



Measurement

COMPARING AND ESTIMATING

Nursery

sort objects according to size
order by length, height, weight and capacity

Reception

compare size, mass and capacity
compare length and height
make indirect comparisons

Year 1

Year 2

Year 3

Year 4

Year 5

Year 6



Measurement

<p>compare, describe and solve practical problems for:</p> <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]	<p>compare and order lengths, mass, volume/capacity and record the results using $>$, $<$ and $=$</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 (cm^2) and square metres (m^2) and estimate the area of irregular shapes (also included in measuring)</p>	<p>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.</p>
				<p>estimate volume (e.g. using 1 cm^3 blocks to build cubes and cuboids) and capacity (e.g. using water)</p>	



Measurement

<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 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>			



Measurement

MEASURING and CALCULATING

Nursery

Talk about size of objects

Reception

Describe length and height

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
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 (appears also in Comparing)	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 (appears also in Converting)



Measurement

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	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
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	find different combinations of coins that equal the same amounts of money				
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Measurement

	<p>solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change</p>	<p>add and subtract amounts of money to give change, using both £ and p in practical contexts</p>	<p>find the area of rectilinear shapes by counting squares</p>	<p>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</p> <p><i>recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)</i> (copied from Multiplication and Division)</p>	<p>calculate the area of parallelograms and triangles</p> <p>recognise when it is possible to use formulae for area and volume of shapes</p>
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Measurement

					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].
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Measurement

TIME

Nursery

use everyday language to describe time order events
measure short periods of time

Reception

order and sequence important times in the day. Recognise regular events
describe when events happen using vocabulary yesterday, tomorrow and today
describe significant events in life discuss events that they are looking forward to
investigate time

Year 1

tell the time to the hour and half past the hour and draw

Year 2

tell and write the time to five minutes, including quarter

Year 3

tell and write the time from an analogue clock,

Year 4

read, write and convert time between analogue

Year 5

solve problems involving converting between units of time

Year 6

use, read, write and convert between standard units,



Measurement

<p>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 sequence events in chronological order using language</p>	<p>past/to the hour and draw the hands on a clock face to show these times compare and sequence intervals of time know the number of minutes in an hour and the number of hours in a day</p>	<p>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 terms of seconds, minutes, hours and o'clock; use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight know the number of seconds in a minute and the number of days in each month, year and leap year compare durations of events</p>	<p>and digital 12 and 24-hour clocks solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days</p>		<p>converting measurements of time from a smaller unit of measure to a larger unit and vice versa</p>
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Measurement

CONVERTING

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	know the number of minutes in an hour and the number of hours in a day.	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



Measurement

			read, write and convert time between analogue and digital 12 and 24- hour clocks solve problems involving converting from hours to minutes; minutes to	solve problems involving converting between units of time understand and use equivalences between metric units and	solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
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Measurement

			seconds; years to months; weeks to days	common imperial units such as inches, pounds and pints	convert between miles and kilometres
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