

## The Body's Defenses

**Directions:** In the blank's provided, fill in the letters of the term or phrase being described.

1. a disease-causing agent       A     - - - - -
2. layers of epithelial tissue that serve as barriers to pathogens and produce chemical defense       M     - - - - -       M     - - - - -
3. a series of events that suppress infection     - - -   L   - - - - -     - - - - -       E   - - - - -
4. chemical that causes local blood vessels to dilate     - - -   I   - - - - -
5. a defense mechanism with 20 different proteins     - - - - -       M   - - - - -     -   Y   - - - - -
6. a protein released by cells infected with viruses     - - - - -       E   - - - - -
7. a white blood cell that releases chemicals that kill pathogens       N     - - - - -
8. a white blood cell that ingests and kills pathogens     - - -   R   - - - - -
9. destroys an infected cell by puncturing its membrane       N     - - - - -     - - - - -       L   - - - - -     - - - - -       L

**Directions:** Use the terms from the list below to fill in the blanks in the following passage.

- |            |                   |                |
|------------|-------------------|----------------|
| antibodies | B cells           | helper T cells |
| antigens   | cytotoxic T cells | plasma cells   |

White blood cells are produced in bone marrow and circulate in blood and lymph. Four main kinds of white blood cells are involved in the immune response. Macrophages consume pathogens and infected cells.

(10) \_\_\_\_\_ attack and kill infected cells. (11) \_\_\_\_\_ label invaders for later destruction by macrophages. (12) \_\_\_\_\_ activate both cytotoxic T cells and B cells. An infected body cell will display \_\_\_\_\_ of an invader on its surface. These are substances that trigger an immune response. In an immune response, B cells divide and develop into (14) \_\_\_\_\_, which release special defensive proteins into the blood. These special proteins are called (15) \_\_\_\_\_.

**Directions:** *In the space provided, write the letter of the description that best matches the term or phrase.*

- |                              |  |
|------------------------------|--|
| _____ 16. Koch's postulates  | a. body's overreaction to a normally harmless antigen                                    |
| _____ 17. immunity           | b. when the body launches an immune response against its own cells                       |
| _____ 18. vaccination        | c. a medical procedure used to produce resistance  |
| _____ 19. vaccine            | d. the virus that causes AIDS  |
| _____ 20. antigen shifting   | e. a guide for identifying specific pathogens  |
| _____ 21. autoimmune disease | f. resistance to a particular disease  |
| _____ 22. AIDS               | g. a solution that contains a dead or modified pathogen that can no longer cause disease |
| _____ 23. HIV                | h. acquired immunodeficiency syndrome  |
| _____ 24. allergy            | i. when a pathogen produces a new antigen that the immune system does not recognize      |
| _____ 25. CD4                | j. receptor protein recognized by HIV  |