Caroline Haslett Primary School - Science: Animals Including Humans Y4

What should I already know?

- Animals can be grouped into **carnivores, herbivores** and **omnivores** and other ways in which to **classify** animals.
- The differences between the teeth (**incisors, molars, canines)** of **carnivores** and **herbivores**.
- Examples of **habitats** (including **microhabitats**) and the animals and plants that can be found there.
- Plants need sunlight to grow.
- Living things depend on each other to survive.
- The seven **life processes** and that **nutrition** is one of them.
- **Nutrition** is the **life process** by which animals get **energy.**
- How **environments** are changing.

Vocabulary

canine	pointed teeth near the front of the mouth of humans and of some animals
carnivore	an animal that eats meat
classification key	a system which divides things into groups or types
energy	the ability and strength to do physical things
environment	all the circumstances, people, things, and events around them that influence their life
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
food web	a combination of **food chains** that integrate to form a network
habitat	the natural **environment** in which an animal or **plant** normally lives or grows
herbivore	an animal that only eats plants
incisor	the teeth at the front of your mouth which you use for biting into food
life processes	There are seven processes that tell us that living things are alive
microhabi-tat	a small part of the **environment** that supports a **habitat**, such as a fallen log in a forest
molar	the large, flat teeth towards the back of your mouth that you use for chewing food
nutrition	the process of taking food into the body and absorbing the nutrients in those foods
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
primary consumer	an **organism** that feeds on **producers** . They are always **herbivores.**
producer	**organisms** that make their own food using **energy** from the Sun.
secondary consumer	**organisms** that eat **primary consumers** for **energy**
tertiary con-sumer	**Tertiary consumers** eat **primary** and **secondary consumers** as their main source of food

What will I know by the end of the unit?

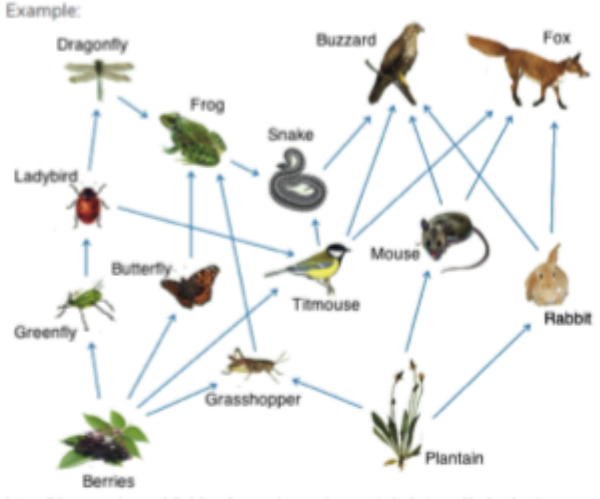
- A **food chain** is a simple way to show the direction in which **energy** moves from the **producer** to the various **consumers** to the top or **tertiary consumer.**
- The **producer** (a plant) gets its **energy** from the Sun.

- In this example, the **producer** is the wheat, which gets its **energy** from the Sun.
- The mouse eats the wheat and gets its **energy** from it. The mouse is the **primary consumer.**
- The mouse is then eaten by the owl, which is the **secondary consumer.** The owl gets its **energy** from the mouse. The owl is the **predator** and the mouse is the **prey.**
- The owl is then eaten by the wolf, which is the **tertiary consumer.** The wolf gets its **energy** from the owl.
- The arrows show the direction in which the **energy** travels.

What is a **food web?**

- A **food web** shows the direction in which **energy** travels when animals and **producers** (plants) are eaten by more than one thing.
- A **food web** shows multiple **food chains** where there are multiple feeding relationships.

Example:



- When part of the **food chain** is removed, this has an impact on the other parts of the **food chain.** The number of some species will increase, while the population of others will decrease.
- This can have a direct impact on the survival of the species.
- The population of **tertiary consumers** depends on healthy populations of **producers, primary** and **secondary consumers.**

Investigate!

- Match **predators** and their **prey** depending on their **habitats.**
- Create **food chains** for different **habitats** and compare them. How do the **producers**, **predators** and **prey** compare? What are their **teeth** like?
- Compare animal populations and explain why some populations (e.g. insects) might be higher than others (e.g. wolves)
- Explore what happens when part of a **food chain** is removed.
- Create **food webs.**
- Explore how the changing **environment** is having an impact on feeding relationships and **food chains/webs.**

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Working scientifically	An observation involves looking closely at objects, materials and living things. Ask relevant scientific questions, independently, about the world around them and begin to identify how they can answer them. Observations can be made regularly to identify changes over time. Begin to choose which observations to make and for how long and make systematic, careful observations and comparisons, identifying changes and connections. Use scientific vocabulary to report and answer questions about their findings based on evidence collected. Draw simple conclusions and identify next steps, improvements and further questions. A conclusion is the answer to a question that uses the evidence collected.
Animals including humans and evolution	Food chains show what animals eat within a habitat and how energy is passed on over time. Construct and interpret a variety of food chains and webs [identifying producers, predators and prey] to show interdependence and how energy is passed on over time. All food chains start with a producer, which is typically a green plant. The producer is eaten by a primary consumer (prey), which is eaten by a secondary consumer (prey), which is eaten by a tertiary consumer. All food chains end with a top or apex predator. Changes within a food chain, such as an abundance or lack of one food type, have an impact on the entire food chain.