

## Science – Cycle A

Subject	Key vocab.	Declarative knowledge	Procedural knowledge
Autumn 1 (A) Phase: EYFS	<ul style="list-style-type: none"> <li>dinosaur</li> <li>spikes</li> <li>horns</li> <li>crest</li> <li>club</li> <li>scales</li> <li>plates</li> <li>feathers</li> <li>tropical</li> <li>volcanic</li> </ul>	<u>Dinosaurs</u> <ul style="list-style-type: none"> <li>I know some different dinosaurs. <i>[The World: ELG]</i></li> <li>I know that the Earth was different during the time of the dinosaurs. <i>[The World: ELG]</i></li> </ul>	<u>Dinosaurs</u> <ul style="list-style-type: none"> <li>I can name and describe some dinosaur features <i>[The World: ELG]</i></li> <li>I can explain that dinosaurs were alive but are not any more <i>[The World: ELG]</i></li> <li>I can talk about volcanoes and earthquakes <i>[The World: ELG]</i></li> </ul>
Autumn 2 (A) Phase: EYFS	<ul style="list-style-type: none"> <li>season</li> <li>spring</li> <li>summer</li> <li>autumn</li> <li>winter</li> <li>weather</li> <li>stormy</li> <li>freezing</li> <li>boiling</li> </ul>	<u>The Solar System</u> <ul style="list-style-type: none"> <li>I know the four seasons. <i>[The World: ELG]</i></li> <li>I know what the weather would be like on some other planets. <i>[The World: ELG]</i></li> </ul>	<u>The Solar System</u> <ul style="list-style-type: none"> <li>I can talk about the changes in weather for the four seasons and the changes they bring. <i>[The World: ELG]</i></li> <li>I can talk about the heat and storms of Venus. <i>[The World: ELG]</i></li> <li>I can talk about the cold icy storms of Neptune. <i>[The World: ELG]</i></li> </ul>
Spring 1 (A) Phase: EYFS	<ul style="list-style-type: none"> <li>wood</li> <li>town</li> <li>countryside</li> <li>trees</li> <li>seed</li> <li>grow</li> <li>strong</li> <li>weak</li> </ul>	<u>Traditional Tales</u> <ul style="list-style-type: none"> <li>I know what is similar and different between story settings and my surroundings. <i>[The World: ELG]</i></li> <li>I know how beans grow. <i>[The World: ELG]</i></li> <li>I know about the different materials used to build the houses of the Three Little Pigs. <i>[The World: ELG]</i></li> </ul>	<u>Traditional Tales</u> <ul style="list-style-type: none"> <li>I can talk about the differences of woods, forests, towns and magical places. <i>[The World: ELG]</i></li> <li>I can use water, soil and sunshine to grow plants. <i>[The World: ELG]</i></li> <li>I can talk about how a plant changes as it grows. <i>[The World: ELG]</i></li> <li>I can talk about why some materials are good/bad at keeping out the wolf. <i>[The World: ELG]</i></li> </ul>
Spring 2 (A) Phase: EYFS	<ul style="list-style-type: none"> <li>hot</li> <li>plains</li> <li>arid</li> <li>jungle</li> <li>filter</li> </ul>	<u>Spring Into Action</u> <ul style="list-style-type: none"> <li>I know the differences and similarities between where I live and some African countries. <i>[The World: ELG]</i></li> <li>I know how to clean water. <i>[The World: ELG]</i></li> <li>I know how farmers prepare for spring. <i>[The World: ELG]</i></li> </ul>	<u>Spring Into Action</u> <ul style="list-style-type: none"> <li>I can compare climates in Africa and where I live. <i>[The World: ELG]</i></li> <li>I can use a filter to clean water of mud. <i>[The World: ELG]</i></li> <li>I can talk about changes in weather, trees, plants and animals. <i>[The World: ELG]</i></li> </ul>
Summer 1 (A) Phase: EYFS	<ul style="list-style-type: none"> <li>fruit</li> <li>vegetable</li> <li>dairy</li> <li>meat</li> <li>confectionary</li> <li>vitamin</li> <li>healthy</li> <li>unhealthy</li> </ul>	<u>Healthy Living</u> <ul style="list-style-type: none"> <li>I know about different food groups. <i>[The World: ELG]</i></li> <li>I know where food comes from. <i>[The World: ELG]</i></li> <li>I know that food affects my body. <i>[The World: ELG]</i></li> </ul>	<u>Healthy Living</u> <ul style="list-style-type: none"> <li>I can sort foods into groups such as: fruit/vegetable, healthy/unhealthy. <i>[The World: ELG]</i></li> <li>I can talk about where food is grown and where it comes from. <i>[The World: ELG]</i></li> <li>I can talk about vitamins and how they help my body. <i>[The World: ELG]</i></li> </ul>
Summer 2 (A) Phase: EYFS	<ul style="list-style-type: none"> <li>firefighter</li> <li>police</li> <li>paramedic</li> <li>lifeguard</li> <li>float</li> <li>sink</li> <li>rescue</li> </ul>	<u>People Who Help Us</u> <ul style="list-style-type: none"> <li>I know how different people help us. <i>[People &amp; Communities: ELG]</i></li> <li>I know about sinking and floating. <i>[The World: ELG]</i></li> </ul>	<u>People Who Help Us</u> <ul style="list-style-type: none"> <li>I can talk about how firefighters, paramedics, nurses, police and teachers help us and keep us safe. <i>[People &amp; Communities: ELG]</i></li> <li>I can find out which materials will help people who cannot swim. <i>[The World: ELG]</i></li> </ul>
