



COMPARING AND ESTIMATING						
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
<pre>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]</pre>	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 (also included in Measuring)	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 (also included in measuring) estimate volume (e.g. using 1 cm <sup>3</sup> 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 <sup>3</sup> ) and cubic metres (m <sup>3</sup> ), and extending to other units such as mm <sup>3</sup> and <sup>3</sup> km <sup>3</sup> .	
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 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)				











MEASURING and CALCULATING						
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
<ul> <li>measure and begin to</li> <li>record the following:</li> <li>lengths and heights</li> <li>mass/weight</li> <li>capacity and volume</li> <li>time (hours, minutes, seconds)</li> </ul>	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	measure, compare, add and subtract: <b>lengths</b> (m/cm/mm); <b>mass</b> (kg/g); <b>volume/capacity</b> (I/mI)	estimate, compare and calculate <b>different measures,</b> including <b>money in</b> <b>pounds and pence</b> (appears also in Comparing)	use all four operations to solve problems involving measure (e.g. <b>length</b> , <b>mass, volume, money</b> ) using decimal notation including scaling.	solve problems involving the calculation and conversion of <b>units of</b> <b>measure</b> , using decimal notation up to three decimal places where appropriate (appears also in Converting)	
		measure the <b>perimeter</b> of simple 2-D shapes	measure and calculate the <b>perimeter</b> of a rectilinear figure (including squares) in centimetres and metres	measure and calculate the <b>perimeter</b> of composite rectilinear shapes in centimetres and metres	recognise that shapes with the same areas can have different <b>perimeters</b> and vice versa	













TRIBAL

	MEASURING and CALCULATING						
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6		
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 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	add and subtract amounts of <b>money</b> to give change, using both £ and p in practical contexts	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 <sup>2</sup> ) and square metres (m <sup>2</sup> ) and estimate the area of irregular shapes recognise and use square numbers and cube numbers, and the notation for squared () and cubed () (copied from Multiplication and Division)	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> ]. recognise when it is possible to use formulae for area and volume of shapes		

MEI

Innovators in Mathematics Education STEM

- myscience -

Science

Leading education and social research

Institute of Education University of London

DE





TELLING THE TIME						
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
tell the time to the hour	tell and write the time to	tell and write the time	read, write and convert			
and half past the hour and	five minutes, including	from an analogue clock,	time between analogue			
draw the hands on a clock	quarter past/to the hour	including using Roman	and digital 12 and 24-hour			
face to show these times.	and draw the hands on a	numerals from I to XII, and	clocks			
	clock face to show these	12-hour and 24-hour	(appears also in Converting)			
	times.	clocks				
recognise and use	know the number of	estimate and read				
language relating to dates,	minutes in an hour and	time with increasing				
including days of the	the number of hours in a	accuracy to the nearest				
week, weeks, months and	day.	minute; record and				
years	(appears also in Converting)	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 Comparing				
		and Estimating)				
			solve problems involving	solve problems involving		
			converting from hours to	converting between units		
			minutes; minutes to	of time		
			seconds; years to months;			
			weeks to days			
			(appears also in Converting)			











	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. (appears also in Telling the Time)	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		
			read, write and convert time between analogue and digital 12 and 24-hour clocks (appears also in Converting)	solve problems involving converting between units of time	solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate (appears also in Measuring and Calculating)		
			solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days (appears also in Telling the Time)	understand and use equivalences between metric units and common imperial units such as inches, pounds and pints	convert between miles and kilometres		







