

Mathematics National Curriculum Programmes of Study for Year 2

This gives an outline of the areas which will be covered during the course of Year 2

NUMER
Number and place value <ul style="list-style-type: none">▪ count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward▪ recognise the place value of each digit in a two-digit number (tens, ones)▪ identify, represent and estimate numbers using different representations, including the number line▪ compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs▪ read and write numbers to at least 100 in numerals and in words▪ use place value and number facts to solve problems
Addition and subtraction <ul style="list-style-type: none">▪ solve problems with addition and subtraction:<ul style="list-style-type: none">▪ using concrete objects and pictorial representations, including those involving numbers, quantities and measures▪ applying their increasing knowledge of mental and written methods▪ recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100▪ add and subtract numbers using concrete objects, pictorial representations, and mentally, including:<ul style="list-style-type: none"><input type="checkbox"/> a two-digit number and ones<input type="checkbox"/> a two-digit number and tens<input type="checkbox"/> two two-digit numbers<input type="checkbox"/> adding three one-digit numbers▪ show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot▪ recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems
Multiplication and division <ul style="list-style-type: none">▪ recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers▪ calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals ($=$) signs▪ show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot▪ solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts
Fractions <ul style="list-style-type: none">▪ 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▪ write simple fractions e.g. $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$

MEASUREMENT

- 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
- compare and order lengths, mass, volume/capacity and record the results using $>$, $<$ and $=$
- recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
- find different combinations of coins that equal the same amounts of money
- solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change
- compare and sequence intervals of time
- 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
- know the number of minutes in an hour and the number of hours in a day

GEOMETRY

Properties of shapes

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

Position and direction

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

STATISTICS

- interpret and construct simple pictograms, tally charts, block diagrams and simple tables
- ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity
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