

Directed Reading A

Section: Your Body's Defenses

1. Your body has to constantly protect itself against _____ that are trying to invade it.

FIRST LINES OF DEFENSE

- _____ 2. Which of these is NOT a first line of defense for your body?
 - a. enzymes
 - b. mucus
 - c. dead skin
 - d. antibiotics
- _____ 3. Most pathogens that are carried to the stomach
 - a. have gotten through the defenses.
 - b. cause hunger.
 - c. are digested.
 - d. may get into the blood.
- _____ 4. What two lines of defense does human skin have?
 - a. dead skin flakes and oil glands
 - b. living skin and mucus
 - c. oil and water
 - d. enzymes and mucus

FAILURE OF FIRST LINES

5. Pathogens can enter the body when skin is _____ or punctured.
6. Cell parts called _____ help to seal an open wound.
7. The body system that fights pathogens is the _____.
8. The purpose of the immune system is to protect the body from invading _____.

CELLS OF THE IMMUNE SYSTEM

9. Name the three main kinds of cells that make up the immune system.

Directed Reading A *continued*

Match the correct description with the correct term. Write the letter in the space provided.

- | | |
|--|------------------|
| _____ 10. engulf and digest many microorganisms or viruses | a. antibodies |
| _____ 11. make antibodies | b. B cells |
| _____ 12. bind to specific antigens | c. antigen |
| _____ 13. coordinate the immune system and attack infected cells | d. T cells |
| _____ 14. stimulate an immune response | e. macrophages |
| _____ 15. recognizes and attacks foreign substances | f. immune system |

RESPONDING TO A VIRUS

16. When virus particles invade a body, some of the particles are engulfed and broken up by _____.

17. If virus particles survive in the body, they may enter a cell and start to _____.

18. What do macrophages, infected body cells, and virus particles all display?

19. What two responses do helper T cells activate to fight viruses?

20. What do killer T cells destroy?

21. When activated B cells divide, what do they form?

22. Describe how antibodies help to destroy viruses.

Directed Reading A *continued*

FEVERS

23. When macrophages tell the brain to “turn up the thermostat,” the result is a(n)

_____.

24. List two reasons why having a mild fever actually helps you to fight infections.

MEMORY CELLS

25. Why are you much more likely to get sick the first time you are infected with a pathogen?

26. A B cell that responds more strongly to a second infection is known as a(n)

_____.

CHALLENGES TO THE IMMUNE SYSTEM

Match the correct description with the correct term. Write the letter in the space provided.

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|---|---------------|
| _____ 27. an overreaction to a harmless substance | a. autoimmune |
| _____ 28. an attack by the immune system on the body’s own cells | disease |
| _____ 29. uncontrolled cell growth leading to invasion of healthy tissues | b. cancer |
| _____ 30. an example of an infection in the immune system | c. allergy |
| | d. HIV |

31. Allergies may be caused by certain foods, medicines, and

_____.

32. In a(n) _____, immune-system cells mistake body cells for pathogens.

33. What do cancers do that may lead to death?

Directed Reading A *continued*

34. Cells growing at an uncontrolled rate are usually destroyed by

_____ cells.

35. To what condition does HIV infection lead?

36. Explain why the immune system of people with AIDS is compromised.