Autumn 1 (A) Phase: Y1/2	<ul style="list-style-type: none"> <li>seasons</li> <li>spring</li> <li>summer</li> <li>autumn</li> <li>winter</li> <li>temperature</li> <li>degrees Celsius</li> <li>thermometer</li> <li>weather vane</li> <li>hot</li> <li>warm</li> <li>mild</li> <li>cold</li> </ul>	<u>Seasons – Autumn and Winter</u> <ul style="list-style-type: none"> <li>I know that the length of the day varies throughout the year.</li> <li>I know the months of the year.</li> <li>I know the names of the four seasons.</li> <li>I know which months are in autumn and winter.</li> <li>I know that the weather affects what I wear.</li> </ul>	<u>Seasons – Autumn and Winter</u> <ul style="list-style-type: none"> <li>I can observe changes in autumn and winter.</li> <li>I can observe changes in the weather in autumn and winter.</li> <li>I can describe changes in the weather in autumn and winter.</li> </ul>
Autumn 2 (A) Phase: Y1/2	<ul style="list-style-type: none"> <li>habitat</li> <li>micro-habitat</li> <li>organism</li> </ul>	<u>Animals including Humans</u> <ul style="list-style-type: none"> <li>I know what a habitat and microhabitat is.</li> <li>I know that most living things need shelter and food to survive.</li> <li>I know that different living things are suited to different habitats.</li> </ul>	<u>Animals including Humans</u> <ul style="list-style-type: none"> <li>I can identify that most living things live in habitats to which they are suited.</li> <li>I can describe how different habitats provide for the basic needs of different animals and plants.</li> <li>I can identify and name a variety of plants and animals in their habitats.</li> <li>I can identify and name some microhabitats.</li> </ul>

<p>Spring 1 (A) Phase: Y1/2</p>	<ul style="list-style-type: none"> <li>• seasons</li> <li>• spring</li> <li>• summer</li> <li>• autumn</li> <li>• winter</li> <li>• temperature</li> <li>• degrees Celsius</li> <li>• thermometer</li> <li>• weather vane</li> <li>• hot</li> <li>• warm</li> <li>• mild</li> <li>• cold</li> </ul>	<p><u>Seasons: Winter and Spring</u></p> <ul style="list-style-type: none"> <li>• I know that the length of the day varies throughout the year.</li> <li>• I know which months are in winter and spring.</li> <li>• I know how the weather affects what I wear.</li> <li>• I know how the weather affects the environment.</li> </ul>	<p><u>Seasons: Winter and Spring</u></p> <ul style="list-style-type: none"> <li>• I can observe changes in winter and spring.</li> <li>• I can name the months of the year.</li> <li>• I can name the four seasons.</li> </ul>
<p>Spring 2 (A) Phase: Y1/2</p>	<ul style="list-style-type: none"> <li>• seasons</li> <li>• spring</li> <li>• summer</li> <li>• autumn</li> <li>• winter</li> <li>• temperature</li> <li>• degrees Celsius</li> <li>• thermometer</li> <li>• weather vane</li> <li>• hot</li> <li>• warm</li> <li>• mild</li> <li>• cold</li> </ul>	<p><u>Seasons: Spring and Summer</u></p> <ul style="list-style-type: none"> <li>• I know that the length of the day varies throughout the year.</li> <li>• I know which months are in summer and spring.</li> <li>• I know that the weather affects what I wear.</li> <li>• I know how the weather affects the environment.</li> </ul>	<p><u>Seasons: Spring and Summer</u></p> <ul style="list-style-type: none"> <li>• I can observe changes in winter and spring.</li> <li>• I can name the months of the year.</li> <li>• I can name the four seasons.</li> </ul>
<p>Summer 1 (A) Phase: Y1/2</p>	<ul style="list-style-type: none"> <li>• baby</li> <li>• toddler</li> <li>• child</li> <li>• teenager</li> <li>• adult</li> <li>• growth</li> <li>• nutrition</li> <li>• respiration</li> <li>• healthy</li> <li>• grow</li> <li>• strong</li> <li>• energy</li> </ul>	<p><u>Animals Including Humans (Healthy Lifestyles)</u></p> <ul style="list-style-type: none"> <li>• I know that animals, including humans, have offspring that grow into adults.</li> <li>• I know that animals, including humans, need water, food and shelter to survive.</li> <li>• I know that humans need to exercise to stay healthy.</li> <li>• I know that humans should eat the correct balance of each food group.</li> <li>• I know the names of the basic parts of the body: head, eyes, ears, mouth, teeth, tongue, nose, arms, shoulders, hands, fingers, legs, knees, feet and toes.</li> </ul>	<p><u>Animals Including Human (Healthy Lifestyles)</u></p> <ul style="list-style-type: none"> <li>• I can describe the importance for humans of exercise.</li> <li>• I can explain the importance of eating the right amounts of different types of foods.</li> <li>• I can explain the importance of hygiene (including washing hands and brushing teeth).</li> <li>• I can name the basic parts of the human body.</li> <li>• I can say which body part is associated with each sense.</li> </ul>
