

## Curriculum 2014 Progression chart **Measurement**

### *Problem solving in **bold***

<b>Y1</b>	<p><i>Pupils should be taught to:</i></p> <ul style="list-style-type: none"> <li>compare, describe and <b>solve practical problems for:</b> <ul style="list-style-type: none"> <li>lengths and heights (e.g. long/short, longer/shorter, tall/short, double/half)</li> <li>mass or weight (e.g. heavy/light, heavier than, lighter than)</li> <li>capacity/volume (full/empty, more than, less than, quarter)</li> <li>time (quicker, slower, earlier, later)</li> </ul> </li> <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 coins and notes</li> <li>sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening</li> <li>recognise and use language relating to dates, including days of the week, weeks, months and years</li> <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> </ul>
<b>Y2</b>	<p><i>Pupils should be taught to:</i></p> <ul style="list-style-type: none"> <li>choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels</li> <li>compare and order lengths, mass, volume/capacity and record the results using &gt;, &lt; and =</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 in a practical context involving addition and subtraction of money of the same unit, including giving change</b></li> <li>compare and sequence intervals of time</li> <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> </ul>
<b>Y3</b>	<p><i>Pupils should be taught to:</i></p> <ul style="list-style-type: none"> <li>measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)</li> <li>measure the perimeter of simple 2-D shapes</li> <li>add and subtract amounts of money to give change, using both £ and p in practical contexts</li> <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</li> <li>know the number of seconds in a minute and the number of days in each month, year and leap year</li> <li>compare durations of events, for example to calculate the time taken by particular events or tasks.</li> </ul>
<b>Y4</b>	<p><i>Pupils should be taught to:</i></p> <p>Convert between different units of measure (e.g. kilometre to metre; hour to minute)</p> <ul style="list-style-type: none"> <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><b>solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.</b></li> </ul>
<b>Y5</b>	<p><i>Pupils should be taught to:</i></p> <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> <li>understand and use equivalences between metric units and common imperial units such as inches, pounds and pints</li> <li>measure and calculate the perimeter 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> <li>estimate volume (e.g. using 1 cm<sup>3</sup> blocks to build cubes and cuboids) and capacity (e.g. using water)</li> <li><b>solve problems involving converting between units of time</b></li> <li>use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling.</li> </ul>
<b>Y6</b>	<p><i>Pupils should be taught to:</i></p> <ul style="list-style-type: none"> <li><b>solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate</b></li> <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>convert between miles and kilometres</li> <li>recognise that shapes with the same areas can have different perimeters and vice versa</li> <li>recognise when it is possible to use formulae for area and volume of shapes</li> <li>calculate the area of parallelograms and triangles</li> <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>