



ALDINGBOURNE PRIMARY SCHOOL PROGRESSION MAP



SUBJECT: MATHS - MEASUREMENT

INTENT

Our maths curriculum endeavours to ensure that children are equipped with a powerful set of tools this subject provides whilst immersing the children in creative, ALPS style learning. Through our innovative approach to maths, we provide the skills for the children to become fluent in the fundamentals of maths by developing a conceptual understanding and ability to recall and apply knowledge rapidly and accurately. The children will have the tools to make rich connections across mathematical ideas to develop fluency, reasoning and competence in solving increasingly sophisticated problems. Maths at Aldingbourne is designed to be fun and exciting as well as accessible to all learners so they can access this highly inter-connected discipline that has been developed over centuries.

AUTUMN	EYFS	KEY STAGE ONE		KEY STAGE TWO			
	YEAR R	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
KNOWLEDGE & SKILLS		Compare, describe and solve practical problems for: mass/weight [for example, heavy/light, heavier than, lighter than]. Measure and begin to record the following: mass/weight. Compare, describe and solve practical problems for:	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	Add and subtract amounts of money to give change, using both £ and p in practical contexts.		Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre). Measure and calculate the perimeter of composite rectilinear shapes	Recognise that shapes with the same areas can have different perimeters and vice versa. Recognise when it is possible to use formulae for area and volume of shapes. Calculate the area of parallelograms and triangles.

		<p>time [for example, quicker, slower, earlier, later].</p> <p>Measure and begin to record the following: time (hours, minutes, seconds). Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening].</p> <p>Recognise and use language relating to dates, including days of the week, weeks, months and years.</p> <p>Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.</p>	<p>of money of the same unit, including giving change.</p>			<p>in centimetres and metres. Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes.</p> <p>Solve problems involving converting between units of time.</p> <p>Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.</p>	
SPRING	EYFS	KEY STAGE ONE		KEY STAGE TWO			
	YEAR R	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6

<p>KNOWLEDGE & SKILLS</p>		<p>Compare, describe and solve practical problems for: lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]. Measure and begin to record the following: lengths and heights.</p> <p>Compare, describe and solve practical problems for: time [for example, quicker, slower, earlier, later].</p> <p>Measure and begin to record the following: time (hours, minutes, seconds). Sequence events in chronological order using language [for example, before and after, next,</p>	<p>Compare and sequence intervals of time. 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. Know the number of minutes in an hour and the number of hours in a day.</p>	<p>Measure the perimeter of simple 2-D shapes.</p>	<p>Convert between different units of measure [hour to minute]. Read, write and convert time between analogue 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>Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. Estimate volume [for example, using 1 cm³ blocks to build cuboids (including cubes) and capacity [for example, using water].</p>	<p>Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate. 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. Convert between miles and kilometres. Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic</p>
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SUMMER	EYFS	KEY STAGE ONE		KEY STAGE TWO			
	YEAR R	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
KNOWLEDGE & SKILLS		<p>Compare, describe and solve practical problems for:</p> <ul style="list-style-type: none"> * lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] * mass/weight [for example, heavy/light, heavier than, lighter than] * capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]. <p>Measure and begin to record the following:</p> <ul style="list-style-type: none"> * lengths and heights * mass/weight 	<p>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.</p> <p>Compare and order lengths, mass, volume/capacity and record the results using >, < and =.</p>	<p>Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).</p> <p>Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks.</p> <p>Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning,</p>	<p>Convert between different units of measure [for example, kilometre to metre; hour to minute].</p> <p>Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.</p> <p>Find the area of rectilinear shapes by counting squares.</p> <p>Estimate, compare and calculate different measures, including money in pounds and pence.</p>	<p>Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre).</p> <p>Solve problems involving converting between units of time.</p> <p>Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.</p>	

		* capacity and volume.		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 [for example to calculate the time taken by particular events or tasks].			
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IMPACT (END POINTS)

EYFS	KEY STAGE ONE		KEY STAGE TWO			
YEAR R	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
	<p>A Year 1 mathematician is becoming familiar with measure by moving from non-standard units of measure to manageable common standards of measure when measuring, recording, comparing and solving measure problems. They have become familiar with a variety of measuring tools. Children can tell the time to o'clock and half past as well as sequence events and use time language. They can recognise coins and notes.</p>	<p>A Year 2 mathematician can use standard units of measure to estimate and measure objects. They can compare and order measurements. Children can make particular values of money and can add and subtract money. They are fluent at telling the time on an analogue clock in 5 minute intervals and recording it.</p>	<p>A Year 3 mathematician can measure, compare, add and subtraction measurements using mixed units. They can measure the perimeter of a simple 2D shape. Children are fluent in recognising the value of coins and can confidently give change. They know and compare duration of time as well as tell and record the time to the nearest minute using both an analogue and digital clock (in 12 hour).</p>	<p>A Year 4 mathematician has an understanding of place value and decimal notation to record metric measure. They can convert between different units of measure as well as estimate, compare and calculate different measurements. Children can measure and calculate the perimeter of rectilinear shapes and find the area of rectilinear shapes. They can read, write and convert time between analogue and digital time in both 12 and 24 hour.</p>	<p>A Year 5 mathematician can confidently convert between different units of metric measure. They are aware of metric and imperial units and know approximate equivalents. They can find the perimeter of composite rectilinear shapes as well as calculate the area of shapes. They are confident at solving problems involving converting units of time and can use all four operations to solve problems, including those with decimal notations.</p>	<p>A Year 6 mathematician has a broad understanding of measure and is able to use their knowledge to problem solve, choosing the appropriate units to express their answers. They can confidently calculate the area, perimeter and volume of shapes and can convert units accordingly. They are confident to apply their knowledge of measure to other areas of the curriculum.</p>

All knowledge and skills are recapped and applied to ensure embedding through morning maths jobs. This happens every Tuesday - Friday for 30 minutes in the junior classes. This happens on Tuesday - Thursday on alternate weeks for the infant classes.