



HEALTHY BODIES

Vocabulary

addiction: an uncontrollable urge to do something as it makes you feel good.

aorta: a major artery carrying blood from the heart to the rest of the body.

artery: a blood vessel carrying blood away from the heart.

atrium: chambers of the heart that receive blood from the veins

blood: the liquid that transports oxygen around the body.

capillaries: tiny blood vessels between the end of the arteries and the start of the veins.

carbon dioxide: gas released when humans and other living things breathe, or when materials are burned.

circulatory system: system of organs and tissues, including the heart, arteries and veins, which circulate blood around the body.

de-oxygenated: not containing oxygen.

exercise: the activity of exerting your muscles in various ways to keep fit. **heart:** the organ that pumps blood around the body.

lungs: the organ that gathers in air as part of breathing.

nicotine: the addictive part of cigarettes.

oxygen: the gas in the air that is needed for respiration.

oxygenated: enriched with oxygen.

pulse: regular throbbing of the arteries, which can be felt at certain parts of the body such as the wrist.

respiration: the process of breathing or taking in oxygen.

vein: a blood vessel carrying blood back to the heart.

ventricles: chambers of the heart from which blood is forced into the arteries.

We are learning to:

- Identify and name the main parts of the human circulatory system, and describe 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.

WORKING SCIENTIFICALLY

- Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.
- Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- Use test results to make predictions to set up further comparative and fair tests.
- Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.
- Identifying scientific evidence that has been used to support or refute ideas or arguments.

OVERVIEW

- In this topic children build on learning from Years 3 and 4 about the main body parts and internal organs (skeletal, muscular and digestive system).
- It considers life processes that are internal to the body, such as the circulatory system.
- The impact of lifestyle on bodies, particularly of humans, is also considered.

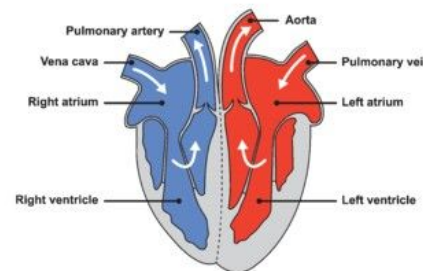
PRIOR LEARNING

- That exercise is good for you from general learning and everyday life.
- That the heart pumps blood around the body.
- That smoking is bad for you.

THE HEART

- The heart pumps blood to the lungs to get oxygen. It then pumps this oxygenated blood around the body.
- Deoxygenated blood returns to the lungs to be oxygenated again.

Heart Anatomy

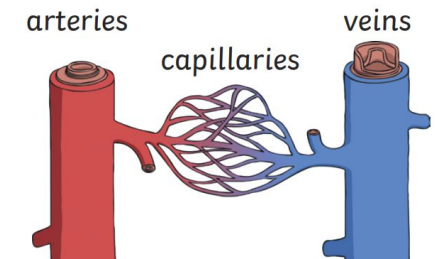


LET'S THINK LIKE SCIENTISTS

- Do all animals have hearts?
- Does the heart ever get tired? Does it ever rest?
- What happens if you hold your breath?

BLOOD VESSELS

- Arteries take oxygenated blood away from the heart to the body organs and tissues, the blood travels through capillaries which are tiny, thin-walled vessels which form a network to take blood through the organs and tissues.
- Veins collect oxygen poor (less oxygen and more carbon dioxide) blood from the capillaries in the body and return the blood to the heart.



EXERCISE

- Strengthens muscles including the heart muscle.
- Increases the amount of oxygen around the body.
- Releases brain chemicals which help you feel calm and relaxed.
- Helps you sleep more easily.
- Strengthens bones.
- It can help to stop us from getting ill.