

Mathematics (Year 3)

Number

Counting and sequences

3Nc.01 Estimate the number of objects or people (up to 1000).

3Nc.02 Count on and count back in steps of constant size: 1-digit numbers, tens or hundreds, starting from any number (from 0 to 1000).

3Nc.03 Use knowledge of even and odd numbers up to 10 to recognise and sort numbers.

3Nc.04 Recognise the use of an object to represent an unknown quantity in addition and subtraction calculations.

3Nc.05 Recognise and extend linear sequences, and describe the term-to-term rule.

3Nc.06 Extend spatial patterns formed from adding and subtracting a constant.

Money

3Nm.01 Interpret money notation for currencies that use a decimal point.

3Nm.02 Add and subtract amounts of money to give change.

Integers and powers

3Ni.01 Recite, read and write number names and whole numbers (from 0 to 1000).

3Ni.02 Understand the commutative and associative properties of addition, and use these to simplify calculations.

3Ni.03 Recognise complements of 100 and complements of multiples of 10 or 100 (up to 1000).

3Ni.04 Estimate, add and subtract whole numbers with up to three digits (regrouping of ones or tens).

3Ni.05 Understand and explain the relationship between multiplication and division.

3Ni.06 Understand and explain the commutative and distributive properties of multiplication, and use these to simplify calculations.

3Ni.07 Know 1, 2, 3, 4, 5, 6, 8, 9 and 10 times tables.

3Ni.08 Estimate and multiply whole numbers up to 100 by 2, 3, 4 and 5.

3Ni.09 Estimate and divide whole numbers up to 100 by 2, 3, 4 and 5.

3Ni.10 Recognise multiples of 2, 5 and 10 (up to 1000).

Place value, ordering and rounding

3Np.01 Understand and explain that the value of each digit is determined by its position in that number (up to 3-digit numbers).

3Np.02 Use knowledge of place value to multiply whole numbers by 10.

3Np.03 Compose, decompose and regroup 3-digit numbers, using hundreds, tens and ones.

3Np.04 Understand the relative size of quantities to compare and order 3-digit positive numbers, using the symbols =, > and <.

3Np.05 Round 3-digit numbers to the nearest 10 or 100.

Fractions, decimals, percentages, ratio and proportion

3Nf.01 Understand and explain that fractions are several equal parts of an object or shape and all the parts, taken together, equal one whole.

3Nf.02 Understand that the relationship between the whole and the parts depends on the relative size of each, regardless of their shape or orientation.

3Nf.03 Understand and explain that fractions can describe equal parts of a quantity or set of objects.

3Nf.04 Understand that a fraction can be represented as a division of the numerator by the denominator (half, quarter and three-quarters).

3Nf.05 Understand that fractions (half, quarter, three-quarters, third and tenth) can act as operators.

3Nf.06 Recognise that two fractions can have an equivalent value (halves, quarters, fifths and tenths).

3Nf.07 Estimate, add and subtract fractions with the same denominator (within one whole).

3Nf.08 Use knowledge of equivalence to compare and order unit fractions and fractions with the same denominator, using the symbols =, > and <.

Geometry and Measure

Time

3Gt.01 Choose the appropriate unit of time for familiar activities.

3Gt.02 Read and record time accurately in digital notation (12-hour) and on analogue clocks.

3Gt.03 Interpret and use the information in timetables (12-hour clock).

3Gt.04 Understand the difference between a time and a time interval. Find time intervals between the same units in days, weeks, months and years.

Geometrical reasoning, shapes and measurements

3Gg.01 Identify, describe, classify, name and sketch 2D shapes by their properties. Differentiate between regular and irregular polygons.

3Gg.02 Estimate and measure lengths in centimetres (cm), metres (m) and kilometres (km). Understand the relationship between units.

3Gg.03 Understand that perimeter is the total distance around a 2D shape and can be calculated by adding lengths, and area is how much space a 2D shape occupies within its boundary.

3Gg.04 Draw lines, rectangles and squares. Estimate, measure and calculate the perimeter of a shape, using appropriate metric units, and area on a square grid.

3Gg.05 Identify, describe, sort, name and sketch 3D shapes by their properties.

3Gg.06 Estimate and measure the mass of objects in grams (g) and kilograms (kg). Understand the relationship between units.

3Gg.07 Estimate and measure capacity in millilitres (ml) and litres (l), and understand their relationships.

3Gg.08 Recognise pictures, drawings and diagrams of 3D shapes.

3Gg.09 Identify both horizontal and vertical lines of symmetry on 2D shapes and patterns.

3Gg.10 Compare angles with a right angle. Recognise that a straight line is equivalent to two right angles or a half turn.

3Gg.11 Use instruments that measure length, mass, capacity and temperature.

Position and transformations

3Gp.01 Interpret and create descriptions of position, direction and movement, including reference to cardinal points.

3Gp.02 Sketch the reflection of a 2D shape in a horizontal or vertical mirror line, including where the mirror line is the edge of the shape.

Statistics and Probability

Statistics

3Ss.01 Conduct an investigation to answer non-statistical and statistical questions (categorical and discrete data).

3Ss.02 Record, organise and represent categorical and discrete data. Choose and explain which representation to use in a given situation:

- Venn and Carroll diagrams

- tally charts and frequency tables

- pictograms and bar charts.

3Ss.03 Interpret data, identifying similarities and variations, within data sets, to answer non-statistical and statistical questions and discuss conclusions.

Probability

3Sp.01 Use familiar language associated with chance to describe events, including 'it will happen', 'it will not happen', 'it might happen'. 3Sp.02 Conduct chance experiments, and present and describe the results.