

Year 6 2023/4	Autumn Term 1	Autumn Term 2	Spring Term 1 and 2	Summer Term 1 and 2
	<b>Sustainability</b> <b>Year group focus for science week: energy consumption (our school)</b>			
	Caring for our planet → How can we make the use of wind turbines more sustainable? Royal Society of Chemistry – Electricity production & use Page 1			Caring for our planet → How can we delay melting ice? Royal Society of Chemistry – Animals and their habitats Page 2
<b>Science</b>	<p style="text-align: center;"><b>Electricity</b></p> <ul style="list-style-type: none"> <li>• associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit</li> <li>• compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches</li> <li>• use recognised symbols when representing a simple circuit in a diagram.</li> <li>•</li> </ul>	<p style="text-align: center;"><b>Light</b></p> <ul style="list-style-type: none"> <li>• recognise that light appears to travel in straight lines</li> <li>• use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye</li> <li>• explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes</li> <li>• use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them</li> </ul>	<p style="text-align: center;"><b>Materials</b></p> <ul style="list-style-type: none"> <li>• compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets</li> <li>• know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution</li> <li>• use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating</li> <li>• give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic</li> <li>• demonstrate that dissolving, mixing and changes of state are reversible changes</li> </ul> <p>explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.</p>	<p style="text-align: center;"><b>Living things and their habitats/ Classification</b></p> <ul style="list-style-type: none"> <li>• describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals</li> <li>• give reasons for classifying plants and animals based on specific characteristics.</li> </ul>
<b>Working Scientifically</b> <b>Red= must be done</b>	<ul style="list-style-type: none"> <li>• <b>Select the most appropriate ways to answer science questions using different types</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Select the most appropriate ways to answer science questions using different types</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Select the most appropriate ways to answer science questions using different types of scientific enquiry, including</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Select the most appropriate ways to answer science questions using different</b></li> </ul>

<p>Amber = this will be an easy link</p>	<p>of scientific enquiry, including observing changes over different periods of time, noticing patterns, grouping and classifying things, carrying out comparative and fair tests and finding things out using a wide range of secondary sources</p> <ul style="list-style-type: none"> <li>planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</li> <li>taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</li> <li>recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</li> <li>using test results to make predictions to set up further comparative and fair tests</li> <li>reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations</li> <li>identifying scientific evidence that has been used to support or refute ideas or arguments.</li> </ul>	<p>of scientific enquiry, including observing changes over different periods of time, noticing patterns, grouping and classifying things, carrying out comparative and fair tests and finding things out using a wide range of secondary sources.</p> <ul style="list-style-type: none"> <li>planning different types of scientific enquiries to answer questions, including <ul style="list-style-type: none"> <li>recognising and controlling variables where necessary</li> </ul> </li> <li>taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</li> <li>recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</li> <li>using test results to make predictions to set up further comparative and fair tests</li> <li>reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations</li> <li>identifying scientific evidence that has been used to support or refute ideas or arguments</li> </ul>	<p>observing changes over different periods of time, noticing patterns, grouping and classifying things, carrying out comparative and fair tests and finding things out using a wide range of secondary sources.</p> <ul style="list-style-type: none"> <li>planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</li> <li>taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</li> <li>recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</li> <li>using test results to make predictions to set up further comparative and fair tests</li> <li>reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations</li> <li>identifying scientific evidence that has been used to support or refute ideas or arguments</li> </ul>	<p>types of scientific enquiry, including observing changes over different periods of time, noticing patterns, grouping and classifying things, carrying out comparative and fair tests and finding things out using a wide range of secondary sources.</p> <ul style="list-style-type: none"> <li>planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</li> <li>taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</li> <li>recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</li> <li>using test results to make predictions to set up further comparative and fair tests</li> <li>reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations</li> <li>identifying scientific evidence that has been used to support or refute ideas or arguments.</li> </ul>
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<p><b>Enquiry types</b>  <b>Red= that enquiry type MUST be done linked to the subject knowledge aspect but the other enquiry types can be chosen to suit investigations</b></p>	<ul style="list-style-type: none"> <li>• observing changes over different periods of time,</li> <li>• noticing patterns,</li> <li>• grouping and classifying things,</li> <li>• carrying out comparative and fair tests</li> <li>• and finding things out using a wide range of secondary sources.</li> </ul>	<ul style="list-style-type: none"> <li>• observing changes over different periods of time,</li> <li>• noticing patterns,</li> <li>• grouping and classifying things,</li> <li>• carrying out comparative and fair tests</li> <li>• and finding things out using a wide range of secondary sources</li> </ul>	<ul style="list-style-type: none"> <li>• observing changes over different periods of time,</li> <li>• noticing patterns,</li> <li>• grouping and classifying things,</li> <li>• carrying out comparative and fair tests</li> <li>• and finding things out using a wide range of secondary sources</li> </ul>	<ul style="list-style-type: none"> <li>• observing changes over different periods of time,</li> <li>• noticing patterns,</li> <li>• grouping and classifying things,</li> <li>• carrying out comparative and fair tests</li> <li>• and finding things out using a wide range of secondary sources</li> <li>•</li> </ul>
<p><b>WS ongoing</b></p>	<ul style="list-style-type: none"> <li>• Ask their own questions about scientific phenomena</li> <li>• Draw conclusions based on their data and observations, use evidence to justify their ideas, and use their scientific knowledge and understanding to explain their findings.</li> </ul>			

- Select the most appropriate ways to answer science questions using different types of scientific enquiry, including observing changes over different periods of time, noticing patterns, grouping and classifying things, carrying out comparative and fair tests and finding things out using a wide range of secondary sources.
- planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- using test results to make predictions to set up further comparative and fair tests
- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
- identifying scientific evidence that has been used to support or refute ideas or arguments.