

Nova's Guide to the Human Circulatory System

Learning objective: Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.

Read the passage carefully and answer the questions below. Ensure you use full sentences for your answers.

Nova the barn owl has been busy observing the human body. She explains that the circulatory system is like a bustling motorway inside us. At the centre of this system is the heart, a powerful muscle that acts as a pump, pushing blood throughout the entire body. This blood travels through a vast network of tubes called blood vessels. There are two main types: arteries, which carry oxygen-rich blood away from the heart to our muscles and organs, and veins, which return blood carrying waste products like carbon dioxide back to the heart. As the blood travels, it delivers essential nutrients and oxygen, which our bodies need to function correctly. Without this constant movement, our cells would not be able to survive. Nova notes that keeping the heart healthy is vital. Regular exercise, such as running or swimming, makes the heart muscle stronger and more efficient at pumping blood. By eating a balanced diet and staying active, humans help their circulatory system run smoothly, ensuring every part of the body receives exactly what it needs to thrive.

Word bank: circulatory · heart · oxygen · vessels · nutrients · carbon dioxide · arteries · veins

1. According to the text, what is the main function of the heart? (2 marks)

2. Name the two types of blood vessels mentioned in the passage. (2 marks)

3. Why is the circulatory system often compared to a 'motorway'? (2 marks)

4. What might happen to the body if the blood stopped moving? (2 marks)

5. Do you think it is important for young people to exercise to protect their circulatory system? Explain your reasoning. (3 marks)

Draw: Draw a diagram of the human heart connected to a network of tubes (vessels) spreading out to different parts of the body, like arms and legs.



Extension challenge: Research how the heart rate changes before and after one minute of star jumps. Record your findings in a table and explain why you think your heart rate increased.