



WALT



WALT understand how the heart works

- ✓ I know what the heart is.
- ✓ I know the importance of the heart.
- ✓ I can start to use the scientific vocabulary.



RECAP

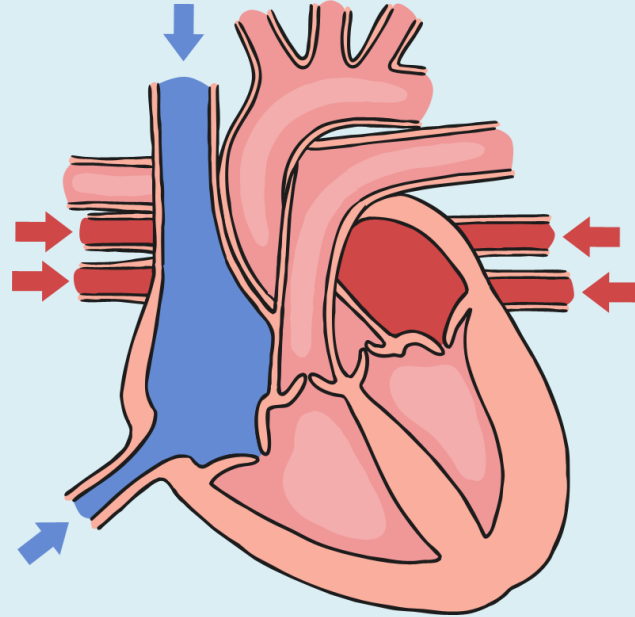
What is the circulatory system?

The circulatory system is one of the most important systems in the body. Made up of the heart, blood and blood vessels, the circulatory system is your body's delivery system.

It delivers nutrients, water, and oxygen to your billions of body cells and carries away wastes such as carbon dioxide that body cells produce.



What do you already know about the heart?



The human heart works like a pump sending blood around your body to keep you alive.

It's a muscle, about the size of your fist, in the middle of your chest tilted slightly to the left.

Watch (2 clips)...

<https://www.bbc.co.uk/bitesize/topics/zwdr6yc/articles/ztg6gdm>

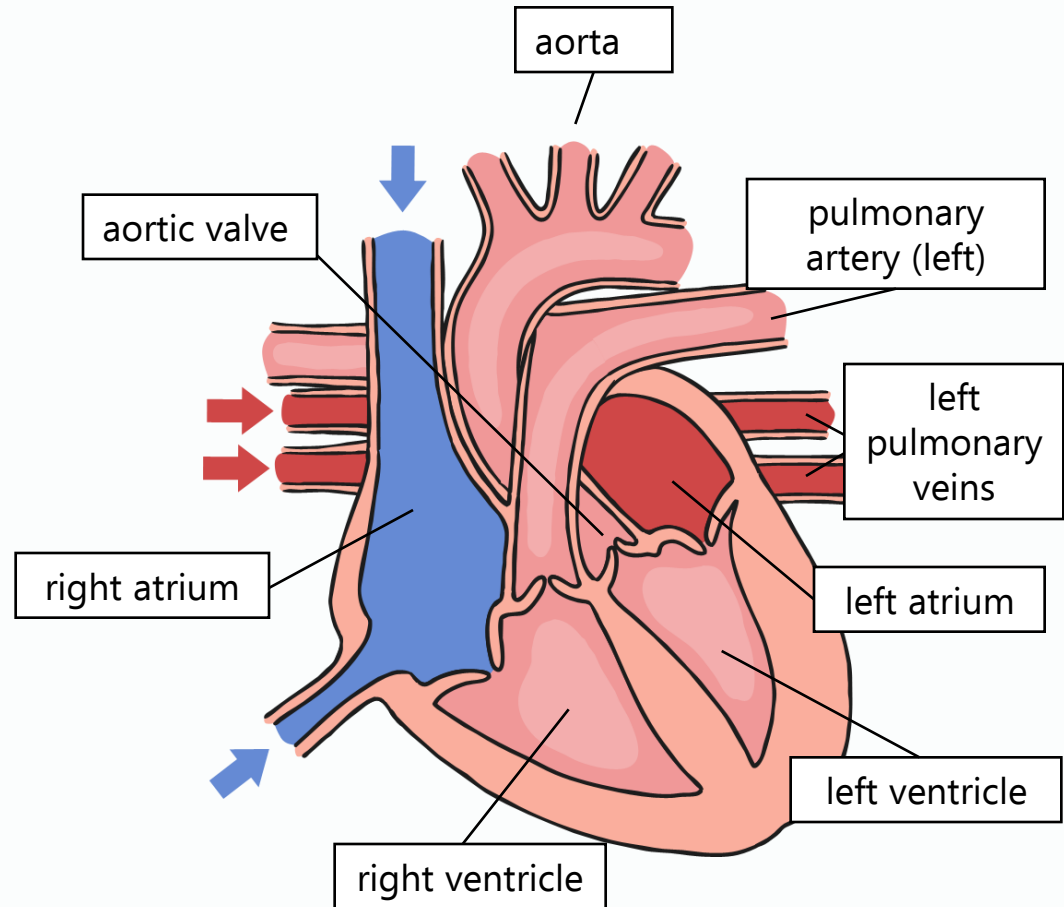
<https://www.bhf.org.uk/information-support/how-a-healthy-heart-works>

