

The Year 2 Learner

Number

Counting and understanding number

Children will count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward. They will recognise the place value of each digit in a two-digit number (tens, ones). The children will identify, represent and estimate numbers using different representations, including the number line. They will compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs. The children will read and write numbers to at least 100 in numerals and in words. They will use place value and number facts to solve problems.

Calculating

Children will solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures and applying their increasing knowledge of mental and written methods. They will recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100. Children will add and subtract numbers using concrete objects, pictorial representations, and mentally, including a two-digit number and ones; a two-digit number and tens; two two-digit numbers and adding three one-digit numbers. They will show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. Children will recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems. They will recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers. Children will calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals ($=$) signs. They will show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. Children will solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

Fractions

Children will recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity. They will write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$

Geometry

Position and direction

Children will order and arrange combinations of mathematical objects in patterns and sequences. They will use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).

Geometry

Properties of shape

Children will identify and describe the properties of 2-D shapes, including the number of sides and symmetry in a vertical line. They will identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces. Children will identify 2-D shapes on the surface of 3-D shapes, [for example a circle on a cylinder and a triangle on a pyramid]. They will compare and sort common 2-D and 3-D shapes and everyday objects.

Measurement

Children will choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ($^{\circ}\text{C}$); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels. They will compare and order lengths, mass, volume/capacity and record the results using $>$, $<$ and $=$. Children will recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value. They will find different combinations of coins that equal the same amounts of money. Children will solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change. They will compare and sequence intervals of time. Children will tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times. They will know the number of minutes in an hour and the number of hours in a day.

Statistics

Children will interpret and construct simple pictograms, tally charts, block diagrams and simple tables. They will ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. Children will ask and answer questions about totalling and comparing categorical data.