

Fluency	Reason Mathematically	Solve Problems
To become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.	To reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language	To solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

MEASUREMENT

COMPARING AND ESTIMATING						
EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems	Compare, describe and solve practical problems for: <ul style="list-style-type: none"> * 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] 	Compare and order lengths, mass, volume/capacity and record the results using $>$, $<$ and $=$		Estimate, compare and calculate different measures, including money in pounds and pence <i>Also included in Measuring</i>	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 <i>Also included in measuring</i>	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 .
					Estimate volume (e.g., using 1 cm^3 blocks to build cubes and cuboids) and capacity (e.g., using water)	
Order and sequence events	Sequence events in chronological order using language [e.g., before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]	Compare and sequence intervals of time	Compare durations of events, for example to calculate the time taken by particular events or tasks			
Use everyday language to talk about time			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 <i>Appears also in Telling the Time</i>			

MEASURING AND CALCULATING						
EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Orders two or three items by length, height, weight or capacity Measures short periods of time in simple ways	Measure and begin to record the following: * lengths and heights * mass/weight * capacity and volume * time (hours, minutes, seconds)	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)	estimate, compare and calculate different measures , including money in pounds and pence <i>Appears also in Comparing</i>	Use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling	Solve problems involving the calculation and conversion of units of measure , using decimal notation up to three decimal places where appropriate <i>Appears also in Converting</i>
			Measure the perimeter of simple 2-D shapes	Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres	Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres	Recognise that shapes with the same areas can have different perimeters and vice versa
MEASURING AND CALCULATING						
EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Beginning to use everyday language related to money	Recognise and know the value of different denominations of coins and notes	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 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				
				Find the area of rectilinear shapes by counting squares	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 <i>Recognise and use square numbers and cube numbers, and the notation for squared (²) and cubed (³)</i> <i>Copied from Multiplication and Division</i>	Calculate the area of parallelograms and triangles Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm ³) and cubic metres (m ³), and extending to other units [e.g. mm ³ and km ³]. Recognise when it is possible to use formulae for area and volume of shapes

TELLING THE TIME						
EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Uses everyday language to talk about 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.	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	<i>Read, write and convert time between analogue and digital 12 and 24-hour clocks</i> <i>Appears also in Converting</i>		
	Recognise and use language relating to dates, including days of the week, weeks, months and years	<i>Know the number of minutes in an hour and the number of hours in a day</i> <i>Appears also in Converting</i>	<i>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</i> <i>Appears also in Comparing and Estimating</i>			
				<i>Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days</i> <i>Appears also in Converting</i>	Solve problems involving converting between units of time	
CONVERTING						
EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
		<i>Know the number of minutes in an hour and the number of hours in a day.</i> <i>Appears also in Telling the Time</i>	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)	Convert between different units of metric measure (e.g., kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)	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
				<i>Read, write and convert time between analogue and digital 12 and 24-hour clocks</i> <i>Appears also in Converting</i>	Solve problems involving converting between units of time	<i>Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate</i> <i>Appears also in Measuring and Calculating</i>
				<i>Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days</i> <i>Appears also in Telling the Time</i>	Understand and use equivalences between metric units and common imperial units such as inches, pounds and pints	Convert between miles and kilometres