The Function of the Heart

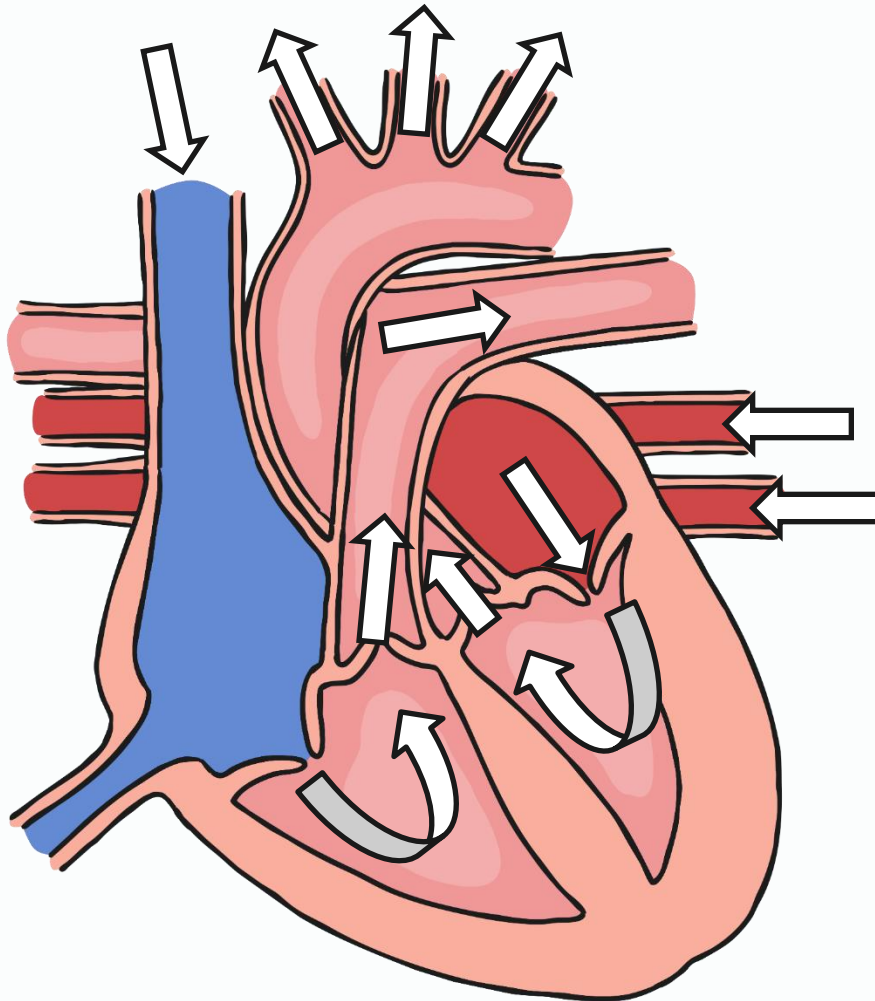
The heart is a powerful muscle that is situated between your lungs, protected by the ribcage.

