Questions to help you review the material and comprehend important points.

1. Are protists monophyletic?
2. How do eukaryotes differ from prokaryotes?
3. From where did chloroplasts and mitochondria arise? How? How do we know?
5. Compare and contrast mitosis and meiosis.
6. Explain why sex does NOT equal reproduction? Can you have one without the other?
7. What are the costs and benefits of sex? Costs and benefits of males?
8. Are protists or prokaryotes more metabolically diverse?
9. How are autotrophs and heterotrophs different? Which is more numerous? Why?
10. What protist group are *Giardia* in?
11. What protist group contains lots of parasites?
12. Provide three reasons why dinoflagellates are important or interesting.
13. Explain how bioluminescence is like a “burglar alarm.”
14. Briefly explain the lifecycle of the apicomplexan that causes malaria.
15. How do *Paramecium* feed?
16. What is conjugation? Is it the same as reproduction or fertilization?
17. Provide three reasons why diatoms are important or interesting.
18. Why do brown algae stand out in a discussion of protists?
19. Members of what group of protists caused the Irish potato famine?
20. You are asked by a friend to explain the difference between protist and prokaryote. What would you say?