

Science Year 6
Core Purpose Long Term Overview

Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Unit	Living things and their habitats	Evolution and inheritance	Electricity	Light	Animals, including humans	
Knowledge content National Curriculum statements	<ul style="list-style-type: none"> 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 give reasons for classifying plants and animals based on specific characteristics 	<ul style="list-style-type: none"> recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution 	<ul style="list-style-type: none"> associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit 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 use recognised symbols when representing a simple circuit in a diagram 	<ul style="list-style-type: none"> recognise that light appears to travel in straight lines 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 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 use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them 	<ul style="list-style-type: none"> identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function describe the ways in which nutrients and water are transported within animals, including humans 	Recap and revisit
Rationale for order	Will focus children on the similar/ different characteristics of animals. This will help them when it comes to understanding inheritance and evolution	Following classification work will aid children in spotting the different characteristics passed down as part of evolution.		Children can build efficient and working circuits with lamps in to help prove that light travels in straight lines and other statements	Fits with the theme of wellbeing and transition associated with moving to secondary school.	Used to plug any gaps or deal with any misconceptions.
Key Knowledge (to be retained in bold)						
SC1 Investigation Focus	<p>What do things need to survive and how can you tell they are alive?</p> <p>Explain that yeast is a living thing and plan, run, report on an investigation testing the ideal conditions for yeast to grow.</p>					
Working Scientifically focus covered from	<p>THIS UNIT WILL BE FULLY GUIDED AND MODELLED BY THE TEACHER</p> <p>This should build on the plan do review model used in EYFS</p> <p>PLAN</p>	<p>PLAN</p> <p>-That scientific investigation begins with a question they want to find the answer to</p>	<p>PLAN</p> <p>-That scientific investigation begins with a question they want to find the answer to</p>	<p>PLAN</p> <p>-That scientific investigation begins with a question they want to find the answer to</p>	<p>PLAN</p> <p>-That scientific investigation begins with a question they want to find the answer to</p>	<p>PLAN</p> <p>-That scientific investigation begins with a question they want to find the answer to</p>

	<p>progression overview:</p> <p>(Focus which will be primarily child led/independent. There is a focus on developing SC1 skills, which should be first modelled and allow a chance for the children to develop indep)</p>	<p>-That scientific investigation begins with a question they want to find the answer to -That they can ask questions about the world and then make observations to answer these questions.</p> <p>CONDUCT -That they can use magnifying glasses to observe objects closely (as a way of collecting results) -That objects can be identified or sorted into groups based on their observable properties (<i>Classification</i>)</p> <p>RECORD - That in order to answer the asked questions, data needs to be gathered and recorded -That they can write down numbers and words or draw pictures to record what they find</p> <p>CONCLUDE AND EXPLAIN -To suggest an answer based on real life experience or using taught scientific knowledge</p>	<p>-That they can ask questions about the world and then make observations to answer these questions.</p> <p>CONDUCT -That they can use magnifying glasses to observe objects closely (as a way of collecting results) -That objects can be identified or sorted into groups based on their observable properties (<i>Classification</i>)</p> <p>RECORD - That in order to answer the asked questions, data needs to be gathered and recorded - That they can write down numbers and words or draw pictures to record what they find</p> <p>CONCLUDE AND EXPLAIN -To suggest an answer based on real life experience or using taught scientific knowledge</p>	<p>-That they can ask questions about the world and then make observations to answer these questions.</p> <p>CONDUCT -That they can use magnifying glasses to observe objects closely (as a way of collecting results) -That objects can be identified or sorted into groups based on their observable properties (<i>Classification</i>)</p> <p>RECORD - That in order to answer the asked questions, data needs to be gathered and recorded - That they can write down numbers and words or draw pictures to record what they find</p> <p>CONCLUDE AND EXPLAIN -To suggest an answer based on real life experience or using taught scientific knowledge</p>	<p>-That they can ask questions about the world and then make observations to answer these questions.</p> <p>CONDUCT -That they can use magnifying glasses to observe objects closely (as a way of collecting results) -That objects can be identified or sorted into groups based on their observable properties (<i>Classification</i>)</p> <p>RECORD - That in order to answer the asked questions, data needs to be gathered and recorded - That they can write down numbers and words or draw pictures to record what they find</p> <p>CONCLUDE AND EXPLAIN -To suggest an answer based on real life experience or using taught scientific knowledge</p>	<p>-That they can ask questions about the world and then make observations to answer these questions.</p> <p>CONDUCT -That they can use magnifying glasses to observe objects closely (as a way of collecting results) -That objects can be identified or sorted into groups based on their observable properties (<i>Classification</i>)</p> <p>RECORD - That in order to answer the asked questions, data needs to be gathered and recorded -That they can write down numbers and words or draw pictures to record what they find</p> <p>CONCLUDE AND EXPLAIN -To suggest an answer based on real life experience or using taught scientific knowledge</p>	<p>-That they can ask questions about the world and then make observations to answer these questions.</p> <p>CONDUCT -That they can use magnifying glasses to observe objects closely (as a way of collecting results) -That objects can be identified or sorted into groups based on their observable properties (<i>Classification</i>)</p> <p>RECORD - That in order to answer the asked questions, data needs to be gathered and recorded - That they can write down numbers and words or draw pictures to record what they find</p> <p>CONCLUDE AND EXPLAIN -To suggest an answer based on real life experience or using taught scientific knowledge</p>
Assessment focus	<p>Teacher Assessment Framework Knowledge</p>	Use the observable features of plants, animals and micro-organisms to group, classify and identify them into broad groups, using keys or other methods	Use the basic ideas of inheritance, variation and adaptation to describe how living things have changed over time and evolved; and provide evidence for evolution	Use simple apparatus to construct and control a series circuit, and describe how the circuit may be affected when changes are made to it; and use recognised symbols to represent simple series circuit diagrams	Use the idea that light from light sources, or reflected light, travels in straight lines and enters our eyes to explain how we see objects and the formation and shape of shadows	Name and describe the functions of the circulatory system Describe the effects of diet, exercise, drugs and lifestyle on how the body functions	