<p>Summer 2 (A) Phase: Y1/2</p>	<ul style="list-style-type: none"> <li>• roots</li> <li>• branch</li> <li>• trunk</li> <li>• stalk</li> <li>• leaf</li> <li>• flower</li> <li>• petal</li> <li>• seeds</li> <li>• bulb</li> <li>• twigs</li> <li>• evergreen</li> <li>• deciduous</li> </ul>	<p><u>Plants</u></p> <ul style="list-style-type: none"> <li>• I know the basic structure of a flowering plant.</li> <li>• I know that a flowering plant has a stem, leaves, roots and petals.</li> <li>• I know the following plants: daffodils, daisies, buttercups, roses, poppies, tulips and dandelions.</li> <li>• I know the following evergreen trees: conifer, pine and fir trees.</li> <li>• I know the following deciduous trees: beech, oak and sycamore tree.</li> <li>• I know that plants need water, light and warmth to grow healthily.</li> <li>• I know how to conduct a fair test.</li> </ul>	<p><u>Plants</u></p> <ul style="list-style-type: none"> <li>• I can identify and describe the basic structure of a variety of flowering plants including trees.</li> <li>• I can name a variety of common wild and garden plants.</li> <li>• I can name deciduous and evergreen trees.</li> <li>• I can observe and describe how seeds and bulbs grow into mature plants.</li> <li>• I can describe how plants need water, light and suitable temperature to grow and stay healthy.</li> <li>• I can investigate the conditions needed for growth.</li> </ul>
<p>Autumn 1 (A) Phase: Y3/4</p>	<ul style="list-style-type: none"> <li>• attract</li> <li>• repel</li> <li>• north pole</li> <li>• south pole</li> <li>• magnetic field</li> <li>• push</li> <li>• pull</li> <li>• friction</li> </ul>	<p><u>Year 3 – Forces and Magnets</u></p> <ul style="list-style-type: none"> <li>• I know that magnets can attract and repel.</li> <li>• I know the difference between magnetic and non-magnetic materials.</li> <li>• I know the effect different materials have on an object.</li> </ul>	<p><u>Year 3 – Forces and Magnets</u></p> <ul style="list-style-type: none"> <li>• I can compare and group materials.</li> <li>• I can set up a simple fair test.</li> <li>• I can record my findings in different ways.</li> <li>• I can use scientific vocabulary to ask and answer questions.</li> </ul>
<p>Autumn 2 (A) Phase: Y3/4</p>	<ul style="list-style-type: none"> <li>• sedimentary</li> <li>• metamorphic</li> <li>• igneous</li> <li>• heat</li> <li>• pressure</li> <li>• erosion</li> <li>• transportation</li> <li>• deposition</li> <li>• melt</li> <li>• solidify</li> </ul>	<p><u>Year 3 Rocks</u></p> <ul style="list-style-type: none"> <li>• I know the three different types of rocks.</li> <li>• I know how fossils are formed.</li> <li>• I know how soil is formed.</li> </ul>	<p><u>Year 3 Rocks</u></p> <ul style="list-style-type: none"> <li>• I can set up simple comparative tests.</li> <li>• I can make careful observations.</li> <li>• I can use a classification key to present information.</li> </ul>

Spring 1 (A) Phase: Y3/4	<ul style="list-style-type: none"> <li>• nutrition</li> <li>• diet</li> <li>• vitamin</li> <li>• minerals</li> <li>• fats</li> <li>• proteins</li> <li>• carbohydrates</li> </ul>	<u>Year 3 – Animals including Humans</u> <ul style="list-style-type: none"> <li>• I know what animals need to survive.</li> <li>• I know that animals and humans have skeletons and muscles.</li> </ul>	<u>Year 3 – Animals including Humans</u> <ul style="list-style-type: none"> <li>• I can use scientific vocabulary to report my findings.</li> <li>• I can set up a comparative test.</li> <li>• I can record data.</li> </ul>
Spring 2 (A) Phase: Y3/4	<ul style="list-style-type: none"> <li>• opaque</li> <li>• translucent</li> <li>• transparent</li> <li>• block</li> <li>• absence of light</li> <li>• reflect</li> <li>• reflection</li> <li>• sunset</li> <li>• sunrise</li> </ul>	<u>Year 3 – Light</u> <ul style="list-style-type: none"> <li>• I know where light comes from.</li> <li>• I know how shadows are formed and how they change.</li> </ul>	<u>Year 3 – Light</u> <ul style="list-style-type: none"> <li>• I can set up a simple fair test.</li> <li>• I can make systematic and careful observations.</li> <li>• I can use bar charts to record my findings.</li> </ul>
Summer 1 (A) Phase: Y3/4	<ul style="list-style-type: none"> <li>• roots</li> <li>• branch</li> <li>• trunk</li> <li>• stalk</li> <li>• leaf</li> <li>• flower</li> <li>• petal</li> <li>• seeds</li> <li>• bulbs,</li> <li>• twigs</li> <li>• petal</li> <li>• stamen</li> <li>• carpel</li> <li>• pollination</li> <li>• fertilisation</li> <li>• germination</li> </ul>	<u>Year 3 – Plants</u> <ul style="list-style-type: none"> <li>• I know the parts of plants and their functions.</li> <li>• I know what plants need to grow.</li> <li>• I know how to recognise changes in different plants.</li> </ul>	<u>Year 3 – Plants</u> <ul style="list-style-type: none"> <li>• I can set up a simple practical enquiry.</li> <li>• I can make systematic and careful observations.</li> <li>• I can use results to draw conclusions.</li> <li>• I can use scientific evidence to answer questions.</li> </ul>
Summer 2 (A) Phase: Y3/4	<ul style="list-style-type: none"> <li>• nutrition</li> <li>• diet</li> <li>• vitamins</li> <li>• minerals</li> <li>• fats</li> <li>• proteins</li> <li>• carbohydrates</li> </ul>	<u>Year 3 – Animals including Humans</u> <ul style="list-style-type: none"> <li>• I know what animals need to survive.</li> <li>• I know that animals and humans have skeletons and muscles.</li> </ul>	<u>Year 3 – Animals including Humans</u> <ul style="list-style-type: none"> <li>• I can use scientific vocabulary to report my findings.</li> <li>• I can set up a comparative test.</li> <li>• I can record data.</li> </ul>
