



# CASTLETOWN PRIMARY SCHOOL



## Numeracy – Year 4

Children will work towards achieving the following learning outcomes.

Number			
Number and place value	Addition and subtraction	Multiplication and division	Fractions
<p>Pupils should be taught to:</p> <ol style="list-style-type: none"> <li>Count in multiples of 7, 8, 11, 12, 25 and 1000.</li> <li>Find 1000 more or less than a given number</li> <li>Count backwards through zero to include negative numbers, and find a number more and less than a negative number (locate numbers on number line) including context of temperature.</li> <li>Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)</li> <li>Read, write, order and compare numbers beyond 1000 (up to 10 000) and find a number between 2 given numbers.</li> <li>Identify, represent and estimate numbers using different representations</li> <li>Round any number to the nearest 10, 100 or 1000</li> <li>Solve number and practical problems that involve all of the above and with increasingly large positive numbers</li> <li>Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.</li> <li>Describe and extend number sentences.</li> </ol>	<p>Pupils should be taught to:</p> <ol style="list-style-type: none"> <li>Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.</li> <li>Estimate and use inverse operations to check answers to a calculation.</li> <li>Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</li> </ol>	<p>Pupils should be taught to:</p> <ol style="list-style-type: none"> <li>Recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math>.</li> <li>Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers</li> <li>Identify factors and multiples.</li> <li>Recognise and use factor pairs and commutativity in mental calculations.</li> <li>Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.</li> <li>Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.</li> <li>To understand the effect when multiplying a given number by 10, 100 and 1000.</li> <li>Divide numbers up to 3 digits by a 1 digit number using a formal written method of short division.</li> <li>Use partitioning to double or halve any number up to 3 digits including decimals to 1 dp.</li> </ol>	<p>Pupils should be taught to:</p> <ol style="list-style-type: none"> <li>Recognise and show, using diagrams, families of common equivalent fractions.</li> <li>Understand that a fraction is one whole number divided by another.</li> <li>Count up and down in unit fractions, hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.</li> <li>Compare and order unit fractions and fractions with the same denominator, including number line.</li> <li>Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.</li> <li>Add and subtract fractions with the same denominator.</li> <li>Read, write and order numbers up to 2 dp and identify the value of each digit.</li> <li>Recognise and write decimal equivalents of any number of tenths or hundredths.</li> <li>Recognise and write decimal equivalents to <math>\frac{1}{2}</math> <math>\frac{1}{4}</math> <math>\frac{3}{4}</math>.</li> <li>Find the effect of dividing a one- or two-digit number by 1 and identifying the value of the digits in the answer as ones, tenths and hundredths.</li> <li>Round decimals with one decimal place to the nearest whole number.</li> <li>Compare numbers with the same number of decimal places up to two decimal places.</li> <li>Solve simple measure and money problems involving fractions and decimals to two decimal places.</li> </ol>

Continued on Page 2.

Measure	Geometry		Statistics
	Properties of Shape	Position and Direction	
<p>Pupils should be taught to:</p> <ol style="list-style-type: none"> <li>Convert between different units of measure [for example, kilometre to metre; hour to minute]</li> <li>Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.</li> <li>Find the area of rectilinear shapes by counting squares.</li> <li>Estimate, compare and calculate different measures, including money in pounds and pence.</li> <li>Read, write and convert time between analogue and digital 12- and 24-hour clocks</li> <li>Find change from up to £100 choosing an appropriate method.</li> <li>Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.</li> </ol>	<p>Pupils should be taught to:</p> <ol style="list-style-type: none"> <li>Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.</li> <li>Identify acute and obtuse angles and compare and order angles up to two right angles by size.</li> <li>Identify lines of symmetry in 2-D shapes presented in different orientations.</li> <li>Complete a simple symmetric figure with respect to a specific line of symmetry.</li> </ol>	<p>Pupils should be taught to:</p> <ol style="list-style-type: none"> <li>Describe positions on a 2-D grid as coordinates in the first quadrant.</li> <li>Describe movements between positions as translations of a given unit to the left/right and up/down.</li> <li>Plot specified points and draw sides to complete a given polygon.</li> </ol>	<p>Pupils should be taught to:</p> <ol style="list-style-type: none"> <li>Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.</li> <li>Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.</li> </ol>