

Maths - Y1

## **Characteristics**

- An understanding of the important concepts and an ability to make connections within mathematics.
- A broad range of skills in using and applying mathematics.
- Fluent knowledge and recall of number facts and the number system.
- The ability to show initiative in solving problems in a wide range of contexts, including the new or unusual.
- The ability to think independently and to persevere when faced with challenges, showing a confidence of success.
- The ability to embrace the value of learning from mistakes and false starts.
- The ability to reason, generalise and make sense of solutions.
- Fluency in performing written and mental calculations and mathematical techniques.
- A wide range of mathematical vocabulary.
- A commitment to and passion for the subject.

| Key Stage 1   | Key Stage 2   |  |  |  |
|---|---|--|--|--|
| • Count and calculate in a range of practical contexts.• Use and apply mathematics in everyday activities and across the curriculum.        | • Count and calculate in increasingly complex contexts, including those that cannot be experienced first hand.  |  |  |  |
| <ul> <li>Repeat key concepts in many different practical ways to<br/>secure retention.</li> </ul>   | <ul> <li>Rigorously apply mathematical knowledge across the<br/>curriculum, in particular in science, technology and<br/>computing.</li> </ul>  |  |  |  |
| • Explore numbers and place value up to at least 100.   | Deepen conceptual understanding of mathematics by   |  |  |  |
| <ul> <li>Add and subtract using mental and formal written methods<br/>in practical contexts.</li> </ul>                                     | frequent repetition and extension of key concepts in a range of engaging and purposeful contexts.   |  |  |  |
| <ul> <li>Multiply and divide using mental and formal written methods<br/>in practical contexts.</li> </ul>                                  | <ul> <li>Explore numbers and place value so as to read and<br/>understand the value of all numbers.</li> <li>Add and subtract using efficient mental and formal written<br/>methods.</li> </ul> |  |  |  |
| Explore the properties of shapes.   |   |  |  |  |
| • Use language to describe position, direction and movement.  | • Multiply and divide using efficient mental and formal written methods.  |  |  |  |
| <ul> <li>Use and apply in practical contexts a range of measures,<br/>including time.</li> <li>Handle data in practical contexts</li> </ul> | • Use the properties of shapes and angles in increasingly complex and practical contexts, including in construction and engineering contexts.   |  |  |  |
| Handle data in practical contexts.  |   |  |  |  |
|   | <ul> <li>Describe position, direction and movement in increasingly precise ways.</li> </ul>   |  |  |  |
|   | • Use and apply measures to increasingly complex contexts.  |  |  |  |
|   | <ul> <li>Gather, organise and interrogate data.</li> </ul>  |  |  |  |
|   | <ul> <li>Understand the practical value of using algebra.</li> </ul>  |  |  |  |

## **Broad Learning Objectives**

- To know and use numbers
- To add and subtract
- To multiply and divide
- To use fractions
- To understand the properties of shapes
- To describe position, direction and movement
- To use measures
- To use statistics
- To use algebra

| MATHS YR 1   |   |   |  |  |   |   |            |  |  |
|--|---|---|--|--|---|---|------------|--|--|
| Number – Number<br>and Place Value   | Number –<br>Addition and<br>subtraction   | Number –<br>Multiplication<br>and<br>division   | Number –<br>fractions  | Measurement  | Geometry –<br>Properties of<br>shape  | Geometry –<br>Position and<br>direction   | Statistics |  |  |
| Pupils should be taught to:<br>• count to and across 100,<br>forwards and backwards,<br>beginning with 0 or 1, or<br>from any given number<br>• count, read and write<br>numbers to 100 in<br>numerals; count in<br>multiples of twos, fives<br>and tens<br>• given a number, identify<br>one more and one less<br>• identify and represent<br>numbers using objects<br>and pictorial<br>representations including<br>the number line, and use<br>the language of: equal to,<br>more than, less than<br>(fewer), most, least<br>• read and write numbers<br>from 1 to 20 in numerals<br>and words. | Pupils should be taught to:<br>• read, write and interpret<br>mathematical statements<br>involving addition (+),<br>subtraction (-) and equals<br>(=) signs<br>• represent and use number<br>bonds and related<br>subtraction facts within 20<br>• add and subtract one-digit<br>and two-digit numbers to<br>20, including zero<br>• solve one-step problems<br>that involve addition and<br>subtraction, using<br>concrete objects and<br>pictorial representations,<br>and missing number<br>problems such as<br>$7 = \boxed{-9}$ . | Pupils should be taught<br>to:<br>• solve one-step<br>problems<br>involving multiplication<br>and<br>division, by calculating<br>the<br>answer using concrete<br>objects, pictorial<br>representations and<br>arrays<br>with the support of the<br>teache | Pupils should be taught to:<br>• recognise, find and name<br>a half as one of two equal<br>parts of an object, shape<br>or quantity<br>• recognise, find and name<br>a quarter as one of four<br>equal parts of an object,<br>shape or quantity.<br>Pupils | Pupils should be taught to:<br>• compare, describe and<br>solve practical problems<br>for:<br>• lengths and heights [for<br>example, long/short,<br>longer/shorter, tall/short,<br>double/half]<br>• mass/weight [for example,<br>heavy/light, heavier than,<br>lighter than]<br>• capacity and volume [for<br>example, full/empty, more<br>than, less than, half,<br>half full, quarter]<br>• time [for example, quicker,<br>slower, earlier, later]<br>• measure and begin to<br>record the following:<br>• lengths and heights<br>• mass/weight<br>• capacity and volume<br>• time (hours, minutes,<br>seconds)<br>• recognise and know the<br>value of different<br>denominations of coins<br>and notes<br>• sequence events in<br>chronological order using<br>language [for example,<br>before and after, next,<br>first, today, yesterday,<br>tomorrow, morning,<br>afternoon and evening]<br>• recognise and use<br>language relating to dates,<br>including days of the<br>week, weeks, months and<br>years<br>• tell the time to the hour<br>and half past the hour and<br>draw the hands on a clock<br>face to show these times | Pupils should be taught<br>to:<br>• recognise and name<br>common 2-D and 3-D<br>shapes, including:<br>• 2-D shapes [for<br>example,<br>rectangles (including<br>squares), circles and<br>triangles]<br>• 3-D shapes [for<br>example,<br>cuboids (including<br>cubes),<br>pyramids and spheres]. | Pupils should be<br>taught to:<br>• describe position,<br>direction<br>and movement,<br>including<br>whole, half, quarter<br>and<br>three-quarter turns |            |  |  |