



Year 6: Animals Including Humans



Kindness Enjoyment Achievement

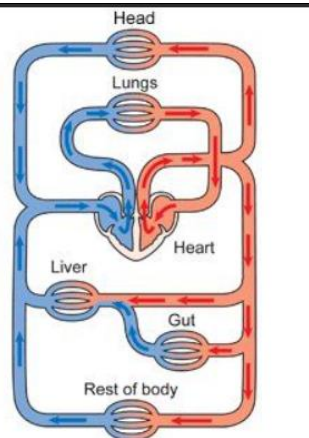
<p><u>Key Concepts:</u> All animals need oxygen to survive. Air is breathed into the lungs where the oxygen from the air is passed into the blood. Every part of animals' bodies need oxygen. Muscles need a supply of oxygen and sugar to make them work, they are supplied this by the blood, which travels through blood vessels</p> <p>The circulatory system is made up of your heart, blood and blood vessels. The heart pumps blood to the lungs where it picks up oxygen. It is then returned to the heart. The heart then pumps the oxygenated blood to all the other parts of the body. As the body uses oxygen, it produces a waste product- carbon dioxide. The blood carries this in the blood back to the heart where the cycle begins again.</p> <p>Arteries carry oxygenated blood. Veins carry deoxygenated blood.</p>	<p><u>Types of Enquiry:</u> <u>Sorting and classifying:</u> Which organs of the body make up the circulation system and where are they found? <u>Fair/ comparative test:</u> How does the length of time we exercise for affect our heart rate? Which type of exercise has the greatest effect on our heart rate? <u>Use of secondary sources:</u> What are the functions of the parts of the circulatory system? <u>Change over time:</u> How does my heart rate change over a day? How much exercise do I do in a week? <u>Pattern seeking:</u> Is there a pattern between what we eat for breakfast and how fast we can run?</p>	<p><u>Vocabulary:</u> Circulatory system Blood Blood vessels Heart Arteries, veins transported Muscles Oxygen, carbon dioxide. Pulse, rate Diet Exercise Drugs lifestyle</p>
	<p><u>Working scientifically skills:</u> <u>Questioning:</u> Independently ask scientific questions and choose a type fo enquiry to carry out. Justify their choice. <u>Observing:</u></p>	<p><u>How it fits in with the rest of the curriculum:</u> Y1: Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. Identify and name a variety of common animals that are carnivores, herbivores and omnivores.</p>



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→ Blood carrying carbon dioxide in veins
→ Blood carrying oxygen in arteries

NB: ALL blood is red: the blue is for diagrammatic purposes only!

Water and other nutrients are taken in through our mouths, absorbed by the intestines and carried in the blood stream to all parts of our body.

A healthy diet impacts your health and wellbeing, making you less prone to diseases such as heart disease and diabetes; it also has an impact on your mental health.

Look for patterns using a suitable sample- understand that the sample should contain at least 16 pieces of data to see a pattern.

Identify and classify:

Explain the function of each part of the circulatory system.

Testing:

Decide whether they need to take repeat measures, adjust the observation period or frequency (heart rate experiments).

Recording:

Choose how to collect and record data

Communicating:

Use oral and written forms such as displays and other presentations to report conclusions, causal relationships and explanation of degree of trust in results.

Concluding:

Identify results that do not fit the overall pattern (pulse rate experiments).

Identify limitations that reduce the trust they have in their data. (pulse rate experiments)

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

Y3: Know that humans get their nutrition from what they eat. Know that foods are a mix of nutrients and we should eat the right amounts of each.

Know about the skeletal and muscular system of a human.

Y4: Describe simple functions of the basic parts of the digestive system.

Cross curricular links:

PSHE: Keeping safe; Drugs education.

Literacy: Presenting research; perhaps a poem based on a close up image (coloured scanning electron micrograph) of blood vessels. Role play the circulatory system, where different children take on the roles of heart, lungs, blood cells and body parts- verbally explain the different processes.

Maths: research some of the staggering statistics and measurements linked to the human circulatory system- read, write and compare numbers to 10 million. How long is our system of blood vessels? How much blood is pumped through the body every



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Drugs are chemicals that affect your body; some drugs are prescribed by doctors to improve our health. You should never use drugs prescribed for someone else. Some others are illegal and can have a dangerous effect on our health.
Cigarettes contain nicotine which is addictive; it causes damage to the lungs and heart.
Alcohol is a depressant. It can cause damage to the liver and brain.

day? How many times does the average heart beat in one week? ...etc.