### **Key Learning**

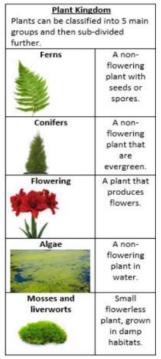
- Living things can be formally grouped according to characteristics.
- Plants and animals are two main groups but there are other livings things that do not fit into these groups e.g. micro-organisms such as bacteria and yeast, and toadstools and mushrooms.
- Plants can make their own food whereas animals 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.

#### **Enquiry Types**

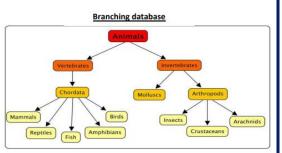
## **Science: Living Things and their Habitats (Year 6)**



#### **Key Knowledge**



| Animals                           | can be classified in 2 main             | groups and the              | en sub-divided further.                |
|-----------------------------------|---|-----------------------------|--|
| Invertebrates                     | Annelida worms-<br>earthworms, leech    | Vertebrates                 | Bird-<br>penguin, owl, ostrich.        |
|                                   | Arthropods-spiders, ant, butterfly      |                             | Fish-<br>tuna, shark, pike             |
| Animals<br>without a<br>backbone. | Molluscs-Snail, squid, octopus          | Animals with<br>a backbone. | Mammal-<br>bat, dolphin, whale, humans |
|                                   | Flatworm- moon<br>flatworm, tape worm   |                             | Reptile-<br>snake, crocodile, turtles. |
|                                   | Echinodermata-<br>starfish, sea urchin. |                             | Amphibian-<br>toad, salamander,frog    |



**Key Scientific Vocabulary** 

Micro-organisms A living thing too small to been seen by the human eye. Annelids An invertebrate that is a segmented worm. Invertebrate Animals without a backbone.

**Arachnid** Small invertebrate usually with 8 legs.

**Vertebrate** Animals with a backbone or spinal column. Species A group of living things that are closely related. Arthropod An invertebrate with an exoskeleton an a segmented body.

Bacteria A single celled microorganism that can live anywhere. **Insect** A small arthropod animal that has six legs and three body parts.

**Deciduous** Plants that shed their leaves annually.

**Molluscs** Invertebrate with an unsegmented body that can have a hard shell.

**Coniferous** Evergreen plants usually with needle-shaped or scale-like leaves, pines or cones.

# **Common Misconceptions**

| Classifying - organisms found in the local area to make a field guide. Research - differences between bacteria, fungi and viruses (how some can be helpful and some are harmful).  Some children may think:  • all micro-organisms are harmful  • mushrooms are plants. |  |  |
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