Y6 ANIMALS INCLUDING HUMANS

Scientist

[Elizabeth Anionwu](#)
Sickle cell and thalassemia specialist

[Barouh Berkovits](#)
(invented the pacemaker and defibrillator)

Skills

I'm recording data like a cardiologist

I'm using scientific diagrams like a haematologist

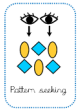
Careers

Cardiologist (a doctor specialising in the heart and circulatory system)
Haematologist (studies blood and its diseases)

Enquiries

What type of exercise has the greatest effect on our heart rate?

How does my heart rate change over the day?



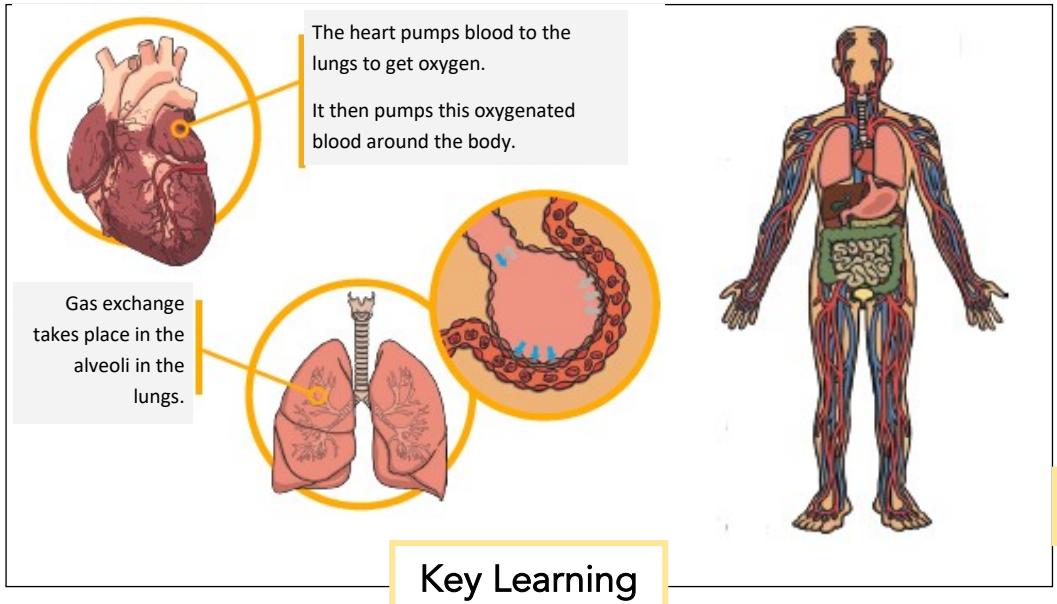
Is there a pattern between what we eat for breakfast and how fast we can run?

Which organs of the body make up the circulation system and where are

How have our ideas about disease and medicine changed over time?

Main idea

Children will be able to name the main parts of the human circulatory system and describe the functions of the heart. They will understand the impact of diet and exercise on the way human bodies function and ways in which nutrients are transported within the body.



Key Learning

- The circulatory system is made of the heart, lungs and the blood vessels.
- The heart is composed of four chambers: the right atrium, the right ventricle, the left atrium and the left ventricle. How often your heart pumps is called a pulse.
- Arteries carry oxygenated blood from the heart to the rest of the body. Veins carry deoxygenated blood from the body to the heart.
- Nutrients pass through the villi and are absorbed into the blood vessels. Water is absorbed in the small intestine.
- Some choices, such as smoking and drinking alcohol can be harmful to our health. They carry short-term effects such as shortness of breath or loss of control.
- Exercise is important because it can tone our muscles and reduce fat. It can also increase fitness and make you feel physically and mentally healthier.

What you should already know

The classification of animals: amphibians, reptiles, birds, fish, mammals, invertebrates.
The differences between carnivores, herbivores and omnivores.
Animals get nutrition from what they eat.
Some animals have skeletons for support, protection and movement.
Respiration is one of the seven life processes.
The life cycle of a human and the changes humans face as they grow.

What comes next?

KS3 - to understand the structure and function of living organisms.

Key vocabulary

Aorta
Arteries
Atrium
Blood vessels
Capillaries
Circulatory System
Deoxygenated
Nutrients
Organ
Oxygenated
Respiration
Vena Cava
Ventilation
Ventricle
Villi

Year 6: Animals including humans

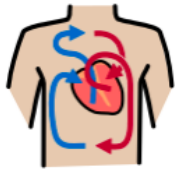
Aorta: the main artery through which blood leaves your heart before it flows through the rest of your body.

Arteries: a tube in your body that carries oxygenated blood from your heart to the rest of your body.

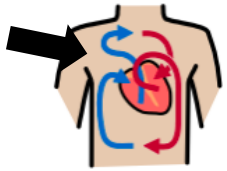
Atrium: one of the chambers in the heart.

Blood Vessels: the narrow tubes through which your blood flows.

Capillaries: the smallest blood vessels in your body.



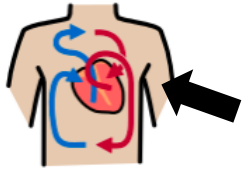
Circulatory System: the system responsible for circulating blood through the body, that supplies nutrients and oxygen to the body and removes waste products such as carbon dioxide.



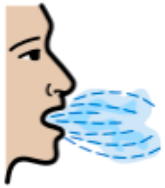
Deoxygenated: blood that does not contain oxygen.

Nutrients: substances that help plants and animals grow.

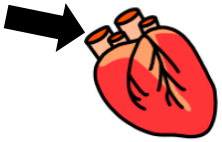
Organ: a part of your body that has a particular purpose.



Oxygenated: blood that contains oxygen.

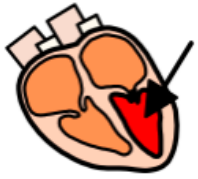


Respiration: process of respiring; breathing'; inhaling and exhaling air.



Vena Cava: a large vein through which deoxygenated blood reaches your heart from the body.

Ventilation: the exchange of air between the lungs and the atmosphere so that oxygen can be exchanged for carbon dioxide.



Ventricle: one of the chambers in the heart.

Villi: structures in the small intestine which help absorbs nutrients.

Year 6: Animals including humans

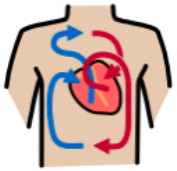
Aorta

Arteries

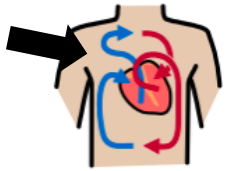
Atrium

Blood vessels

Capillaries



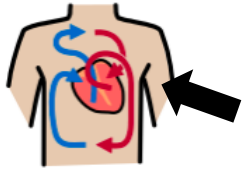
Circulatory system



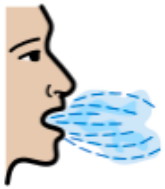
Deoxygenated

Nutrients

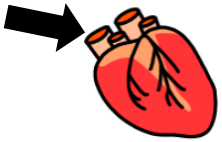
Organ



Oxygenated



Respiration



Vena Cava

Ventilation

Ventricle

Villi