charts.
- Find the mean from a frequency table.
- Compare data using averages and the range.
- To identify with reasons, equally likely outcomes.
- To use probability scale 0 to 1.
- To describe probabilities as fractions.