Autumn 1 (A) Phase: Y5/6	<ul style="list-style-type: none"> <li>• gravity</li> <li>• friction</li> <li>• air resistance</li> <li>• particles</li> <li>• upthrust</li> <li>• weight</li> <li>• Newtons (Newton meter)</li> </ul>	<u>Year 5 - Forces</u> <ul style="list-style-type: none"> <li>• I know that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.</li> <li>• I know about the effects of air resistance, water resistance and friction that act between moving surfaces.</li> <li>• I know that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</li> </ul>	<u>Year 5 - Forces</u> <ul style="list-style-type: none"> <li>• I can plan different types of enquiry to answer questions and choose the most appropriate equipment.</li> <li>• I can recognise and control variables where necessary.</li> <li>• I can take measurements to collect data, using a range of scientific equipment with increasing accuracy and precision.</li> <li>• I can record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables and bar and line graphs.</li> <li>• I can report and present findings from enquires, including conclusions, causal relationships and explanations of results (in oral and written forms).</li> <li>• I can use simple models to describe scientific ideas.</li> <li>• I can use their results to identify when further tests and observations might be needed.</li> </ul>

<p>Autumn 2 (A) Phase: Y5/6</p>	<ul style="list-style-type: none"> <li>• thermal</li> <li>• conductor</li> <li>• insulator</li> <li>• solvent</li> <li>• solid</li> <li>• liquid</li> <li>• particles</li> <li>• suspensions</li> </ul>	<p><u>Year 5 Properties of materials</u></p> <ul style="list-style-type: none"> <li>• I know that everyday materials can be grouped together on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.</li> <li>• I know the particular uses of everyday materials, including metals, wood and plastic based on evidence from investigations</li> </ul>	<p><u>Year 5 – Properties of Materials</u></p> <ul style="list-style-type: none"> <li>• I can recognise and control variables where necessary.</li> <li>• I can choose the most appropriate equipment.</li> <li>• I can take measurements, using a range of scientific equipment with increasing accuracy and precision.</li> <li>• I can record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables and bar and line graphs.</li> <li>• I can report and present findings from enquires, including conclusions, causal relationships and explanations of results (in oral and written forms).</li> <li>• I can use simple models to describe scientific ideas.</li> <li>• I can identify scientific evidence that has been used to support or refute ideas or arguments.</li> <li>• I can use their results to identify when further tests and observations might be needed</li> </ul>
<p>Spring 1 (A) Phase: Y5/6</p>	<ul style="list-style-type: none"> <li>• gestation</li> <li>• foetus</li> <li>• fertilisation</li> <li>• species</li> <li>• baby</li> <li>• toddler</li> <li>• adolescent</li> <li>• adult</li> <li>• elderly person</li> <li>• puberty</li> <li>• hormones</li> <li>• pituitary gland</li> <li>• testosterone</li> <li>• oestrogen</li> </ul>	<p><u>Year 5 Animals, including humans</u></p> <ul style="list-style-type: none"> <li>• I know the 6 stages of human development.</li> <li>• I know the differences between mammal, amphibian, insect and bird.</li> <li>• I know what a table, bar chart and line graph are.</li> </ul>	<p><u>Year 5 Animals, including humans</u></p> <ul style="list-style-type: none"> <li>• I can take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</li> <li>• I can record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</li> <li>• I can use test results to make predictions to set up further comparative and fair tests</li> <li>• I can report and present 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> </ul>
<p>Spring 2 (A) Phase: Y5/6</p>	<ul style="list-style-type: none"> <li>• pollination</li> <li>• fertilisation</li> <li>• germination</li> <li>• petal</li> <li>• stamen (anther + filament)</li> <li>• carpel (stigma + style + ovary + ovule)</li> </ul>	<p><u>Year 5 - Living Things</u></p> <ul style="list-style-type: none"> <li>• I know the life process of reproduction in some plants.</li> </ul>	<p><u>Year 5 - Living Things</u></p> <ul style="list-style-type: none"> <li>• I can understand and draw scientific diagrams with labels.</li> </ul>
<p>Summer 1 (A) Phase: Y5/6</p>	<ul style="list-style-type: none"> <li>• solvent</li> <li>• solution</li> <li>• solute</li> <li>• soluble</li> <li>• insoluble</li> <li>• solid</li> <li>• liquid</li> <li>• particles</li> <li>• suspensions</li> </ul>	<p><u>Year 5 - Properties of Materials</u></p> <ul style="list-style-type: none"> <li>• I know the properties of solids, liquids and gases</li> <li>• I know that some materials will dissolve in liquid to form a solution</li> <li>• I know how to recover a substance from a solution.</li> <li>• I know how mixtures might be separated, through filtering, sieving and evaporating.</li> <li>• I know that dissolving, mixing and changes of state are reversible changes</li> <li>• I know 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.</li> </ul>	<p><u>Year 5 - Properties of Materials</u></p> <ul style="list-style-type: none"> <li>• I can control variables when planning a fair-test.</li> <li>• I can evaluate an enquiry in terms of the amount of trust one can have in it.</li> <li>• I can report and present findings from enquiries, including conclusions, causal relationships and explanations.</li> </ul>

