

Science

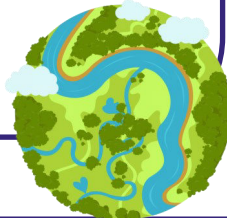
All children – regardless of gender, starting point or background – will have the opportunity to engage with a high-quality science education. They will be equipped with the knowledge, skills and vocabulary to understand how science can be used to explain what is occurring, predict how things will behave and analyse caused. We intend to inspire a sense of enjoyment and curiosity about science.

Living Things and their Habitats

Autumn 1

Igniting Prior Knowledge:

- All objects are either living, dead or have never been alive.
- Living things live in a habitat which provides an environment to which they are suited. Living things are adapted to live in the habitat in which they live.
- A habitat provides the basic needs of the animals and plants that live there – shelter, food and water.
- Within a habitat there are different micro-habitats each with their own conditions.
- The plants and animals in a habitat depend on each other for food and shelter.
- Plants can make their own food; animals get their energy from the foods they eat.
- A food chain has a producer (plant) and consumers.



Key

Vocabulary:

- | | |
|----------------|----------------------|
| • Environment | • Invertebrate |
| • Habitat | • Pollution |
| • Human impact | • Deforestation |
| • Positive | • Global warming |
| • Negative | • Extinct |
| • Migrate | • Endangered |
| • Hibernate | • Sustainable |
| • Organism | • Classification key |
| • Vertebrate | • Ecosystem |

New Knowledge

- Living things can be grouped (classified) in different ways according to their features
- A classification key is a set of questions about the characteristics of living things.
- Classification keys can be used to identify and name living things.
- You can use a key to identify a living thing or decide which group it belongs to by answering the questions.
- Environments may change naturally e.g. with the seasons, through flooding, fire, earthquakes etc.
- Environmental change affects habitats differently.
- Change can affect the flora and fauna found there.
- 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/rewilding) or in a bad way (i.e. negative human impact, such as littering, plastic ocean/deforestation, global warming).
- Rewilding is restoring ecosystems to the point where nature can take care of itself, and restoring our relationship with the natural world.
- Negative changes to an environment can sometimes pose dangers and have an impact on living things. These include: loss of habitats, broken food chains, loss of breeding grounds, death.
- Positive changes include a reduction in pollution during National Lockdowns.
- An organism that dies out completely is classed as extinct.
- An organism that is at serious risk of extinction is classed as being endangered.