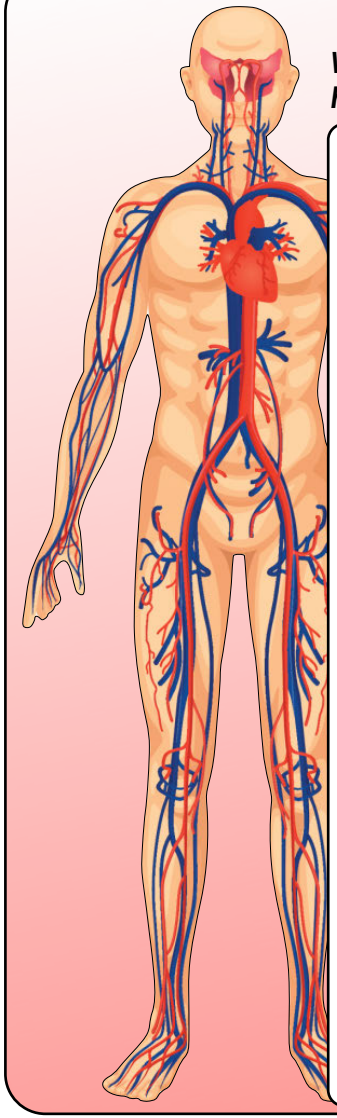
Name: _____ Date: _____

How does the circulatory system work?



Write a description of how the circulatory system works. Include details about what is transported in the blood, how it gets into the blood and how the heart works.

Name: _____ Date: _____

Heart Dissection Recount

Who? What? When? Where?

What did you do first and why?

What did you do after that?

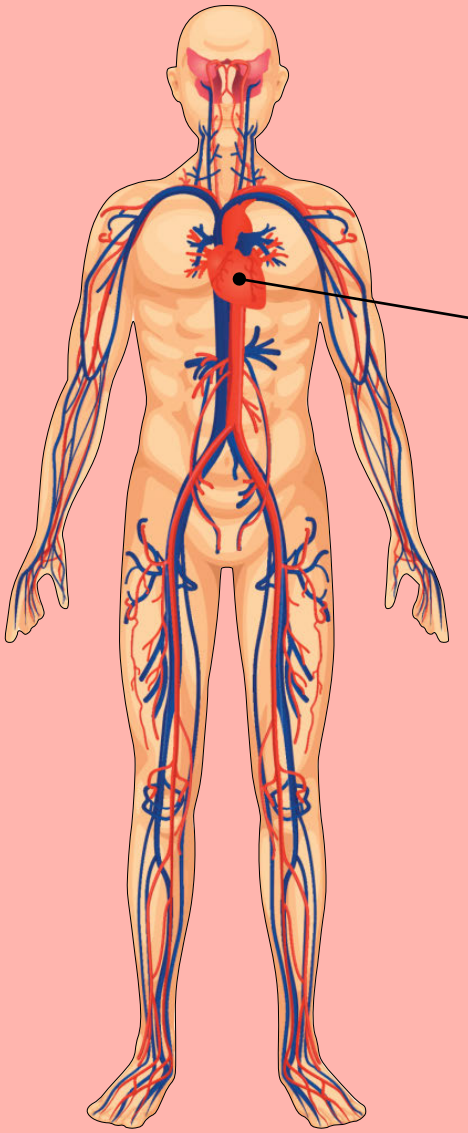
What did you find out?

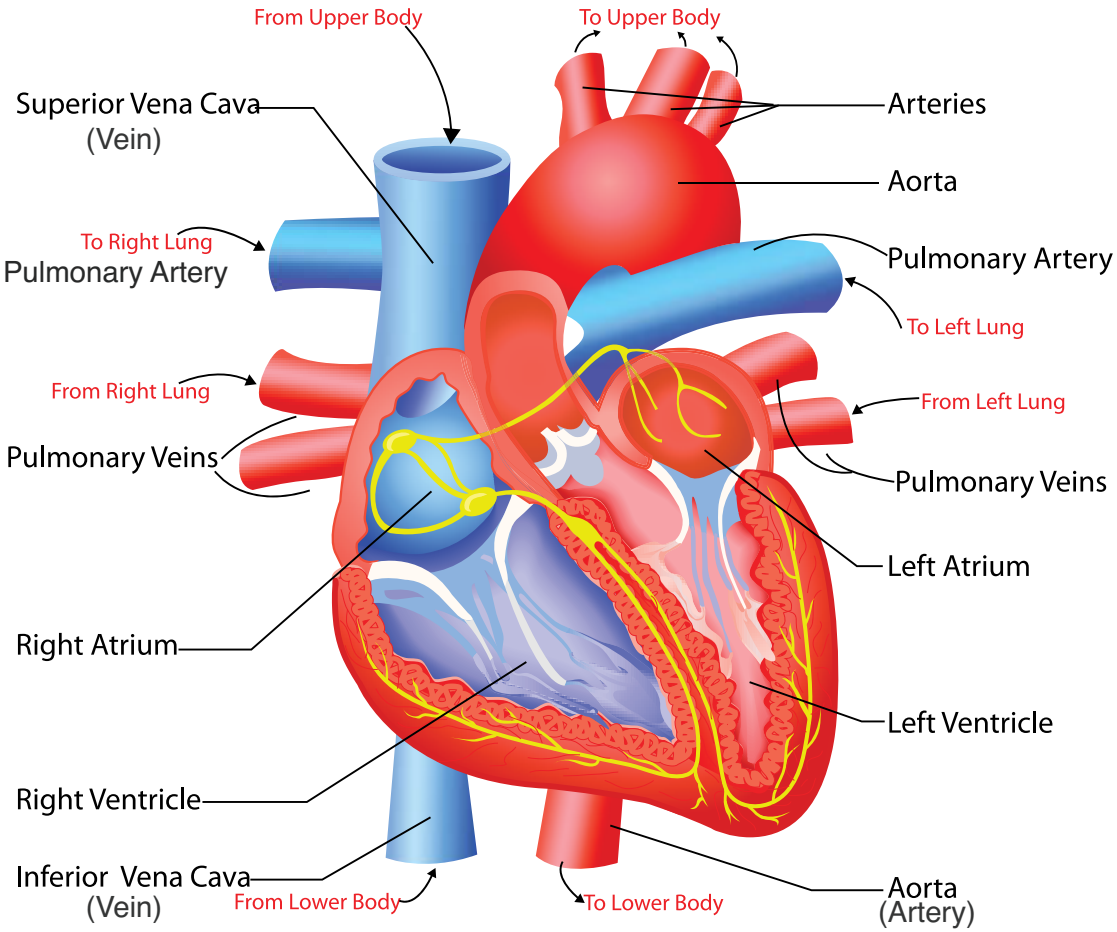
Diagram:

