Coley Primary School – Knowledge Organiser

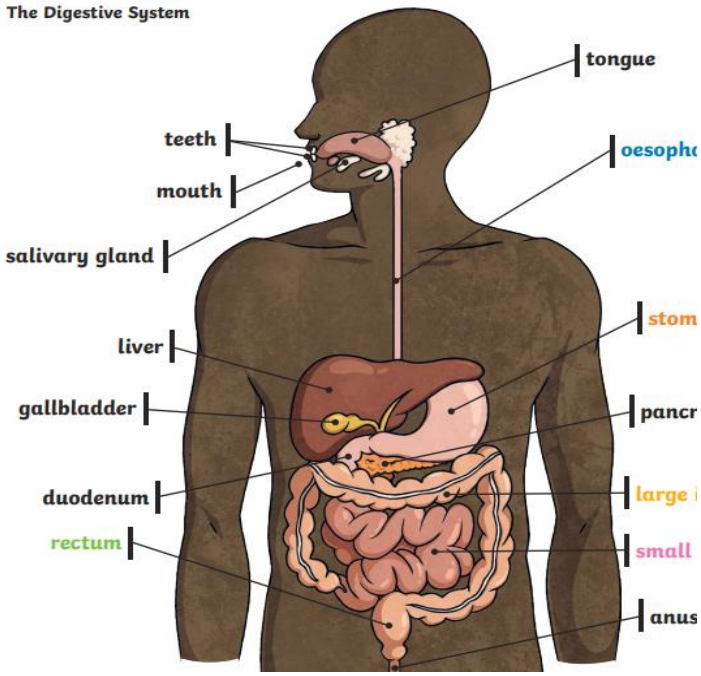
SUBJECT FOCUS: Biology strand	Science: Animals, including humans	YEAR 4	TERM 3

WHAT? – Key Knowledge

Digestion is how the body breaks food down to give the body **energy** and **nutrition**.

1. Food is **chewed** in the **mouth** and then travels to the stomach down the **oesophagus**.
2. The **stomach** churns food up with acid into a sort of porridge mixture.
3. The mixture travels through the **small intestines** and **nutrients** are passed into the blood stream.
4. It moves on into the **large intestines** where water is absorbed.
5. Finally any waste is pushed out of the body.

Other organs such as the liver, pancreas and gallbladder aid digestion.



Food Chains

Food chains are a diagram to show how **nutrients** and **energy** are passed from creature to creature.

Food chains start with a **producer** – usually green plants.

Consumers eat plants and animals as their food.

Food chains have arrows to show how different plants and animals are linked and in which order they are consumed.

The arrows mean '**is food for**'

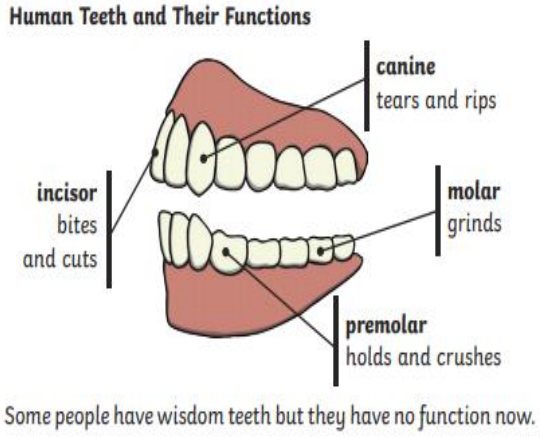




WHAT? – Key Vocabulary

Digest	Break down food so it can be used by the body.
Oesophagus	A muscular tube which moves food from the mouth to the stomach.
Stomach	An organ in the digestive system, where food is broken down with stomach acid and by being churned around.
Small intestine	Part of the intestine where nutrients are absorbed into the body.
Large intestine	Part of the intestine where water is absorbed from remaining waste food. Stools are formed in the large intestine.
Rectum	Part of the digestive system where stools are stored before leaving the body through the anus.
Organ	a part of your body that has a particular purpose.
Producer	Living things that produce their own food. Plants are producers.
Prey	An animal eaten by other animals.
predator	An animal that eats other animals
Herbivore	An animal that only feeds on plants.
Carnivore	An animal that only feeds on animals.
Omnivore	An animal that feeds on both plants and animals.
Nutrition	The types of food necessary to help growth and stay in good health.
Nutrient	A substance from food needed for health and growth.

Diagrams and symbols



Diagrams and symbols



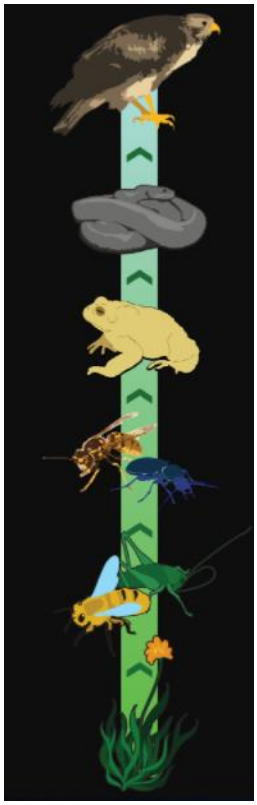
To help prevent tooth decay:

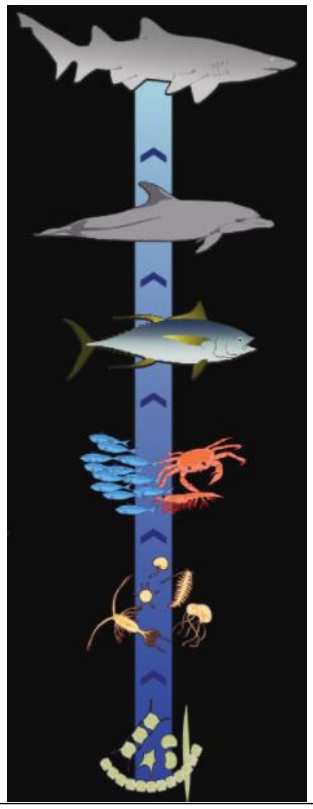
- limit sugar food and drink;
- brush teeth twice daily using a fluoride toothpaste;
- visit your dentist regularly.

Food Chains

Living things are classified as producers, predators or prey. Depending on their place in the food chain.

Examples of food chains.





Famous Scientists

Claude Bernard (1813 – 1878) was a French scientist who discovered the role of the pancreas in digestion. He also discovered a function of the liver.



Working Scientifically Challenge:

Let's think like scientists…

Can I use scientific language and vocabulary?
Can I explain my thinking to others?
Can I draw labelled diagrams to present information?
Can I read scientific diagrams.
Can I make careful observations?
Can I plan a fair test?
Can I explain what the results of a test show?

I wonder…

- Can I classify living things into prey, predator and producer?
- Can I explain the process of digestion?
- Can I can follow and create food chains?
- Can I name the types of teeth humans have and explain their functions?
- Do I know what to do to have healthy teeth?

Possible experiences: *Curious minds…*

Explore different food chains; try to make the longest food chain.

Create a model of the digestive system and explain how it works.

Look at teeth from different animals and use them to identify the types of food that they eat.

Experiment with teeth in different drinks and see what effect sugars have on teeth. Sugar Level:

Resource

- **A Journey Through the Human Body**, by Steve Parker