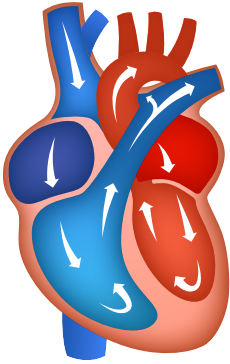
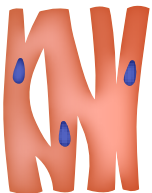
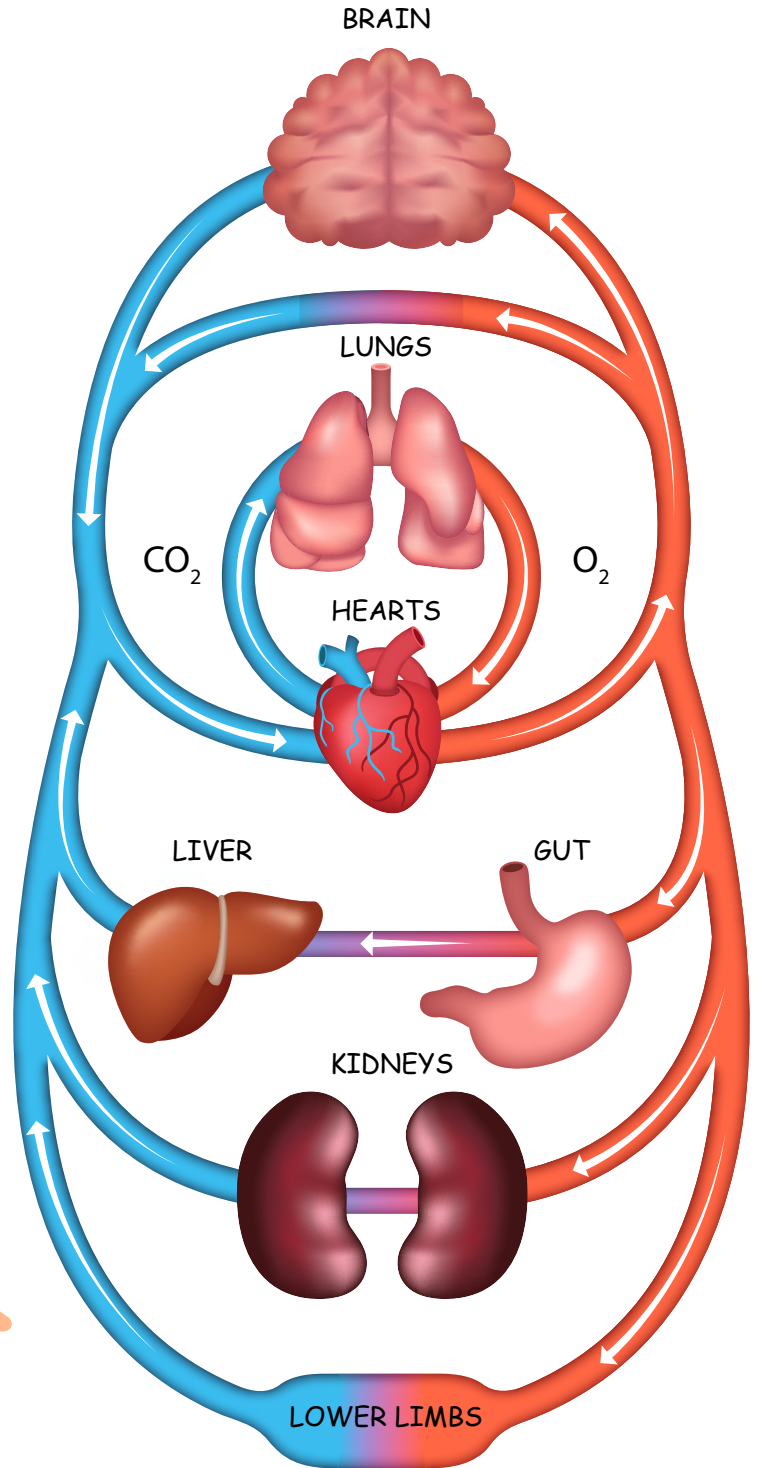
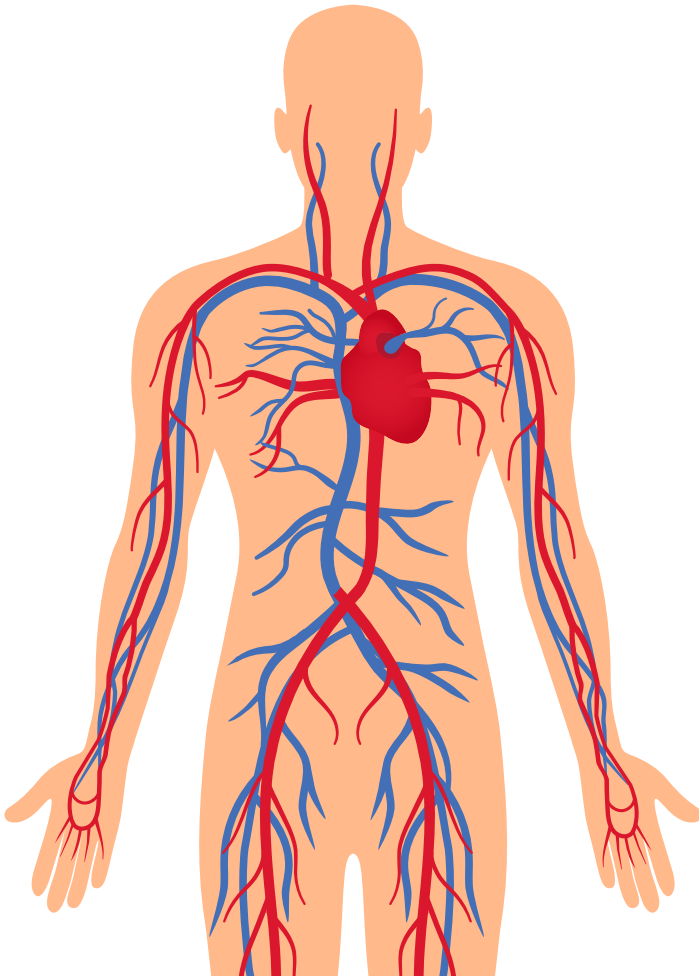


