

	Comparing and Estimating	Measuring and Calculating	Telling the Time	Converting
Year R*				
Year 1	<ul style="list-style-type: none"> <li>compare, describe and solve practical problems for:               <ul style="list-style-type: none"> <li>lengths and heights [e.g. long/short, longer/shorter, tall/short, double/half]</li> <li>mass/weight [e.g. heavy/light, heavier than, lighter than]</li> <li>capacity and volume [e.g. full/empty, more than, less than, half, half full, quarter] time [e.g. quicker, slower, earlier, later]</li> </ul> </li> <li>sequence events in chronological order using language [e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]</li> </ul>	<ul style="list-style-type: none"> <li>measure and begin to record the following:               <ul style="list-style-type: none"> <li>lengths and heights</li> <li>mass/weight</li> <li>capacity and volume</li> <li>time (hours, minutes, seconds)</li> </ul> </li> <li>recognise and know the value of different denominations of <b>coins and notes</b></li> </ul>	<ul style="list-style-type: none"> <li>tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.</li> <li>recognise and use language relating to dates, including days of the week, weeks, months and years</li> </ul>	
Year 2	<ul style="list-style-type: none"> <li>compare and order lengths, mass, volume/capacity and record the results using &gt;, &lt; and =</li> <li>compare and sequence intervals of time</li> </ul>	<ul style="list-style-type: none"> <li>choose and use appropriate standard units to estimate and measure <b>length/height</b> in any direction (m/cm); <b>mass</b> (kg/g); <b>temperature</b> (°C); <b>capacity</b> (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels</li> <li>recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value</li> <li>find different combinations of coins that equal the same amounts of money</li> <li><b>solve simple problems</b> in a practical context involving addition and subtraction of money of the same unit, including giving change</li> </ul>	<ul style="list-style-type: none"> <li>tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.</li> <li>Know the number of minutes in an hour and the number of hours in a day (appears also in Converting)</li> </ul>	<ul style="list-style-type: none"> <li>know the number of minutes in an hour and the number of hours in a day. (appears also in Telling the Time)</li> </ul>
Year 3	<ul style="list-style-type: none"> <li>compare durations of events, for example to calculate the time taken by particular events or tasks</li> <li>estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight (appears also in Telling the Time)</li> </ul>	<ul style="list-style-type: none"> <li>measure, compare, add and subtract: <b>lengths</b> (m/cm/mm); <b>mass</b> (kg/g); <b>volume/capacity</b> (l/ml)</li> <li>measure the <b>perimeter</b> of simple 2-D shapes</li> <li>add and subtract amounts of <b>money</b> to give change, using both £ and p in practical contexts</li> </ul>	<ul style="list-style-type: none"> <li>tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks</li> <li>estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight (appears also in Comparing and Estimating)</li> </ul>	<ul style="list-style-type: none"> <li>know the number of seconds in a minute and the number of days in each month, year and leap year</li> </ul>
Year 4	<ul style="list-style-type: none"> <li>estimate, compare and calculate different measures, including money in pounds and pence (also included in Measuring)</li> </ul>	<ul style="list-style-type: none"> <li>estimate, compare and calculate <b>different measures</b>, including <b>money in pounds and pence</b> (appears also in Comparing)</li> <li>measure and calculate the <b>perimeter</b> of a rectilinear figure (including squares) in centimetres and metres</li> <li>find the area of rectilinear shapes by counting squares</li> </ul>	<ul style="list-style-type: none"> <li>read, write and convert time between analogue and digital 12 and 24-hour clocks (appears also in Converting)</li> <li>solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days (appears also in Converting)</li> </ul>	<ul style="list-style-type: none"> <li>convert between different units of measure (e.g. kilometre to metre; hour to minute)</li> <li>read, write and convert time between analogue and digital 12 and 24-hour clocks (appears also in Converting)</li> <li>solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days (appears also in Telling the Time)</li> </ul>
Year 5	<ul style="list-style-type: none"> <li>calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm<sup>2</sup>) and square metres</li> </ul>	<ul style="list-style-type: none"> <li>use all four operations to solve problems involving measure (e.g. <b>length, mass, volume, money</b>) using decimal notation including scaling.</li> </ul>	<ul style="list-style-type: none"> <li>solve problems involving converting between units of time</li> </ul>	<ul style="list-style-type: none"> <li>convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)</li> </ul>

	<p>(m<sup>2</sup>) and estimate the area of irregular shapes (also included in measuring)</p> <ul style="list-style-type: none"> <li>estimate volume (e.g. using 1 cm<sup>3</sup> blocks to build cubes and cuboids) and capacity (e.g. using water)</li> </ul>	<ul style="list-style-type: none"> <li>measure and calculate the <b>perimeter</b> of composite rectilinear shapes in centimetres and metres</li> <li>calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm<sup>2</sup>) and square metres (m<sup>2</sup>) and estimate the area of irregular shapes</li> </ul> <p><i>recognise and use square numbers and cube numbers, and the notation for squared ( )<sup>2</sup> and cubed ( )<sup>3</sup> (copied from Multiplication and Division)</i></p>		<ul style="list-style-type: none"> <li>solve problems involving converting between units of time</li> <li>understand and use equivalences between metric units and common imperial units such as inches, pounds and pints</li> </ul>
<p>Year 6</p>	<ul style="list-style-type: none"> <li>calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm<sup>3</sup>) and cubic metres (m<sup>3</sup>), and extending to other units such as mm<sup>3</sup> and km<sup>3</sup>.</li> </ul>	<ul style="list-style-type: none"> <li>solve problems involving the calculation and conversion of <b>units of measure</b>, using decimal notation up to three decimal places where appropriate (appears also in Converting)</li> <li>recognise that shapes with the same areas can have different <b>perimeters</b> and vice versa</li> <li>calculate the area of parallelograms and triangles</li> <li>calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm<sup>3</sup>) and cubic metres (m<sup>3</sup>), and extending to other units [e.g. mm<sup>3</sup> and km<sup>3</sup>].</li> <li>recognise when it is possible to use formulae for area and volume of shapes</li> </ul>		<ul style="list-style-type: none"> <li>use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places</li> <li>solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate (appears also in Measuring and Calculating)</li> <li>convert between miles and kilometres</li> </ul>

\*for Reception, please refer to ‘Mathematics in Early Years’ document