# Year 6

# Classifying Living Things

## Essential knowledge, skills and concepts

Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals.

Give reasons for classifying plants and animals based on specific characteristics.

## Misconceptions

Children may believe ...

That there are only two groups of living things – animals and plants.

That plants are green and 'traditionally plant-like'.

That coral is a plant.

That fungi aren't alive.

That mushrooms and other fungi are plants.

That microbes are always bad.

That all animals move and have legs.

## Essential Vocabulary

**amphibian:** an animal with an internal skeleton that lives both in and out of water
**bacteria:** single-celled organisms, most of which can only be seen with a microscope
**fauna:** living things that are animals
**fermentation:** a change brought about by ferment (e.g. yeast into alcohol)
**flora:** living things that are plants
**fungi:** taxonomic kingdom comprising all the fungus groups and sometimes also the slime moulds
**genus:** the group that an organism belongs to
**insect:** an animal with six legs
**invertebrate:** animal without a backbone
**mammal:** an animal that gives birth to live young
**microbe**: tiny single-celled bacteria
**mushroom:** any of various fleshy fungi including the toadstools, puffballs, coral fungi and morels
**organisms:** living things
**reptile:** are animals that are cold-blooded. Most reptiles lay eggs and their skin is covered with hard, dry scales
**species:** the sub-group within the genus that an organism belongs to
**toadstool:** any of various mushrooms having a stalk with an umbrella-like cap
**vertebrate:** animal with a backbone

## Working Scientifically

This topic develops the following working scientifically skills: Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. Use test results to make predictions to set up further comparative and fair tests. Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations. Identify scientific evidence that has been