

Preston Primary School Knowledge Organiser

Topic: Science- Animals including humans

Term: Spring 2

Year: Unit 3

Duration: 6 Weeks

The Powerful Knowledge we will take away from this Learning Enquiry (what children will be learning):

Develop our previous learning about nutrition, animals, and humans and how they need certain amounts of the right foods. Food chains in nature will highlight the relationship between producers, predators, and prey. The function of the digestive system in humans will be explored.



Humans and animals have different nutritional needs to keep them healthy and their bodies functioning. We will complete an experiment looking into the digestive system.

All food comes from a producer, and is consumed by prey animals, which are consumed in turn by predators. This is a food chain.



Our digestive system comprises of many parts which each play a role in the digestive process.



The digestive system digests our food and enables our bodies to use the energy stored within food. We then excrete the waste products as faeces or urine. We will demonstrate this process practically and visually through an experiment that demonstrates how food that is eaten passes from the mouth to the point of excretion.

Our Key Vocabulary:

Word	Meaning
Nutrition	There are lots of different kinds of vitamins and minerals and nutrition is the term that describes what is in our food.
Living things	Animals, including humans, that breathe oxygen and cannot make their own food or water.
Excretion	The elimination by an organism of waste products.
Food Chain	A series of organisms each dependent on the next as a food source.
Predator	An animal that preys on other animals. These are always carnivores (meat eaters).
Producer	An organism that produces its own food, for example a plant.
Prey	An organism that is eaten by another organism. These could be herbivores (plant eaters) or omnivores (eat both plants and animals).
Digestive system	The parts of the body that work together to extract energy from food and excrete waste products.
Carbohydrate	A source of energy that humans ingest via food. We cannot make our own.
Protein	Protein is essential for building and repairing muscles and other body tissue.

Website links:

What is a food chain? BBC Bitesize

<https://www.bbc.co.uk/bitesize/clips/z96r82p>

What is the digestive system? - BBC Bitesize

<https://www.bbc.co.uk/bitesize/topics/z27kng8/articles/z9wk7p3>

What happens to food in your mouth? - BBC Bitesize

<https://www.bbc.co.uk/bitesize/topics/z27kng8/articles/z2rx82>

What happens in your stomach? - BBC Bitesize

<https://www.bbc.co.uk/bitesize/topics/z27kng8/articles/zg2g7p3>

What happens in your intestines? - BBC Bitesize

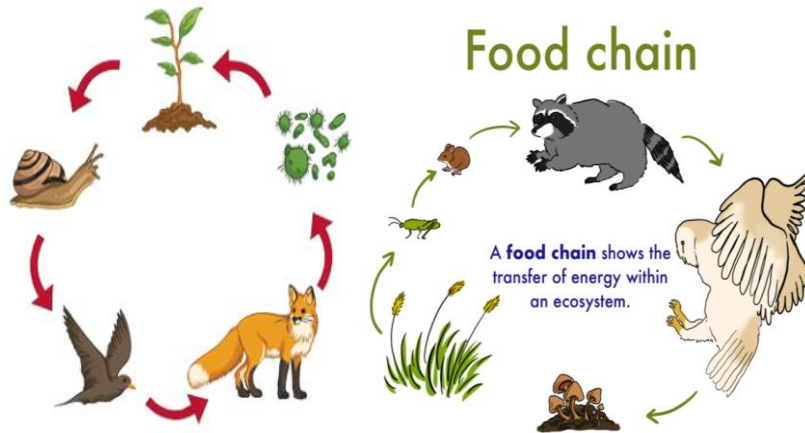
<https://www.bbc.co.uk/bitesize/topics/zv9qhyc/articles/zdkfvk7>

What I already know:

In Unit 2, children learned that humans and animals have basic needs for survival: food, water, and air. They learnt that humans and animals reproduce.

In Unit 3, children have studied the different nutritional requirements of humans and know that we need to eat a healthy and balanced diet. They have learnt about the function of the skeleton and are able to identify the role played by major bones e.g., the rib cage protects our lungs from damage. They have learned about human and animal teeth. Children have discussed carnivores, herbivores and omnivores and the types of teeth each of these groups have depending on their diets.

Food chain

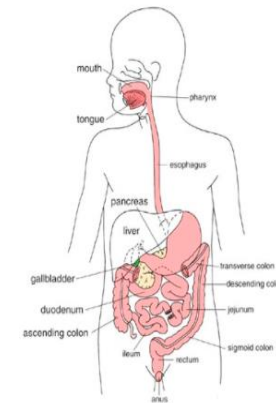


A food chain shows the transfer of energy between organisms when one organism eats another.

How does the digestive process work?

Digestion involves:

- ▶ The mixing of food.
- ▶ The movement of food through the digestive tract.
- ▶ A chemical breakdown of large molecules of food into smaller molecules.



Digestion begins in the mouth, where food and drink are taken in and is completed in the small intestine.