CIRCULATORY SYSTEM





THE HUMAN HEART

The human heart is an organ that pumps blood throughout the body via the circulatory system, supplying oxygen and nutrients to the tissues and removing carbon dioxide and other wastes.



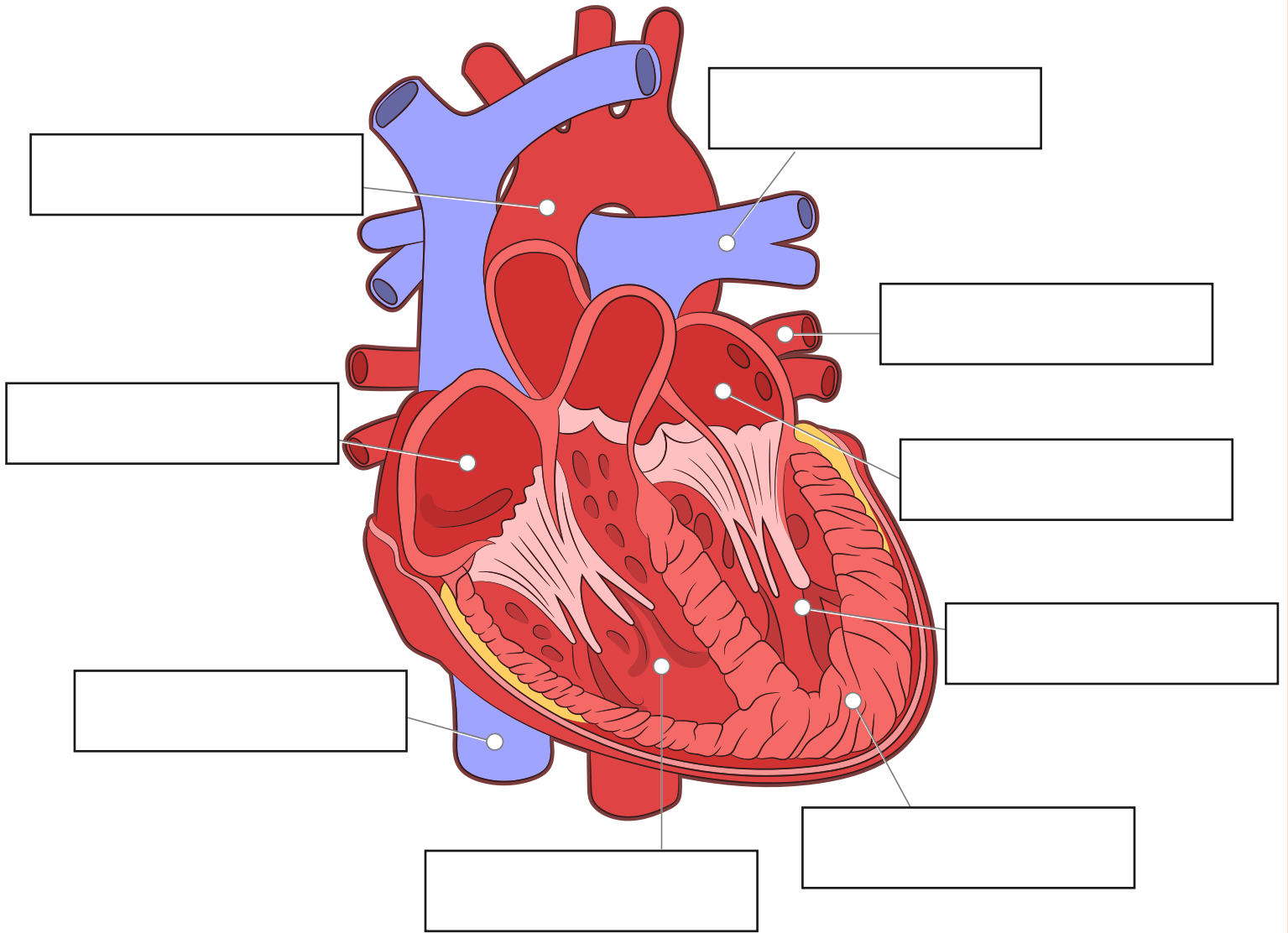
CARDIAC MUSCLE

Cardiac muscle tissue works to keep your heart pumping through involuntary movements. This is one feature that differentiates it from skeletal muscle tissue, which you can control. It does this through specialized cells called pacemaker cells. These control the contractions of your heart.

