

The Circulatory System: A Journey with Nova

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

Follow the drawing steps below to create a diagram of the human circulatory system. Use the word bank to label your diagram accurately. Ensure your lines are clear and your labels are neatly written.

Draw: Draw a simplified diagram of the human torso. In the centre, draw a heart shape with four chambers. Draw two sponge-like shapes representing the lungs above the heart. Use red arrows to show the path of oxygenated blood travelling from the lungs and heart to the rest of the body, and blue arrows to show the path of deoxygenated blood returning. Use thin, branching lines to represent the network of capillaries reaching towards the limbs.



Label words: Heart · Lungs · Oxygenated blood · Deoxygenated blood · Arteries · Veins · Capillaries

Steps:

1. Explain the role of the heart within the circulatory system.
2. Label your drawing to show which vessels carry blood away from the heart and which carry blood back to the heart.
3. What is the main gas that blood picks up when it passes through the lungs?
4. Why do we need capillaries to connect our arteries and veins?

5. Describe one way that exercise affects the heart rate.