

Maths Year One	
Topic/Step	Curriculum Link and Ideas
Action Plan	<u>Measurement – Children could think about their actions and the length of time they will take using the language below.</u> - Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]. - Recognise and use language relating to dates, including days of the week, weeks, months and years.
Biodiversity	<u>Number – Children could count the number of Insects, animals or plants they can find in your school grounds.</u> Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.
Litter	<u>Number and Place Value – Children could count the amount of litter found within their school grounds.</u> - Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. <u>Measurement – Children could weigh the amount of litter they collect during a litter-pick.</u> - 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.
Transport	<u>Measurement – Children could think about how long it takes to commute to school using the language below.</u> - Compare, describe and solve practical problems for: time (for example, quicker, slower, earlier, later). - Measure and begin to record the following: time (hours, minutes, seconds).
Waste	<u>Measurement – Children could weigh how much recycling, compost etc. the school produces and record on Eco-Board.</u> - 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.
Water	<u>Measurement – Children could estimate how much they need to fill their reusable water bottles.</u> - Compare, describe and solve practical problems for: capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]. - Measure and begin to record the following: capacity and volume.
Maths Year Two	
Action Plan	<u>Measurement – Children could think about how long each action will take?</u> Compare and sequence intervals of time.
Monitoring and Evaluation	<u>Statistics – children could monitor their actions and interpret the data using pictograms, tally charts etc.</u> - Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. - Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. - Ask and answer questions about totalling and comparing categorical data.

Biodiversity	<u>Number and Place Value- Children could count the number of Insects, animals or plants they can find in your school grounds.</u> • Read and write numbers to at least 100 in numerals and in words. <u>Statistics – Children could create tally charts, pictograms etc. for amount of plants, animals or insects in the school grounds or local area.</u> • Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. • Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. • Ask and answer questions about totalling and comparing categorical data.
Energy	<u>Measurement – Children could monitor the temperature in classrooms in order to save energy.</u> • 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.
Litter	<u>Number and Place Value - Children could count the amount of litter found within their school grounds.</u> • Read and write numbers to at least 100 in numerals and in words. <u>Measurement - Children could weigh the amount of litter they collect during a litter-pick.</u> • 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. • Compare and order lengths, mass, volume/capacity and record the results using >, < and =.
Transport	<u>Measurement – children could think about the amount of time it takes to commute to school using various forms of transport.</u> • Compare and sequence intervals of time. <u>Statistics – Children could create pictograms, tally charts etc. recording the different ways pupils commute to school.</u> • Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. • Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. • Ask and answer questions about totalling and comparing categorical data.
Waste	<u>Measurement - Children could weigh how much recycling, compost etc. they produce and record on Eco-Board.</u> • 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. • Compare and order lengths, mass, volume/capacity and record the results using >, < and =. <u>Statistics – Children could record how much recycling, compost etc. they produce using pictograms, tally charts etc.</u> • Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. • Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. • Ask and answer questions about totalling and comparing categorical data.

Water	<u>Measurement – Children could measure how much water is used per flush of a toilet or through leaving the tap on too long and think about how they could reduce water usage.</u> - 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. - Compare and order lengths, mass, volume/capacity and record the results using $>$, $<$ and $=$.
Maths Year Three	
Action Plan	<u>Measurement – Children could think about how long each of their actions will take.</u> Compare durations of events [for example to calculate the time taken by particular events or tasks].
Monitoring and Evaluation	<u>Measurement – Children could work out statistics for the amount of money saved through participation in Eco-Schools.</u> - Add and subtract amounts of money to give change, using both £ and p in practical contexts. <u>Statistics – Children could use bar charts, pictograms and tables to show the impact of their actions.</u> - Interpret and present data using bar charts, pictograms and tables. - Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.
Biodiversity	<u>Statistics – Children could count animals, plants or insects in the school grounds and represent the data using bar charts, pictograms or tables.</u> - Interpret and present data using bar charts, pictograms and tables. - Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.
Litter	<u>Measurement – Children could measure the amount of litter collected during a litter-pick.</u> - Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). <u>Statistics – Children could record the different types of litter found during a litter-pick using bar charts, pictograms and tables.</u> - Interpret and present data using bar charts, pictograms and tables. - Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.
School Grounds	<u>Measurement – Children could create rectangular planters in the school grounds focusing on their perimeter.</u> Measure the perimeter of simple 2-D shapes.
Transport	<u>Measurement – Children could compare how long it takes to commute to school using different modes of transport.</u> - Compare durations of events [for example to calculate the time taken by particular events or tasks]. <u>Statistics – Children could present data of the different ways children commute to school.</u> - Interpret and present data using bar charts, pictograms and tables. - Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.



