

Circulation ■ *Guided Reading and Study*

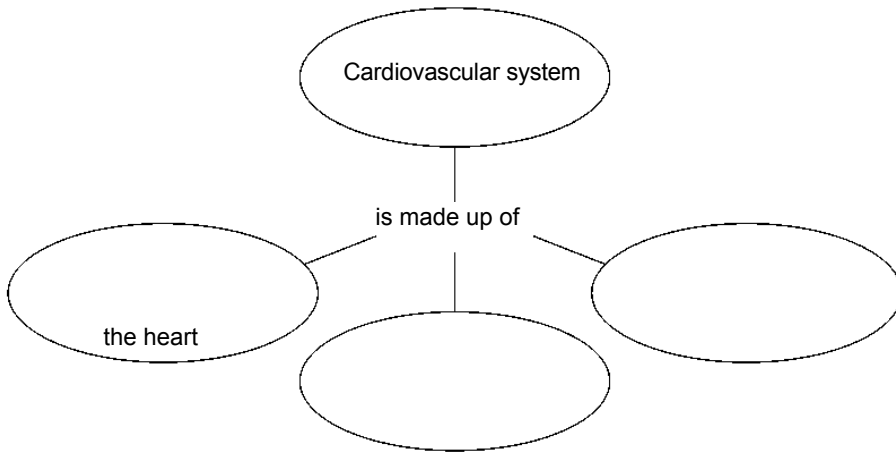
The Body's Transport System

This section describes how the heart, blood vessels, and blood work together to carry materials throughout the body.

The Cardiovascular System

1. Another name for the cardiovascular system is the _____ system.

2. Complete this concept map to show what makes up the cardiovascular system.



3. What three things are carried throughout the body by the cardiovascular system?

The Heart

4. Each time the heart beats, what does it do to blood?

5. Complete the table about the chambers of the heart.

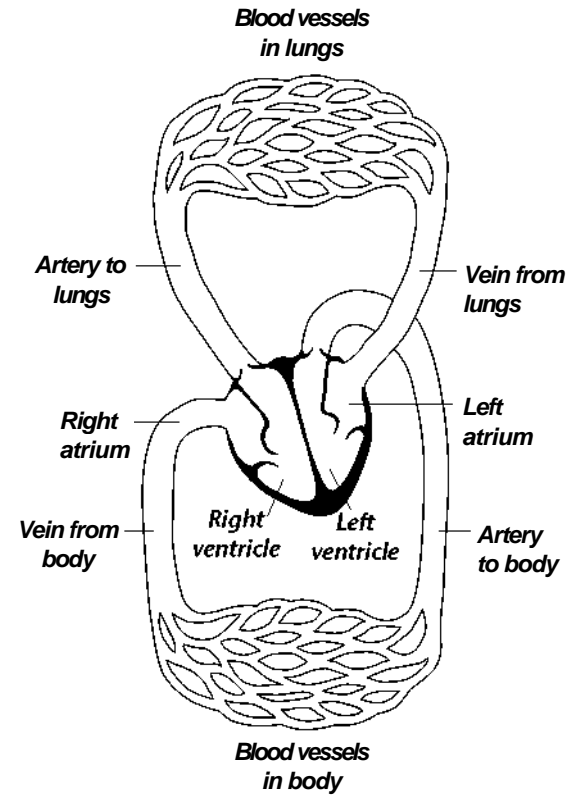
Chambers of the Heart		
Questions	Upper Chambers	Lower Chambers
What are these chambers called?		
How many are there?		
What is the function, or job, of these chambers?		

6. A flap of tissue that prevents blood from flowing backward is a(n) _____.
7. The group of cells that adjusts the speed of the heart beat is called _____.
8. When blood flows through the heart, what force pushes the blood out of the heart and into the arteries?

Two Loops

9. Name the three kinds of blood vessels.
10. Describe the loop in which the blood picks up oxygen.

11. Draw arrows on the diagram below to show how blood circulates through the body. The first arrow should start in the right atrium.



12. The largest artery in the body is called the _____.

Arteries

13. What is the structure of an artery?

14. Arteries carry blood away from the _____ .

15. Is the following sentence true or false? The coronary arteries provide the stomach with its blood supply. _____

16. Circle the letter of each sentence that is true about pulse.

- a. The faster your heart beats, the slower your pulse will be.
- b. Pulse is caused by the expanding and narrowing of artery walls.
- c. When you count pulse beats, you are also counting heartbeats.
- d. You can feel pulse in veins but not in arteries.

17. Is the following sentence true or false? Arteries control the amount of blood that different organs receive. _____

Capillaries

18. What important thing happens in the capillaries?

19. One process in which materials are exchanged between the blood and the body cells is _____ .

Veins

20. What job do veins carry out?

21. What three things help push blood through veins?

- a. _____
- b. _____
- c. _____

22. Is the following sentence true or false? The walls of veins are generally much thinner than those of the arteries. _____

Blood Pressure

23. What is blood pressure?

24. As blood moves away from the heart, does the blood pressure increase or decrease? _____

25. Circle the letter of the name of the instrument that measures blood pressure.

- a. stethoscope
- b. X-ray machine
- c. sphygmomanometer
- d. mercury