Portfields Primary School Medium Term Plan

Year Group – **2**   Subject - **Science**   Strand –   Topic - **Living Things and their habitats**   Term – **Spring 2**

National Curriculum	Key Questions	Substantive Knowledge	Key Vocabulary	Real-Life Links
Pupils should be taught to: ● explore and compare the differences between things that are living, dead, and things that have never been alive ● identify that most living things live in habitats to which they are suited ● describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other ● identify and name a variety of plants and animals in their habitats, including microhabitats ● 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.	● What does living, dead and non-living mean? ● Where do humans and animals live? ● How are habitats suitable? ● What animals and plants live in our forest school environment?	Different animals and plants live in different places. Living things depend on each other to survive in different habitats.	Living, dead, never alive, minibeasts, food, food chain, woodland, ocean, rainforest, desert, arctic, conditions, desert, damp, shade, survive, depend, dependency.	● Garden habitats ● Forest school ● Homes ● Bury Field

Notes and guidance (non-statutory)	Technical Questions			
Pupils should be introduced to the idea that all living things have certain characteristics that are essential for keeping them alive and healthy. They should raise and answer questions that help them to become familiar with the life processes that are common to all living things. Pupils should be introduced to the terms 'habitat' (a natural environment or home of a variety of plants and animals) and 'micro-habitat' (a very small habitat, for example for woodlice under stones, logs or leaf litter). They should raise and answer questions about the local environment that help them to identify and study a variety of plants and animals within their habitat and observe how living things depend on each other, for example, plants serving as a source of food and shelter for animals. Pupils should compare animals in familiar habitats with animals found in less familiar habitats, for example, on the seashore, in woodland, in the ocean, in the rainforest. Pupils might work scientifically by: sorting and classifying things according to whether they are living, dead or were never alive, and recording their findings using charts. They should describe how they decided where to place things, exploring questions for example: 'Is a flame alive? Is a deciduous tree dead in winter?' and talk about ways of answering their questions. They could construct a simple food chain that includes humans (e.g. grass, cow, human). They could describe the conditions in different habitats and micro-habitats (under log, on stony path, under bushes) and find out how the conditions affect the number and type(s) of plants and animals that live there.	**What is a life process?** *All living things do certain things to stay alive.* *Animals, including humans, do these things. Plant do too although they do them in different ways. These are called life processes.* **What are the 7 life processes?** *MRS GREN: Movement, respiration, sensitivity, growth, reproduction, excretion, nutrition.* **What does living mean?** *Living means an organism that is currently able to carry out all 7 life processes* **What does dead mean?** *Dead means an organism that used to perform the 7 life processes, but no longer does.* **What does non-living mean?** *A non-living organism was never alive doesn't carry out the 7 life processes and has never done them.* **What is a habitat?** *A habitat is a place where animals and plants live, where they can find everything they need to stay alive.* **What is a micro-habitat?** Some habitats are very small; we call these microhabitats, these can be under a log, under bushes, on a stony path. **What is a food chain?** *A food chain shows how each animal gets its food. Food chains are one of the ways that living things depend on each other to stay alive.*			

		Disciplinary Knowledge	Technical Vocabulary	Inventors and Makers
		Sort and classify things according to whether they are living, dead or never alive. Record findings on a chart. Construct a simple food chain. Describe conditions in different habitats and micro-habitats, research how the conditions affect the number of plants & animals that live there.	Habitats, micro-habitats, Enquiry, survey, Life process, living, non-living, dead, never alive, movement, respiration, sensitivity, growth, reproduction, excretion, nutrition. Food chain, consumer, producer, predator, prey, herbivore, carnivore, omnivore.	David Attenborough – Life in the undergrowth. https://www.youtube.com/watch?v=kIO4W8el7Fk

Lesson Breakdown

Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6
Learning Objective LO: To explore and compare the differences between things that are living, dead, and things that have never been alive.	Learning Objective LO: To identify and name a variety of plants and animals in their habitats. Success Criteria	Learning Objective LO: To identify and name a variety of plants and animals in their habitats, including micro-habitats. Success Criteria	Learning Objective LO: To identify that most living things live in habitats to which they are suited. (Rainforest, ocean, arctic, desert). Success Criteria	Learning Objective LO: To identify how an animal is suited to its habitat and how living things depend on each other. (Rainforest, ocean, arctic, desert).	Learning Objective LO: To use a simple food chain to describe how animals obtain their food from plants and other animals. Success Criteria

Success Criteria I can compare the differences between things that are living, dead and have never been alive. I can answer questions about things that are living, dead or have never been alive. **Star Knowledge** **Life processes**: All living things do certain things to stay alive. Animals, including humans, do these things. Plant do too although they do them in different ways. **7 life processes –** **MRS GREN:** Movement, respiration, sensitivity, growth, reproduction, excretion, nutrition. A living organism is an organism that is currently able to carry out all these processes, a dead organism used to perform the processes, but no longer does, a non-living, an organism that was never alive doesn't carry them out and has never done them.	I can record or suggest which animals live in a specific habitat in the local environment (Forest school). I can sort given objects into categories and give reasons for my choice. I can classify objects as those that are living, dead and those that have never been alive within forest school. **Star Knowledge** **Habitat:** A habitat is a place where animals and plants live, where they can find everything they need to stay alive. Humans are unique because we can make big changes to our habitats to make sure we have everything we need.	I can identify animals in their habitats. I can use information I have gathered to answer a question. **Star Knowledge** **Microhabitats:** Some habitats are very big, like a woodland. Some habitats are very small; we call these microhabitats. A large habitat contains many microhabitats. A microhabitat can be as small as a fallen branch or the space under a stone. **Minibeasts:** A minibeast is a small creature like an insect, a worm or a spider. Many different minibeasts live in many different microhabitats.	I can describe a habitat and identify animals live in it. I can ask and answer questions about habitats. I can describe the conditions of a habitat. **Star Knowledge** **Conditions:** Each habitat has different conditions such as the amount of light, the temperature and the amount of moisture. **Survive:** animals/plants have to live somewhere that has the right conditions to help them stay alive and well. Different animals and plants all have special ways to survive in their special habitats. All of them have special features that help them to survive in their habitat.	Success Criteria I can identify the needs of different plants and animals. I can explain how living things in a habitat depend on each other. I can suggest how an animal survives in its habitat. **Star Knowledge** **Dependency:** Living things in a habitat **depend** on each other. This means they need each other to stay alive.	I can describe how animals get their food I can name some sources of food. I can give examples of carnivores, herbivores and omnivores. I can order living things in a food chain. **Star Knowledge** **Producer:** Each food chain starts with a green plant. Green plants are called producers because they produce their own food. **Consumer:** All animals are called consumers because they consume their food by eating plants and other animals. **Predator:** Animals that eat other animals are called predators. **Prey:** The animals that predators eat are called prey.

Assessment Statements

Working At

- Explain some of the life processes.
- Ask questions to decide if a thing is living, dead or has never been alive.
- Identify some plants and animals in global habitats.
- Draw a map of a local habitat.
- Sort objects into categories and give reasons for their choices.
- Identify and name minibeasts in microhabitats.
- Gather and record information.
- Suggest how an animal is able to survive in their habitat.
- Answer questions about habitats they have researched.
- Explain why the animals in a habitat need the plants.
  Draw a simple food chain.