Mathematics Programmes of Study

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Number, place value and rounding

- I can read Roman numerals to 100 (I to C) and understand how the numeral system changed.
- I can solve number and practical problems using place value.
- I can round any number to the nearest 10, 100 or 1000.
- I can identify, represent and estimate numbers.
- I can order and compare numbers beyond 1000.
- I can recognise the place value of each digit in a 4-digit number.
- I can count backwards through zero to include negative numbers.
- I can find 100 more or less than a given number.
- I can count in multiples of 6, 7, 9, 25 and 1000.

Addition and Subtraction

- I can solve mental calculations with increasingly large numbers.
- I can solve subtraction two-step problems deciding which operations and methods to use and why.
- I can solve addition two-step problems deciding which operations and methods to use and why.
- I can use inverse s to check answers to calculations.
- I can estimate to check answers to calculations.
- I can subtract numbers with up to 4 digits using efficient written methods.
- I can add numbers with up to 4 digits using efficient written methods.

Multiplication and Division

- I can solve problems involving multiplying and dividing.
- I can multiply three-digit numbers by a one-digit number.
- I can multiply two-digit numbers by a one-digit number.
- I can recognise and use factor pairs in mental calculations.
- I can multiply together three numbers.
- I can use place value, known and derived facts to divide mentally.
- I can use place value, known and derived facts to multiply mentally.
- I can recall x and ÷ facts for multiplication tables up to 12 x 12.

Fractions and Decimals

- I can solve simple measure and money problems involving fractions and decimals to two decimal places.
- I can compare numbers with the same number of decimal places.
- I can round decimals with 1 decimal place to the nearest whole number.
- I can find the effect of dividing a number by 10 and 100 and identify the the value of the digits in the answer.
- I can recognise and write decimal equivalents to 1/4, 1/2, 3/4.
- I can recognise and write decimal equivalents of any number of 10ths or 100ths.
- I can add and subtract fractions with the same denominator.
- I can identify, name and write equivalent fractions of a given fraction.
- I can count up and down in 100ths and recognise that 100ths arise when dividing an object by a 100 and dividing 10ths by 10.

Measures

- I can solve problems involving converting from hours to minutes; minutes to seconds; years to months and weeks to days.
- I can read, write and convert time between analogue and digital 12 and 24-hour clocks.
- I can estimate, compare and calculate different measures, including money in pounds and pence.
- I can find the area of rectilinear shapes by counting.
- I can measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
- I can convert between different units of measure (e.g. Kilometre to metre; hour to minute).

Geometry

- I can plot specified points and draw sides to complete a given polygon.
- I can translate shapes.
- I can describe position on a 2-D grid as co-ordinates in the first quadrant.
- I can complete a simple symmetric figure with respect to a specific line of symmetry.
- I can identify lines of symmetry in 2-D shapes presented in different orientations.
- I can compare and order angles up to two right angles by size.
- I can identify acute and obtuse angles.
- I can compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.

Statistics

- I can use a range of scales when interpreting and presenting data.
- I can solve 'difference' problems using information presented in bar charts, pictograms, tables and simple line graphs.
- I can solve 'sum' problems using information presented in bar charts, pictograms, tables and simple line graphs.
- I can solve 'comparison' problems using information presented in bar charts, pictograms, tables and simple line graphs.
- I can interpret and present data using line graphs.
- I can interpret and present data using bar charts.

Problem Solving

- I can be flexible in choosing effective methods to answer questions.
- I can understand and explain the methods I choose and produce accurate answers.
- I can reason mathematically (verbal).
- I can justify my answer or give proof using mathematical language (written).
- I can solve problems using mathematical knowledge learnt.
- I can break down problems into simpler steps to seek solutions.