

Exploring the heart: Worksheet 3.13

1 The function of the heart

Complete the sentences.

The function of the heart is to pump around the body.

The right side of the heart pumps blood to the

The left side of the heart pumps blood to the rest of the

Blood in the arteries is under higher than blood in veins.

Blood flows from areas of pressure to areas of pressure.

2 My journey as a red blood cell

Choose from the following words to complete the sentences below.

aorta	atrium	atrium	away	lungs
oxygen	pressure	pulmonary artery	pulmonary vein	valves
vein	vein	vena cava	ventricle	ventricle

I am a red blood cell. I carry to all the cells in the body.

I like travelling in arteries – I get pushed around so fast. This is because the blood in arteries goes from the heart, so it is under high

I return to the heart in a

I have to get through, which are like a one-way door.

I return in a large called the

I enter the right of the heart.

Muscles contract and squeeze me into the right

This chamber then contracts, forcing me out of the heart through the

This takes me to the, where I pick up oxygen. I go bright red!

I return to the heart in the and go to the left

This then forces me into the left

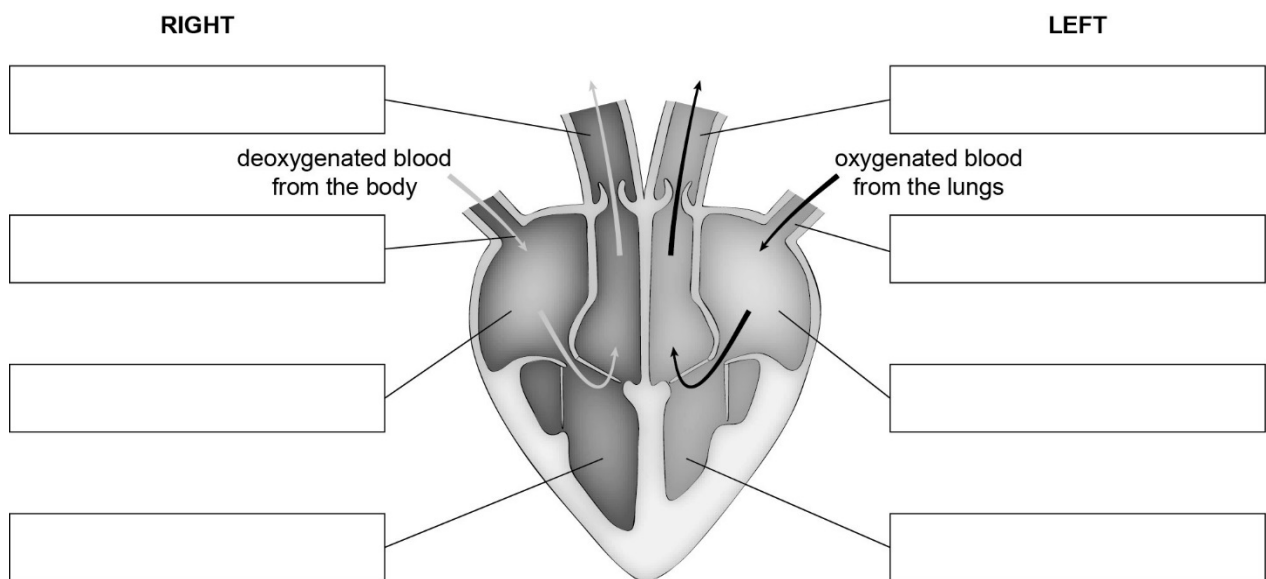
This chamber is the most powerful part of the heart.

I am then forced out in the main artery called the

3 The heart

1. Label the diagram of the heart. Use the words in the box to help you.

aorta	pulmonary vein	left atrium	left ventricle
pulmonary artery	vena cava	right atrium	right ventricle



2. Name the part of the heart that pumps blood to the lungs.

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3. Name the part of the heart that pumps blood to the body.

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4. Name the part of the heart that receives blood from the body.

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5. Name the part of the heart that receives blood from the lungs.

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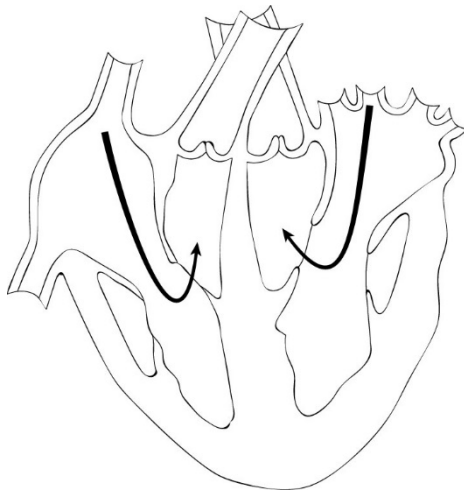
6. Explain why the left ventricle has a thicker wall than the right ventricle.

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4 The cardiac cycle

1. The diagram shows a section through a human heart.



Describe the stage of the cardiac cycle that is shown by the arrows in the diagram.

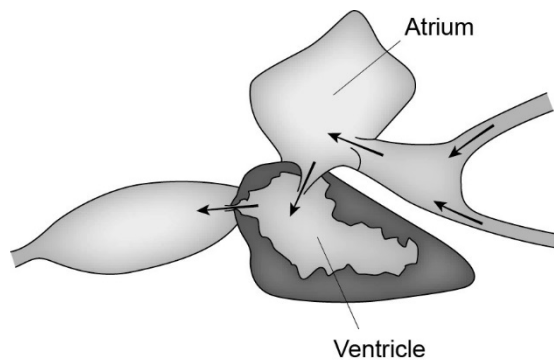
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2. The diagram shows a section through a fish heart.



Describe how and why the structure of the fish heart is different from the human heart.

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