 VENOUS CIRCULATION
 ARTERIAL CIRCULATION

Name: _____

The Valves Of The Heart



heart muscle

aorta

left ventricle

right ventricle

pulmonary artery

right atrium

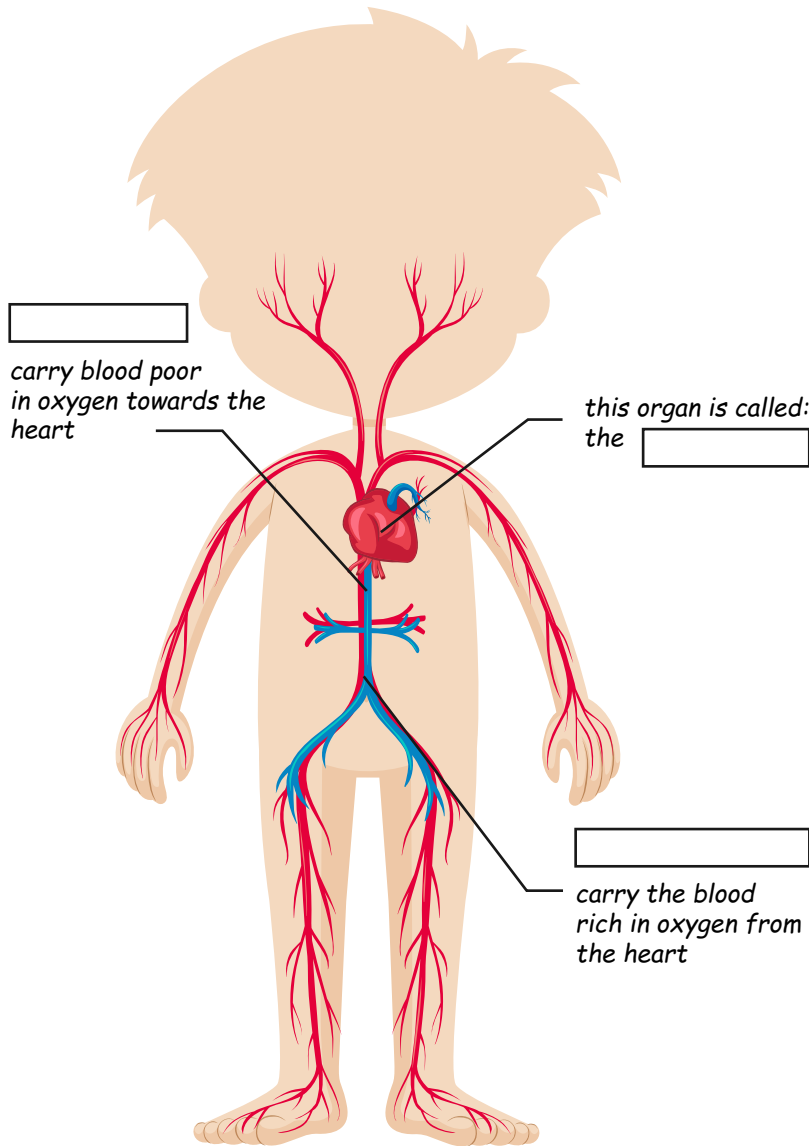
pulmonary vein

inferior vena cava

left atrium

Name: _____

CIRCULATORY SYSTEM



The heart pump blood around the body.

Circulatory System:

- The heart
- The blood vessels
 - ▶ Arteries
 - ▶ Veins
- The blood

Blood carries nutrients and oxygen to all parts of the body, and carries away waste materials and carbon dioxide.

1. What does the heart do?

2. What are the names of the two types of tubes that carry the blood?

3. What are the main parts of the circulatory system?

4. What's the function of the blood?

Name: _____

Matching Game!

Circulatory	Capillaries	Aorta	Blood	Vascular
Artery	Lungs	Vein	Blue	Cardiac
oxygen	Heart	Carbon Dioxide	Red	Cell

Directions: Match the term with the best description.
Some terms may be used more than once.

- _____ 1. its presence makes the body's blood red.
- _____ it is the biggest artery in the human body.
- _____ 3. is an organ has thousands of capillaries to receive inhaled oxygen.
- _____ 4. these are the smallest blood vessels in the human body.
- _____ 5. this fluid carries oxygen and nutrients to all of the body systems.
- _____ 6. this organ is the "pumping system" of the human body.
- _____ 7. is a gaseous material is exhaled from the lungs as waste.
- _____ 8. this vessel carries blood that is often blueish in color.
- _____ 9. is a specialized body fluid that brings food and carries away waste.
- _____ 10. is one of twelve organ systems in the human body.
- _____ 11. thousands of these are located in the lungs of a human.
- _____ 12. is the color of oxygenated blood.
- _____ 13. _____ 14. are two organs that have both oxygenated and deoxygenated blood flowing into and out of them.
- _____ 15. is a vessel that transports blood away from the heart.

Name: _____

The Heart

AORTA

The aorta is the largest artery in the body. The aorta begins at the top of the left ventricle, the heart's muscular pumping chamber.

PULMONARY ARTERY

The pulmonary artery carries deoxygenated blood from the right ventricle to the lungs.

PULMONARY VEIN

The pulmonary veins are the veins that transfer oxygenated blood from the lungs to the heart.

RIGHT ATRIUM

The right atrium receives deoxygenated blood from the body through the vena cava and pumps it into the right ventricle which then sends it to the lungs to be oxygenated.

LEFT ATRIUM

Its primary roles are to act as a holding chamber for blood returning from the lungs and to act as a pump to transport blood to other areas of the heart.

INFERIOR VENA CAVA

The inferior vena cava (or IVC) is a large vein that carries the deoxygenated blood from the lower and middle body into the right atrium of the heart.

