

Mathematics

- count in multiples of 6, 7, 9, 25 and 1000
 - find 1000 more or less than a given number
 - count backwards through zero to include negative numbers
 - recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)
 - order and compare numbers beyond 1000
 - identify, represent and estimate numbers using different representations
 - round any number to the nearest 10, 100 or 1000
 - solve number and practical problems that involve all of the above and with increasingly large positive numbers
 - read Roman numerals to 100 and know that the numeral system changed to include the concept of zero and place value.
-
- add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
 - estimate and use inverse operations to check answers to a calculation
 - solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
-
- recall multiplication and division facts for multiplication tables up to 12×12
 - use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers
 - recognise and use factor pairs and commutativity in mental calculations
 - multiply two-digit and three-digit numbers by a one-digit number using formal written layout
 - solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.
-
- recognise and show, using diagrams, families of common equivalent fractions
 - count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten
 - solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities
 - add and subtract fractions with the same denominator
 - recognise and write decimal equivalents of any number of tenths or hundredths
 - recognise and write decimal equivalents to $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$ • 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
 - round decimals with one decimal place to the nearest whole number
 - compare numbers with the same number of decimal places up to two decimal places
 - solve simple measure and money problems involving fractions and decimals to two decimal places.
-
- Convert between different units of measure
 - measure and calculate the perimeter of a rectilinear shape
 - find the area of rectilinear shapes by counting squares
 - estimate, compare and calculate different measures
 - read, write and convert time between analogue and digital 12- and 24-hour clocks

- solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
- compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes
- identify acute and obtuse angles and compare and order angles up to two right angles by size
- identify lines of symmetry in 2-D shapes presented in different orientations
- complete a simple symmetric figure with respect to a specific line of symmetry.
- 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
- plot specified points and draw sides to complete a given polygon.
- interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs
- solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs