

Burps, Bottoms and Bile. Year 4.

Spring 1 2022- 2023



Key Learning Area - SCIENCE

In science this term we are starting a topic called 'Burps, Bottoms and Bile'. The children will be learning about the human digestive system, human teeth, animal teeth, keeping healthy and blood. We will be doing several experiments throughout the term, including looking at the effects of sugary drinks on teeth (egg shells) and testing out how saliva helps break down our food! We will continue ensuring all the science objectives from the national curriculum are covered in depth.

It's going to be a potentially gross topic for the teachers —but the children are already really looking forward to what it has in store!

ENGLISH

In English this term we are reading *The Demon Dentist* by David Walliams. This book runs nicely alongside our science and PSHE topic for this term. We will be writing an explanation text all about teeth and writing a creative story about travelling through the inside of a human body.

We will continue to learn the Year 3/4 common exception words.

MATHEMATICS

In Maths , we will cover these units:

Number – multiplication and division (Long written methods)

Measurement (Length and perimeter)

Number – fractions (Mixed and equivalent fractions)

Decimals and Percentages

GEOGRAPHY

We will visit aspects of Geography throughout our science topic, although most of our Geography learning will be taking place in stand alone lessons where we will look at the UK.

Capital cities, countries, counties and main towns and cities will all be learnt.

ART & DESIGN

In art and design we will be making a working replica of a human digestive system.. We will be use all sort of different materials for the parts of the body. This will consolidate our end of topic .

D&T

In design and technology we will be making a working replica of a human digestive system.. We will be use all sort of different materials for the parts of the body. This will consolidate our end of topic .

RE

Our RE Week will be in Week 7 focusing on 'How do festivals and family life show what is important to Muslim people'.

The children will be visiting a Mosque to experience first hand what a Muslim place of worship is like.

PSHE

In PSHE this term we will be looking at keeping healthy and looking after our bodies.

We will also be looking at legal and illegal drugs and learning about the difference between the two and exploring our feelings around this issue.

COMPUTING

In computing we have started a brand new scheme of work across the school from 'Teach Computing'. (Free for anyone to access). Our first topic is looking at computer networks, inputs/outputs and processes and digital devices.

The new scheme is tricky for staff and children but hopefully as a school, we will be very computer literate by Year 6!

MUSIC

In Music we will continue to appreciate and understand a wide range of high-quality recorded music drawn from different traditions and from great composers through our daily Morning Music sessions. Year 4 will also enjoy ukulele lessons with a specialist music teacher whilst Year 3 will be learning to read music and play the glockenspiel with Miss Dunn.

PE

In PE we will be using our RealPe scheme to continue looking at movement and how this can help in different sports and games. As well, we will complete our RealPe Gym Unit.

Sharks will also be starting their swimming lessons this term. Jellyfish will be in a later term.

FRENCH

In French, children will be covering the topic 'Going shopping' where they look at different food related vocabulary and other items that may be bought from a variety of shops using French vocabulary and phrases.

SMSC & VALUES

The values we will be covering are

To develop our SMSC awareness we will continue to have assemblies that focus on our values and encourage children to reflect on their own beliefs and values.

Burps, Bottoms and Bile

Human digestion

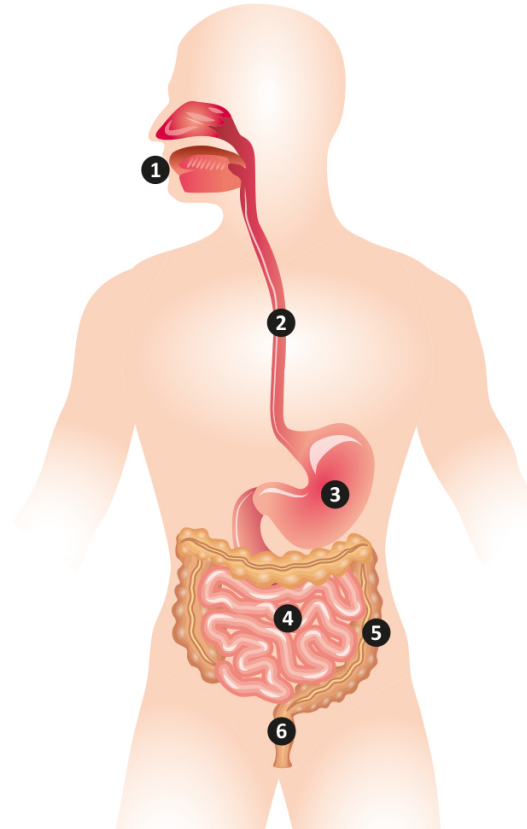
Humans need to absorb proteins, carbohydrates, fats, vitamins and minerals from their food to keep healthy and have enough energy to live and work. The job of the digestive system is to break down food so it can be absorbed and used by the body.

The digestive system

- 1 Teeth chew food into small pieces in the **mouth**. These pieces mix with saliva containing enzymes to start digestion.
- 2 The muscles in the **oesophagus** move a ball, or bolus, of food down to the stomach.
- 3 The muscles in the **stomach** churn the food and acids and enzymes break it down. This can take 2–6 hours.
- 4 Partially digested food travels through the **small intestine** and nutrients are absorbed into the body. This can take 3–5 hours.
- 5 The **large intestine** removes excess water from the food that can't be digested to make solid faeces (poo). This can take 4–72 hours.
- 6 The faeces are stored in the **rectum** ready to leave the body.

Healthy digestion

The digestive system is directly affected by food and lifestyle. It is important to have a healthy digestive system to maintain good general health and well-being. Eating a balanced diet and drinking plenty of water will keep food moving through the digestive system. Regular exercise is also important to maintain a healthy weight and keep muscles moving digestive waste through the body.



