

Year 4 2023/4	Autumn Term 1	Autumn Term 2	Spring Terms 1 and 2	Summer Term 1	Summer Term 2
	Sustainability Year group focus for science week: school waste (food waste)				
	Caring for our planet → Should vehicles be powered by fossil fuels? Royal Society of Chemistry – Electricity & batteries Page 2		Caring for our planet → How much waste does our school produce?	Caring for our planet → How environmentally friendly is a plant-based diet?	
Science Knowledge	Light <ul style="list-style-type: none"> recognise that they need light in order to see things and that dark is the absence of light notice that light is reflected from surfaces recognise that light from the sun can be dangerous and that there are ways to protect their eyes recognise that shadows are formed when the light from a light source is blocked by a solid object find patterns in the way that the size of shadows change. 	Electricity <ul style="list-style-type: none"> identify common appliances that run on electricity. construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. recognise some common conductors and insulators, and associate metals with being good conductors. 	States of matter <ul style="list-style-type: none"> compare and group materials together, according to whether they are solids, liquids or gases observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature . 	Plants <ul style="list-style-type: none"> identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant investigate the way in which water is transported within plants explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. 	Living things and their habitats <ul style="list-style-type: none"> recognise that living things can be grouped in a variety of ways. explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. recognise that environments can change and that this can sometimes pose dangers to living things. construct and interpret a variety of food chains, identifying producers, predators and prey.

<p>Working Scientifically Red= must be done Amber = this will be an easy link</p>	<ul style="list-style-type: none"> • setting up simple practical enquiries, comparative and fair tests • making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and dataloggers. • Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. • recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables • reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions • using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions • identifying differences, similarities or changes related to simple scientific ideas and processes <p>using straightforward scientific evidence to answer questions or to support their findings</p>	<ul style="list-style-type: none"> • setting up simple practical enquiries, comparative and fair tests • making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and dataloggers. • Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. • recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables • reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions • using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions • identifying differences, similarities or changes related to simple scientific ideas and processes • using straightforward scientific evidence to answer questions or to support their findings. 	<ul style="list-style-type: none"> • setting up simple practical enquiries, comparative and fair tests • making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and dataloggers. • Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. • recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables • reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions • using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions • identifying differences, similarities or changes related to simple scientific ideas and processes • using straightforward scientific evidence to answer questions or to support their findings. 	<ul style="list-style-type: none"> • . setting up simple practical enquiries, comparative and fair tests • making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and dataloggers. • Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. • recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables • reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions • using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions • identifying differences, similarities or changes related to simple scientific ideas and processes • using straightforward scientific evidence to answer questions or to support their findings 	<ul style="list-style-type: none"> • setting up simple practical enquiries, comparative and fair tests • making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and dataloggers. • Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. • recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables • reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions • using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions • identifying differences, similarities or changes related to simple scientific ideas and processes • using straightforward scientific evidence to answer questions or to support their findings.
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<p>WS Enquiry type Red= that enquiry type MUST be done linked to the subject knowledge aspect but the other methods can be chosen to suit investigations</p>	<ul style="list-style-type: none"> • observing changes over time, • noticing patterns, • grouping and classifying things, • carrying out simple comparative and fair tests • and finding things out using secondary sources 	<ul style="list-style-type: none"> • observing changes over periods of time, • noticing patterns, • grouping and classifying things, • carrying out simple comparative and fair tests • and finding things out using secondary sources 	<ul style="list-style-type: none"> • observing changes over periods of time, • noticing patterns, • grouping and classifying things, • carrying out simple comparative and fair tests • and finding things out using secondary sources 	<ul style="list-style-type: none"> • observing changes over time, • noticing patterns, • grouping and classifying things, • carrying out simple comparative and fair tests • and finding things out using secondary sources 	<ul style="list-style-type: none"> • observing changes over periods of time, • noticing patterns, • grouping and classifying things, • carrying out simple comparative and fair tests • and finding things out using secondary sources
<p>WS ongoing</p>	<ul style="list-style-type: none"> • Ask their own relevant questions about what they observe and using different types of scientific enquiries to answer them. • Draw simple conclusions and use some scientific language, first, to talk about and, later, to write about what they have found out. 				