



Lowerhouse Junior School Science Overview Sheet



Year 4 – Living Things and Their Habitats



Rationale: Teaching Living Things and their Habitats in Year 4 Science is crucial for fostering an understanding of biodiversity and ecosystems. It helps students appreciate the interdependence of organisms and their environments, promoting environmental awareness and conservation. This knowledge encourages curiosity, respect for nature, and responsible stewardship of the planet.

Substantive Knowledge:

- 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.

Disciplinary Knowledge:

- Classifying
- Researching

Overview:

Lesson 1: How can living things be classified and sorted?

Lesson 2: What are classification keys?

Lesson 3: How can we use classification keys?

Lesson 4: What is a habitat?

Lesson 5: How can environments change?

Lesson 6: How do changing environments impact living things?

Key Vocabulary:

Classification: The process of organizing living things into groups based on their similarities and differences, often using a hierarchical system.

Classification keys: Tools used to identify and categorize organisms based on a series of choices that lead to the correct name or group.

Environment: The surrounding conditions in which an organism lives, including air, water, soil, and other living things.

Habitat: The natural environment where a living thing resides, providing the necessary conditions for survival, such as food, water, shelter, and space.

Human impact: The effect of human activities on the natural environment, which can be positive or negative.

Positive: Beneficial effects of human activities on the environment, such as conservation efforts, pollution reduction, and habitat restoration.

Negative: Harmful effects of human activities on the environment, such as pollution, deforestation, and climate change.

Migrate: The seasonal movement of animals from one region to another for breeding, feeding, or climate reasons.

Hibernate: A state of inactivity and metabolic depression in animals during winter, allowing them to survive periods of cold and food scarcity.

Impact/Assessment

Most Children will be able to:

- name living things living in a range of habitats, giving the key features that helped them to identify them
- give examples of how an environment may change both naturally and due to human impact
- keep a careful record of living things found in different habitats throughout the year (diagrams, tally charts etc.)
- use classification keys to identify unknown plants and animals
- present their learning about changes to the environment in different ways e.g. campaign video, persuasive letter