

## Classifying big and small

### Prior knowledge



#### Year 1 and 2

- ❑ There are invertebrates and vertebrates.
- ❑ Two of the main groups of living things are animals and plants.
- ❑ 'Germs' cause diseases.

#### Year 4

- ❑ Living things can be grouped in a variety of ways.
- ❑ Classification keys can help group, identify and name a variety of living things in their local and wider environment.

### Knowledge and skills covered in this topic



- ❑ Children will explain how organisms are classified using the Linnaean system.
- ❑ Children will classify the cold-blooded vertebrate groups using their common characteristics.
- ❑ Children will classify the warm-blooded vertebrate groups using their common characteristics.
- ❑ Children will classify invertebrates.
- ❑ Children will describe how the plant kingdom is organised (based on shared characteristics).
- ❑ Children will describe and classify microorganisms.

### Scientific skills developed in this topic



- ❑ **Classifying and grouping:** To produce a working classification key.

### British Values



- ❑ Mutual respect.

### Key words



- Amphibian:** A cold-blooded vertebrate that lays jelly-coated eggs, has moist skin, breathes with either lungs, gills or through their skin and lives in moist places or near water to keep from drying out, e.g. frog.
- Binomial system:** A system used to give living things a two-part Latin name.
- Bird:** A warm blooded vertebrate that breathes with lungs, has feathers, wings and lays hard-shelled eggs (e.g. duck). Most birds are able to fly.
- Characteristic:** A feature that allows something to be sorted into a group.
- Classification key:** A diagram used to sort organisms using their similarities and differences.
- Classify:** To group things based on similarities.
- Cold-blooded:** Animals that rely on external sources, like the Sun, to control their body temperature.
- Conifer:** A plant that reproduces with seeds inside of cones and has roots and needle-like leaves.
- Exoskeleton:** A casing, shell or skeleton on the outside of the body.
- Fern:** A plant that reproduces using spores, has roots and feathery leaves (fronds).
- Fish:** A cold-blooded vertebrate that breathes with gills, lays soft eggs in water, has wet scales.
- Flowering plant:** A plant that reproduces with seeds that are often held in fruit and has roots, flowers and long or broad leaves.
- Genus:** The group that an organism belongs to.
- Insect:** An invertebrate with six legs, three body segments, two pairs of wings (mostly), antennae and an exoskeleton.
- Invertebrate:** An animal without a backbone.
- Life processes:** The seven processes a living organism performs (movement, respiration, sensitivity, growth, reproduction, excretion, nutrition).
- Linnaean system:** A system created by Carl Linnaeus to classify living things according to their shared characteristics.
- Mammal:** A warm-blooded vertebrate that breathes air, grows hair at some stage in its life, produces milk and gives birth to live young (e.g. cow).
- Microorganism:** A microscopic living thing (e.g. bacteria, protista and some fungi).
- Microscopic:** Smaller than the eye can see.
- Moss:** A plant that reproduces using spores, has simple leaves and no roots.
- Organism:** A living thing e.g. an animal, plant, fungi or bacteria.
- Reptile:** A cold-blooded vertebrate that breathes with lungs and has dry skin covered in hard scales. They live on land and lay leathery eggs (e.g. snake).
- Snail:** An invertebrate with an unsegmented, soft body and an external shell.
- Species:** The sub-group within the genus that an organism belongs to.
- Spider:** An invertebrate with eight legs, two body segments and an exoskeleton.
- Vertebrate:** An animal with a backbone and internal skeleton e.g. mammals, birds, amphibians, fish.
- Warm-blooded:** Animals that can control their body temperature internally (e.g. mammals and birds).
- Worm:** An invertebrate with a segmented, soft body.

