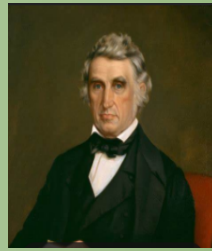


The Digestive System

Year 4 Spring 1

The Art of Food

Science



William Beaumont was a U.S. army surgeon, the first person to observe and study human digestion as it occurs in the stomach.

Useful websites

The digestive system

<https://www.bbc.co.uk/bitesize/topics/zcyycd/articles/z8bntrd>

Sticky Knowledge

What is the digestive system important?

The digestive system allows the body to take in nutrients from food as it passes through the body.

What is the process of digestion?

Digestion is the breaking down of larger pieces of food into smaller pieces so the body can use it for energy. The digestion process begins when food is bitten by the teeth. • Saliva turns smaller pieces of food into a more liquid substance so it travels smoothly down the oesophagus to the stomach. • The stomach churns the food, and adds acid to break it down further before the partially digested food passes to the small intestine. • The small intestine absorbs nutrients from the food and passes the remaining food to the large intestine. • The large intestine absorbs water from the remaining food, and then passes the remaining waste to the rectum.

How does the structure of teeth affect diet?

Carnivores have long, sharp teeth to help them with ripping and tearing through meat. **Herbivores** have large, flat teeth to grind and chew through grasses and plants. **Omnivores** have a combination of sharp and flat teeth, allowing them to tear through meat and grind plants.

How do germs effect tooth enamel?

The human mouth is full of different germs which feed on sugar in the mouth and can cause plaque to build up. • If plaque is not removed from the teeth, it can cause the enamel layer to rot away, exposing the sensitive layers underneath.

How can we look after our teeth?

We can look after our teeth by brushing them twice a day, reducing our sugar intake and visiting the dentist regularly.

- incisors – flat teeth at the front of the mouth that are used to bite into food



- canines – sharp, pointed teeth that help with ripping and tearing



- premolars – the teeth found between canine teeth and molars that guide food to the back of the mouth



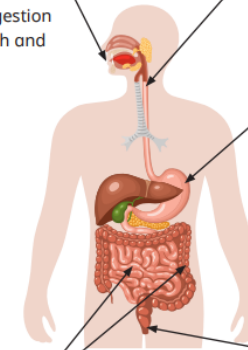
- molars – the large teeth at the very back of the mouth used to grind and chew food



- digestive system – organs working together to break down food into smaller pieces

mouth – the organ that takes in food and begins digestion using teeth and saliva

oesophagus – the organ that pushes food from the mouth to the stomach



stomach – the organ that squeezes and breaks down food

intestines (small and large) – the organs that absorb nutrients and water from food

rectum – part of the large intestine where waste exits the body

- saliva – clear liquid in the mouth that softens food

Key Vocabulary

Vocabulary	Definition
Digestive system	organs working together to break down food into smaller pieces
teeth	the hard structures in the mouth used to bite and chew through food
plaque	a sticky coating made by germs that can harm the teeth and gums.
enamel	the protective layer of a tooth
root	the part of a tooth that holds it in place in the jaw
decay	a process of a material breaking down
germs	tiny living things that cannot be seen by the human eye