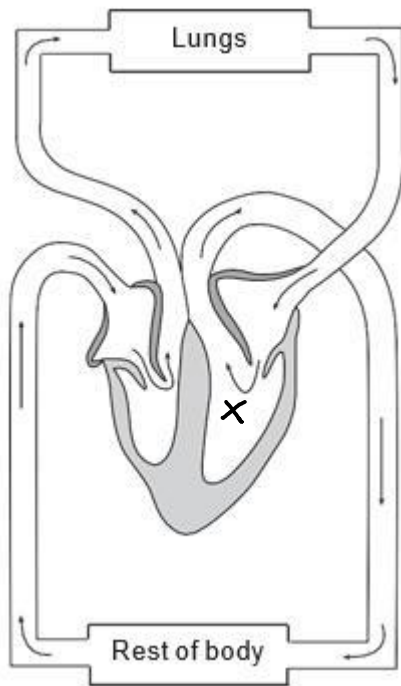


**GCSE Biology A (Gateway)**

**J247/01 B1-B3 and B7 Foundation (Foundation Tier)**

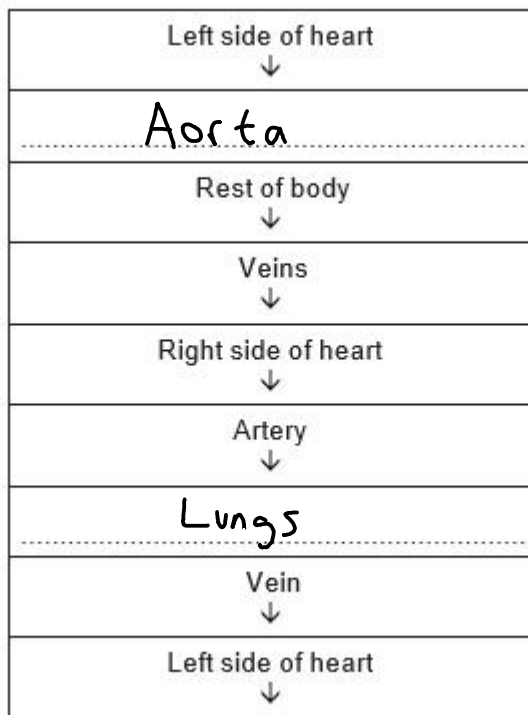
**Question Set 11**

1 Look at the diagram of the human circulatory system.



(a) (i) Write the letter X on the diagram to show the position of the left ventricle. [1]

(ii) Complete the sequence to show the flow of blood through the circulatory system.



[2]

(b) The blood travels through the heart twice on one complete circuit of the body.

(i) What is the name of this type of circulation?

[1]

Double circulation

(ii) Suggest **two** advantages of blood travelling through the heart twice in each complete circuit of the body.

1 ..... Increases pressure of blood .....

2 ..... Increases flow rate of blood .....

[2]

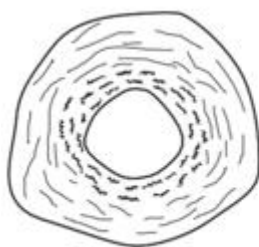
(c) How is the **thickness** of the heart wall on the left side different to the right side?

Write down **two** reasons for the difference.

The left side is thicker than the right side this is because the left side has to pump blood further than the right side. Also the thicker muscle helps generate enough pressure for the blood to be pushed all around the body. [2]

(d) Look at the diagram.

It shows a section of an artery and a vein.



Artery



Vein

(i) Describe **two** differences in structure between the artery and the vein shown in the diagram.

1 ..... The artery has a thicker wall .....

2 ..... The artery has a narrower lumen. .... [2]

- (ii) Write down **one** difference between arteries and veins that is **not** shown in the diagram.

Veins have valves which are not shown in the diagram.

[1]

**Total Marks for Question Set 11: 11**

---

**OCR**  
Oxford Cambridge and RSA

**Copyright Information**

OCR is committed to seeking permission to reproduce all third-party content that it uses in its assessment materials. OCR has attempted to identify and contact all copyright holders whose work is used in this paper. To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced in the OCR Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download from our public website ([www.ocr.org.uk](http://www.ocr.org.uk)) after the live examination series.

If OCR has unwittingly failed to correctly acknowledge or clear any third-party content in this assessment material, OCR will be happy to correct its mistake at the earliest possible opportunity.

For queries or further information please contact The OCR Copyright Team, The Triangle Building, Shaftesbury Road, Cambridge CB2 8EA.

OCR is part of the Cambridge Assessment Group; Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge