YEAR 4   BIOLOGY: How can we group together different living things?   SCIENCE

KEY VOCABULARY

Animals: Living organisms that feed on plants or other animals and, typically, have nervous systems that enable them to respond to stimuli.

Biologist: A scientist who studies living organisms and how they relate to their environments.

Classification: This is where plants or animals are placed into groups according to their similarities.

Endangered species: A plant or animal where there are not many of their species left and scientists are concerned that the species may become extinct.

Environment: An environment contains many habitats and these include areas where there are both living and non-living things.

Extinct: When a species has no more members alive on the planet, it is extinct.

Fungi: A group of organisms that include microorganisms like yeast and moulds. Fungi play an important role in decomposing plant and animal matter.

Habitat: The specific area or place in which particular animals or plants may live.

Invertebrate: A term to describe an animal without a backbone.

Nutrition: The process of obtaining food to provide living things with energy to live and stay healthy.

Organism: Another word for a 'living thing'.

Plants: A living organism that is able to make its own food by the process of photosynthesis.

Respiration: A process where plants and animals use oxygen gas from the air to help turn their food into energy.
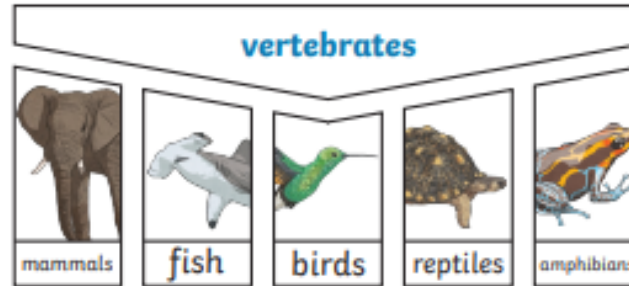
Sensitivity: The way living things react to changes in their environment.

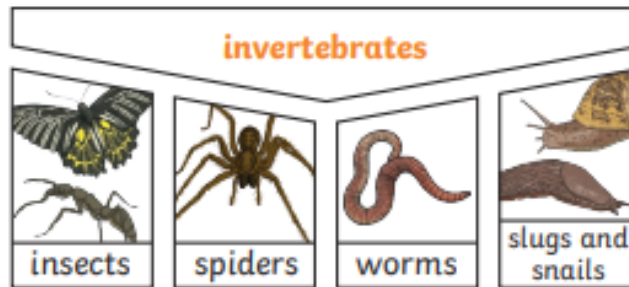**Species:** A class of living organism that can breed with others of the same class to produce fertile offspring.

Vertebrate: An animal with a backbone.

KEY CONCEPT

Animals are classified into two groups: Vertebrates and invertebrates.
Vertebrates can be sorted into five main groups:

vertebrates — mammals, fish, birds, reptiles, amphibians

These are the four main groups of invertebrates. The vast majority of living things on the planet are invertebrates.

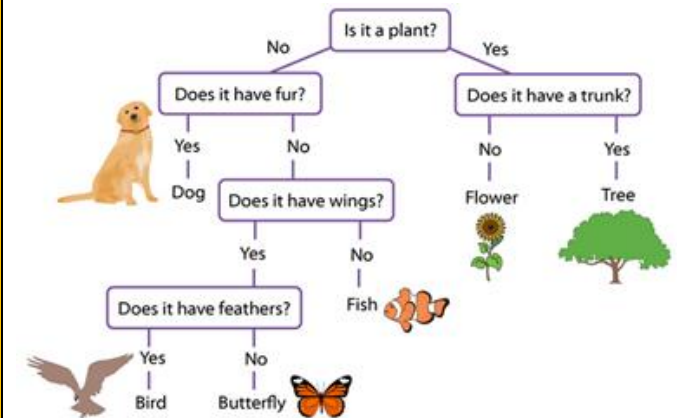invertebrates — insects, spiders, worms, slugs and snails

STICKY KNOWLEDGE

1. To stay alive and healthy, all living things need certain conditions that let them carry out the seven life processes: movement, respiration, sensitivity, growth, reproduction (producing young), excretion (getting rid of waste) and nutrition.

2. Classification is a way of grouping different living things together by their features. There are more than 8 million species of living things on Earth. To help us identify and study them, they are classified into different groups.

KEY CONCEPT

Classification keys are a way of identifying unknown organisms based on their particular features. Keys involve a series of questions about an organism's physical characteristics, with the answers branching off to other questions until the organism is identified. Classification keys should only include questions with **Yes** or **No** answers.

KEY CONCEPT

Changes to an environment can be natural or caused by humans. Changes to an environment can have positive as well as negative effects. Here are some examples of things that can change an environment:

Natural: earthquakes, floods, storms, droughts, wildfires, the seasons.

Human-made: deforestation, pollution, climate-change.

Plants and animals rely on the environment to give them everything they need. Therefore, when habitats change, it can be very dangerous to the plants and animals that live there.