Nova’s Circulatory System Safari

Learning objective: To identify and describe the main parts of the human circulatory system and explain their functions, including the role of the heart, blood vessels, and blood.

Nova the Owl is mapping out how the heart works! Use the words from the word bank to complete the sentences below. Once you have filled in the blanks, draw a simple diagram of the heart and label the four chambers: the left and right atria, and the left and right ventricles.

Word bank: oxygen · heart · carbon dioxide · blood vessels · lungs · arteries · veins

1. The _____ acts as a muscular pump to push blood around the body. (1 mark)

2. Blood travels away from the heart through _____ and returns to the heart through _____. (2 marks)

3. In the _____, the blood picks up fresh _____ and drops off _____ to be breathed out. (3 marks)

4. Why is it important that the heart has two separate sides? Explain your reasoning. (2 marks)

5. Max the monkey is running a race. Why does his heart rate increase during exercise? (2 marks)

Draw: Draw a large outline of a heart. Clearly label the four chambers: Right Atrium, Left Atrium, Right Ventricle, and Left Ventricle. Use red arrows to show where oxygenated blood flows and blue arrows to show where deoxygenated blood flows.

Extension challenge: Nova wants to know how long it takes for a red blood cell to travel a full circuit of your body. Research the circulatory system and write a short, creative paragraph from the perspective of a red blood cell describing its journey from the heart, through the body, and back again.