

Microbiology Learning Objectives
Chapter 1 / The Microbial World and You

1. Describe some of the destructive and beneficial actions of microbes.
2. What is the system of scientific nomenclature that uses two names? Give examples.
3. Differentiate the major characteristics of each group of microorganisms. Which groups of microbes are prokaryotes? Which are eukaryotes?
4. What are the three domains?
5. What types of organisms are in each domain?
6. What is the cell theory?
7. How was spontaneous generation disproved?
8. When was the germ theory proven? What is the germ theory of disease?
9. What are Koch's Postulates? Why is this important?
10. Define: bacteriology, mycology, parasitology, immunology, and virology.
11. What are two beneficial uses of bacteria?
12. What is the difference between biotechnology and recombinant DNA technology?
13. What is the difference between normal microbiota and infectious disease?
14. What is a biofilm? Why are biofilms important?
15. What factors contribute to the emergence of an infectious disease?