

Science Y4 Summer 1 and 2– Classifying living things and Food chains

In this unit of work the children will understand the need to classify living things into groups. They will sort and classify animals in a number of different ways for instance using branched diagrams and venn diagrams. They will create food chains and food webs and discuss how the environment can pose dangers to living things and think of ways in which they could protect it.

In this unit children will:

- Understand the need for grouping living things in a variety of ways.
- Sort vertebrates and invertebrate animals into groups, describing their key features.
- Use classification keys to help group, identify and name a variety of living things in their local and wider environment.
- Create their own
- Discuss how environments can change and think of ways that this could pose dangers to living things – both positive and negative impact of humans on the environment.
- Create more complex food chains/ webs

Prior Learning

FS – The importance of eating a balanced diet. Know good practices which contribute to good health.

Y1 – Know the structure of a variety of common animals. Name the basic parts of the human body.

Y2 – Know the basic needs of animals inc humans for survival and create simple food chains.

Cross Curricular Links

PSHCE – Families

Key Vocabulary

Biomes – A natural area of vegetation and animals.

Classification key – A system that divides things into groups or types.

Criteria – A factor on which something is judged.

Environment–All the circumstances, the people, things, events around them that influences their life.

Excretion– Eliminating waste from the body.

Food Chain– A series of living things that are linked to each other because each thing feeds on the one next to it in the series.

Habitat– The natural environment in which plants or animals normally live or grow.

Invertebrate – A creature that doesn't have a spine.

Nutrition – The process of taking food into the body and absorbing the nutrients in those foods.

Producer – Plants in food chains.

Predator – An animal that hunts and kills.

Prey – An animal killed for food.

Urban – Belonging to a town or city

Vertebrate– A creature which has a spine

Key Knowledge

All living things, which can be called organisms, have to do certain things to stay alive. These are life processes and include movement, respiration, sensitivity, growth, reproduction, excretion and 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 4 legs.
- A classification key is a tool that is used to group living things to help identify them.
- Classifying living things into groups allows scientists to learn about what makes each species unique.
- There are many different classes of animals. Those with a backbone are known as the class vertebrates. These are then grouped into mammals, birds, fish, reptiles and amphibians.
- Invertebrates, animals without backbones are arachnids, insects, snails, worms and slugs.
- A habitat is a non living environment surrounding a living thing. It provides shelter, space, food and water.



- Habitats can change throughout the year and this can have an effect on the plants and animals that live there.
- Humans can have a positive and negative effect on the environment. The positive effects include – nature reserves and ecological parks. Negative effects include – litter, urban development.
- An eco system is made up of the living organism and the non living habitat.
- Food chains are a map of the flow of energy from a plant through consumers and hunters.

Key Questions

- Which 3 things do all animals do?
- What can we use to help us accurately define living things?
- Why are a duck and a fish similar?
- Which of these animals is not a vertebrate – bird, mammal, reptile, insect or amphibian?
- Name 1 way in which we can help the local environment.