

Name: \_\_\_\_\_ Period: \_\_\_\_ Date: \_\_\_\_\_

**Ms. Randall Anatomy & Physiology  
Adaptive Immune Response Worksheet**

**Match the term in the second column with the description in the first that fits best.**

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|--|-------------------------|
| ____ 1. type of immune response that is specific for specific pathogens                      | a. macrophage           |
| ____ 2. cell death   | b. acquired or adaptive |
| ____ 3. protein molecule that attaches to antigen  | c. receptor             |
| ____ 4. cell that ingests foreign cells  | d. autoimmune disease   |
| ____ 5. cell that matures in the thymus  | e. antibody             |
| ____ 6. makes it possible to quickly attack a pathogen your immune cells have already "seen" | f. T cell               |
| ____ 7. antibody producing cell  | g. B cell               |
| ____ 8. occurs when lymphocytes attack "self"  | h. memory cell          |
| ____ 9. surface marker on cell   | i. apoptosis            |

10. Before T cells are released to do their jobs, they must go through a selection process. Place the following events in the order in which they would occur by numbering them 1-5.

- \_\_\_\_\_ T cells migrate to the thymus
- \_\_\_\_\_ T cells that don't recognize "self" protein are destroyed
- \_\_\_\_\_ T cells are produced in the bone marrow
- \_\_\_\_\_ mature T cells migrate to the lymph nodes and spleen
- \_\_\_\_\_ T cells that bind too tightly to self protein are destroyed

Which type of T cell does what?

- |                             |                                  |
|-----------------------------|----------------------------------|
| _____ 11. helper T cell     | a. turns off the immune response |
| _____ 12. cytotoxic T cell  | b. kills virus-infected cells    |
| _____ 13. suppressor T cell | c. starts the immune response    |

14. When you are infected by a pathogen, you will make antibody against it. What do antibodies actually do to the pathogen?

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15. You have lots of different B cells, each capable of producing a different antibody. When you are infected by a pathogen, a particular type of B cell makes the right antibody for that pathogen. The events below occur during that selection process. Put them in the order in which they occur by numbering them 1 to 3.

- \_\_\_\_\_ B cells are produced in the bone marrow
- \_\_\_\_\_ the activated B cell divides and produces plasma cells, which make large amounts of one antibody
- \_\_\_\_\_ the pathogen “locks on” to the receptor on a B cell and activates the B cell

16. Why are memory B cells important?

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