

What I should already know:

Classification of animals (amphibians, reptiles, birds, fish, mammals, invertebrates)

Animals that are carnivores, herbivores and omnivores. Animals have offspring which grow into adults.

The basic needs of animals for survival (water, food, air) The importance of exercise, hygiene and a balanced diet. Animals get nutrition from what they eat.

Some animals have skeletons for support, protection and movement.

The basic parts of the digestive system.

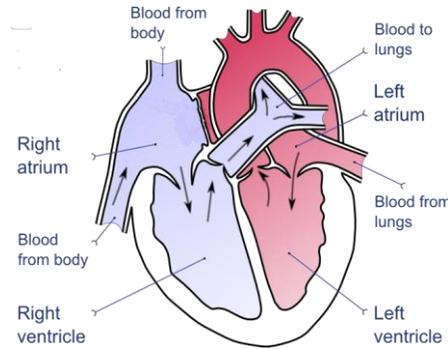
The different types of teeth in humans.

Respiration is one of the seven life processes.

The life cycle of a human and how we change as we grow.

YEAR 6: Animals including humans:

Science: Strand—Biology



By the end of this unit:

Identify and name the main parts of the human circulatory system, and explain the functions of the heart, blood vessels and blood

Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function

Describe the ways in which nutrients and water are transported within animals, including humans.

Investigate

How does your pulse change with exercise? What is the most efficient way of presenting this data? How do we make this a fair test?

Key Facts

The **right atrium** collects the **deoxygenated** blood from the body. It sends the blood to the **right ventricle**

The **right ventricle** pumps the **deoxygenated** blood to the **lungs**, here the blood picks up **oxygen** and disposes the **carbon dioxide**

The **lungs** send **oxygenated** blood back to the heart to the **left atrium** which pumps it to the **left ventricle**

The **left ventricle** pumps the blood to the rest of the body via the **aorta**

The **circulatory system** is made up of the **heart, lungs** and **blood vessels**.

Exercise is very important as it can strengthen the heart, improve lung function, improve skin, increase fitness and make you feel physically and mentally better

Tobacco, alcohol and other drugs can have harmful effects on the body

Give advice on keeping our bodies healthy, through diet, exercise and good lifestyle choices

Vocabulary

| | |
|--------------------|--|
| Aorta | The main artery through which blood leaves the heart before it flows through the rest of the body |
| Arteries | A tube in the body that carries oxygenated blood from the heart to the rest of the body |
| Atrium | One of the chambers of the heart |
| Blood vessel | The narrow tubes through which the blood flows. Arteries, veins and capillaries are blood vessels |
| Capillaries | Tiny blood vessels in the body |
| Carbon dioxide | A gas produced by animals and people breathing out |
| Circulatory system | The system responsible for circulating blood through the body, that supplies nutrients and oxygen to the body and removes waste products such as carbon dioxide |
| Deoxygenated | Blood that does not contain oxygen |
| Heart | The organ in the chest that pumps the blood around the body |
| Lungs | Two organs in the chest which fill with air when you breathe in. they oxygenate the blood and remove carbon dioxide from it |
| Nutrients | Substances that help plants and animals grow |
| Organ | A part of the body that has a particular purpose |
| Oxygen | A colourless gas that plants and animals need to survive |
| Oxygenated | Blood that contains oxygen |
| Pulse | The regular beating of blood through the body. How fast or slow the pulse is depends on the activity you are doing |
| Respiration | Process of respiring; breathing; inhaling and exhaling air |
| Veins | A tube in the body that carries deoxygenated blood to your heart from the rest of the body |
| Ventricle | One of the chambers of the heart |

Exercise and Pulse Rate

