



Maths in Year Two



Throughout the Key Stage One curriculum there is a great emphasis on the need to manipulate numbers mentally. Mental warm up activities are a daily part of learning for children with the emphasis on rapid mental dexterity. www.ictgames.co.uk is a good website to support your children's learning.

The KS1 curriculum is divided into 7 areas:-

- Numbers and Place Value
- Addition and Subtraction
- Multiplication and Division
- Fractions
- Measures
- Geometry - position and direction
- Geometry - properties of shape
- Statistics

Each of these areas is covered each term, which enables the children to build and consolidate on previous learning whilst meeting new challenges.

By the end of Year 2 pupils should be able to:-

- ✓ Count in steps of 2, 5, 10 and 3 from any number forwards and backwards.
- ✓ Count, compare, read, order and write numbers to at least 100 in numerals and words.
- ✓ Recognise the value of each digit in a 2 digit number (tens and ones).
- ✓ Use their knowledge of place value and number facts to solve problems.
- ✓ Use mental and written methods to solve problems with addition, subtraction, multiplication and division.
- ✓ Recall the addition and subtraction facts for all numbers to 20 fluently, and use these to derive related facts to 100.
- ✓ Add and subtract 2 digit numbers where regrouping is required using a written or mental method.
- ✓ Recall the multiplication and division facts for the 2, 5 and 10 multiplication tables recognising odd and even.
- ✓ Recognise and name fractions including $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{3}$, $\frac{2}{4}$ and use these to find fractions of shapes, objects and numbers.

- ✓ Choose and use the correct standard unit of measure for length, mass, temperature and capacity using the correct equipment and use this to compare.
- ✓ Find combinations of coins that equal the same amounts of money, recognising the £ and p symbols.
- ✓ Tell the time to nearest 15 minutes including $\frac{1}{4}$ past and $\frac{1}{4}$ to.
- ✓ Identify and describe the properties of 2d and 3d shapes using the correct mathematical language, including the identification of symmetry.
- ✓ Use mathematical language to describe position, direction and movement including rotation and right angles in $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$ turns.
- ✓ Interpret and construct simple tables, tally charts, pictograms and block diagrams, asking questions and comparing data.
- ✓ Solve problems with addition, subtraction, multiplication and division using concrete objects, pictorial representations, written methods and mental methods.
- ✓ Add and subtract 2 digit numbers where regrouping is required using a range of concrete, written and mental methods.
- ✓ Compare numbers using $<$ $>$ and $=$.
- ✓ Recall doubles and halves to 20 (e.g. knows that double and halves to 20).
- ✓ Identify, represent and estimate numbers using different representations, including the number line.
- ✓ Read and write numbers to at least 100 in words.
- ✓ Estimate to check that answers to a calculation are reasonable.
- ✓ Recall and use addition and subtraction facts to 20 fluently e.g. $18 = 9 + ?$.
- ✓ 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.
- ✓ Show that multiplication of two numbers can be done in any order (commutative).
- ✓ Solve problems involving multiplication and division, using materials, arrays, repeated addition and mental methods.
- ✓ Write simple fractions e.g. $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.
- ✓ Know number of minutes in an hour and the number of hours in a day.
- ✓ Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.
- ✓ Can use different coins to make the same amount (e.g. how many £2 coins are needed in exchange for a £20 note).
- ✓ Read scales in divisions of 1, 2, 5 and 10 in a practical situation where all numbers on the scale are given.
- ✓ Order and arrange combinations of mathematical objects in patterns.
- ✓ Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line.

- ✓ 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.