

## Science Progression of Knowledge and Skills Living things and their habitats

**Key to understanding this document: Black = National Curriculum objectives   Red = Knowledge/Skills to be taught   Green = Resources to be used**

***At The Discovery School we understand the importance of our children knowing more, remembering more and doing more. With this in mind, we teach the children the knowledge they require, ensuring they have opportunities for the retrieval of knowledge and the chance to apply new skills during their learning.***

<u>Area of Learning</u>	<u>EYFS</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>
<b><u>Living things and their habitats</u></b>	<p>Explore the natural world around them, making observations and drawing pictures of animals and plants.</p> <p>Know some similarities and differences between the natural world around them and contrasting environments, drawing on their</p>		<p>Working scientifically: identifying and classifying.</p> <p>LT1: Explore and compare the differences between things that are living, dead, and things that have never been alive.</p> <p>Children have a selection of objects/ picture which they must sort into living, dead, never been alive. Through this children are able to generate ideas as to what</p>		<p>Working scientifically: Gathering and classifying data to answer questions.</p> <p>LT1: recognise that living things can be grouped in a variety of ways.</p> <p>Give children a selection of living things pictures and get the children to sort them in their own way, compare different groups within the class. Teacher can then give the children different categories for the children to sort their pictures</p>	<p>Working Scientifically 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</p> <p>LT1: describe the differences in the life cycles of a</p>	<p>Working Scientifically</p> <p>Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</p> <p>LT1: describe how living things are classified into broad groups according to</p>

	<p>experiences and what has been read in class.</p> <p>Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</p>	<p>makes something dead/alive.</p> <p>Working scientifically: Using observations and ideas to suggest answers to questions.</p> <p>LT2: 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. Children to look at a variety of habitats. Consider what animals live there and why this might be. What do they</p>	<p>into. E.g. invertebrates/vertebrates. Flowering and non-flowering plants.</p> <p>Working scientifically: Making systematic and careful observations using equipment.</p> <p>Gathering, recording and classifying data to answer questions.</p> <p>Recording findings using keys. LT2: explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.</p>	<p>mammal, an amphibian, an insect and a bird.</p> <p>Recap life cycle. Place knowledge on working wall. Over five lessons the children will research the life cycle of a mammal, an amphibian, an insect and a bird. (of their choice) On the fifth lesson the children will write an explanation using diagrams comparing and contrasting the different life cycles</p> <p>Working scientifically Identifying scientific evidence that has been used to support or refute</p>	<p>common observable characteristics and based on similarities and differences, including microorganisms, plants and animals.</p> <p>Introduce classification and why we need to classify animals. Working wall display. Put picture of different birds and ask the children to discuss what the same is and what is different. The go on to discuss the importance of classification.</p>
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			<p>need to be provided with in this habitat to survive. E.g. where do they get their food source from? Are they dependent on another animal or plant in the habitat?</p> <p>Working scientifically: Observing closely using simple equipment. Gathering and recording data to help in answering questions. LT3: Identify and name a variety of plants and animals in their habitats, including microhabitats. Children are familiar with a habitat and microhabitat.</p>	<p>Children to go to Discovery Walk and use classification keys to sort living things they can find. Children could design their own classification chart for other children to use in Discovery Walk.</p> <p>Working scientifically: Gathering and presenting data in a variety of ways to help in answering questions. Report on findings from enquiries using displays or presentations. LT3: recognise that environments can change and that this can sometimes pose</p>	<p>ideas or arguments. LT2: describe the life process of reproduction in some plants and animals.</p> <p>Dissect plant and place on paper revising from previous years. Add stigma, stamen, ovary carpel, anther,</p> <p>Research reproduction of plants. Then go around school grounds and the children pick up different specimens of plants and flowers and then return to class and discover how they reproduce from plliation.from research. The</p>	<p>The repeat process for plants and microorganisms.</p> <p>Working Scientifically</p> <p>recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p> <p>LT2: give reasons for classifying plants and animals based on specific characteristics.</p> <p>Classification tour. The class walk</p>
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		<p>Children can explore Discovery Walk to see what habitats they can find. Children can take i-pads to take photos of their habitats and use apps such as 'piccollage' to add information. Children design and make their own bug hotel habitat in Discovery Walk. Children consider what the animals will need to survive and why this will be a suitable habitat.</p> <p>Working scientifically: Identifying and classifying. LT4: Describe how animals obtain their food from plants and other animals, using the idea of</p>	<p>dangers to living things. Choose a way in which an environment might be being affected e.g. plastic pollution. Children to generate questions, research how this environment is being affected and why. Children could then produce a leaflet, poster etc warning people about the negative impact on living things in the environment.</p>	<p>draw a diagram showing the different features of reproduction.</p>	<p>around the school taking pictures of animals and plants. Then in a group present classification examples, explaining to the class why they have classified their examples using which criteria.</p>
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			<p>a simple food chain, and identify and name different sources of food.</p> <p>Children to create a simple food chain using pictures. E.g. grass, cow, human.</p> <p>Note: You do not need to use vocabulary such as producer, consumer etc. This is later on in the curriculum.</p>				
Key Vocabulary			<p>Dead</p> <p>Alive</p> <p>Habitat</p> <p>Micro-habitat</p> <p>Food chain</p> <p>Seashore</p> <p>Woodland</p> <p>Ocean</p> <p>rainforest</p>		<p>Classification</p> <p>Flowering plants</p> <p>Non-flowering plants</p> <p>Vertebrates</p> <p>Invertebrates</p> <p>Pollution</p>	<p>Reproduction, Pollination</p> <p>Stigma</p> <p>Ovary</p> <p>Anther</p> <p>Stamen carpel</p> <p>Mammal, Amphibian</p> <p>Insect</p> <p>Bird</p>	<p>Microorganism</p> <p>Classification</p> <p>Key</p> <p>Children will develop vocabulary through own research.</p>



Resources			i-pads Bug hotel resources Discovery walk		Living things pictures. Discovery walk Classification keys I-pads/laptops	Flowers, ipads, plants, pictures of animlas, Pictures of trees Diagram of parts of flowers.	School ground, pictures of birds, plants microorganism . I pads.

