

## Queen's Park C.E/U.R.C Primary School: Maths Progression Map

### Measurement

#### Comparing and Estimating

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p><i>DM: compare and describe:</i></p> <ul style="list-style-type: none"> <li>lengths and heights [e.g. long/short, longer/shorter, tall/short]</li> <li>mass/weight [e.g. heavy/light, heavier than, lighter than]</li> <li>capacity and volume [e.g. full/empty]</li> <li>time [e.g. quick/fast, slow].</li> </ul>	<p>compare, describe and solve practical problems for:</p> <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]</li> <li>* time [e.g. quicker, slower, earlier, later]</li> </ul> <p>sequence events in chronological order using language [e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]</p>	<p>compare and order lengths, mass, volume/capacity and record the results using <math>&gt;</math>, <math>&lt;</math> and <math>=</math></p> <p>compare and sequence intervals of time</p>	<p>compare durations of events, for example to calculate the time taken by particular events or tasks</p> <p>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)</p>	<p>estimate, compare and calculate different measures, including money in pounds and pence (also included in Measuring)</p>	<p>calculate and compare the area of squares and rectangles including using standard units, square centimetres (<math>\text{cm}^2</math>) and square metres (<math>\text{m}^2</math>) and estimate the area of irregular shapes (also included in measuring)</p> <p>estimate volume (e.g. using <math>1 \text{ cm}^3</math> blocks to build cubes and cuboids) and capacity (e.g. using water)</p>	<p>calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (<math>\text{cm}^3</math>) and cubic metres (<math>\text{m}^3</math>), and extending to other units such as <math>\text{mm}^3</math> and <math>\text{km}^3</math>.</p>

## Measuring and Calculating

	<p>measure and begin to record the following:</p> <ul style="list-style-type: none"> <li>* <b>lengths and heights</b></li> <li>* <b>mass/weight</b></li> <li>* <b>capacity and volume</b></li> <li>* <b>time</b> (hours, minutes, seconds)</li> </ul> <p>recognise and know the value of different denominations of coins and notes</p>	<p>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</p> <p>recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value</p> <p>find different combinations of coins that equal the same amounts of money</p> <p>solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change</p>	<p>measure, compare, add and subtract: <b>lengths</b> (m/cm/mm); <b>mass</b> (kg/g); <b>volume/capacity</b> (l/ml)</p> <p>measure the perimeter of simple 2-D shapes</p> <p>add and subtract amounts of <b>money</b> to give change, using both £ and p in practical contexts</p>	<p>estimate, compare and calculate <b>different measures, including money in pounds and pence</b> (appears also in Comparing)</p> <p>measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres</p> <p>find the area of rectilinear shapes by counting squares</p>	<p>use all four operations to solve problems involving measure (e.g. <b>length, mass, volume, money</b>) using decimal notation including scaling.</p> <p>measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres</p> <p>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</p>	<p>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)</p> <p>recognise that shapes with the same areas can have different <b>perimeters</b> and vice versa</p> <p>calculate the area of parallelograms and triangles 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>].</p> <p>recognise when it is possible to use formulae for area and volume of shapes</p>
--	---	--	---	---	---	---

## Telling the Time

<p>tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.</p> <p>recognise and use language relating to dates, including days of the week, weeks, months and years</p>	<p>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.</p> <p>know the number of minutes in an hour and the number of hours in a day.</p>	<p>tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks</p> <p>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</p>	<p>read, write and convert time between analogue and digital 12 and 24-hour clocks (appears also in Converting)</p> <p>solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days</p>	<p>solve problems involving converting between units of time</p>		

## Converting

		<p>know the number of minutes in an hour and the number of hours in a day. (appears also in Telling the Time)</p>	<p>know the number of seconds in a minute and the number of days in each month, year and leap year</p>	<p>convert between different units of measure (e.g. kilometre to metre; hour to minute)</p> <p>read, write and convert time between analogue and digital 12 and 24-hour clocks (appears also in Converting)</p> <p>solve problems involving converting from hours to</p>	<p>convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)</p> <p>solve problems involving converting between units of time</p> <p>understand and use equivalences</p>	<p>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</p> <p>solve problems involving the</p>

				<p>minutes; minutes to seconds; years to months; weeks to days (appears also in Telling the Time)</p>	<p>between metric units and common imperial units such as inches, pounds and pints</p>	<p>calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate (appears also in Measuring and Calculating)</p> <p>convert between miles and kilometres</p>
--	--	--	--	---	--	--