<p>Summer 2 (A) Phase: Y5/6</p>	<ul style="list-style-type: none"> <li>• Earth</li> <li>• axis</li> <li>• rotate</li> <li>• star</li> <li>• Sun</li> <li>• Planets</li> <li>• Mercury</li> <li>• Venus</li> <li>• Earth</li> <li>• Mars</li> <li>• Jupiter</li> <li>• Saturn</li> <li>• Uranus</li> <li>• Neptune</li> <li>• full moon</li> <li>• gibbous moon</li> <li>• half moon</li> <li>• crescent moon</li> <li>• new moon</li> <li>• waxing</li> <li>• waning</li> <li>• orbit</li> <li>• planets</li> <li>• revolve</li> <li>• sphere</li> </ul>	<p><u>Year 5 – The Earth and Space</u></p> <ul style="list-style-type: none"> <li>• I know that the movement of the Earth, and other planets, is relative to the Sun in the solar system.</li> <li>• know that the movement of the Moon relative to the Earth.</li> <li>• I know how the Earth’s rotation explains day and night and the apparent movement of the Sun across the sky.</li> </ul>	<p><u>Year 5 – The Earth and Space</u></p> <ul style="list-style-type: none"> <li>• I can plan a scientific enquiry to answer a question.</li> <li>• I can identify scientific evidence that has been used to support or refute ideas or arguments.</li> <li>• I can plan a fair-test; identifying the control variables.</li> <li>• I can take repeated accurate measurements using a stopwatch.</li> <li>• I can explain the degree of trust in results.</li> <li>• I can use test results to make predictions to set up further fair-tests.</li> </ul>
-------------------------------------	--	--	---

## Science – Cycle B

Subject	Key vocab.	Declarative knowledge	Procedural knowledge
Autumn 1 (B) Phase: EYFS	<ul style="list-style-type: none"> <li>wood</li> <li>town</li> <li>countryside</li> <li>trees</li> <li>seed</li> <li>grow</li> <li>strong</li> <li>weak</li> </ul>	<u>Fairy Tales</u> <ul style="list-style-type: none"> <li>I know what is similar and different between story settings and my surroundings. <i>[The World: ELG]</i></li> <li>I know how beans grow. <i>[The World: ELG]</i></li> <li>I know about the different materials used to build castles. <i>[The World: ELG]</i></li> </ul>	<u>Fairy Tales</u> <ul style="list-style-type: none"> <li>I can talk about the differences of woods, forests, towns and magical places. <i>[The World: ELG]</i></li> <li>I can use water, soil and sunshine to grow plants. <i>[The World: ELG]</i></li> <li>I can talk about how a plant changes as it grows. <i>[The World: ELG]</i></li> <li>I can talk about why some materials are good/bad at keeping out invaders. <i>[The World: ELG]</i></li> </ul>
Autumn 2 (B) Phase: EYFS	<ul style="list-style-type: none"> <li>sea creature</li> <li>fin</li> <li>pincer</li> <li>tentacle</li> <li>shell</li> <li>bury</li> <li>pollution</li> <li>harm</li> </ul>	<u>Under The Sea</u> <ul style="list-style-type: none"> <li>I know some different sea creatures and their features. <i>[The World: ELG]</i></li> <li>I know the life-cycle of a sea turtle. <i>[The World: ELG]</i></li> <li>I know that pollution is bad for sea creatures. <i>[The World: ELG]</i></li> </ul>	<u>Under The Sea</u> <ul style="list-style-type: none"> <li>I can describe a sea creature's shell, fins, gills, tail, pincers or tentacles. <i>[The World: ELG]</i></li> <li>I can describe how sea turtles lay their eggs. <i>[The World: ELG]</i></li> <li>I can talk the pollution in the sea, how it got there and the harm it causes. <i>[The World: ELG]</i></li> </ul>
Spring 1 (B) Phase: EYFS	<ul style="list-style-type: none"> <li>melting</li> <li>season</li> <li>cold</li> <li>warm</li> <li>cold</li> <li>rainy</li> <li>material</li> <li>keep warm</li> <li>keep cold</li> <li>arctic</li> <li>wool</li> <li>leather</li> <li>tin foil</li> </ul>	<u>Materials That We Use</u> <ul style="list-style-type: none"> <li>I know about melting. <i>[The World: ELG]</i></li> <li>I know what seasons bring. <i>[The World: ELG]</i></li> <li>I know some materials and their insulating properties. <i>[The World: ELG]</i></li> <li>I know about the Arctic region. <i>[The World: ELG]</i></li> </ul>	<u>Materials That We Use</u> <ul style="list-style-type: none"> <li>I can talk about what happens when ice melts. <i>[The World: ELG]</i></li> <li>I can explain why ice melts. <i>[The World: ELG]</i></li> <li>I can talk about changes in weather, trees, plants and animals. <i>[The World: ELG]</i></li> <li>I can talk about felt, wool, leather, and tin foil that might keep us warm. <i>[The World: ELG]</i></li> <li>I can talk about the cold Arctic weather and how animals keep warm. <i>[The World: ELG]</i></li> </ul>
Spring 2 (B) Phase: EYFS	<ul style="list-style-type: none"> <li>fruit</li> <li>vegetable</li> <li>juicy</li> <li>dry</li> <li>sweet</li> <li>smell</li> <li>bitter</li> <li>tasty</li> <li>colours</li> </ul>	<u>The Gift of Charity</u> <ul style="list-style-type: none"> <li>I know about different fruit and vegetables. <i>[The World: ELG]</i></li> </ul>	<u>The Gift of Charity</u> <ul style="list-style-type: none"> <li>I can describe the texture, shape, colour and smell of different fruit and vegetables. <i>[The World: ELG]</i></li> <li>I can describe the differences of foods when you look inside them. <i>[The World: ELG]</i></li> </ul>
