Nova’s Guide to the Human Circulatory System

Learning objective: To identify and explain the functions of the heart, blood vessels, and blood, and describe the ways in which nutrients and water are transported within humans.

Use this writing frame to construct a clear, scientific report. Use the word bank to help you link your ideas together logically. Ensure you use technical vocabulary accurately to describe the journey of blood through the body.

The human circulatory system is a complex transport network that works tirelessly to keep every part of our body functioning correctly.

Word bank: oxygenated · deoxygenated · circulatory system · pulmonary artery · capillaries · nutrients · consequently · furthermore · in contrast · essential

1. The Heart's Role: Describe the primary function of the heart. You may want to start by writing: The heart acts as a powerful pump, which... (2 marks)

2. Blood Vessels: Explain the difference between arteries, veins, and capillaries. Start by writing: There are three main types of blood vessels, each with a specific purpose... (3 marks)

3. Transporting Nutrients: How does the blood deliver nutrients and oxygen to the cells? Start by writing: Blood travels through the body carrying vital substances, such as... (3 marks)

4. Gas Exchange: Explain what happens when blood reaches the lungs. Start by writing: When deoxygenated blood reaches the lungs, a crucial exchange occurs... (2 marks)

5. Conclusion: Summarise why a healthy circulatory system is important for human survival. Start by writing: In conclusion, the circulatory system is vital because... (2 marks)

Extension challenge: Research and explain how regular exercise affects the heart rate. Use your findings to add a paragraph about 'The Impact of Physical Activity' to your report.