



Dallimore Science Knowledge Organiser

Animals including humans Yr5/6 Biology

What should I already know? Vocabulary

We can describe the basic needs of animals, including humans, for survival (water, food and air)

We can also describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene

We can identify that humans and some other animals have skeletons and muscles for support, protection and movement and describe the simple functions of the basic parts of the digestive system in humans.

circulatory system The system which includes the heart, veins, arteries and blood transporting substances around the body.

heart An organ which constantly pumps blood around the circulatory system.

blood vessels The tube-like structures that carry blood through the tissues and organs. Veins, arteries and capillaries are the three types of blood vessels.

Sticky Knowledge

The circulatory system is made up of the heart, blood vessels and blood.

The heart pumps the blood around the body



lungs These two organs are inside your chest and fill with air when you breathe in. They oxygenate the blood and remove carbon dioxide from it.

oxygen A gas that animals need to create energy to live.

carbon dioxide A gas which is a waste product from animals.

pulse The regular beat of the heart produces a pulse of blood moving around your body which we can feel and measure.

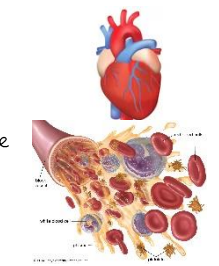
respiration The process of breathing

oxygenated Oxygenated blood has more oxygen

deoxygenated Blood is deoxygenated when the oxygen has passed from the arteries to the rest of the body.

nutrients Substances from food to help the body grow.

Mammals have hearts with four chambers. The blood that has come from the body is deoxygenated, and the blood that has come from the lungs is oxygenated again. The blood isn't actually red and blue: it is shown like that on a diagram.



Blood is made up of different things which all play an important part in the function of our blood

Blood is important because it transports gases, nutrients and waste products around our bodies.

We should be careful to put good nutritional foods in our bodies and avoid drugs, alcohol and nicotine from cigarettes.



Did you know?

If you linked up all of the body's blood vessels, including arteries, capillaries, and veins, they would measure over 60,000 miles.



Daniel Hale Williams

Daniel Hale Williams was born on January 18, 1856, in Pennsylvania, USA. He first worked as a barber but then became an apprentice with Dr. Henry Palmer, a highly accomplished surgeon. At that time black Americans were not allowed to work in medical jobs at hospitals so he set up his own hospital.

In 1893, Williams continued to make history when he operated on James Cornish, a man with a severe wound to his chest. Without the benefits of a blood transfusion or modern surgical procedures, Williams successfully repaired the heart, thus becoming one of the first people to perform open-heart surgery



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