Summer 1 (B) Phase: EYFS	<ul style="list-style-type: none"> <li>egg</li> <li>larva</li> <li>pupa</li> <li>butterfly</li> <li>adult</li> </ul>	<u>Julia Donaldson vs Eric Carle</u> <ul style="list-style-type: none"> <li>I know the life-cycle of a butterfly. <i>[The World: ELG]</i></li> </ul>	<u>Julia Donaldson vs Eric Carle</u> <ul style="list-style-type: none"> <li>I can describe the changes of a caterpillar into a butterfly. <i>[The World: ELG]</i></li> <li>I can order the stages of a butterfly life-cycle correctly. <i>[The World: ELG]</i></li> </ul>
Summer 2 (B) Phase: EYFS	<ul style="list-style-type: none"> <li>grow</li> <li>baby</li> <li>adult</li> <li>healthy</li> <li>heart</li> <li>lungs</li> <li>skeleton</li> <li>exercise</li> </ul>	<u>Healthy Bodies, Healthy Minds</u> <ul style="list-style-type: none"> <li>I know I know how people change as they grow. <i>[The World: ELG]</i></li> <li>I know that different parts of the body are for. <i>[The World: ELG]</i></li> <li>I know what happens when we exercise. <i>[The World: ELG]</i></li> </ul>	<u>Healthy Bodies, Healthy Minds</u> <ul style="list-style-type: none"> <li>I can describe the differences between grown-ups and babies in what they eat, how they move and how they talk. <i>[The World: ELG]</i></li> <li>I can explain the functions of the heart, the lungs and the skeleton. <i>[The World: ELG]</i></li> <li>I can talk about exercise keeping my body healthy. <i>[The World: ELG]</i></li> </ul>
Autumn 1 (B) Phase: Y1/2	<ul style="list-style-type: none"> <li>wood</li> <li>plastic</li> <li>glass</li> <li>metal</li> <li>rock</li> <li>solid</li> <li>liquid</li> <li>gas</li> </ul>	<u>Properties of Everyday Materials</u> <ul style="list-style-type: none"> <li>I know the names of the following materials: wood, plastic, glass, metal and rock.</li> <li>I know how to compare and classify.</li> <li>I know the following properties: hard, soft, bendy, rigid, smooth, rough, transparent, opaque and waterproof.</li> </ul>	<u>Properties of Everyday Materials</u> <ul style="list-style-type: none"> <li>I can distinguish between an object and the material from which it is made.</li> <li>I can describe the properties of wood, plastic, glass, metal and rock.</li> <li>I can compare and group together a variety of everyday materials based on their properties.</li> </ul>
Autumn 2 (B) Phase: Y1/2	<ul style="list-style-type: none"> <li>growth</li> <li>nutrition</li> <li>respiration</li> <li>egg</li> <li>larva</li> <li>pupa</li> <li>adult</li> <li>birds</li> <li>fish</li> <li>amphibians</li> <li>reptiles</li> </ul>	<u>Animals Including Humans (Classifying Animals)</u> <ul style="list-style-type: none"> <li>I know that animals, including humans, have offspring that grow into adults.</li> <li>I know that animals, including humans, need water, food and shelter to survive.</li> <li>I know the differences between birds, mammals, reptiles, fish and amphibians.</li> <li>I know the differences between carnivores, herbivores and omnivores.</li> </ul>	<u>Animals Including Humans (Classifying Animals)</u> <ul style="list-style-type: none"> <li>I can name a variety of common animals including fish, amphibians, birds, reptiles and mammals.</li> <li>I can describe and compare the structure of a variety of common animals.</li> <li>I can name a variety of common animals that are carnivores, herbivores and omnivores.</li> </ul>

	<ul style="list-style-type: none"> <li>mammals</li> <li>invertebrates</li> <li>carnivore</li> <li>herbivore</li> <li>omnivore</li> </ul>		
Spring 1 (B) Phase: Y1/2	<ul style="list-style-type: none"> <li>wood</li> <li>plastic</li> <li>glass</li> <li>metal</li> <li>rock</li> <li>hard</li> <li>soft</li> <li>bendy</li> <li>rigid</li> <li>smooth</li> <li>rough</li> <li>transparent</li> <li>opaque</li> <li>waterproof</li> </ul>	<u>Suitability of Everyday Materials</u> <ul style="list-style-type: none"> <li>I know the names of the following materials: wood, plastic, glass, metal and rock.</li> <li>I know the following properties: hard, soft, bendy, rigid, smooth, rough, transparent, opaque and waterproof.</li> <li>I know how to conduct a fair test.</li> </ul>	<u>Suitability of Everyday Materials</u> <ul style="list-style-type: none"> <li>I can describe the properties of wood, plastic, glass, metal and rock.</li> <li>I can compare the suitability of a variety of everyday materials for particular uses.</li> <li>I can conduct a fair test.</li> <li>I can make observations.</li> <li>I can record my findings in a table.</li> <li>I can ask scientific questions.</li> </ul>
Spring 2 (B) Phase: Y1/2	<ul style="list-style-type: none"> <li>squash</li> <li>bend</li> <li>stretch</li> <li>twist</li> </ul>	<u>Changing Shape: Everyday Materials</u> <ul style="list-style-type: none"> <li>I know that some materials can have their shape changed easily.</li> <li>I know how to conduct a fair test.</li> <li>I know the differences between solids and liquids.</li> <li>I know the meaning of the verbs: squashing, bending, twisting and stretching.</li> </ul>	<u>Changing Shape: Everyday Materials</u> <ul style="list-style-type: none"> <li>I can find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</li> <li>I can make observations.</li> <li>I can record my findings in a table.</li> </ul>