LEFT VENTRICLE

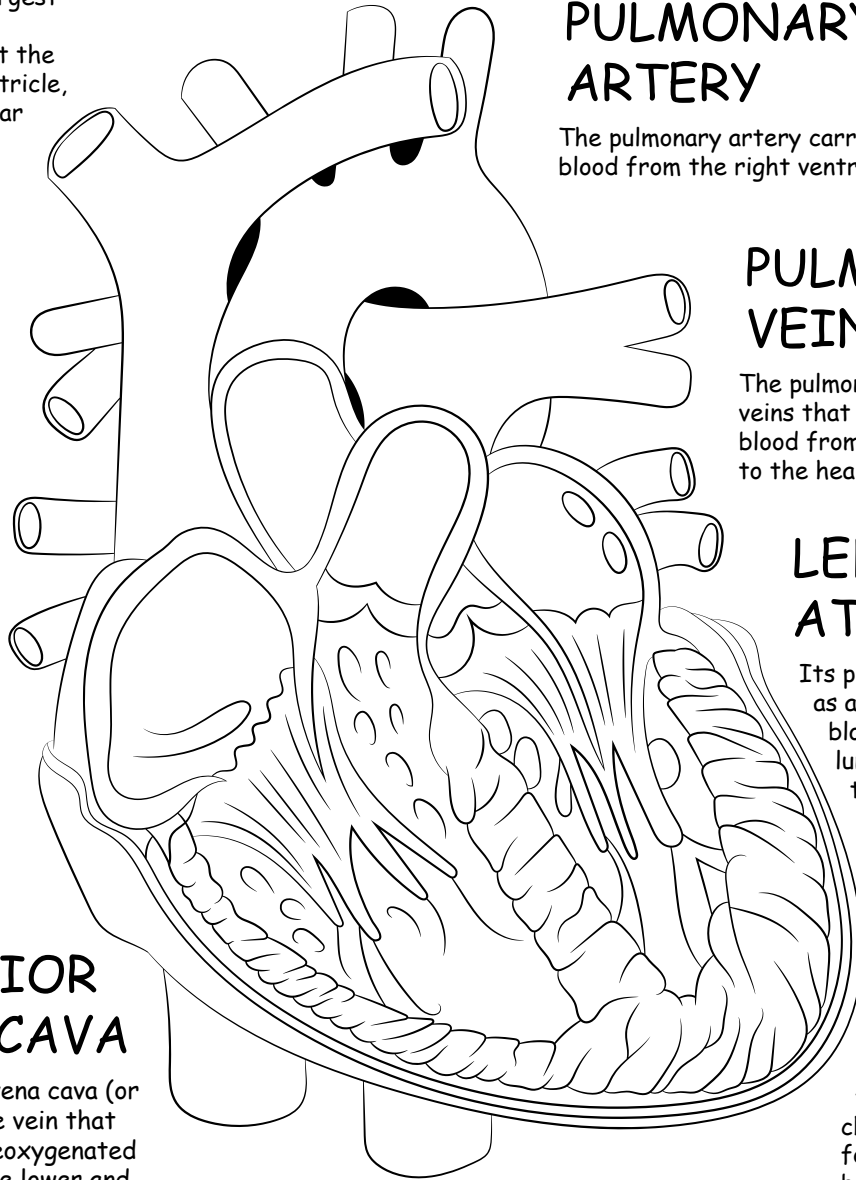
The left ventricle is the thickest of the heart's chambers and is responsible for pumping oxygenated blood to tissues all over the body.

RIGHT VENTRICLE

It receives deoxygenated blood from the right atrium (RA) and pumps it into the pulmonary circulation.

HEART MUSCLE

is one of three types of vertebrate muscles, with the other two being skeletal and smooth muscles.



Name: _____

Heartbeat Lab

1. How many times does your heart beat in a minute while sitting?
2. How many times does your heart beat after running on the spot for 1 minute?
2. How many minutes/seconds can you hold your breath for?



What You Need:

1. Timer
2. A peer to take your pulse (find the pulse on the wrist)

What To Do:

1. Sit quietly for 2 minutes. Predict how many times your heart beats.
2. Have your peer take your pulse (heartbeat) for 1 minute.
3. Run on the spot for a minute, sit down and have your friend take your pulse for a minute.

Compare your results with your peers explain why the differences may occur. What changes in pulse (heartbeat) happened after you ran on the spot for a minute? Why might this be?