Brentfield Primary School

Children of Today, Champions for Tomorrow

Progression in Measurement

All programmes of study statements are included in the progression map and some appear twice. This is indicated in the text. This occurs where:

- The statement has central relevance to more than one sub category within a topic;
- The statement has central relevance to more than one mathematics topic. This is done to reflect the aims of the curriculum that pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems.

PROGRESSION IN MEASUREMENT							
	EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
COMPARING AND ESTIMATING	• compare length, weight and capacity.	• compare, describe and solve practical problems for: - lengths and heights [e.g. long/short, longer/shorter, tall/short, double/half] - mass/weight [e.g. heavy/light, heavier than, lighter than] - capacity and volume [e.g. full/empty, more than, less than, half, half full, quarter] - time [e.g. quicker, slower, earlier, later] • sequence events in chronological	• compare and order lengths, mass, volume/capacity and record the results using >, < and = • compare and sequence intervals of time	• compare durations of events, for example to calculate the time taken by particular events or tasks • 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 (also in Telling the Time)	• estimate, compare and calculate different measures, including money in pounds and pence (also included in Measuring)	• calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes (also included in measuring) • Estimate volume (e.g. using 1 cm3 blocks to build cubes and cuboids) and capacity (e.g. using water)	• calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm^3) and cubic metres (m^3), and extending to other units such as mm^3 and km^3.

		order using language [e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]					
MEASURING AND CALCULATING		• measure and begin to record the following: - lengths and heights - mass/weight - capacity and volume - time (hours, minutes, seconds) • recognise and know the value of different denominations of coins and notes	• 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 • recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value	• measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) • add and subtract amounts of money to give change, using both £ and p in practical contexts • measure the perimeter of simple 2-D shapes	• estimate, compare and calculate different measures, including money in pounds and pence (appears also in Comparing) • measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres • find the area of rectilinear shapes by counting squares	• use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling. • measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres • calculate and compare the area of squares and rectangles including using standard	• solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate (appears also in Converting) • recognise that shapes with the same areas can have different perimeters and vice versa • calculate the area of parallelograms and triangles • calculate, estimate and

			• find different combinations of coins that equal the same amounts of money • solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change			units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes • recognize and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) (also in Multiplication and Division)	compare volume of cubes and cuboids using standard units, including cubic centimetres (cm3) and cubic metres (m3), and extending to other units [e.g. mm3 and km3]. • Recognise when it is possible to use formulae for area and volume of shapes
TELLING THE TIME		• tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. • recognise and use language relating to dates, including days of the week, weeks, months and years	• 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	• 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 and read time with increasing accuracy to the nearest minute; record and compare time in	• read, write and convert time between analogue and digital 12 and 24-hour clocks (appears also in Converting) • solve problems involving converting from hours to minutes; minutes to seconds;	• solve problems involving converting between units of time	

				terms of seconds, minutes, hours and o'clock; use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight	years to months; weeks to days (appears also in Converting)		
CONVERTING			• know the number of minutes in an hour and the number of hours in a day. (also in Converting)	• know the number of seconds in a minute and the number of days in each month, year and leap year	• convert between different units of measure (e.g. kilometre to metre; hour to minute) • read, write and convert time between analogue and digital 12 and 24-hour clocks (appears also in Converting) • solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days (appears also	• convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) • solve problems involving converting between units of time • understand and use equivalences between metric units and common imperial units such as inches,	• 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 • solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal

					in Telling the Time)	pounds and pints	places where appropriate • convert between miles and kilometres