

## Year 6 Science Assessment: Animals Including Humans

*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, drugs and lifestyle on the way their bodies function.*

Read each question carefully. Answer in full sentences where required. Use the provided word bank if you need help with scientific terminology.

Nova the barn owl has been observing human activity from her tree. She notices that humans are always moving, eating, and keeping their bodies healthy. To keep their bodies working, humans have a complex transport system that moves vital substances around. Max the monkey is currently studying how this system reacts when humans exercise, noting that their heart rate increases to keep up with the body's demands.

*Word bank: Circulatory · Oxygen · Nutrients · Arteries · Veins · Capillaries · Heart · Lifestyle · Pulse*

**1. Name the three main types of blood vessels found in the human circulatory system. (3 marks)**

---

**2. Explain why your heart rate increases when you are running or playing a sport. (2 marks)**

---

---

**3. Describe the main role of the heart within the circulatory system. (2 marks)**

---

---

**4. List two factors that could have a negative impact on human health and explain how they affect the body's functions. (4 marks)**

---

---

---

---

5. Nova observes that humans need a balanced diet. Why is it important for the body to receive a variety of different food groups, and what happens if a diet is lacking in essential nutrients? (4 marks)

---

---

---

6. Max the monkey wants to design an experiment to test how different levels of exercise affect a person's pulse rate. Write a plan for this experiment, including what you will measure and how you will keep it a fair test. (5 marks)

---

---

---

---

---

7. Give one example of how a healthy lifestyle helps prevent illness. (5 marks)

---

**Draw:** Draw a diagram of the human heart and label the direction of blood flow using \_\_\_\_\_ arrows. Include labels for the main chambers if you can recall them.



*Extension challenge: Total: /25*