National Curriculum Milestones Document

Measurement

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measurement	Compare, describe and solve practical problems for: lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]	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	Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	Convert between different units of measure [for example, kilometre to metre; hour to minute]	Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)	Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate

	Compare, describe and solve practical problems for: mass/weight [for example, heavy/light, heavier than, lighter than]	Compare and order lengths, mass, volume/capacity and record the results using >, < and =	Measure the perimeter of simple 2-D shapes	Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres	Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints	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
	Compare, describe and solve practical problems for: capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]	Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value	Add and subtract amounts of money to give change, using both £ and p in practical contexts	Find the area of rectilinear shapes by counting squares	Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres	Convert between miles and kilometres

	Compare, describe and solve practical problems for: time [for example, quicker, slower, earlier, later]	Find different combinations of coins that equal the same amounts of money	Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks	Estimate, compare and calculate different measures, including money in pounds and pence	Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes	Recognise that shapes with the same areas can have different perimeters and vice versa
	Measure and begin to record the following: lengths and heights	Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change	Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight	Read, write and convert time between analogue and digital 12- and 24-hour clocks	Estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water]	Recognise when it is possible to use formulae for area and volume of shapes
	Measure and begin to record the following: mass/weight	Compare and sequence intervals of time	Know the number of seconds in a minute and the number of days in each month, year and leap year	Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days	Solve problems involving converting between units of time	Calculate the area of parallelograms and triangles

	Measure and begin to record the following: capacity and volume	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	Compare durations of events [for example to calculate the time taken by particular events or tasks]		Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling	Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm3) and cubic metres (m3), and extending to other units [for example, mm3 and km3]
	Measure and begin to record the following: time (hours, minutes, seconds)	Know the number of minutes in an hour and the number of hours in a day				
	Recognise and know the value of different denominations of coins and notes					

	Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]					
	Recognise and use language relating to dates, including days of the week, weeks, months and years					
	Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times					