Summer 1 (B) Phase: Y1/2	<ul style="list-style-type: none"> <li>evergreen</li> <li>deciduous</li> <li>root</li> <li>branch</li> <li>trunk</li> <li>stalk</li> <li>leaf</li> <li>flower</li> <li>petal</li> <li>seeds</li> <li>bulbs</li> <li>twigs</li> <li>water</li> <li>light</li> <li>heat</li> <li>temperature</li> </ul>	<u>Plants</u> <ul style="list-style-type: none"> <li>I know that a flowering plant has a stem, leaves, roots and petals.</li> <li>I know the following plants: daffodils, daisies, buttercups, roses, poppies, tulips and dandelions.</li> <li>I know the following evergreen trees: conifer, pine and fir trees.</li> <li>I know the following deciduous trees: beech, oak and sycamore tree.</li> <li>I know that plants need water, light and warmth to grow healthily.</li> </ul>	<u>Plants</u> <ul style="list-style-type: none"> <li>I can name a variety of common wild and garden plants.</li> <li>I can name deciduous and evergreen trees.</li> <li>I can observe and describe how seeds and bulbs grow into mature plants.</li> <li>I can describe how plants need water, light and suitable temperature to grow and stay healthy.</li> <li>I can investigate the conditions needed for growth.</li> </ul>
Summer 2 (B) Phase: Y1/2	<ul style="list-style-type: none"> <li>movement</li> <li>respiration</li> <li>sensitivity</li> <li>nutrition</li> <li>excretion</li> <li>reproduction</li> <li>growth</li> </ul>	<u>Living Things</u> <ul style="list-style-type: none"> <li>I know that there are seven life processes that all living things do: movement, respiration, sensitivity, nutrition, excretion, reproduction, growth.</li> <li>I know how to classify and compare.</li> </ul>	<u>Living Things</u> <ul style="list-style-type: none"> <li>I can explain the seven life processes.</li> <li>I can classify things that are living, dead or never alive.</li> <li>I can make observations of living things.</li> <li>I can record my observations.</li> </ul>
Autumn 1 (B) Phase: Y3/4	<ul style="list-style-type: none"> <li>vibration</li> <li>volume</li> <li>pitch</li> <li>wave</li> <li>source</li> <li>decibel</li> </ul>	<u>Year 4 - Sound</u> <ul style="list-style-type: none"> <li>I know that sound is made from vibrations.</li> <li>I know the differences between patterns of vibrations.</li> </ul>	<u>Year 4 - Sound</u> <ul style="list-style-type: none"> <li>I can use scientific enquiry to answer a question.</li> <li>I can use a data logger to take measurements.</li> <li>I can use scientific vocabulary to ask and answer questions.</li> </ul>
Autumn 2 (B) Phase: Y3/4	<ul style="list-style-type: none"> <li>solid</li> <li>liquid</li> <li>gas</li> <li>melting</li> <li>condensation</li> <li>evaporation</li> <li>solidifying</li> <li>freezing</li> <li>particles</li> <li>water vapour</li> <li>steam</li> <li>heating</li> </ul>	<u>Year 4 - States of Matter</u> <ul style="list-style-type: none"> <li>I know the differences between solid, liquids and gases.</li> <li>I know that some materials can change state.</li> <li>I know the stages of the water cycle.</li> </ul>	<u>Year 4 - States of Matter</u> <ul style="list-style-type: none"> <li>I can use results to draw conclusions.</li> <li>I can use a data logger to take measurements.</li> <li>I can set up a simple fair test.</li> <li>I can use scientific vocabulary to answer questions.</li> </ul>

Spring 1 (B) Phase: Y3/4	<ul style="list-style-type: none"> <li>appliance</li> <li>circuit</li> <li>battery</li> <li>bulb</li> <li>switch</li> <li>buzzer</li> <li>wire</li> <li>conductor</li> <li>insulator</li> </ul>	<u>Year 4 - Electricity</u> <ul style="list-style-type: none"> <li>I know the effect electricity has on different appliances.</li> <li>I know how to construct a simple series electrical circuit.</li> <li>I know some common electrical conductors and insulators.</li> </ul>	<u>Year 4 - Electricity</u> <ul style="list-style-type: none"> <li>I can set up a simple practical enquiry.</li> <li>I can collect results to inform predictions.</li> <li>I can use scientific vocabulary to explain my results.</li> </ul>
Spring 2 (B) Phase: Y3/4	<ul style="list-style-type: none"> <li>producer</li> <li>consumer</li> <li>predator</li> <li>prey</li> <li>herbivore</li> <li>carnivore</li> </ul>	<u>Year 4 – Animals including Humans</u> <ul style="list-style-type: none"> <li>I know how food chains works.</li> <li>I know the parts that different animals play in food chains.</li> </ul>	<u>Year 4 – Animals including Humans</u> <ul style="list-style-type: none"> <li>I can carry out research to support my findings</li> </ul>
Summer 1 (B) Phase: Y3/4	<ul style="list-style-type: none"> <li>vertebrate</li> <li>invertebrate</li> <li>environment</li> <li>habitat</li> </ul>	<u>Year 4 – Living Things</u> <ul style="list-style-type: none"> <li>I know the different groups that living things belong to</li> <li>I know how different environments change</li> </ul>	<u>Year 4 – Living Things</u> <ul style="list-style-type: none"> <li>I can create and use classification keys</li> <li>I can use scientific vocabulary to report my findings</li> </ul>
