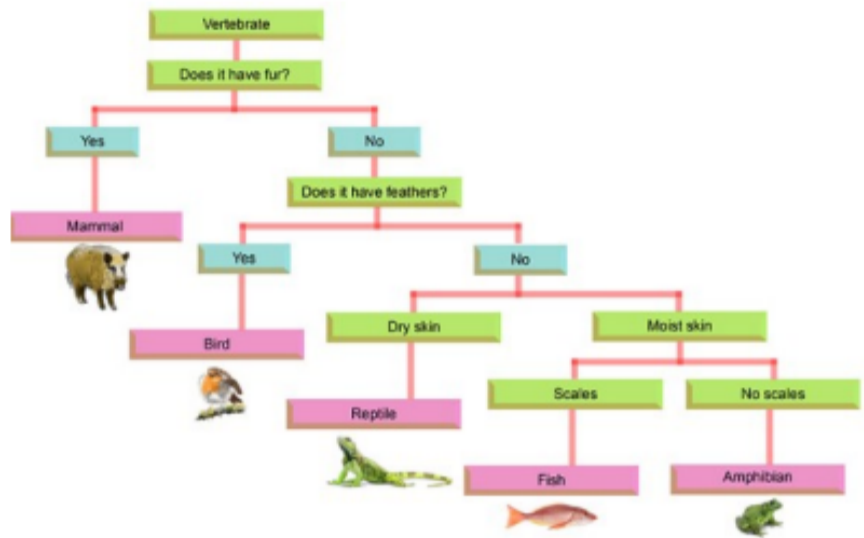


What should I already know?

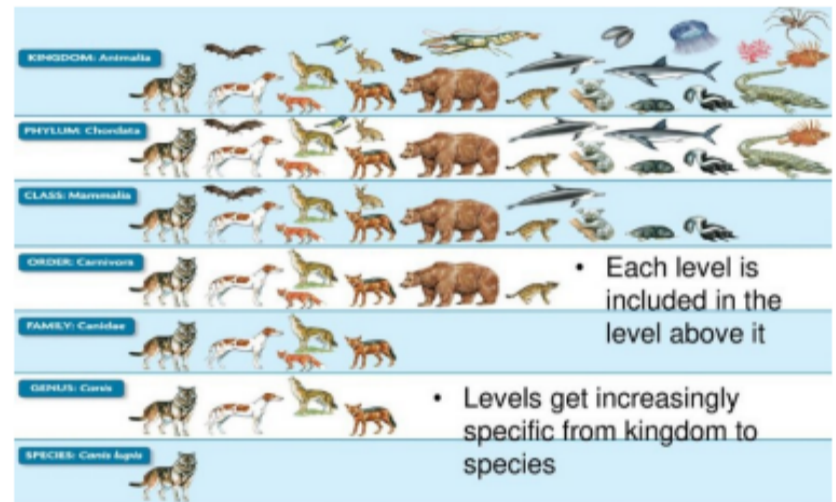
- Animals can be grouped into **carnivores**, **herbivores** and **omnivores**. They can also be grouped into **vertebrates** and **invertebrates**.
- **Organisms** can be **classified** and we can use a **classification key** to identify them.
- Examples of **habitats** (including **microhabitats**) and the **organisms** that can be found there.
- Living things depend on each other to survive.
- How **environments** are changing.
- The relationships between **predators** and **prey**.
- **Food chains** demonstrate the direction in which **energy** travels.
- How **organisms** have **adapted** and **evolved** over time.

What will I know by the end of the unit?

- Living things can be grouped according to different **criteria** (where they live, what type of **organism** they are, what features they have). For example, a camel can belong in a group of **vertebrates**, a group of animals that live in the desert, and a group of animals that have four legs.
- A **classification key** is a tool that is used to group living things to help us identify them using recognisable **characteristics**.



- The Linnaean system, named after Carl Linnaeus, has different levels where the number of living things in each group gets smaller and smaller, until there will just be one type of animal in the **species** group.



What are microorganisms?

- **Microorganisms** are very tiny **organisms** where a microscope has to be used to see them.
- Examples of **microorganisms** include dust mites, bacteria and fungi, such as mould.
- Some **microorganisms** can be helpful in certain situations. Others can be harmful, and their spread needs to be controlled or contained.

Vocabulary

| | |
|--------------------|--|
| adaptation | a change in structure or function that improves the chance of survival for an animal or plant within a given environment |
| carnivore | an animal that eats meat |
| characteristics | the qualities or features that belong to them and make them recognisable |
| classification key | a system which divides things into groups or types |
| criteria | a factor on which something is judged |
| energy | the ability and strength to do physical things |
| environment | all the circumstances, people, things, and events around them that influence their life |
| evolution | a process of change that takes place over many generations, during which species of animals, plants, or insects slowly change some of their physical characteristics |
| food chain | a series of living things which are linked to each other because each thing feeds on the one next to it in the series |
| habitat | the natural environment in which an animal or plant normally lives or grows |
| herbivore | an animal that only eats plants |
| invertebrate | a creature that does not have a spine, for example an insect, a worm, or an octopus |
| microhabitat | a small part of the environment that supports a habitat , such as a fallen log in a forest |
| microorganism | a very small living thing which you can only see if you use a microscope |
| minibeast | a small invertebrate animal such as an insect or spider |
| omnivore | person or animal eats all kinds of food, including both meat and plants |
| organism | a living thing |
| predator | an animal that kills and eats other animals |
| prey | an animal hunted or captured by another for food |
| species | a class of plants or animals whose members have the same main characteristics and are able to breed with each other |
| vertebrate | a creature which has a spine |

Procedural Knowledge

- Sort **vertebrate** and **invertebrate** animals into groups, describing their key features. Use a **classification key** to identify which group of **vertebrates** animals belong to and then create your own.
- Explore the different ways in which **invertebrates** can be **classified** (e.g. arachnids, insects, molluscs).
- Describe some **organisms** that may be difficult to **classify** (e.g. platypus) and explain why.
- Use simple computer software programmes to create a branching **classification key**.
- Sort scenarios where **microorganisms** might be helpful (e.g. yeast in baking) or harmful; (e.g. infectious diseases).
- Use **classification systems** and keys to identify some **organisms** in the immediate **environment**. Record these in a variety of ways (e.g. Venn and Carroll diagrams, tables).
- Research unfamiliar **organisms** from a broad range of other **habitats** and decide where they belong in the **classification system**.
- Research the work of Carl Linnaeus.