

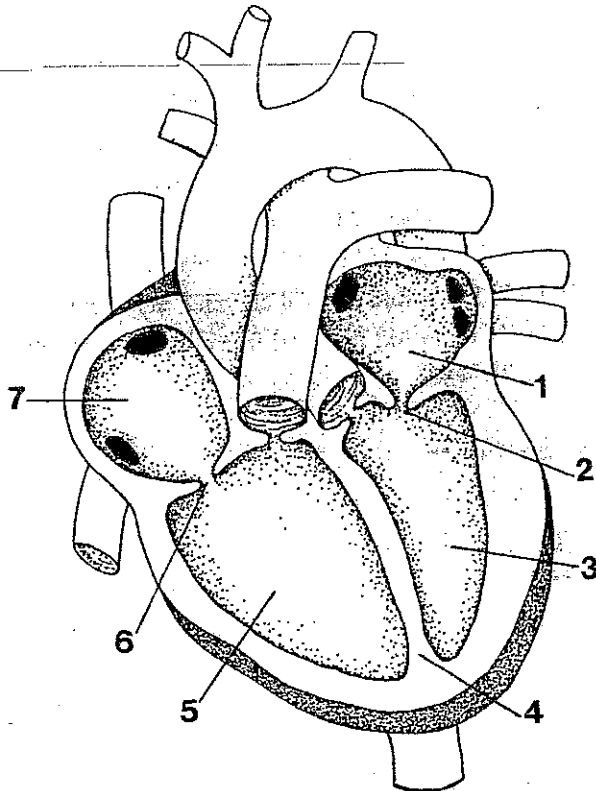
Chapter 22 Circulation

Section Review 22-1

The Circulatory System

On each line, write the name of the part of the heart that has the same number in the diagram. Then fill in the blank to complete the sentence.

left atrium right atrium bicuspid valve septum left ventricle right ventricle tricuspid valve



1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

8. The valve between the right atrium and right ventricle is called the _____.
9. Blood gets pumped from the _____ to the lungs to pick up oxygen.
10. The valve between the left atrium and the left ventricle is the _____.
11. Blood is pumped from the _____ to the rest of the body.
12. The thick wall that separates the heart into two sides is called the _____.
13. Oxygenated blood enters the _____ of the heart.

Part B: Read each statement. Indicate whether the statement is characteristic of an artery (A), vein (V), or capillary (C). Write the correct letter in the space provided.

- _____ 1. Blood travels through at high pressure
- _____ 2. Blood travels through at low pressure
- _____ 3. Carries oxygenated blood away from the heart
- _____ 4. Carries deoxygenated blood to the heart
- _____ 5. Contains valves to prevent back flow of blood
- _____ 6. Cell walls that are one cell thick
- _____ 7. Thick, muscular, elastic walls
- _____ 8. Thin, nonmuscular walls
- _____ 9. Where food and oxygen diffuse out of blood into body cells.

Part C: Answer the following questions in the space provided.

- 1. What is considered a "normal" blood pressure? _____
- 2. How does hardening of the arteries cause high blood pressure? _____

- 3. How can you reduce your risk of heart attack? _____

- 4. What causes a heart attack? _____

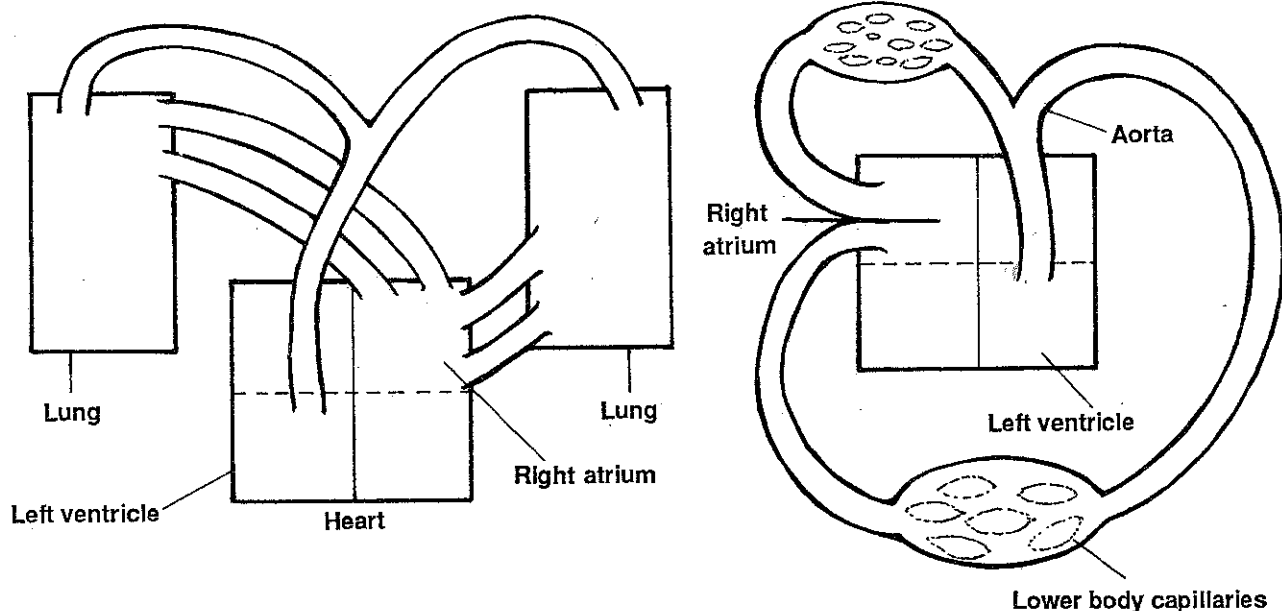
- 5. What are some signs of a heart attack? _____

