

Science Knowledge Organisers

Science Focus

Animals, including humans

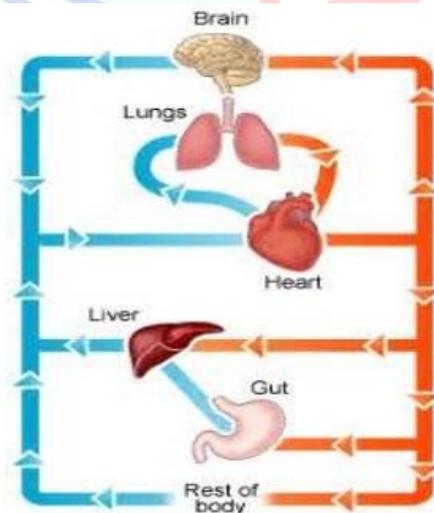
Year 6

Summer 2

Key Knowledge	
The main parts of the human circulatory system	Heart Blood vessels Blood
What does the heart do?	The heart pumps the blood through the blood vessels so that food and oxygen can get to all the parts of the body
What do the blood vessels do?	The blood vessels carry the blood around the body
There are three main types of blood vessels	The arteries, which carry the blood away from the heart The capillaries, which enable the actual exchange of energy between the blood and the tissues The veins, which carry blood from the capillaries back toward the heart
What does the blood do?	Blood moves food and oxygen around the body
Things humans need to be healthy	To have a balanced diet of the right amount of different types of food and drink To exercise regularly To be hygienic
Health risks that can damage the body	Smoking Drugs Alcohol Obesity
Dangers of smoking	Addictive and can cause heart disease and cancer
Dangers of drugs	Addictive and can damage the brain or cause death
Dangers of alcohol	Ok in small amounts for adults but can damage the liver, heart and stomach
Dangers of obesity	Can cause heart disease and lead to cancer
Possible Experiences	
<ul style="list-style-type: none"> Making a circulatory system with a pump Finding out what causes the heart to work harder/ maximum heart rates 	

Key Vocabulary	
Oxygen	The air we breathe in
Addictive	Substances that cause you to need more and more (out of control)
Arteries	Muscular-walled tubes that transport blood from the heart to other parts of the body
Blood	Red liquid that circulates in arteries and veins, carrying oxygen to and carbon dioxide from tissues of the body
Bones	Hard whitish tissue making up the skeleton in humans and other vertebrates
Circulatory system	The system that circulates blood through the body, including the heart, blood vessels and blood
Heart	A hollow muscular organ that pumps the blood through the circulatory system
Lungs	Pair of organs situated within the ribcage where oxygen can pass into the blood and carbon dioxide be removed
Muscles	A band or bundle of fibrous tissues that have the ability to contract, producing movement in or maintaining positions of parts of the body
Nutrients	A substance that provides nourishment essential for the maintenance of life and for growth
Organs	Part of an organism that is typically self-contained and has a specific vital function (e.g. the heart and lungs)

Diagrams and Symbols



Greater Depth Thinking

Identify and explain the processes which break down food into nutrients by creating a digestive system.

How do the circulatory and digestive system connect to transport water and nutrients throughout the body?

how has scientific evidence has changed ideas about smoking?