

All children – regardless of gender, starting point or background – will have the opportunity to engage with a high-quality science education. They will be equipped with the knowledge, skills and vocabulary to understand how science can be used to explain what is occurring, predict how things will behave and analyse caused. We intend to inspire a sense of enjoyment and curiosity about science.

## Living Things and their Habitats

Spring 1

### Prior Knowledge

- Plants can make their own food whereas animals cannot.
- 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; amphibians; reptiles; birds; and mammals. Each group has common characteristics.
- Invertebrates can be divided into a number of groups, including insects, spiders, snails and worms.
- Plants can be divided broadly into two main groups: flowering plants; and non-flowering plants.

### Key Vocabulary:

- Vertebrates
- Invertebrates
- Fish
- Amphibian
- Reptile
- Bird
- Mammal
- Insect
- Spider
- Snail
- Worms
- Lowering
- Non-flowering plants
- Micro-organism
- Bacteria
- Fungi
- Classify
- Domain
- Kingdom
- Phylum
- Class
- Order
- Family
- Genus

### New Knowledge:

- 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 yeast; toadstools and mushrooms.
- Carl Linnaeus created the standard system of classifying and names species in the 1700s. He classified things into a hierarchy of three kingdoms - minerals, plants and animals.
- Today the Linnaean system only classifies living things.
- Linnaeus' levels of taxonomy, beginning at the top, are: Kingdom, Phylum, Class, Order, Family, Genus, Species.
- Living things are named scientifically, in Latin, using their genus and species e.g. *Canis lupus* is dog
- A species is a group of organisms that can reproduce to produce fertile offspring.
- Micro-organisms are very tiny living things and are not visible to the naked eye. They can be useful e.g. yeast for making bread rise, penicillin or they can be harmful e.g. chicken pox.
- Bacteria are single cell micro-organisms.