Summer 2 (B) Phase: Y3/4	<ul style="list-style-type: none"> <li>incisor</li> <li>canine</li> <li>molar</li> <li>premolar</li> <li>saliva</li> <li>oesophagus</li> <li>stomach</li> <li>small intestine</li> <li>large intestine</li> </ul>	<u>Year 4 – Animals including Humans</u> <ul style="list-style-type: none"> <li>I know the different types of teeth and their functions</li> <li>I know the parts of the digestive system and their functions</li> </ul>	<u>Year 4 – Animals including Humans</u> <ul style="list-style-type: none"> <li>I can set up a simple test</li> <li>I can use diagrams to report my findings</li> <li>I can use scientific vocabulary to report my findings</li> </ul>
Autumn 1 (B) Phase: Y5/6	<ul style="list-style-type: none"> <li>volts</li> <li>resistance</li> <li>conductor</li> <li>insulator</li> <li>circuit</li> <li>battery</li> <li>bulb</li> <li>switch</li> <li>buzzer</li> <li>wire</li> </ul>	<u>Year 6: Electricity</u> <ul style="list-style-type: none"> <li>I know what the components of the circuit are.</li> <li>I know the electrical symbol for each component.</li> <li>I know why repeated measurements are needed in an investigation.</li> <li>I know what a data logger is and what it is used for.</li> <li>I know what a fair test in and what variables are.</li> </ul>	<u>Year 6: Electricity</u> <ul style="list-style-type: none"> <li>I can 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>I can 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>I can use recognised symbols when representing a simple circuit in a diagram</li> <li>I can plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</li> <li>I can take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</li> <li>I can use test results to make predictions to set up further comparative and fair tests</li> <li>I can report and present 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> </ul>
Autumn 2 (B) Phase: Y5/6	<ul style="list-style-type: none"> <li>reflection</li> <li>refraction</li> <li>light source</li> <li>opaque</li> <li>translucent</li> <li>transparent</li> </ul>	<u>Year 6: Light</u> <ul style="list-style-type: none"> <li>I know that light appears to travel in straight lines.</li> <li>I know 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>I know that because light travels in straight lines objects are seen because they give out or reflect light into the eye.</li> <li>I know that light travels in straight lines so shadows have the same shape as the objects that cast them.</li> </ul>	<u>Year 6 Light</u> <ul style="list-style-type: none"> <li>I can use scientific evidence to support or refute on idea.</li> <li>I can plan a scientific enquiry to answer a questions.</li> <li>I can use test results to make predictions to set up further comparative tests.</li> <li>I can plan a scientific enquiry to answer a question</li> <li>I can plan a fair-test; recognising and controlling variables.</li> </ul>
Spring 1 (B) Phase: Y5/6	<ul style="list-style-type: none"> <li>circulatory system</li> <li>heart</li> <li>blood</li> <li>veins</li> <li>arteries</li> <li>pulse</li> <li>clotting</li> <li>vessels</li> <li>valve</li> </ul>	<u>Year 6: Animals, including humans</u> <ul style="list-style-type: none"> <li>I know the names of the main parts of the human circulatory system,</li> <li>I know the functions of the heart, blood vessels and blood.</li> </ul>	<u>Year 6: Animals, including humans</u> To be taught through reading and writing lessons. <ul style="list-style-type: none"> <li>I can explain how the circulatory system works.</li> </ul>



<p>Spring 2 (B) Phase: Y5/6</p>	<ul style="list-style-type: none"> <li>kingdoms</li> <li>animal</li> <li>plant</li> <li>micro-organism</li> </ul>	<p><u>Year 6 – Living Things</u></p> <ul style="list-style-type: none"> <li>I know that fossils provide information about living things that inhabited the Earth millions of years ago.</li> <li>I know that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.</li> <li>I know that animals and plants are adapted to suit their environment in different ways.</li> </ul>	<p><u>Year 6 – Living Things</u> To be taught through reading and writing lessons.</p> <ul style="list-style-type: none"> <li>I can explain that living things have changed over time</li> <li>I can explain how animals adapt and why</li> </ul>
<p>Summer 1 (B) Phase: Y5/6</p>	<ul style="list-style-type: none"> <li>classification</li> <li>micro-organism</li> <li>vertebrate</li> <li>invertebrate</li> </ul>	<p><u>Year 6 Living things</u></p> <ul style="list-style-type: none"> <li>I know that 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>I know the reasons for classifying plants and animals based on specific characteristics.</li> </ul>	<p><u>Year 6</u></p> <ul style="list-style-type: none"> <li>I can make a key to classify plants.</li> </ul>
<p>Summer 2 (B) Phase: Y5/6</p>	<ul style="list-style-type: none"> <li>lifestyle</li> <li>substance</li> <li>balanced diet</li> </ul>	<p><u>Year 6 - Animals, including humans</u></p> <ul style="list-style-type: none"> <li>I know the impact of diet, exercise, drugs and lifestyle on the way bodies function.</li> </ul>	<p><u>Year 6 - Animals, including humans</u></p> <ul style="list-style-type: none"> <li>I can explain how different factors affect how the body changes</li> </ul>