Waste	<u>Measurement – Children could measure the weight of recycling, compost etc.</u> • Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). <u>Statistics – Children could present data about the amount of school waste that goes to landfill before and after an action.</u> • Interpret and present data using bar charts, pictograms and tables. • Solve one-step and two-step questions [for example, ‘How many more?’ and ‘How many fewer?’] using information presented in scaled bar charts and pictograms and tables.
Water	<u>Measurement – children could work out the amount of water wasted in school e.g. excessive toilet flushes, leaving the tap on too long before and after an action.</u> • Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
Maths Year Four	
Action Plan	<u>Measurement – Children could decide on the duration of actions in their Action Plan.</u> • Convert between different units of measure [for example, kilometre to metre; hour to minute]. • Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
Monitoring and Evaluation	<u>Statistics – Children could present before and after data using bar charts and graphs.</u> • Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. • Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
Biodiversity	<u>Statistics – children could record biodiversity in school grounds before and after an action using appropriate graphical methods.</u> • Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. • Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
Litter	<u>Geometry – children could plot the location of bins in the school grounds.</u> • Describe positions on a 2-D grid as coordinates in the first quadrant. <u>Statistics – Children could compare the amount of litter in the school grounds before and after an action using appropriate graphical methods.</u> • Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. • Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
School Grounds	<u>Measurement – children could create planters for the school focusing on their shape and perimeter.</u> • Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.





Transport	<u>Measurement – Children could measure their journeys to school in kilometres, metres, hours and minutes comparing how long the commute is using different methods of transport.</u> • Convert between different units of measure [for example, kilometre to metre; hour to minute]. <u>Statistics – Children could collect data on how pupils commute to school and present it using appropriate graphical methods.</u> • Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. • Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
Waste	<u>Statistics – Children could measure how much waste goes to landfill before and after an action and represent the data using appropriate graphical methods.</u> • Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. • Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
Maths Year Five	
Monitoring and Evaluation	<u>Statistics – Children could present data from before and after an action and consider the impact of their actions.</u> • Solve comparison, sum and difference problems using information presented in a line graph. • Complete, read and interpret information in tables, including timetables.
Biodiversity	<u>Statistics – Children could record the amount of plants, animals and insects in the school grounds before and after an action and consider the impact of their actions.</u> • Solve comparison, sum and difference problems using information presented in a line graph. • Complete, read and interpret information in tables, including timetables.
Litter	<u>Measurement – Children could measure the amount of litter collected during a litter-pick in different units.</u> • Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre). • Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling. <u>Statistics – Children could present the data collected on a litter-pick and consider the impact of their actions.</u> • Solve comparison, sum and difference problems using information presented in a line graph. • Complete, read and interpret information in tables, including timetables.
School Grounds	<u>Measurement – Children could create planters in the school grounds with a focus on perimeter and area.</u> • Measure and calculate the perimeter of composite rectilinear shapes 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.
Transport	<u>Measurement – Children could use different units to measure their commutes to school and compare their length of commute using different modes of transport.</u>





	- Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre). - Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling. <u>Statistics – Children could present data on the way children commute to school.</u> - Solve comparison, sum and difference problems using information presented in a line graph. - Complete, read and interpret information in tables, including timetables.
Waste	<u>Measurement – Children could measure and compare how much waste gets composted, recycled or goes to landfill using different units of measurement.</u> - Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre). - Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling. <u>Statistics – Children could present data about the amount of school waste that goes to landfill.</u> - Solve comparison, sum and difference problems using information presented in a line graph. - Complete, read and interpret information in tables, including timetables.
Water	<u>Measurement – Children could estimate and measure how much water is wasted in school.</u> - Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre). - Estimate volume [for example, using 1 cm³ blocks to build cuboids (including cubes)] and capacity [for example, using water].
Maths Year Six	
Monitoring and Evaluation	<u>Ratio and Proportion – children could convert monitoring and evaluation information into percentages.</u> - Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison. <u>Statistics – Children could present monitoring information as pie charts and line graphs and work out the impact of their actions using the mean as an average.</u> - Interpret and construct pie charts and line graphs and use these to solve problems. - Calculate and interpret the mean as an average.
Biodiversity	<u>Statistics – Children could collect data on plants, animals and insects in the school grounds and present the data as a pie chart or line graph.</u> Interpret and construct pie charts and line graphs and use these to solve problems.
Litter	<u>Measurement – Children could measure the amount of litter collected on a litter-pick using different units of measurement.</u> 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.





	<u>Statistics – Children could present information on litter collected on a litter-pick using a pie chart.</u> Interpret and construct pie charts and line graphs and use these to solve problems.
School Grounds	<u>Measurement – Children could create planters for school grounds considering the area and volume of soil required.</u> - 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. <u>Geometry: Position and Direction – Children could plan actions in school grounds using a grid.</u> - Describe positions on the full coordinate grid (all four quadrants).
Transport	<u>Measurement – Children could measure distance to school converting between miles and kilometres.</u> - 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. <u>Statistics – Children could present data on how pupils commute to school using pie charts and line graphs.</u> - Interpret and construct pie charts and line graphs and use these to solve problems.
Waste	<u>Ratio and Proportion – Children could calculate the amount of waste being recycled, composted or ending in landfills using percentages.</u> - Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison. <u>Measurement – Children could calculate the amount of waste being recycled, composted or ending in landfills using different units of measurement.</u> - 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. <u>Statistics – Children could present data on waste their school produces using pie charts and line graphs.</u> - Interpret and construct pie charts and line graphs and use these to solve problems.
Water	<u>Measurement – Children could estimate and measure the volume of water wasted in school.</u> 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.

