

**Study Questions on the Bacteria and Viruses**

***BACTERIA***

1. What are the ecological "roles" or "**niches**" for most bacteria?
2. What do the terms **bacilli**, **cocci**, and **sprilli** refer to?
3. How does the cell wall of bacteria differ from members of the Fungi?
4. What do the terms **plankton** and **heterocyst** refer to?
5. What is **binary fission**?
6. How do the bacteria accomplish genetic recombination? (Look for the terms **bacterial chromosome**, **plasmid**, **transformation**, **transduction**.)
7. Are any bacteria **autotrophs**? Can they, like plants, make their own food? What is the difference between a **chemoautotroph** and a **photoautotroph**?
8. Name five bacterial diseases of humans. Are there bacterial plant parasites?
9. Where are **cyanobacteria** frequently found as **symbionts**?

***VIRUSES***

1. What is the basic structure of a virus particle?
2. What is a **bacteriophage**?
3. How do viruses reproduce?
4. Name five viral diseases of humans? Any plant viruses?
5. Why is it more difficult to treat viral infections with antibiotics than to treat bacterial infections?