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

**Listening Guide Ch. 43 – Immune System (Bozeman Biology)**

**<https://www.youtube.com/watch?v=z3M0vU3Dv8E>**

1. A virus uses the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of your cells to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, which will eventually \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ your cells and spread out to infect other cells.
2. If it weren’t for our \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ we would be devastated by all the viruses entering our body.
3. Your immune system was compared to a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. What is the first barrier of defense against infection (compared to the castle wall)? \_\_\_\_\_\_\_\_\_\_
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are the “big eaters” that consume things that don’t belong in our body.
6. An \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a word for anything that doesn’t belong in our body.
7. Macrophage will secrete \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_into an antigen to break it down.
8. One problem with a macrophage is it will attack anything that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
9. To fight antigens, a specific immune response uses \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
10. An antigen has \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ on its surface
11. The word antigen means \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
12. Anitbodies are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ produced by our body and come in a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ shape.
13. The antibody will \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to the antigen so the macrophage can find the antigen and make it harder for the antigen to do its job.
14. Lymphocytes are a type of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_blood cell
15. There are two types of lymphocytes: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
16. B lymphocytes are responsible for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_response (any time there are viruses free in the fluids of our body).
17. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cell senses the shape of the antigen and produces \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ specific to that antigen.
18. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cells give you immunity for life (or long periods of time).
19. T lymphocytes are created in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and are responsible for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ response.
20. T lymphocytes will \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cells infected by a virus.
21. When an antigen is eaten by a macrophage, the macrophage chops it up and presents the pieces on its surface using a chemical called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
22. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cell is responsible for initiating both humoral and cell-mediated immune responses.
23. Helper T cells are the type of cells infected by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
24. When you are exposed to a cold, there is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ time before you produce antibodies.
25. The two ways cold viruses can get around your immune system are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.