



Year 6 Sticky Knowledge Mat:

The Heart & Circulatory System

Exciting resources

- 3D Models
- A range of interactive resources online

Subject Specific Vocabulary

Circulatory system	The system through which the heart pumps blood to the rest of the body
Heart	The muscle which pumps blood. Also known as an organ.
Blood vessels	Tube-like structures which carry blood around the body: capillaries, veins and arteries.
Artery /arteries	Large blood vessels which carry the blood <u>away</u> from the heart
Vein/veins	Large blood vessels which carry the blood back <u>towards</u> the heart
Capillary/capillaries	Smaller blood vessels
Oxygenated blood	Blood which is full of oxygen.
Deoxygenated blood	Blood which has already transferred the oxygen to the rest of the body.
Nutrients	Molecules in the blood which help us make energy, grow, develop and reproduce

Prior learning

Y2- Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene

Y3- Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat.

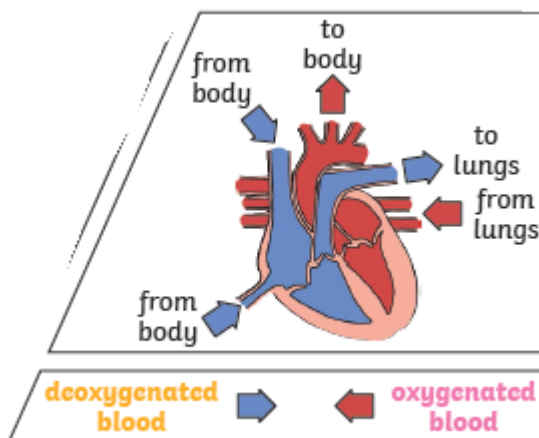
Y4-Describe the simple functions of the basic parts of the digestive system in humans.

Sticky Knowledge - Biology

The circulatory system is made up of the heart, blood and blood vessels (arteries, veins and capillaries).

The circulatory system operates in a 'figure of 8' with the blood being pumped as follows:

1. From the heart to the lungs to become **oxygenated**
2. Back to the heart
3. From the heart to the rest of the body where it becomes **deoxygenated**
4. Back to the heart again



Blood transports oxygen, nutrients and water to the body and removes carbon dioxide and waste products.

Blood is made up of:

- red blood cells which transport oxygen
- White blood cells which protect against disease
- platelets which help you stop bleeding when hurt
- Plasma which is the liquid part

Oxygen is exchanged for carbon dioxide in the lungs.

Drugs, alcohol, smoking and eating unhealthily can cause serious health problems, such as heart disease and lung cancer.

Regular exercise strengthens muscles (including the heart muscle) and increases the amount of oxygen in the body.