

Goose Green Statistics and Measure Progression

Interpreting, constructing, and representing data	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		Use of tallies to count and assign values in group work up to 5	Use of tallies to count and assign values in group work up to 10	Interpret and construct simple pictograms, tally charts, block diagrams and simple tables	Interpret and present data using bar charts, pictograms and tables.	Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs	Complete, read and interpret information in tables, including timetables	Interpret and construct pie charts and line graphs and use these to solve problems.
		Compare a range of objects by size: this one is bigger/smaller	Record real world data	Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity	Solve simple problems and decide how to present data in different ways to show the information as simply as possible	Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs	Solve comparison, sum and difference problems using information presented in a line graph	Calculate and interpret the mean as an average
				Ask and answer questions about totalling and comparing categorical data	Solve one-step and two-step questions [e.g. 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.			

Comparing and estimating	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		<p>Compare lengths of found objects</p> <p>Compare shapes, weight and capacity</p>	<p>Compare, describe and solve practical problems for:</p> <p>Lengths and heights [e.g. Long/short, longer/shorter, tall/short, double/half]</p> <p>Mass/weight [e.g. Heavy/light, heavier than, lighter than]</p> <p>Capacity and volume [e.g. Full/empty, more than, less than, half, half full, quarter]</p> <p>Time [e.g. Quicker, slower, earlier, later]</p>	<p>Compare and order lengths, mass, volume/capacity and record the results using >, < and =</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</p>	<p>Estimate, compare and calculate different measures, including money in pounds and pence</p>	<p>Calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes</p>	<p>Calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm³) and cubic metres (m³), and extending to other units such as mm³ and km³.</p>
							<p>Estimate volume (e.g. Using 1 cm³ blocks to build cubes and cuboids) and capacity (e.g. Using water)</p>	
			<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>			

Measuring and calculating	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			Measure and begin to record the following: <ul style="list-style-type: none"> ▪ 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	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
					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	Nursery	Reception	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	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	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	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].
				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				
								Recognize when it is possible to use formulae for area and volume of shapes

Telling the time	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			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	Read, write and convert time between analogue and digital 12 and 24-hour clocks		

			Recognise and use language relating to dates, including days of the week, weeks, months and years	Know the number of minutes in an hour and the number of hours in a day.	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	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	
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Measure Converting	Nursery	Reception	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

							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
						Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days	Understand and use equivalences between metric units and common imperial units such as inches, pounds and pints	Convert between miles and kilometres