What was the experience like?

The left and right ventricles are the bottom two chambers of the heart. They pump blood out of the heart.	The left atrium and the right atrium are the two chambers at the top of the heart. They receive blood entering the heart.	Arteries transport blood containing oxygen and nutrients from the heart to the rest of the body, apart from the pulmonary arteries that carry deoxygenated blood from the heart to the lungs.
Veins transport blood back to the heart. This blood no longer has oxygen which is why the veins look blue. The exceptions are the pulmonary veins that carry oxygenated blood from the lungs to the heart.	The heart is a muscle which is located between the lungs, just to the left of the chest.	Arteries and veins are blood vessels which transport blood around the body so that the body can get the oxygen, nutrients and water it needs.
The heart has lots of valves which make sure the blood only flows in one direction.	When blood enters the right atrium, it has no oxygen. It is sent to the right ventricle which then sends the blood to the lungs to get more oxygen.	When the blood leaves the lungs with lots of oxygen, it is sent to the left atrium and then the left ventricle. The left ventricle sends the blood out to the rest of the body.

Human Circulatory System





How to dissect a sheep's heart

Health and Safety:

- Keep the heart in the fridge until it is ready to be used. Make sure it is fresh.
- Wear protective aprons and make sure sleeves are rolled up.
- Make sure the heart is placed on a surface that can be washed easily, such as a plastic or disposable tray.
- Anyone who has handled the heart should wash their hands well with anti-bacterial handwash.
- All equipment (tray, scissors) should be washed thoroughly after use.
- Tables should be cleaned with a household disinfectant spray after the dissection.

You will need:

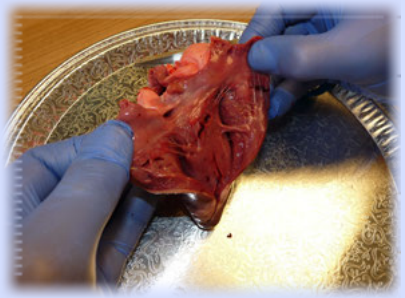
- A sheep's heart
- Scissors
- Surgical gloves
- Apron
- A tray

1. Identify the left and right sides of the heart.

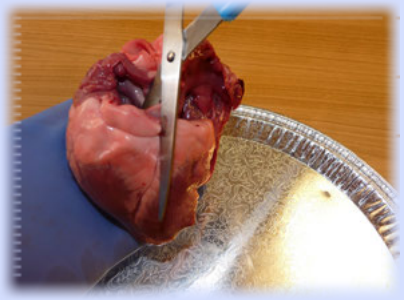
2. Place the heart with the front down and the left ventricle and atrium on the left-hand side, as though it were in your body.

3. Identify the superior and inferior vena cava, as well as the aorta. Poke around with your fingers to feel difference.

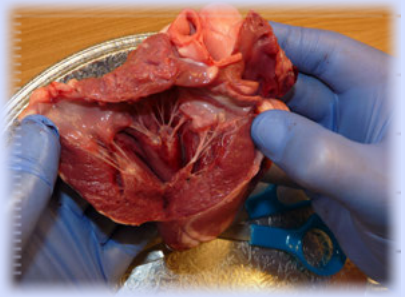
4. Insert your scissors into the superior vena cava and make an incision down the wall of the right atrium.



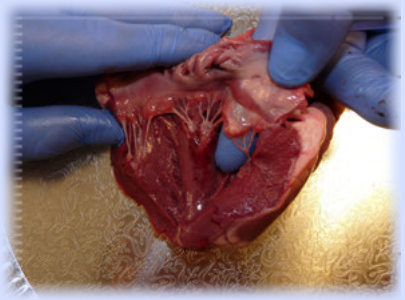
5. Open the heart up and have a look around. What can you see?



6. When you've finished with the right side, insert your scissors into the top of the aorta and cut down to the bottom of the heart.



7. Open it up and have a look around. What can you see?



8. Put your fingers through each of the vessels and chambers to see where they lead.