

# BARNSTON PRIMARY SCHOOL MEDIUM TERM PLANNING SUMMER



**SUBJECT:** Mathematics

**YEAR GROUP:** Year 3

**YEAR IN CYCLE:** Yearly

	NATIONAL CURRICULUM	ADDITIONAL SCHOOL CURRICULUM
<b>Summer</b>	<p><b>Number and Place Value</b></p> <ul style="list-style-type: none"> <li>Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.</li> <li>Solve number problems and practical problems involving these ideas.</li> </ul> <p><b>Addition and Subtraction</b></p> <ul style="list-style-type: none"> <li>Add and subtract numbers mentally, including:                             <ul style="list-style-type: none"> <li>a three-digit number and ones</li> <li>a three-digit number and tens</li> <li>a three-digit number and hundreds</li> </ul> </li> <li>Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.</li> </ul> <p><b>Multiplication and Division</b></p> <ul style="list-style-type: none"> <li>Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.</li> <li>Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.</li> <li>Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.</li> </ul> <p><b>Measurement</b></p> <ul style="list-style-type: none"> <li>Measure, compare, add and subtract: volume/capacity (l/ml)</li> <li>Add and subtract amounts of money to give change, using both £ and p in practical contexts.</li> <li>Know the number of seconds in a minute and the number of days in each month, year and leap year.</li> </ul>	<p>They use larger numbers to at least 1000, applying partitioning related to place value using varied and increasingly complex problems, building on work in year 2 (for example, <math>146 = 100 + 40</math> and <math>6, 146 = 130 + 16</math>).</p> <p>Using a variety of representations, including those related to measure, pupils continue to count in ones, tens and hundreds, so that they become fluent in the order and place value of numbers to 1000.</p> <p>Pupils continue to practise their mental recall of multiplication tables when they are calculating mathematical statements in order to improve fluency. Through doubling, they connect the 2, 4 and 8 multiplication tables.</p> <p>Pupils develop efficient mental methods, for example, using commutativity and associativity (for example, <math>4 \times 12 \times 5 = 4 \times 5 \times 12 = 20 \times 12 = 240</math>) and multiplication and division facts (for example, using <math>3 \times 2 = 6</math>, <math>6 \div 3 = 2</math> and <math>2 = 6 \div 3</math>) to derive related facts (for example, <math>30 \times 2 = 60</math>, <math>60 \div 3 = 20</math> and <math>20 = 60 \div 3</math>).</p> <p>Pupils solve simple problems in contexts, deciding which of the four operations to use and why. These include measuring and scaling contexts.</p> <p>The comparison of measures includes simple scaling by integers (for example, a given quantity or measure is twice as long or five times as high) and this connects to multiplication.</p> <p>Pupils continue to become fluent in recognising the value of coins, by adding and subtracting amounts, including mixed units, and giving change using manageable amounts. They record £ and p separately. The decimal recording of money is</p>

- Compare durations of events [for example to calculate the time taken by particular events or tasks].

**Geometry**

- Make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them.
- Recognise angles as a property of shape or a description of a turn.
- Recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle.

**Fractions**

- Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.
- Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.
- Compare and order unit fractions, and fractions with the same denominators.
- Recognise and show, using diagrams, equivalent fractions with small denominators.
- Solve problems that involve all of the above.

**Statistics**

- Interpret and present data using bar charts, pictograms and tables.
- Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.

introduced formally in year 4.

They should be able to describe the properties of 2-D and 3-D shapes using accurate language, including lengths of lines and acute and obtuse for angles greater or lesser than a right angle.

They should go beyond the [0, 1] interval, including relating this to measure

Pupils understand and use simple scales (for example, 2, 5, 10 units per cm) in pictograms and bar charts with increasing accuracy.  
They continue to interpret data presented in many contexts

**ENTERPRISE**

**SOCIAL, SPIRITUAL, MORAL & CULTURAL**

**SCHOOL DRIVERS**

- Mental Maths test every other week to improve mental capability to solve problems quickly.
- Opportunities for children to solve problems that arise through their learning.
- Remind children that mistakes are OK.

Children to become team players and allow collaborative sharing of ideas and resources.  
Children to take responsibility of their own learning.  
Children to work effectively on their own, but at times are able to work as part of a team.  
Children to become aware of their own desire to become more independent.