

Name: _____

Date: _____

Period: _____

The Immune System

Week # _____

Directions: Read p. 1012 – 1013 to complete the table below.

How Diseases Spread	Description
Coughing, Sneezing, Physical Contact	_____ and _____ releases _____ that can be _____ or settle on objects. Touching objects and then touching your _____ can transfer pathogens. Pathogens can also be spread by any kind of _____ contact and contact with _____ or _____.
Exchange of Body Fluids	Some diseases can be transmitted by _____ or by using _____ for users of injected drugs.
Contaminated Water or Food	Spread by consuming water contaminated with _____ from _____ or other animals, eating food without being _____, or eating food that has not been _____ or _____ properly.
Zoonoses: The Animal Connection	Diseases that thrive in both _____ and _____ hosts. Can be transmitted through carriers, or _____, that transport the _____ but _____ by an infected animal, _____ the meat of an infected animal, or comes into contact with an infected animal's _____.

Directions: Read p. 1014 – 1019 to complete the questions below.

- Your body's first defense against pathogens are nonspecific defenses, which are _____ and _____ barriers that _____.
 - The first line of defense is the _____, a _____ barrier.
 - Pathogens cannot enter through the mouth, nose, and eyes because of _____, _____, and _____ that contain an _____ to break down bacterial cell walls.
- Since the splinter has cut your skin, your body's second line of defense comes into action.
 - The inflammatory response causes _____.
 - The pathogens stimulate mast cells to release _____, that _____.
 - White blood cells, or _____, arrive to _____ bacteria.
 - Some of your body's cells make interferons that interfere with the production of new viruses.
 - Your body releases chemicals that increase body temperature, producing a fever, to _____ and speed up the immune response.
- Next, the body's specific defense kicks into gear. Its job is to distinguish _____ and inactivate or _____.
 - The ability to recognize "self" is essential because the immune system has powerful weapons that could _____.
 - The immune system recognizes "others" by recognizing _____, which can stimulate an immune response.
 - _____ tag antigens for destruction by immune cells.
 - _____ cells and _____ cells are capable of _____.
 - Plasma cells produce and release antibodies, but memory B cells remain alive and react _____.
 - Helper T cells activate _____ and _____.
 - Cytotoxic T cells _____.

Name: _____

Date: _____

Period: _____

Battlefield Cell

Directions: Answer each question as you watch the video.

1. What is the focus of the army of virus clones? _____
2. How many cells does each person have? _____
3. What are some things that DNA is responsible for? _____
4. What do white blood cells do? _____
5. Where are the weak spots that can carry in “invaders”? _____
6. What two illnesses can adenoviruses cause? _____
7. What does the virus do when it reaches the cell’s nucleus? _____
8. What is the job of an antibody? _____
9. What molecules can easily seep in and out of a cell? _____
10. Why does the cell allow the virus to enter? _____
11. Why do endosomes pump in hydrogen ions (acidic environment)? _____
12. What does the “odd shape protein” released by the virus do? _____
13. What are the cell’s floating power stations called? _____
14. How does the virus move toward the nucleus? _____
15. What was the recent discovery about motor proteins? _____
16. What happens after the proteins attach themselves to the antibodies? _____
17. What do proteasomes do? _____
18. What are the unique gateways into the nucleus called? _____
19. What does the tug-of-war do to the virus? _____
20. What do the DNA machines do to the viral code? _____
21. What do ribosomes do with the viral instructions? _____
22. Where is the new viral army built? _____
23. What is the new focus of the cell’s DNA? _____
24. What does the parcel carried by the motor protein contain? _____
25. What happens if white blood cells spot the viral fragments? _____
26. What gets delivered into the viral shells? _____
27. What does the adenovirus death protein destroy? _____
28. What two things do white blood cells engulf? _____
29. Why do we become aware of the battle? _____
30. What is every living creature descended from? _____