

Year 6 Science Assessment: The Human Body

Learning objective: To identify and name the main parts of the human circulatory system, describe the functions of the heart, blood vessels, and blood, and recognise the impact of diet, exercise, and lifestyle on the way the body functions.

Read each question carefully. Answer in full sentences where required. Use the provided word bank if you need help with scientific terminology. You have 30 minutes to complete this assessment.

Nova the barn owl is studying how humans stay active. She knows that the human body works like a complex machine, constantly transporting essential materials to muscles and organs so we can run, jump, and think clearly.

Word bank: circulatory · heart · oxygen · nutrients · arteries · veins · carbon dioxide · pulse · lifestyle · stamina

1. Name the three main components that make up the human circulatory system. (3 marks)

2. Describe the difference in function between an artery and a vein. (2 marks)

3. Max the monkey notices his heart rate increases when he exercises. Explain why the heart beats faster during physical activity. (3 marks)

4. What is the primary role of red blood cells within the human body? (2 marks)

5. Explain how a balanced diet and regular exercise contribute to the health of the circulatory system. (4 marks)

6. If a person chooses a lifestyle that includes smoking or a lack of exercise, what are the potential long-term impacts on their body functions? Use scientific reasoning to support your answer. (5 marks)

7. Identify one way in which water is important for the effective functioning of the human body. (2 marks)

8. Define what is meant by the term 'pulse' and explain where it can be measured on the human body. (2 marks)

Draw: Draw a simple diagram showing the path of blood through the body, labelling the heart, the lungs, and a limb (such as an arm or leg).



Extension challenge: Total: /25. Research task: Find out how the circulatory system is affected by high blood pressure and write three facts about how to keep blood pressure at a healthy level.