The Year 3 Learner

Number

Counting and understanding number

Children will count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number. They will recognise the place value of each digit in a three-digit number (hundreds, tens, and ones). Children will compare and order numbers up to 1000. They will identify, represent and estimate numbers using different representations. Children will read and write numbers up to 1000 in numerals and in words. They will solve number problems and practical problems involving these ideas.

Calculating

Children will add and subtract numbers mentally, including a three-digit number and ones; a three-digit number and tens and a three-digit number and hundreds. They will add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction. Children will estimate the answer to a calculation and use inverse operations to check answers. They will solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. Children will recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. They will write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. Children will solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.

Fractions

Children will count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10. They will recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. Children will recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. They will recognise and show, using diagrams, equivalent fractions with small denominators. Children will add and subtract fractions with the same denominator within one whole (for example, $^{5}/_{7} + {}^{1}/_{7} = {}^{6}/_{7}$). They will compare and order unit fractions, and fractions with the same denominators. Children will solve problems that involve all of the above.

Geometry

Properties of shape

Children will draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them. They will recognise angles as a property of shape or a description of a turn. Children will identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle. They will identify horizontal and vertical lines and pairs of perpendicular and parallel lines.

Measurement

Children will measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). They will measure the perimeter of simple 2-D shapes. Children will add and subtract amounts of money to give change, using both £ and p in practical contexts. They will tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks. Children will estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight. They will know the number of seconds in a minute and the number of days in each month, year and leap year. Children will compare durations of events [for example to calculate the time taken by particular events or tasks].

Statistics

Children will interpret and present data using bar charts, pictograms and tables. They will solve one-step and two-step questions [for example 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.