

SHORT ANSWER Answer the questions in the space provided.

1. Identify three ways that bacteria can be transmitted from person to person. _____

2. Name one bacterial disease that affects nerves, one that affects the intestine, and one that affects the skin. _____

3. Describe two ways that antibiotics work. _____

4. List four foods that are produced with the assistance of bacteria. _____

5. **Critical Thinking** Why are broad-spectrum antibiotics often used to treat infections caused by unidentified pathogens? What is the danger associated with overusing such antibiotics? _____

STRUCTURES AND FUNCTIONS The diagram below shows a Petri dish containing a bacterial culture and four paper disks (labeled A–D) treated with different antibiotics. The concentrations of all four antibiotics are the same. Dark areas on the dish indicate bacterial growth, and clear areas indicate inhibition of bacterial growth. State whether the bacteria in this culture are very sensitive, moderately sensitive, or insensitive to each antibiotic, and explain your reasoning.

- A. _____

- B. _____

- C. _____

- D. _____

