Bacteria, Viruses and Protist Review Answers

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1. A
3. B
5. A
7. D
8. C

11. Prokaryotes are the smallest and most common microorganisms. They are unicellular and lack a nucleus.

12. The three most common shapes of prokaryotes are rod- shaped (bacilli), spherical shaped (cocci) and spiral or cork-screw shaped (spirilla).

13. Gram - Positive bacteria with a single cell wall layer absorb only the violet stain. Gram - Negative bacteria have a thin layer or peptidoglycan. This layer absorbs the red stain so that the bacteria appear red.

14. Some prokaryotes move using flagella, others move using cilia.

17. Obilgate aerobes require oxygen to survive. Obligate anaerobes are killed by oxygen.

20. One characteristic all viruses have in common is that they enter cells and once inside use the cell to make more viruses, which can escape and infect other cells.

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1. C
2. C
3. C
9. B

11. Yes, the terms are useful because many protists have characteristics similar to plants, animals and fungi.

13. Ciliates use short hair-like structures called cilia to move. The cilia beat in unison propelling the ciliate throughout the water. Sarcodines use pseudopods for movement. These pseudopods extend out of the central mass of the cell.

16. Euglenophytes obtain energy from photosynthesis. If sunlight is not available, euglenophytes can obtain energy by absorbing nutrients available in decaying matter.

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1. A
2. D
6. E
7. D
8. A
9. C