

Blood vessels: practice questions

3 questions • 8 marks • mark scheme at the back

For Cambridge IGCSE Combined Science 0653. **Supplement** is Extended content, only examined on Papers 2 and 4.

Name

Total / 8

1 Which type of blood vessel contains valves?

[1 mark]

- A. ☐ Artery
- B. ☐ Capillary
- C. ☐ Vein
- D. ☐ Aorta

2 Describe three differences between the structure of an artery and the structure of a vein. [3 marks]

3 **Supplement**

[4 marks]

Explain how the structure of arteries and veins is related to the pressure of the blood they carry.

Mark scheme

One mark for each point unless a maximum is given. Words in brackets are not needed for the mark.

1. [1]

C C (1) Veins have valves

2. [3]

- artery wall thicker than vein wall (1)
- artery lumen narrower than vein lumen (1)
- veins have valves, arteries do not (1)

3. [4] **Supplement**

- arteries carry blood at high pressure (1)
- thick walls with muscle and elastic fibres withstand the pressure (1) allow narrow lumen maintains pressure
- veins carry blood at low pressure so walls are thinner / lumen is wide (1)
- valves in veins stop backflow (1)