

4 Fig. 4.1 shows a section through a human heart and the main blood vessels.

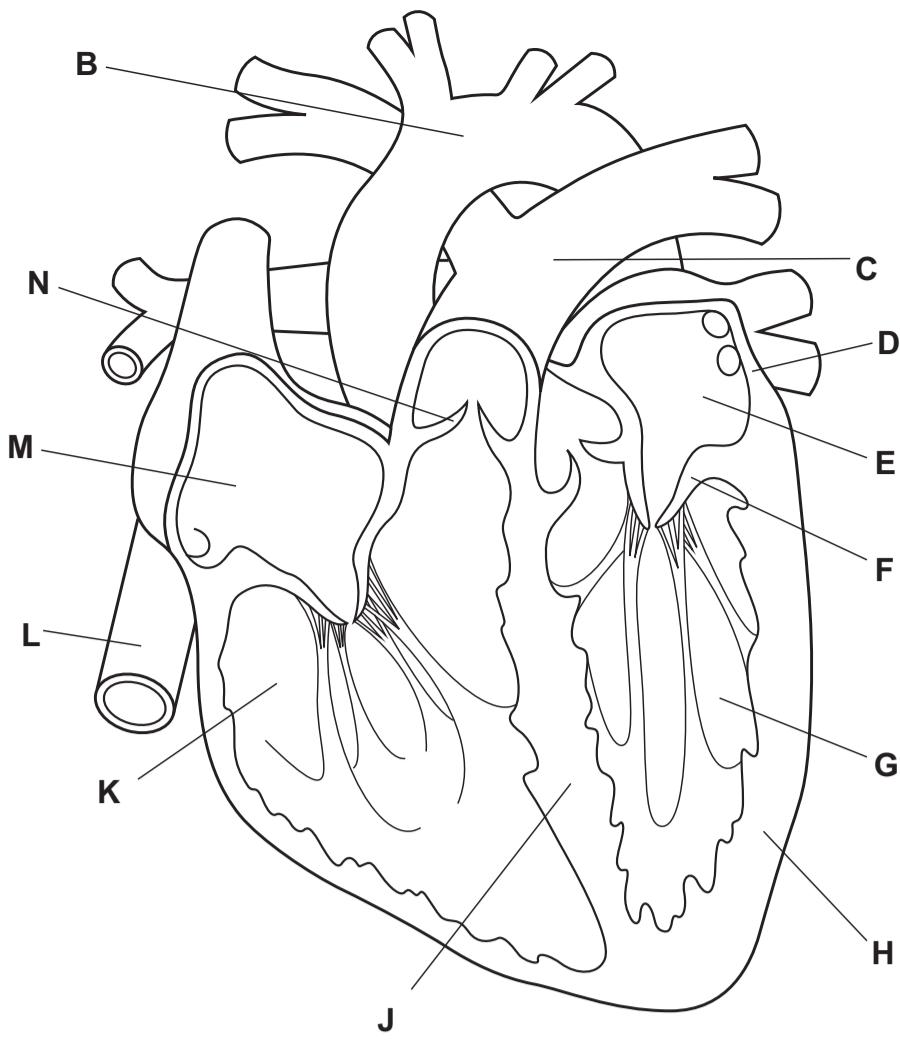


Fig. 4.1

- (a) (i) State the letter in Fig. 4.1 that identifies:
 the structure that separates oxygenated and deoxygenated blood
 an atrioventricular valve.

[2]

- (ii) Explain why the heart wall at H is thicker than the heart wall at D in Fig. 4.1.

.....

[2]

- (iii) Table 4.1 contains eight descriptions of parts of the pathway a red blood cell takes as it moves from the vena cava to the aorta.

Using Fig. 4.1, complete Table 4.1 by numbering the descriptions to show the correct sequence.

Two have been done for you.

Table 4.1

description	sequence
blood enters C	
blood enters E and then E contracts	
blood enters M and then M contracts	1
blood travels to lungs	
blood moves into G	
blood moves into B	8
N opens	
blood moves into K	

[2]

- (b) Fig. 4.2 shows the effect of exercise on heart rate.

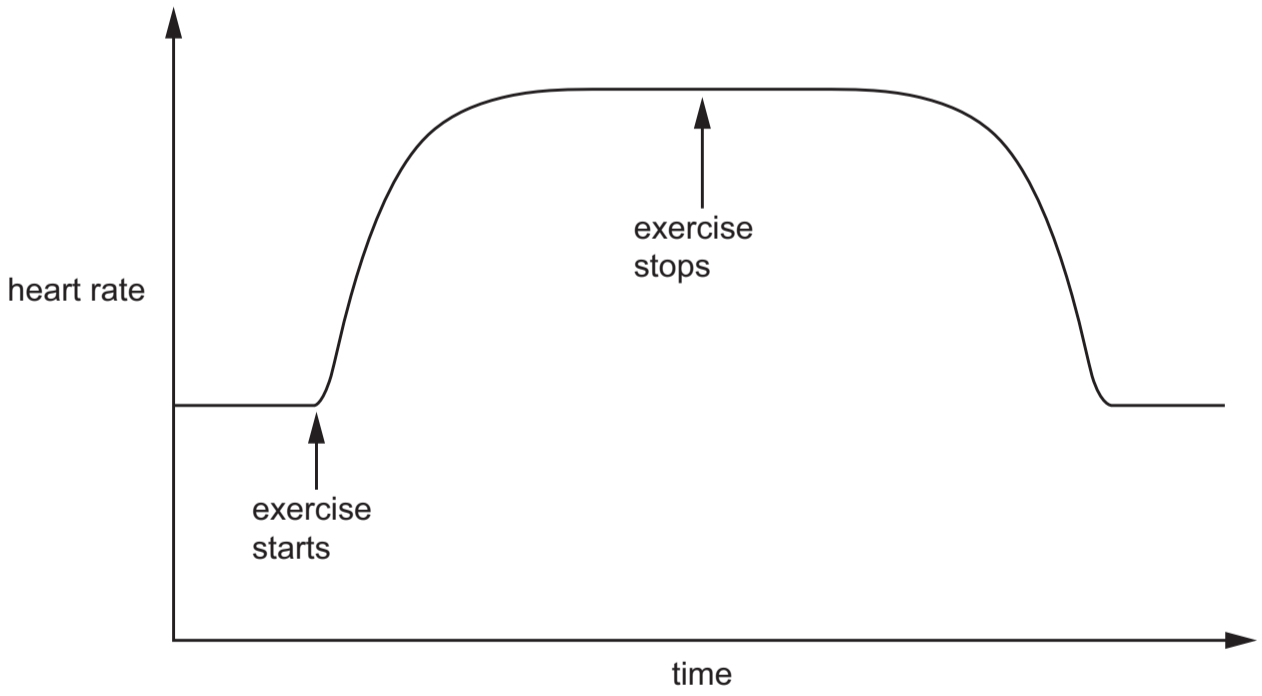


Fig. 4.2

- (i) Explain the effect of exercise on heart rate shown in Fig. 4.2.

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[5]

- (ii) A lack of exercise can increase the risk of coronary heart disease.

State **three** other factors that can increase the risk of coronary heart disease.

- 1
 2
 3

[3]