St John Fisher RC Primary School
Year 6 Knowledge Organiser – Autumn Term One - Science

What we will be learning

I know:

Lesson 1
- How to explain the conditions needed for a living thing to survive.

Lesson 2
- How to group organisms.

Lesson 3
- How to classify animals.

Lesson 4
- How to classify plants.

Lesson 5
- What microorganisms are.
- How to classify microorganisms.
- **Lesson 6**
- About the scientist Carl Linneus.

Living Things & Their Habitats - Key Facts to Remember

- **Habitats are homes**: Every living thing needs a place to live, which is called a habitat. Habitats can be forests, oceans, deserts, or even your garden! Each one has its own set of conditions that suit different animals and plants.
- **Classification system explains diversity**: Scientists group living things into categories based on their similarities. This is called the classification system. The main groups are animals, plants, fungi, and microorganisms. Within these groups, creatures are further sorted into families, genera, and species!
- **Adaptations help survival**: Animals and plants have special features, called adaptations, that help them survive in their habitats. For example, camels have humps to store water for long journeys in the desert, while polar bears have thick fur to keep warm in icy conditions.
- **Food chains connect us**: In every habitat, living things are connected through food chains. For instance, in a woodland, the grass is eaten by rabbits, and then foxes eat the rabbits. This shows how energy moves from one living thing to another!
- **Human impact on habitats**: Unfortunately, human activities can harm habitats. Pollution, deforestation, and climate change can lead to the loss of many species. It's important to protect our environment to ensure that all living things can thrive!

Key Vocabulary and Glossary

Characteristics	Special qualities or appearance that make an individual or a group of things different o another.
Classify	To sort things into different groups.
Invertebrate	An animal without a backbone, such as an arthropod, mollusc, annelid.
Key	A key is a series of 'yes' or 'no' questions about the characteristics of living things that help to sort and classify them.
Microorganism	An organism that can only be seen using a microscope, e.g. bacteria, mould and yeast.
Organisms	Living things.
Species	A group of animals that can reproduce to produce fertile offspring.
Vertebrate	An animal with a backbone or spinal column, including mammals, birds, reptiles, amphibians and fish.

Key Knowledge: All living things can be organised and classified into different groups.

Note: The Linnaeus classification system, created by a smart scientist named Carl Linnaeus in the 18th century, helps us organise living things. He divided all plants and animals into groups based on similar features. For example, a house cat and a lion are both part of the big cat family, or Felidae, because they share common traits. This system makes it easier for us to study and understand the variety of life on our planet!