Sithney C.P. School Knowledge Organiser

Science. Biology: Classification



What you should already know:

Animals can be grouped into carnivores, herbivores and omnivores. They can also be grouped into vertebrates and invertebrates.

Organisms can be classified and we can use a classification key to identify them.

Examples of habitats (including microhabitats) and the organisms that can be found there.

Living things depend on each other to survive.

The relationships between predator and prey.

Food chains demonstrate the direction in which energy travels.

Key learning:

Living things can be formally grouped according to characteristics.

Plants and animals are two main groups but there are other living things that do not fit into these groups e.g. micro-organisms such as bacteria, and fungi such as mushrooms. Animals can be divided into two main groups: those that have backbones (vertebrates) and those that do not (invertebrates).

Vertebrates can be divided into five small groups: fish, animals, birds, reptiles and mammals

Invertebrates can be divided into a number of groups, including insects, spiders, snails and worms.

Each group has common characteristics.

Plants can be divided broadly into two main groups: flowering plants and non-flowering plants.

Living things are grouped according to the Linnaean System.

Key Vocabulary:

Amphibian: cold-blooded vertebrate that have gills and live in water as larvae but breathe air as adults. **Bacteria:** single cell micro-organisms

Birds: Warm-blooded and lay eggs. Bodies are covered in feathers.

Classification System: How scientists group living organisms

Fish: Cold blooded vertebrates. Most have scales and generally breathe through gills.

Flowering plants: Plants that produce flowers to reproduce.

Insects: Invertebrates that have a hard exoskeleton. **Invertebrates:** Animals that do not have a backbone. **Mammals:** An animal that breathes air, has a backbone, and grows hair at some point during its life. In addition, all female mammals have glands that can produce milk.

Microorganism: A living thing can is too small to be seen with the naked eye. Examples include bacteria, algae and dust mites.

Non-flowering Plants: Plants that produce spores or seeds to reproduce.

Organism: A living thing made up of one or more cells that use energy, grow and reproduce.

Reptile: A cold-blooded vertebrate that breathes air, has dry skin and is covered in scales. Most lay eggs. **Vertebrates:** An animal with a backbone.