Good toilet habits

It is important to go to the toilet as soon as the urge is felt. Not going can lead to stomach ache and constipation. It is essential to maintain good personal hygiene when using the toilet, including washing hands with soap and water to prevent the spread of germs. Soap kills bacteria and viruses that could cause illness. Drying hands thoroughly is also important because bacteria spread more easily on wet hands.

Healthy diet

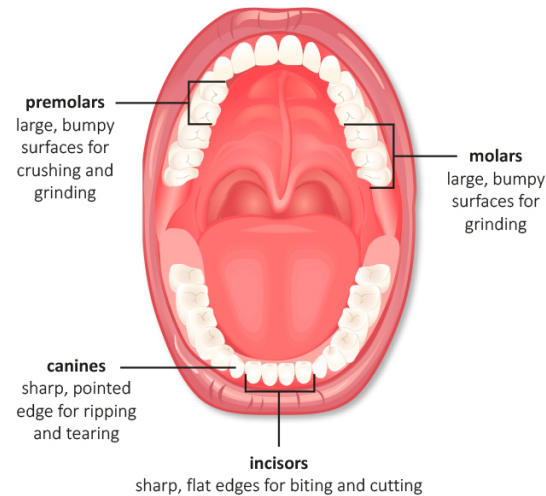
Eating a healthy, balanced diet helps people to get rid of solid waste more easily. Fibre or roughage in our diet is crucial to healthy digestion. Fibre is found in fruit and vegetables, wholewheat breakfast cereals, granary bread and pulses, such as beans or lentils. Drinking plenty of water also helps to break down food and softens faeces to prevent constipation. Foods that contain a lot of fat, such as chips, burgers and fried foods are harder to digest and can cause stomach ache. Eating more lean meat and fish, drinking skimmed or semi-skimmed milk and grilling instead of frying foods can help to keep the digestive system working well.

A healthy society

One of the main health problems today is obesity. Obesity means being extremely overweight, which is dangerous for health. Being overweight can lead to type 2 diabetes, where there is too much sugar in the blood, which can cause serious problems with the eyes, heart and nerves. It can also cause heart disease, cancer and strokes. Having a healthy diet with more fruit and vegetables and fewer high-fat foods and fizzy drinks helps people to stay healthy. It is also important to do plenty of exercise, which reduces the risk of major illnesses.

Teeth

Teeth are hard, white objects in the mouth that are used for biting and chewing. Humans have two sets of teeth over their lifetime. The first set of 20 teeth are called deciduous or milk teeth. These start to come through when babies are around six months old. They are gradually replaced by 32 permanent adult teeth from about six years old. There are four different types of teeth, which are shaped according to the job they do.

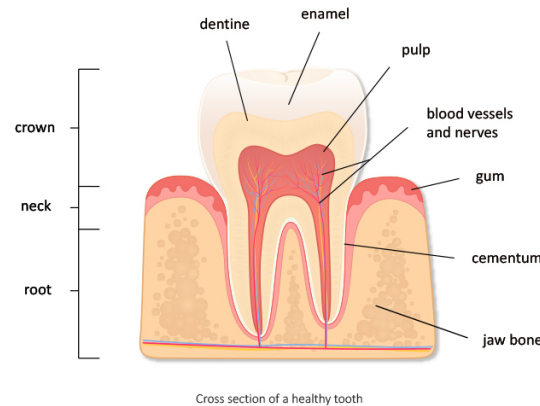


Tooth decay

Bacteria are microorganisms that live in and on the body. Some are completely harmless or even helpful, but some cause disease. Millions of bacteria live in a healthy mouth. If sugary foods are left on teeth after eating, the sugar and bacteria in the mouth form a soft, sticky film on the teeth called plaque. The bacteria then turn the sugar into acid. The acid starts to dissolve the tooth enamel, leading to holes and pain. This is called tooth decay or cavities.

Structure of a tooth

The visible part of a tooth is called the crown. The neck of a tooth is between the crown and the root. The root is anchored in the jawbone to keep the tooth still. The outer layer of a tooth is the enamel, which is the hardest substance in the body. Under the enamel is a layer called dentine. Dentine contains the pulp, which is the soft middle of the tooth that has a blood supply and nerves. The gums protect a tooth's root. It is important that gums are regularly cleaned and kept healthy.



Keeping teeth healthy

It is important to keep teeth healthy by regularly removing plaque. This is done by brushing twice a day using a toothbrush and toothpaste that contains fluoride. Fluoride is a mineral that helps prevent tooth decay. Having a dental check up every six months will make sure any problems are sorted out as soon as possible and the dentist will give advice about keeping teeth healthy. It is also important not to have too many sugary foods and drinks.

Glossary

absorb	To take in or soak up a substance.
bacteria	Microorganisms that are found everywhere. Some can be useful but others cause disease.
bolus	A small, chewed-up lump of food.
constipation	A condition where it becomes difficult to expel faeces from the body.
decay	Damage caused by bacteria.
digestion	The process when food is broken down and absorbed inside the body after being eaten.
digestive system	The parts of the body that are responsible for digesting food.
enzyme	A chemical in the body that speeds up changes. For example, enzymes in saliva start the breakdown of food.
faeces	The solid waste passed out of the body after digestion. Also known as poo.
microorganism	A living thing that can only be seen with a microscope.
nutrient	A substance needed by the body to live and grow.
saliva	The liquid made in the mouth that contains enzymes and starts digestion.
tongue	A muscular organ in the mouth that is involved in swallowing.