

Year 1 Maths Objectives

- Count, read and write numerals to 100
- 1 more or less than a given number to 100
- Begin to know place value in numbers beyond 20
- Number bonds within 20
- Add and subtract one-digit and two-digit numbers to 20
- Adding and subtracting zero
- Use the terms: put together, add, altogether, total, take away, distance between, difference between, more than and less than to develop the concept of addition and subtraction
- Counting in twos, fives and tens
- Multiplication and division problems using concrete objects and arrays (grouping and sharing)
- Finding halves and quarters of objects, numbers and quantities
- Move from measuring using non-standard units to common standard units
- Recognise and know the value of coins and notes
- Tell the time to the hour and half past the hour
- Recognise and name common 2D and 3D shapes, e.g. rectangles (including squares), circles and triangles, cuboids (including cubes), pyramids and spheres
- Describe position, directions and movements—make whole, half, quarter and three-quarter turns
- **Solve number problems and practical problems involving these ideas**

Year 2 Maths Objectives

- Count in 2s, 3s and 5s from 0 and 10s from any number
- Read, write, compare and order numbers to at least 100
- Know the place value of each digit in two-digit numbers
- Recall and use facts to 20 and derive related facts to 100
- Using concrete objects, pictorial representations and mentally, add and subtract ones, tens and two-digit numbers to and from two-digit numbers
- Add several single digits
- Tables and division facts for $\times 2$, $\times 5$ and $\times 10$
- Use commutativity for addition and multiplication
- Check answers to calculations using inverse relationships
- Recognise, find, name and write fractions $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$, $\frac{3}{4}$
- Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value; add and subtract money of the same unit, including giving change
- Identify, compare and sort 2D and 3D shapes based on their properties (including symmetry in a vertical line) and use vocabulary, such as sides, edges, vertices and faces
- Identify 2D shapes on the surface of 3D shapes
- Right angle turns clockwise and anti-clockwise
- Interpret and construct simple pictograms, tally charts, block diagrams and simple tables
- **Solve number problems and practical problems involving these ideas**

Year 3 Maths Objectives

- Count in 4s, 8s, 50s, 100s and tenths from zero
- Read, write, compare and order numbers to at least 1000
- Know the place value of each digit in three-digit numbers
- Find 10 or 100 more or less than a given number
- Add and subtract ones, tens and hundreds to or form three-digit numbers mentally, two two-digit numbers where the answers could exceed 100
- Add and subtract three-digit numbers using formal written columnar methods
- Tables and division facts for $\times 3$, $\times 4$ and $\times 8$
- Add and subtract fractions with the same denominator
- Develop formal written multiplication and division methods for two-digit by one-digit numbers
- Begin to understand unit and non-unit fractions as numbers on a number line, and deduce relations between them, such as size and equivalence
- Measure the perimeter of simple shapes
- Tell the time to the nearest minute using analogue clocks
- Add and subtract amounts of money to give change, using both \pounds and p in practical contexts
- Draw 2D and make 3D shapes
- Recognise and describe 3D shapes in different orientations
- Recognise that angles are a property of shape or a description of turn, using right angles as a marker
- Horizontal and vertical lines and pairs of perpendicular and parallel lines
- Understand and use simple scales (e.g. 2, 5, 10 units per cm) in pictograms and bar charts
- **Solve number problems and practical problems involving these ideas**

Year 4 Maths Objectives

- Count in 6s, 7s, 9s, 25s, 100s and hundredths; count backwards through zero to include negative numbers
- Read, write, compare, order and know place value of numbers to at least 10000 and numbers with the same number of decimal places up to two decimal places
- Round any number to the nearest 10, 100 or 1000 and decimals with 1 decimal place to the nearest whole number
- Add and subtract up to four-digit numbers mentally and using formal written columnar methods
- Tables and division facts 12×12 , including 0 and 1
- Multiply three numbers
- Multiply two and three digit numbers by a one-digit number using formal written layout
- Dividing a one or two-digit number by 10 and 100, identifying value of digits
- Add and subtract fractions with the same denominator
- Measure and calculate perimeter of rectilinear shapes in metres and centimetres
- Find the area of rectilinear shapes by counting squares
- Read, write and convert time between analogue and digital 12 and 24 hour clocks
- Conversion between units of measure
- Sorting and classifying quadrilaterals and triangles
- Identify lines of symmetry in 2D shapes presented in different orientations
- Identify acute and obtuse angles and compare and order angles up to two right angles by size
- Describing positions and translations (movement) within the first quadrant
- **Solve number and practical problems involving these ideas**

Year 5 Maths Objectives

- Read, write, order and compare numbers to at least 1 million and numbers with up to three decimal places, determine the value of each digit
- Interpret negative numbers in context, counting backwards and forwards
- Round any number up to a million to a power of 10 and decimals with two decimal places to the nearest whole or tenth
- Add and subtract whole numbers with more than four digits, including using formal written methods
- Identify prime numbers to 100 and recall those to 19, awareness of prime factors and non-prime numbers
- Short multiplication and division of four-digit by a one-digit and long multiplication of four-digit by two-digit number
- Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
- Compare, order, add and subtract fractions whose denominators are all multiples of the same number
- Understand that per cent relates to "number of parts per 100", and write percentages as a fraction with denominator 100, and as a decimal
- Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
- Convert different units of metric measures
- Understand and use equivalence between metric and imperial units
- Calculate the perimeter of composite rectilinear shapes and the area of rectangles using standard units
- Measure angles in degrees including acute, obtuse and reflex angles
- Distinguish between regular and irregular polygons based on reasoning about equal sides and angles
- **Solve number and practical problems involving these ideas**

Year 6 Maths Objectives

- Read, write, order and compare numbers up to 10 million and determine the value of each digit
- Short and long multiplication and division using numbers up to four digits; multiply one-digit numbers with up to two decimal places by whole numbers
- Mental calculations, including with mixed operations and large numbers
- Multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places
- Add and subtract fractions with different denominators and mixed numbers
- Multiply simple pairs of proper fractions and divide proper fractions by whole numbers
- Recall and use equivalences between simple fractions, decimals and percentages
- Solve problems involving ratio and proportion
- Use algebra in terms of formula, sequences, variables and unknowns
- Recognise and use the formula for volume and area including parallelograms and triangles
- Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
- Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles
- Draw and translate simple shapes on the coordinate plane, and reflect them in the axes
- Construct pie charts
- Calculate and interpret the mean as an average
- **Solve number and practical problems involving these ideas**