



# Year 4 – Animals including humans

The small intestine is about 6 metres long, while the large intestine is only about 1.5 metres long.

The average adult human produces about 160 kg of poo in a year!

## Vital Vocabulary – learn these words and their definitions

Key Word	Definition
<b>digestion</b>	Breaking food down into smaller pieces that can be <b>absorbed</b> into the blood
<b>absorb</b>	Take in or soak up (energy or a liquid or other substance)
<b>organ</b>	<b>Organs</b> are the body's recognisable structures
<b>oesophagus</b>	Tube connecting your mouth to your stomach
<b>stomach</b>	Organ which <b>churns</b> food and <b>contains acid</b>
<b>small intestine</b>	The organ where most digestion happens and the <b>nutrients</b> from the food are absorbed into the blood
<b>large intestine</b>	Organ that absorbs water from food that is not digested
<b>incisor</b>	sharp teeth at the front of the mouth for <b>cutting</b> food
<b>canine</b>	pointed teeth at the side of the mouth for <b>ripping</b>
<b>molar</b>	blunt teeth at the back of the mouth for <b>grinding</b> food

## Frederick Banting



In 1921, **Frederick Banting** co-discovered insulin, a hormone that is made in the **pancreas** and controls blood sugar. This discovery led to the treatment for a serious human disease called diabetes, which has saved millions of lives around the world.

## The Digestive System

Follow the boxes to see where your food travels through the **organs** of the digestive system.

**1 mouth**  
Food is chewed by the teeth and saliva is added.

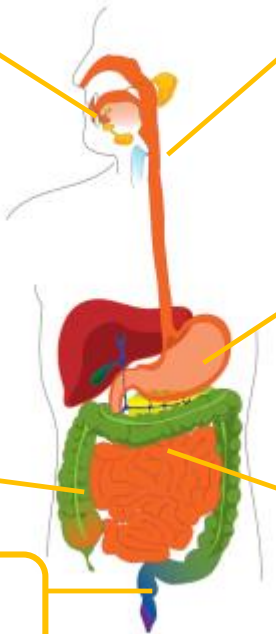
Upper  
Lower

- incisors
- canines
- premolars
- molars

**liver** – makes a substance called bile that helps to break down fat

**5 large intestine**  
Excess water is **absorbed**.

**6 rectum and anus**  
Food is stored in the rectum and then leaves the body via the anus.



**2 oesophagus**  
After food is swallowed, it passes down the **oesophagus**, which connects your mouth to your **stomach**.

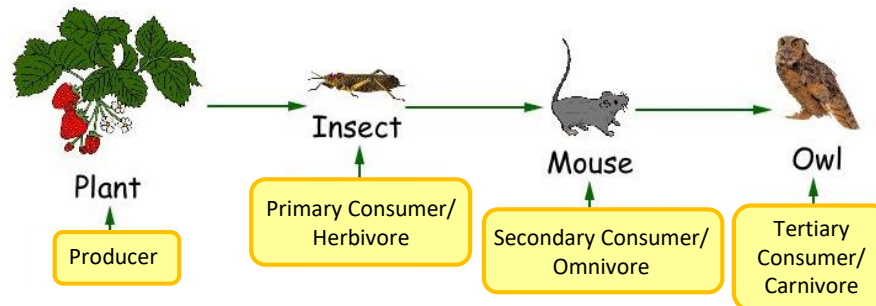
**3 stomach**  
Food is churned and mixed with acid.

**pancreas** – makes substances called enzymes that break down the food

**4 small intestine**  
Most of the **digestion** happens here. The **nutrients** from the foods are then absorbed into the bloodstream.

## Food chains

Food chains show the path of energy from one living thing to another.



**Producers** convert light energy into food by a process called **photosynthesis**.

Animals are called **consumers** because they eat plants and other animals to get their energy.

**Herbivores** only eat plants.

**Omnivores** eat both plants and animals.

**Carnivores** eat only animals.