**Diseases**

*Fill in the Blank*

1. When you have a \_\_\_\_\_\_\_\_\_\_\_\_\_, your normal body functions are disrupted.
2. A\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ disease is a disease such as cancers and heart disease that does not spread between one person to the next.
3. A\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ disease is one that can be passed from one living thing to another. They are caused by agents called\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, such as a virus.

*Short Answer*

1. What happens in the genetic disorder disease called Hemophilia?
2. What are viruses?
3. Which bacteria can cause strep throat?

*True or False*

1. Pathogens can’t travel through the air
2. Humans can get a fungus called ringworm from handling an infected dog or cat
3. Ticks may carry bacteria that cause Lyme disease or Rock Mountain Spotted Fever
4. Microorganisms cannot make you sick, but rather help you when water you drink becomes infected.
5. Leaving food out of the refrigerator when it is supposed to be cold can help decrease bacteria by burning them.

*Select the letter containing the most appropriate answer*

1. The ability to resist or to recover from an infectious disease is
2. Vaccination Reaction
3. Cellular Respiration
4. Immunity
5. Pasteurization
6. Ultraviolet Radiation can be used to
7. Prevent the spread of pathogens
8. Prevent the spread of immunity
9. Increase the spread of Pathogens
10. None of the above
11. During the mid-1800s, a French scientist, discovered microorganisms affected the quality of wine, who was the scientist?
12. Louis Pasteur
13. Charles Darwin
14. Edward Jenner
15. Terrel Shepherd
16. What are microorganisms?
17. Antiviral medicines
18. Bacteria
19. Immunity Spreading Vaccinations
20. Vaccines
21. What can be used to kill bacteria in wine?
22. Chilled Storage
23. Pathogens
24. Bacteria
25. Heat
26. The method of removing bacteria from wine is known as what?
27. Pasteurization
28. Immunity
29. Antibiotic
30. T cells
31. What disease did Edward Jenner study?
32. Flu
33. Infectious Disease
34. Smallpox
35. Largepox
36. People who have been infected with cowpox are immune to which disease?
37. Flu
38. Infectious Disease
39. Small Pox
40. Largepox
41. What is a substance that helps your body develop immunity to a disease?
42. Vaccine
43. Pathogen
44. Bacteria
45. Pasteurization
46. What is a substance that can kill bacteria or slow the growth of bacteria/
47. Vaccine
48. Pathogen
49. Bacteria
50. Antibiotic

*True or False*

1. All viruses can be destroyed or killed with antibiotics
2. Vaccines contain treated pathogens
3. Antibiotics can kill both living and nonliving organisms
4. For a pathogen to harm you, it must attack a part of your body
5. Most pathogens around you make it past your first line of defense

*Short Answer*

1. What destroy by many organisms that try to enter your eyes or mouth?
2. Pathogens that enter your nose are washed down the back of your throat by what?
3. What happens to the pathogens that enter your stomach?
4. Your skin is made of many layers of what?
5. What does oil on your skin do?

*Order the steps of your first line of defense process, 1 being the first step, 4 being the last.*

1. \_\_\_\_\_\_\_\_ Blood flow to the injured area increases
2. \_\_\_\_\_\_\_\_ Skin is cut or punctured, allowing pathogens to enter body
3. \_\_\_\_\_\_\_\_ Body acts quickly to keep out as many pathogens as possible
4. \_\_\_\_\_\_\_\_ Cell parts in the body called platelets help seal the open wound so no more pathogens can enter

*Give the word the definition describes*

1. The cells and tissues that recognize and attack foreign substances in the body
2. A cell that engulfs pathogens and other materials
3. A cell that coordinates the immune system and attacks many infected cells
4. A white blood cell that makes antibodies
5. A protein made by B cells that binds to a specific antigen

*Fill in the blank for the steps of your body’s defense*

1. When virus particles invade the body, some of the particles are engulfed by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Other virus particles infect\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Macrophages that have engulfed virus particles, infected body cells, and virus particles all display\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Helper\_\_\_ cells have receptor proteins that recognize the shape of the viral\_\_\_\_\_\_\_\_\_\_\_ on the macrophages.
5. These helper T cells begin two responses: a \_\_\_ cell response and a B \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. Helper T cells activate\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. Killer T cells recognize the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ on infected cells.
8. The killer T cells destroy the infected cells so that the virus particles inside the cell cannot \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
9. Meanwhile, helper \_\_\_\_\_\_\_\_\_\_\_\_ also activate B cells
10. Activated B cells divide to make cells that can make \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ recognize the shape of the viral antigen.
12. Antibodies bind to the viral\_\_\_\_\_\_\_\_\_\_ on the viruses.
13. The antibodies bound to the viruses cause the viruses to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
14. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ marks the virus particles for destruction.

*Short Answer*

1. When macrophages activate the helper T cells, they send a chemical signal that tells your brain to turn up the temperature. When this happens, what do you get?
2. Your immune system can respond to a second encounter faster than it can respond the first time. Which type of cell allows this?
3. What is an autoimmune disease?