

STUDENT PRE AND POST TEST

WHAT DID YOU KNOW?

WHAT DID YOU LEARN?

BACTERIA AND VIRUSES

ANTIBIOTICS

AND

BACTERIAL RESISTANCE TO ANTIBIOTICS

Pre and Post Test Questions

1. Do viruses or bacteria invade and live in a live host cell? _____
2. List 3 possible modes of transmission (means of acquiring the infection) for viruses:
 - a. _____
 - b. _____
 - c. _____
3. List 3 habitats of bacteria:
 - a. _____
 - b. _____
 - c. _____
4. In humans, bacteria can be beneficial by: (circle best answer)
 - A. Living in or colonizing sites that might otherwise be invaded by harmful bacteria.
 - B. Aiding in digestion.
 - C. Neutralizing flesh-eating viruses
 - D. A and B only
 - E. All of the Above
5. If you are “colonized” with bacteria, does that mean you have an infection?

6. List 3 defense mechanisms used by the body to prevent bacteria from entering the body:

- a.
- b.
- c.

7. Which of the following are mechanisms that antibiotics use to kill bacteria or slow their growth? (circle best answer)

- A. Interfering with DNA or RNA replication
- B. Disrupting production of bacterial cell wall
- C. Preventing production of proteins or molecules that are necessary for growth and replication.
- D. All of the above

8. How do bacteria acquire mutations that make them resistant to antibiotics? (circle best answer)

- A. Bacteria can spontaneously develop mutations in their own genetic material that makes them resistant to bacteria.
- B. Bacteria that are resistant to antibiotics can transfer their DNA or RNA to other bacteria, making those bacteria also resistant to antibiotics.
- C. Both A and B
- D. None of the above

9. Which of the following are effects of mutations in the bacteria that allow the bacteria to develop resistance to antibiotics? (circle best answer)

- A. Pump the drug into the bacterial cell
- B. Make the bacterial cell membrane less permeable, preventing the antibiotic from entering the bacteria
- C. Produce enzymes that inactivate the antibiotic
- D. A and B only
- E. B and C only

10. What is "selective pressure"?

11. Do antibiotics kill viruses? _____

12. List 2 reasons to be concerned about antibiotic resistance

a. _____

b. _____

13. Which strategies below can be effective in preventing antibiotic resistance?
(circle best answer)

- a. When prescribed antibiotics, only take it until you feel better, so that you limit the number of doses you take
- b. Only take 1 pill a day instead of two or three times a day, so that your body is exposed to fewer doses of antibiotics
- c. If you get a prescription for antibiotics and your friends or family members develop similar symptoms, share your medication with them right away so that they can be treated early
- d. None of the above

14. Name one way a person can acquire antibiotics through their environment.

15. Name two ways to prevent bacterial and viral infections.

a. _____

b. _____