

## The Human Microbiome (posttest)

Name \_\_\_\_\_

Date \_\_\_\_\_

**Please circle the BEST answer to the following questions.**

- 1) Which is most likely to be true about the interaction between humans and microbes?**
  - a. Microbes typically harm humans.
  - b. Microbes and humans depend on one another for survival.
  - c. Microbes and humans do not depend on one another for survival.
  - d. Both a and c
  
- 2) Sometimes conditions in our body change (for example, diet, hygiene, pathogens, etc.). The microbes living in and on our bodies usually respond to these changes by:**
  - a. dying
  - b. reproducing
  - c. either dying or reproducing
  - d. moving to a different body part
  
- 3) A symbiotic relationship is between two or more organisms. In this relationship:**
  - a. these organisms live together and benefit from one other.
  - b. one organism is helped and the other organism is harmed.
  - c. one organism benefits and the other organism is neither helped nor harmed.
  - d. All of the above
  
- 4) How can taking antibiotics (medicine that fights infections) harm microbes in humans?**
  - a. Antibiotics RARELY harm microbes.
  - b. Antibiotics target ONLY disease-causing microbes.
  - c. Antibiotics target MOSTLY disease-causing microbes.
  - d. Antibiotics do NOT target disease-causing microbes.

**5) Bacteria that are no longer killed effectively by antibiotics (medicine that fights infections) are called “antibiotic resistant.” Which of the following is NOT true about bacteria that are antibiotic resistant?**

- a. These bacteria are naturally resistant to certain antibiotics.
- b. These bacteria can spread resistance through reproduction.
- c. These bacteria *can* transfer resistance genes to other bacteria through DNA transfer.
- d. These bacteria *cannot* transfer resistance genes to other bacteria through DNA transfer.

**6) The human body can be thought of an ecosystem. Why?**

- a. It includes biotic (or living) factors
- b. It includes abiotic (or non-living) factors
- c. It changes little over time
- d. Both a and b

**7) Where would microbes most likely NOT be found in or on the human body?**

- a. Skin
- b. Muscles
- c. Nasal passages
- d. Digestive system

**8) Microbes may have a relationship with chronic diseases like asthma and diabetes. What is this relationship?**

- a. Microbes almost always cause these diseases.
- b. These diseases kill the microbes in our bodies.
- c. People with these diseases have groups of microbes that are out of balance.
- d. Microbes have nothing to do with these chronic diseases. Microbes are related to contagious diseases.