St Peter's Bratton Church of England Academy

Sustainability

Subject: Science

Year group: 4

Term: Summer

Unit name: Living things and their habitats

National curriculum:

- Recognise that living things can be grouped in a variety of ways
- Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment
- Recognise that environments can change and that this can sometimes pose dangers to living things.

Prior Knowledge - Animals can be grouped into vertebrates (and then further into fish,
reptiles, amphibians, birds and mammals) and invertebrates. Animals can be grouped into carnivores, herbivores and omnivores. The differences between the teeth of carnivores and herbivores. The names of some common wild and garden plants and deciduous and evergreen trees. Examples of habitats (including microhabitats) and the animals and plants that can be found there. Living things depend on each other to survive. How food chains and food webs work. How land use has changed over time and the effects this has on the environment (e.g. urban development)

Scientific enquiry

Classifying	Based on the children's own criteria: * classify a number of living things in their local environment (plants and animals) * classify a number of living things in the wider environment (plants and animals) after completing research * introduce branching databases/dichotomous keys.
Observing over time	Observe living things in their local environment at different times of the year.
Pattern seeking	Do animals with …. have ….? Do plants with …. have ….?
Comparative/fair testing	Not relevant
Researching	Research and be able to name plants and animals in the wider environment e.g. polar, desert, jungle, etc. Research global environmental issues and their impact on living things.

Key vocabulary

Carnivore	an animal that eats meat
Classification key	a system which divides things into groups or types
Environment	all the circumstances, people, things, and events around them that influence their life
Habitat	the natural **environment** in which an animal or **plant** normally lives or grows
Herbivore	an animal that only eats plants
Hibernate	spend the winter in a dormant state.
Human impact	**changes to biophysical environments and to ecosystems, biodiversity, and natural resources caused directly or indirectly by humans**.
Migrate	move from one region or habitat to another according to the seasons.
Omnivore	person or animal eats all kinds of food, including both meat and **plants**

Spiritual Development

This unit enables the children to learn about how humans are impacting the natural and encourage them to learn from mistakes that have been made. *Numbers 35: You shall not pollute the land in which you live.*

Key Learning Assessment Statements- what will the children know by the end of the unit?		
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 (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.		
To know that lliving things can be divided into groups based upon their characteristics.	All living things, which can also be called organisms, have to do certain things to stay alive. These are the life processes: Movement, respiration, sensitivity, growth, reproduction, excretion, nutrition. Living things can be grouped according to different criteria (where they live, what type of organism they are, what features they have). For example, a camel can belong in a group of vertebrates, a group of animals that live in the desert, and a group of animals that have four legs.	
To understand the term classification key.	A **classification key** is a tool that is used to group living things to help us identify them.	
To understand how environmental change affects different habitats differently.	**Habitats** can change throughout the year and this can have an effect on the plants and animals that live there. Humans can have positive and negative effects on the environment: positive effects: nature reserves, ecological parks; negative effects: litter, **urban** development.	

To understand that different organisms are affected by environmental change.

To understand how human activity significantly affects the environment.

To know that different food chains occur in different habitats.

Assessment for Learning	**Activity ideas**
Recapping prior knowledge- beginning of unit- what do children already know? Beginning of each lesson- focus on recall of previous learning (quick quizzes)	• Observe plants and animals in different habitats throughout the year. • Compare and contrast the living things observed. • Use classification keys to name unknown living things. • Classify living things found in different habitats based on their features. • Create a simple identification key based on observable features. • Use fieldwork to explore human impact on the local environment e.g. litter, tree planting. • Use secondary sources to find out about how environments may naturally change. • Use secondary sources to find out about human impact, both positive and negative, on environments.