

# TRANSPORT WORKSHEETS

Name: \_\_\_\_\_ period \_\_\_\_

In the space at the left, write the letter of the word or phrase that best completes the statement or answers the question.

- \_\_\_\_\_ 1. The transport system of vascular plants consists of  
a. roots and stems.    b. buds and leaves.    c. xylem and phloem.    d. cells and root hairs.
- \_\_\_\_\_ 2. The transport of oxygen in the blood is the function of the  
a. red blood cells.    b. white blood cells.    c. antibodies.    d. antigens.
- \_\_\_\_\_ 3. Cell fragments that help repair cuts by clotting the blood are called  
a. red blood cells.    b. white blood cells.    c. platelets.    d. antigens.

**Write the word or phrase that best completes the statement.**

4. After \_\_\_\_\_ cells in plants die, they form hollow tubes that transport water to the leaves and other parts of the plant.
5. The process by which water is lost through the pores in stomata is called \_\_\_\_\_
6. Oxygen, carbon dioxide, and nitrogenous wastes pass through the capillary wall by the process of \_\_\_\_\_.
7. The largest blood vessel in the body is the \_\_\_\_\_.

In the space at the left, write the letter of the phrase from Column B that best matches the term in Column A.

- | Column A                        | Column B   |
|---------------------------------|--|
| _____ 8. root hair              | a. proteins on the membranes of red blood cells                                      |
| _____ 9. vein                   | b. place where an electrical impulse causes the ventricles to contract               |
| _____ 10. lymph node            | c. site where gases and nutrients are exchanged between the body cells and the blood |
| _____ 11. white blood cell      | d. carries blood to the heart  |
| _____ 12. antigens              | e. living phloem cells that transport sucrose  |
| _____ 13. sieve tube            | f. place where most bacteria in the body are destroyed                               |
| _____ 14. artery                | g. absorbs water and dissolved ions from the film of moisture around soil particles  |
| _____ 15. capillary             | h. carries blood away from the heart   |
| _____ 16. type O blood          | i. cell that defends against viruses, microorganisms, and parasites                  |
| _____ 17. atrioventricular node | j. universal donor   |

Blood pressure changes as the blood flows through the body. A blood pressure reading includes the systolic pressure, the pressure during the contraction of the ventricles, over the diastolic pressure, the pressure during the relaxation of the ventricles. The highest blood pressure occurs in the ventricles. Use the information about the changes in blood pressure (Figure 21-2) and the velocities of blood flow to answer the following questions.

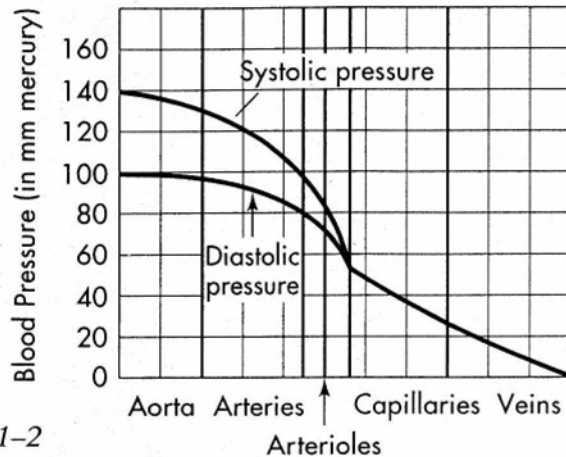


Figure 21-2

### VELOCITIES OF BLOOD FLOW

Vessels	Velocity (cm/sec)
Aorta	40
Arteries	40-10
Arterioles	10-0.1
Capillaries	0.1
Venules	0.3
Veins	0.3-5.0
Vena Cavae	5-20

7. What is the patient's blood pressure as shown in the graph when the blood enters the aorta?
  
8. What happens to the blood pressure as the blood enters the arteries?
  
9. What is the blood pressure in the arterioles?
  
10. What change do you notice in the blood pressure of the capillaries?
  
11. Relate the pressures to the velocities of the blood as it flows through the body.
  
12. Why is it a selective advantage that the blood slows down in the capillaries?