Chapter 22 Circulation

Section Review 22-2

Pulmonary and Systemic Circulation

Part A: The drawings below show the pathway of pulmonary and systemic circulation. Use a red pencil to trace the path of blood away from the heart, and a blue pencil to trace the path of blood returning to the heart.



Part B: Choose the word or words listed below that will make each statement true. Words may be used more than once.

right ventricle	carbon dioxide	left ventricle
lungs	left atrium	vena cava
oxygen	aorta	right atrium

- Blood from the lungs flows into the _____ and then to the _____.
- As blood travels through the lungs it picks up _____.
- When blood enters the right atrium, it contains _____.
- Blood from the left ventricle flows into the _____.
- The pulmonary system is the circulation of blood to the _____.
- When blood passes through the _____ it travels through the body or the systemic system.
- Blood goes from the right ventricle to the _____.

Chapter 22 Circulation**Section Review 22-3****Blood**

Part A: Study the characteristics of blood in Table 1. Complete the table by placing a check mark in the correct column.

Table 1 Comparing Parts of the Blood

Characteristic	Plasma	Red Blood Cell	White Blood Cell	Platelet
1. Disklike shape				
2. Shapeless and colorless				
3. Liquid part of blood				
4. Carries oxygen				
5. Controls clotting				
6. Phagocytes				
7. Not living				
8. Makes antibodies				
9. Forms mesh over an open wound				
10. Carries nutrients through body				
11. Contains hemoglobin				
12. Gives blood its color				

Part B: Complete the following table by filling in the missing information. Then answer the questions.

Table 2

Blood Type	Antigens	Antibodies
A	A	1.
B	2.	Anti-A
3.	AB	4.
O	5.	Anti-A and Anti-B

6. What would happen if someone with type A blood was given a transfusion with type B blood? _____

7. What type of blood can be given to anyone? Why? _____

Part C: Read each statement below. In the space provided, place an *A* if the statement refers to Anemia or an *L* if the statement refers to leukemia.

- ____ 1. Internal bleeding; many infections
- ____ 2. Blood does not carry normal amounts of oxygen
- ____ 3. Millions of abnormal white blood cells are produced
- ____ 4. Tired, pale, and unable to tolerate cold
- ____ 5. Too few red blood cells
- ____ 6. Treated with drugs, radiation therapy, or bone marrow transplants
- ____ 7. Treated with vitamins and eating foods high in iron

The Lymphatic System

Answer the following questions in the space provided.

1. What is the lymphatic system? _____

2. What do lymph vessels do? _____

3. What two functions do lymph nodes perform? _____

4. What are swollen glands? What causes them? _____

5. What are lymph nodes in the throat called? _____
6. Is tissue fluid the same thing as plasma? _____

7. What substances need to be dissolved in tissue fluid before they can pass through the cell membrane? _____

Chapter 22 Circulation**Vocabulary Review**

Circle the correct word in each of the following statements.

1. The valve between the right atrium and the right ventricle is the (bicuspid / tricuspid) valve.
2. (Plasma / Hemoglobin) is a part of the red blood cell that carries oxygen.
3. (Platelets / White blood cells) produce antibodies to fight antigens.
4. (Veins / Arteries) carry blood away from the heart.
5. The (atrium / ventricle) is the upper chamber of the heart.
6. (Arteries / Capillaries) are the smallest of all blood vessels.
7. The (aorta / septum) divides the right and left sides of the heart.
8. (Pulmonary / Systemic) circulation is the way in which blood travels through the lungs.
9. The valve between the left atrium and left ventricle is the (bicuspid / semilunar) valve.
10. (Leukemia / Anemia) is a common blood disorder in which the red blood cells do not carry normal amounts of oxygen.
11. Tissue fluid becomes (blood / lymph) when it enters the lymphatic system.
12. The (red blood cell / platelets) help heal wounds by sticking together to form a plug.
13. White blood cells fight infection by making (antibodies / antigens).
14. The (atria / ventricles) pump blood to the body.
15. Lymph (nodes / vessels) clean and filter lymph before it is returned to blood.