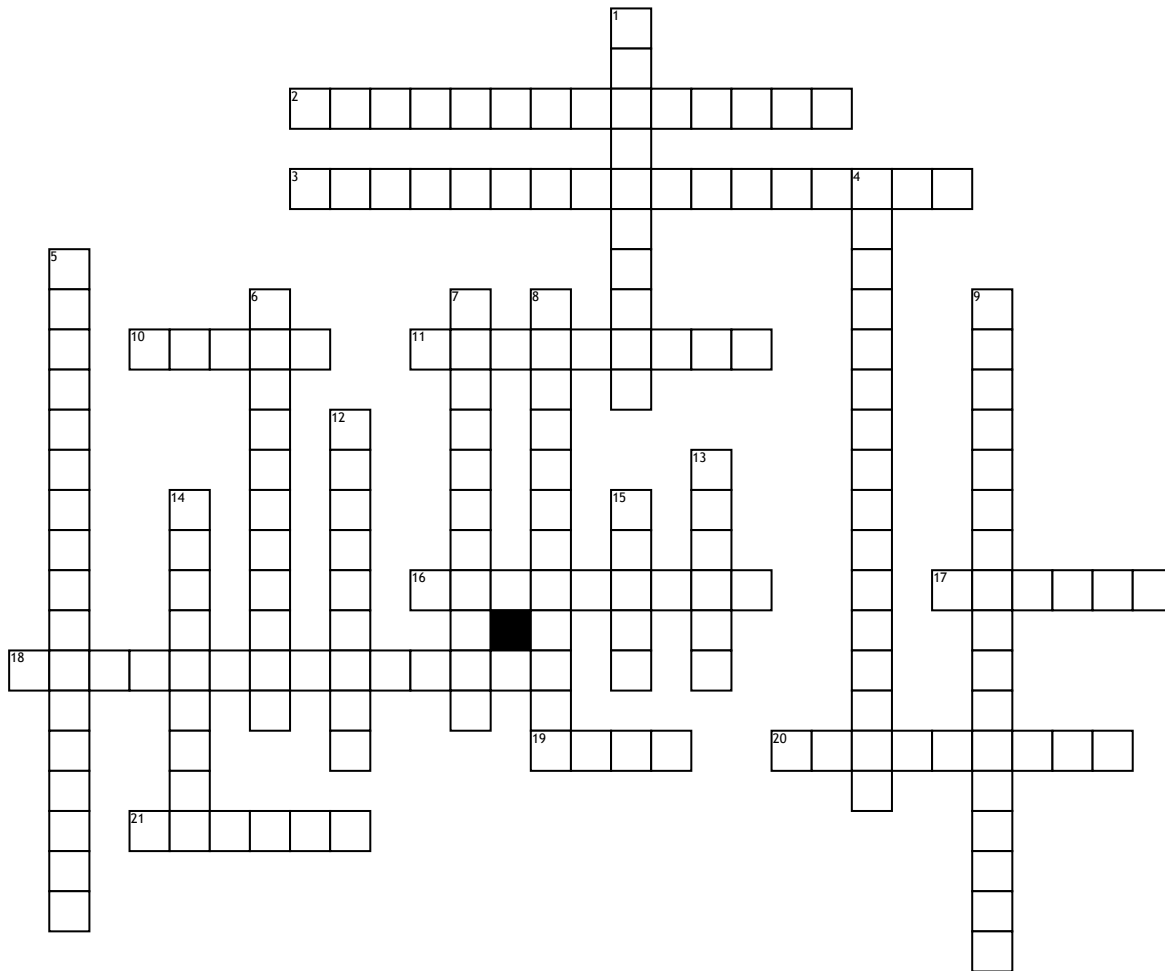


Name: \_\_\_\_\_

Date: \_\_\_\_\_

# The Immune System



## Across

2. This response provides immediate, general protection against pathogens. Examples are the inflammatory response and phagocytosis.

3. A disease that occurs when the immune system acts against our own cells.

10. A common symptom of widespread inflammation in which elevated body temperature interferes with the growth and replication of microorganisms. This helps the body fight infection.

11. Certain viruses, bacteria, fungi, protozoa, and worms that enter the body through air, food, and water; during copulation; and through wounds in the skin.

16. Specialize basophils that release histamine.

17. This occurs during the first of the three main processes of the inflammatory response. The released histamine and other compounds do this to the blood vessels which causes the tissue to warm and redden.

18. Large, granular lymphocytes that destroy target cells by releasing perforins.

19. A physical barrier that is the body's first line of defense against pathogens.

20. A large, diverse group of polypeptides that regulate the intensity and duration of immune responses.

21. Lymphocytes that are responsible for antibody-mediated immunity. They produce specific antibodies that bind to specific antigens.

## Down

1. The study of internal defense systems of humans and other animals.

4. A response that recognizes specific molecules as foreign and produces highly specific proteins that bind to them.

5. Occurs when the immune system overreacts.

6. The most common white blood cell. They do endocytosis to destroy pathogens. They react fast but their action is short-lived.

7. Large phagocytes that develop from monocytes. They take longer to arrive but train other cells to react.

8. During the third main process of the inflammatory response, the amount of cells doing this term increases. This is the main function of the inflammatory response.

9. Linings of the digestive tract, respiratory passageways, and urinary tract that have mechanisms that expel, trap, or destroy pathogens.

12. These cause pores to form in target-cell membranes. This allows granzymes to enter and cause apoptosis (controlled cell death).

13. Lymphocytes that are responsible for cell-mediated immunity. These attack body cells infected by invading pathogens and cells altered by mutation.

14. Cells with long cytoplasmic extensions that produce antiviral cytokines. Some capture microbial antigens.

15. This occurs during the second main process of the inflammatory response. This is the term for the increase of volume of interstitial fluid (swelling).