

Biology 102 Assignment Two

1. Which microorganism first gave the Earth its oxygen-containing atmosphere?
2. How do most evolutionary biologists believe that the first living cells on Earth were like?
3. If bacteria were to disappear from Earth, what would be the most likely consequence?
4. Bacterial cell walls are composed of a unique substance called?
5. Why are archaeobacteria believed to be the most primitive cells?
6. Why do some microbiologists propose to place the archaeobacteria in a separate kingdom?
7. Rod-shaped bacteria are called?
8. Curved bacterial cells that are shaped like commas are called?
9. Autotrophic bacteria obtain their carbon and energy from which sources?
10. The short, thin appendages that help bacterial cells adhere to surfaces, such as rocks or cells, are called?
11. What organisms are common soil inhabitants and grow in the form of a filamentous mass of branching cell chains that superficially resembles a fungus?
12. Which organisms are capable of converting atmospheric nitrogen into nitrogen containing compounds such as nitrite and nitrate?
13. What is the term for the close association between two or more species?
14. What is the Endosymbiotic Theory? How does it describe the origins of certain organelles in eukaryotic cells?
15. What are diatoms and dinoflagellates?
16. Why do we classify viruses as obligatory intracellular parasites?
17. Contrast viroids and prions. Name a disease caused by each.
18. List the four properties that define a virus. What is a virion?
19. Certain viruses produce toxins only when they are lysogenic. What does this mean? Compare and contrast the lytic cycle with the lysogenic cycle.
20. What is a bacteriophage?