The heart pumps blood to the lungs to get oxygen.

The heart pumps the oxygenated blood to the rest of the body.



How the Heart Works



Click to go through each stage of the process.

right atrium

right ventricle

pulmonic valve

pulmonary artery (left)

left pulmonary veins

left atrium

left ventricle

aortic valve

aorta

Did you know?

- A long time ago, people thought that their emotions came from their hearts, maybe because the heart beats faster when a person is scared or excited. Now we know that emotions come from the brain, and in this case, the brain tells the heart to speed up.
- Your heart is a very strong muscle that pumps blood around your body. It is made of four chambers, two upper chambers and two lower chambers. Blood enters the upper chambers. These squeeze and push the blood into the lower chambers, which then squeeze and push the blood out of your heart.
- The heart works tirelessly - more than 2.5 billion times over an average lifetime - to pump blood around the body. The heart's contractions or 'squeezes' are triggered by electrical impulses that come from a specialised area of heart tissue.
- Your pulse is a measure of how fast your heart is beating. It is the number of beats your heart makes in one minute. Your heart beats faster or slower depending on what you are doing. You can feel your pulse at certain points on your body. The easiest place to feel it is in your wrist, using the first two fingers of your other hand. When you sit, the average heart beats about 80 times per minute. However, everybody is different, so your pulse could be higher or lower than this.

Activity 1

Write the paragraph filling in the blanks on the next PowerPoint.

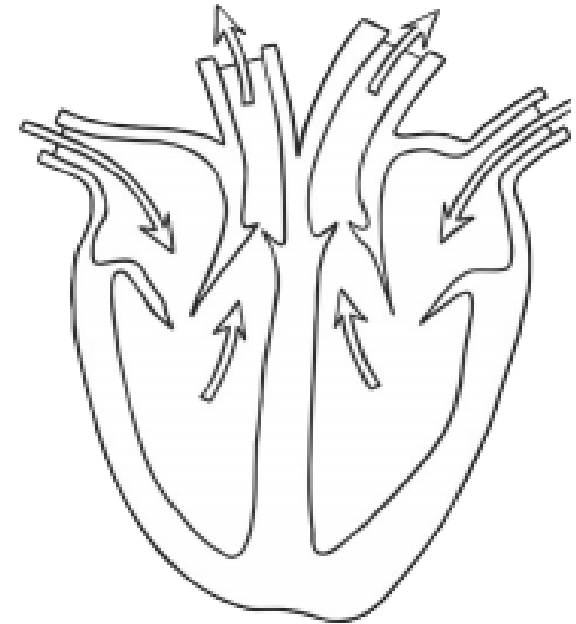
Draw a picture of the heart to go with it.

The heart is a muscle in your chest made up of four chambers:

- the right atrium;
- the left atrium;
- the right ventricle;
- the left ventricle.

Your heart is protected by your ribs and pumps blood around your body. This is what happens:

Your blood 'picks up' the oxygen from your lungs and then it travels to your heart. The heart pumps or pushes the blood around your body by using the muscles in its walls. These muscles contract to push the blood around the body. Arteries carry the blood to every part of your body so your muscles and organs can use the food and oxygen to make them work. Veins carry blood back to your heart when all the oxygen has been used so the blood can be pumped back to your lungs again to 'pick up' more oxygen.



The Heart

Task 1: Complete the following paragraph using the paragraph above to help you.

The heart is a _____ in your chest made up of _____ chambers. The heart is protected by the _____. The heart acts like a _____ pushing blood around the body. This happens because the muscles in the _____ of the heart regularly contract, squeezing out the blood. Blood travels away from the heart in blood vessels called _____ and travels to _____ part of your body. The blood travels through _____ to return to the heart. Blood collects _____ from the lungs then returns to the heart to begin the cycle again.

Activity 2 Quiz

<https://www.bbc.co.uk/bitesize/topics/zwdr6yc/articles/ztg6gdm>