



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.

OVERVIEW

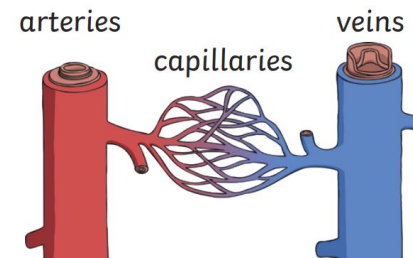
- In this topic children build on learning from Years 3 and 4 about the main body parts and internal organs (skeletal, muscular and digestive system).
- It considers life processes that are internal to the body, such as the circulatory system.
- The impact of lifestyle on bodies, particularly of humans,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

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.



WORKING SCIENTIFICALLY

Using and developing keys to identify and classify living things and materials.		Using scientific knowledge to ask questions.	
Recognising when to use other sources to answer questions and separating opinion from fact.		Using scientific language to draw conclusions.	
Recording data, taking repeat measurements where necessary and calculating a mean.		Evaluating plans and results and suggesting improvement s.	
Accurately taking measurements using scientific equipment.		Planning different types of enquiry controlling variables where necessary.	

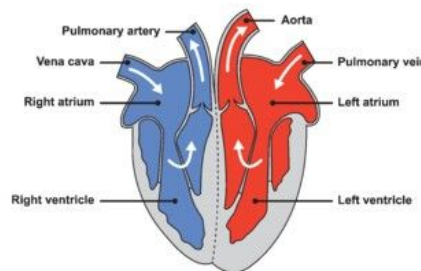
PRIOR LEARNING

- 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



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.

