



Medium Term Plan: Living Things and their Habitats

During this unit of work, children will learn to sort living things using a variety of criteria and extend their use of scientific vocabulary to describe features and characteristics of animals and plants. They will conduct a local habitat search and learn to identify unknown living things using a classification key. Children will consider how environmental change impacts the local area and suggest ways in which humans can prevent further damage.

Key Stage Two
(Year 3/4)

Which living things can be found in the local area?

Scientific Knowledge and Conceptual Understanding*

biology	chemistry	physics
---------	-----------	---------

Working Scientifically*

asking relevant questions and using different types of scientific enquiries to answer them	setting up simple practical enquiries, comparative and fair tests	making observations, taking accurate measurements, using a range of equipment	gathering, recording, classifying and presenting data 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, 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 findings	

Lower Key Stage 2 Scientific Knowledge and Conceptual Understanding Areas*

Forces and Magnets	Animals, including humans	Rocks	Plants	Sound
Living Things and their Habitats	Light	Electricity	States of Matter	

*Shaded boxes indicate coverage for this unit

Why has this science unit been chosen for pupils at Applegarth Primary School?	In this science unit, our Applegarth children will: learn to sort living things using a variety of criteria and extend their use of scientific vocabulary to describe features and characteristics of animals and plants. They will conduct a local habitat search using the local area and/or school field and learn to identify unknown living things using a classification key. Children will consider how environmental change impacts the local area by inviting a visitor (local tree surgeon or member of the planning department) in to school and suggest ways in which humans can prevent further damage.
What specifically do we want the children to know, understand and be able to do by the end of this unit?	Children will know that: Living things can be grouped (classified) in different ways according to their features. Classification keys can be used to identify and name living things. Living things live in a habitat which provides an environment to which they are suited. These environments may change naturally or humans also cause change. Positive human impacts are those such as setting up nature reserves or negative, such as littering). These environments also change with the seasons with different living things being found in a habitat at different times of the year. They will learn about the work of Jane Goodall and how important her work with chimpanzees has been to understand their habits and behaviours and impact environmental changes can have on the species. Children will be able to: compare, sort and group living things from a range of environments, in a variety of ways, based on observable features and behaviour. They will be able to describe how environments can change due to human and natural influences and the impact this can have on living things. They will also be able to explain how unfamiliar habitats, such as a mountain or ocean, can change over time and what influences these changes.

KS2 National Curriculum PoS	Knowledge Focus (from progression document)	Possible Misconceptions
<p>Recognise that living things can be grouped in a variety of ways</p> <p>Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment</p> <p>Recognise that environments can change and that this can sometimes pose dangers to living things.</p> <p>For more details, working scientifically and non-statutory guidance, click this link.</p>	<p>Living things can be grouped (classified) in different ways according to their features. Classification keys can be used to identify and name living things.</p> <p>Living things live in a habitat which provides an environment to which they are suited (Year 2 learning). These environments may change naturally e.g. through flooding, fire, earthquakes etc. Humans also cause the environment to change. This can be in a good way (i.e. positive human impact, such as setting up nature reserves) or in a bad way (i.e. negative human impact, such as littering). These environments also change with the seasons; different living things can be found in a habitat at different times of the year.</p>	<p>Some children may think:</p> <p>the death of one of the parts of a food chain or web has no or limited consequences on the rest of the chain</p> <p>there is always plenty of food for wild animals</p> <p>animals are only land-living creatures</p> <p>animals and plants can adapt to their habitats, however they change</p> <p>all changes to habitats are negative.</p>

Prior Learning	Subsequent Learning
----------------	---------------------

<p>In Y1/2, children will have learned to:</p> <p>Explore and compare the differences between things that are living, dead, and things that have never been alive</p> <p>Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other</p> <p>Identify and name a variety of plants and animals in their habitats, including micro-habitats</p> <p>Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.</p>	<p>In Y5/6 children will be taught to:</p> <p>Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird</p> <p>Describe the life process of reproduction in some plants and animals.</p> <p>Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and difference, including micro-organisms, plants and animals.</p> <p>Give reasons for classifying plants and animals based on specific characteristics.</p> <p>Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents</p> <p>Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution</p>
--	--

Exploring how scientific ideas have changed over time	Cross-curricular links
---	------------------------

<p>How did Jane Goodall learn about the habits and behaviours of chimpanzees and why does she still need to work to protect their habitat?</p>	<p>Geography</p> <p>Describing distinctive characteristics of settlements – looking at habitats – water supply/ coastal/ towns etc.</p> <p>Maps/ grid references – what living things would you find in different grid references?</p> <p>Physical and human characteristics</p> <p>History</p> <p>Link to settlements – romans/ Boudicca</p> <p>Egyptians – used to clean their teeth with cloth and twig – what would their teeth have been like linked to what their diet consisted of?</p> <p>How was roman armour used to protect the body of a roman soldier? How do parts of our body or skeleton protect our internal organs?</p> <p>How do animals protect themselves?</p> <p>Roman farmers grew crops – what conditions are needed?</p>
--	---

Local Context	Cultural Capital
---------------	------------------

<p>We are lucky enough to have a field stocked with various trees, a fruit orchard, vegetable beds, wildlife area, poly tunnel and many established as well as newer trees. The local park next to the school also has very mature trees.</p>	<p>Visit from a local tree surgeon or someone from local planning department if possible to talk about environmental impact</p>
---	---


Previously Learned Vocabulary	New Vocabulary
-------------------------------	----------------

<p>Living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed, water, air, survive, survival, names of local habitats (e.g. pond, woodland, wildlife area), names of micro-habitats (e.g. under logs, in bushes etc), conditions, light, dark, shady, sunny, wet, damp, dry, hot, cold, names of living things in the habitats and micro-habitats studied</p>	<p>classification, classification keys, environment, habitat, human impact, positive, negative, migrate, hibernate</p>
---	--

Significant People / Events

<p>Historical Figures see https://www.primary-science.co.uk/product-page/scientists-across-the-curriculum</p> <p>Jacques Cousteau - (Oceanographer and co-inventor of the aqualung)</p> <p>Under-represented groups</p> <p>Wangari Maathai - search document for information (Biologist & Environmental Activist awarded the 2004 Nobel Peace Prize for her contribution to sustainable development)</p> <p>Modern Scientists</p> <p>Liz Bonnin - (TV Presenter & Wildlife Conservationist)</p>
--

Recommended Reads (Reading for pleasure and writing opportunities)**	Recommended Reads – Curriculum Enhancement**
--	--

<p>James and the Giant Peach (Roald Dahl)</p> <p>The Vanishing Rainforest (Richard Platt)</p> <p>The Morning I Met a Whale (Michael Morpurgo) links with Cornerstones - Blue Abyss</p> <p>Journey to the River Sea (Eva Ibbotson)</p> <p>Window (Jeannie Baker)</p>	
--	---