

## Section 37–2 Blood and the Lymphatic System (pages 951–955)



**TEKS FOCUS:** 10B Interrelationships of organ systems

*This section describes the functions of the different components of blood. It also outlines the role of the lymphatic system.*

### Blood Plasma (page 951)

1. The straw-colored fluid portion of blood is called \_\_\_\_\_.
2. Circle the letter of each sentence that is true about plasma.
  - a. It makes up 90 percent of the volume of blood.
  - b. It is about 55 percent water.
  - c. It contains only dissolved gases and salts.
  - d. It contains both nutrients and enzymes.

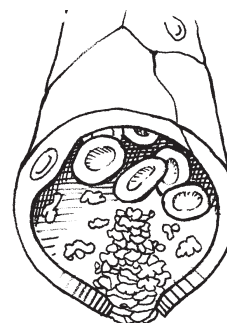
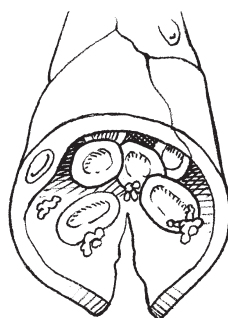
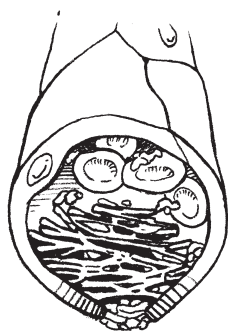
*Match each type of plasma protein with its function.*

_____	<b>Type of Protein</b>	<b>Function</b>
_____	3. albumin	a. Helps blood clot
_____	4. globulin	b. Transports substances
_____	5. fibrinogen	c. Fights infections

### Blood Cells (pages 952–954)

6. List the three components of the cellular portion of blood.
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
7. Circle the letter of each sentence that is true about red blood cells.
  - a. They are the least numerous cells in the blood.
  - b. Their role is to transport oxygen.
  - c. They contain hemoglobin.
  - d. They are produced in the bone marrow.
8. Is the following sentence true or false? Mature red blood cells have two nuclei.  
\_\_\_\_\_
9. Circle the letter of each sentence that is true about white blood cells.
  - a. They contain nuclei.
  - b. They attack foreign substances.
  - c. They contain hemoglobin.
  - d. They are also called leukocytes.
10. Is the following sentence true or false? Most white blood cells live for an average of 120 days. \_\_\_\_\_
11. White blood cells that engulf and digest foreign cells are called \_\_\_\_\_.

12. What does a sudden increase in the number of white cells tell a physician?  
\_\_\_\_\_
13. List the two components of blood that make clotting possible.  
a. \_\_\_\_\_ b. \_\_\_\_\_
14. Number the drawings below to show the correct sequence in which a blood clot forms when a blood vessel is injured.



15. A genetic disorder that results from a defective protein in the clotting pathway is \_\_\_\_\_.

### The Lymphatic System (pages 954–955)

16. What is the lymphatic system? \_\_\_\_\_
17. The fluid lost by blood is called \_\_\_\_\_.
18. Circle the letter of each choice that is a function of lymph nodes.
- a. Trapping bacteria
  - b. Helping blood to clot
  - c. Preventing backward flow of lymph

#### Reading Skill Practice

When you read a section with difficult material, writing a summary can help you identify and remember the main ideas and supporting details. Write a concise paragraph summing up the material under each heading in Section 37–2. Each of your paragraphs should be much shorter than the text under that heading in your book. Include each of the boldface vocabulary terms in your summary. Do your work on a separate sheet of paper.