

Bumblebees – Science KCV – Living Things and Their Habitats



Key facts to learn:

• Know that there are three types of micro-organism: viruses, fungi and bacteria; of these three, viruses are often not really considered to be alive by many scientists mainly because they don't have the 'machinery' to reproduce inside them

• Know that germs are disease-causing micro-organisms

• Know that an arthropod is an invertebrate with a hard, external skeleton and jointed limbs

• Know that insects are a type of arthropod; their bodies consist of six legs, a

head, a thorax and an abdomen; most insects also have a pair of antennae and a pair of wings (e.g. wasp)

• Know that an arachnid (e.g. spider) is a type of arthropod with eight legs and no antennae or wings

- Know that a crustacean is a type of arthropod with two pairs of antennae (e.g. woodlouse)
- Know that a myriapod is an arthropod with a flat and long or cylindrical body and many legs (e.g. centipede)
- Know that Jane Goodall is an anthropologist, most famous for her study of chimpanzees, of which she is considered the world's foremost expert

• Know that Goodall is also a conservationist and environmentalist, which means she does important work to help protect the planet, in particular animal habitats

Key skills to do:

• 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.
- Report and present findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations.

| Words to know and spell (Tier 2 Vocabulary) | | | |
|---|--------------|-----------|--|
| micro-organism | adaptation | herbivore | |
| animal | biomes | carnivore | |
| plants | amphibian | omnivore | |
| classification | reptile | habitat | |
| invertebrates | microhabitat | organism | |
| vertebrates | offspring | | |

Words to understand and spell (Tier 3 Vocabulary)

| Myriapod | An arthropod with two pairs of antennae. |
|-----------|--|
| Arachnid | A type of arthropod with eight legs and no |
| | antennae or wings. |
| Arthropod | An invertebrate with a hard, external skeleton and |
| | jointed limbs. |
| Fungus | A type of organism that gets their food from |
| | decaying material or other living things. |
| Mollusc | An animal that has a soft body, no spine and is |
| | often covered with a shell. |

Concept check questions. Test yourself:

Name some ways in which we group animals detailing the key physical characteristics, features and behaviours. Explain why you think scientists have chosen to classify living things. What might be different about the animal kingdom in the future? Give reasons for your answer. In what ways is a reptile different to an amphibian? How is a food web different to a food chain?

Opportunities for Investigation:

Identifying and Classifying: How would you make a classification key for vertebrates/invertebrates or microorganisms?