

Knowledge Organiser - Spring 2 Blood Heart

Year 6

Recap from previous years	Important vocabulary	Key facts	Pictures/diagrams
	<p>Retrieval vocabulary</p> <p>Component- a part of a whole thing</p> <p>Energy- strength/ force required for movement</p> <p>Growth- process of increasing in size</p> <p>Survival- continuing to live/ exist</p> <p>Nutrients- substance that provides nourishment essential for life</p> <p>Skeleton- the framework of bones which support the body</p> <p>Ribcage- bony frame formed by ribs surrounding the chest</p> <p>Protein- A dietary component required for growth and repair</p> <p>Carbohydrate- A dietary component required for energy</p> <p>Organ- part of the body which has a specific purpose</p> <p>Oesophagus- internal canal which connects the throat to the stomach</p> <p>Breathe- take air into the lungs followed by exhaling</p> <p>Oxygen- colourless odourless gas animals inhale to make energy.</p> <p>Blood- red liquid that circulates the body carrying essential nutrients.</p>	<p><u>The Heart</u></p> <p>The heart is a muscle found in the chest cavity between the lungs. It is made up of four chambers. The heart pumps blood around your body. Blood vessels carries bloody to and from the heart.</p> <p><u>The Circulatory System</u></p> <p>Made up of the heart, blood vessels and blood. It is responsible for transporting nutrients, oxygen, water and waste products around the body.</p> <p><u>The Blood</u></p> <p>The blood is made up of different components, each part is made in a different part of the body and has a special role:</p> <ul style="list-style-type: none"> - Red blood cells: transport oxygen and carbon dioxide around the body - White blood cells: part of the body's immune system which fights against infection. - Plasma: liquid substance (largest component in the blood) which transports water, salts and enzymes. - Platelets: helps blood clot when a person is injured. 	 <p>The diagram illustrates the human heart and its major blood vessels. Key components labeled include:</p> <ul style="list-style-type: none"> From Upper Body: Superior Vena Cava To Upper Body: Arteries, Aorta To Right Lung: Pulmonary Artery To Left Lung: Pulmonary Veins From Right Lung: Pulmonary Veins From Left Lung: Pulmonary Artery Internal Heart Structures: Left Atrium, Mitral (Bicuspid) Valve, Left Ventricle, Purkinje Fibers, Septum, Aorta, Right Atrium, Tricuspid Valve, Right Ventricle From Lower Body: Inferior Vena Cava Other Labels: Atrioventricular Node, Superior Node

New vocabulary

Artery- Blood vessel which transports blood away from the heart

Aorta- the main artery which transports blood from the heart around the body.

Atrium- top two sections of the heart which receive blood from veins and push it down into the ventricles.

Blood vessels- a tubular structure carrying blood through the tissues and organs e.g. a vein, artery, or capillary.

Capillary- a small blood vessel which forms a network between the arteries and veins.

Circulatory system- the system that circulates blood around the body which includes the heart and lungs.

Vein- Blood vessel which carries blood back to the heart

Pulse- found in the neck or wrist- a rhythmical throbbing caused by movement of blood through arteries.

Ventricle- bottom 2 sections of the heart which receive blood from the atria and pump it to the body and lungs.

Resting heart rate- amount of times a heart beats per minute when person is inactive.

The blood performs a wide range of functions including transporting a variety of substances around the body, forming clots after injury, helping fight infection, getting rid of waste and regulating body temperature.

Interesting Facts:

- Deoxygenated blood is not actually blue, it's a deep reddish-purple colour.
- Veins appear blue in our arms and legs due to the different wavelengths of light absorbed by our skin.
- Human blood is red because of haemoglobin; the iron in haemoglobin gives blood its red colour.
- Squids octopuses and snails have blue blood.
- The study of the human heart is known as "Cardiology".
- The heartbeat is produced by the closing valves of in the heart.
- The blue whale has the largest heart of any living creature: it can weigh over 680kg.



