Over Hall Community School

Topic: Living things and their habitats	Year: 6	Strand: Biology

What should I already know?

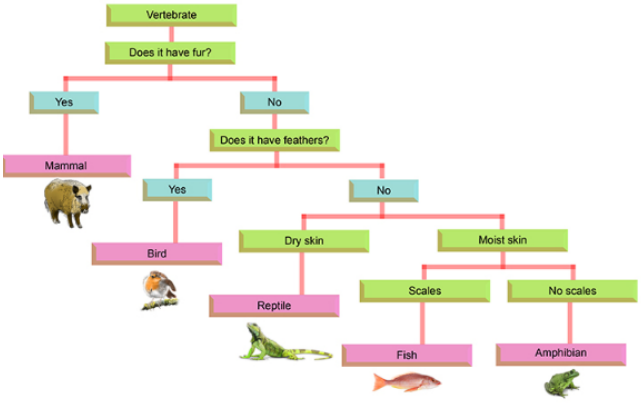
- Animals can be grouped into **carnivores, herbivores** and **omnivores.** They can also be grouped into **vertebrates** and **invertebrates.**
- **Organisms** can be **classified** and we can use a **classification key** to identify them.
- Examples of **habitats** (including **microhabitats**) and 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.

Vocabulary

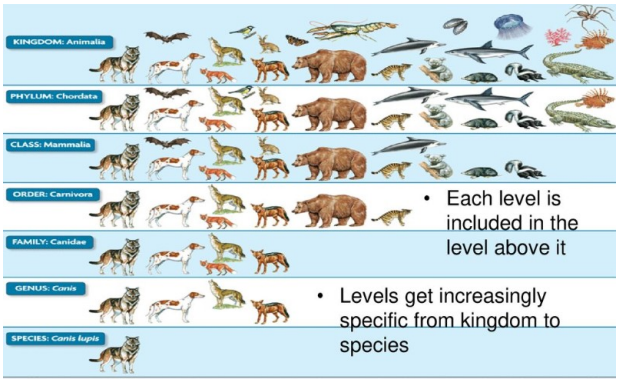
adaptation	a change in structure or function that improves the chance of survival for an animal or plant within a given **environment**
carnivore	an animal that eats meat
characteristics	the qualities or features that belong to them and make them recognisable
classification key	a system which divides 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

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.

Investigate!

- 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.

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Question 1: Which of these is **not** a vertebrate?	Start of unit:	End of unit:
bird		
mammal		
reptile		
insect		
amphibian		

Question 2: Give an example of a microorganism.	Start of unit:	End of unit:

Question 3: Name one thing that makes these animals similar and one thing that makes them different.


lion


tiger

similar	different

Start of unit:	End of unit:

Question 4: Give an example of when microorganisms are helpful.	Start of unit:	End of unit:

Question 5: Give an example of when microorganisms are harmful.	Start of unit:	End of unit:

Question 6: Give an example how food is preserved to stop it from going mouldy.	Start of unit:	End of unit:

Question 7: What is Carl Linnaeus famous for and why is his work important?	Start of unit:	End of unit:

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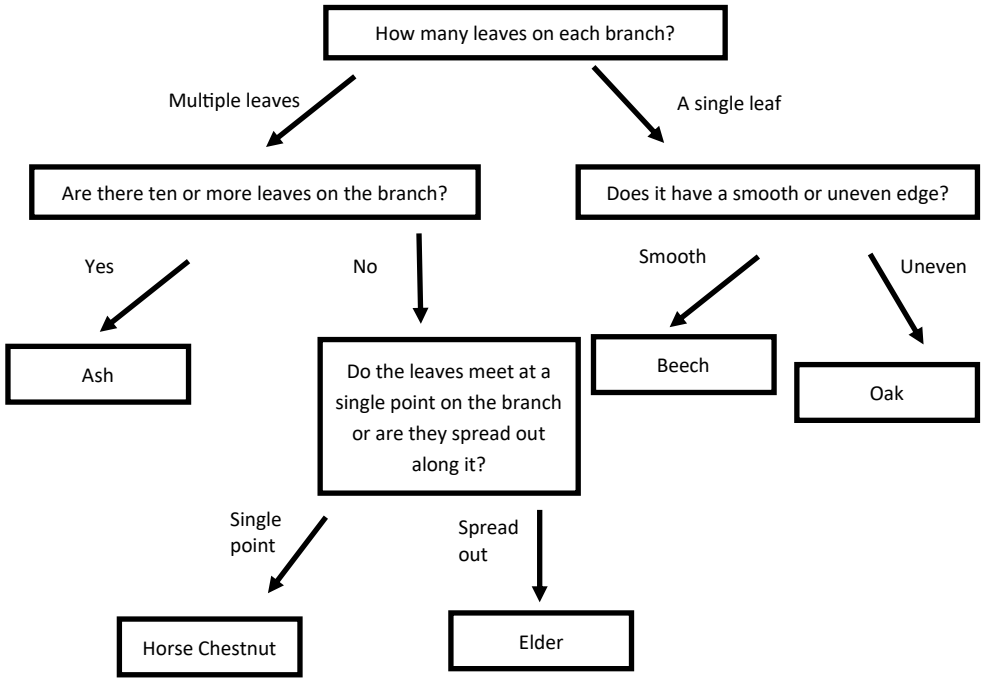
Question 8: Use the classification key to identify which plant these leaves have come from.	Start of unit:	End of unit:



Question 9: This is a holly leaf. Choose a leaf from above it is similar to and give reasons why.	Start of unit:	End of unit:
		

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Question 10: Create your own classification key to sort the following animals. It has been started for you.	Start of unit:	End of unit: