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?
4. Define endosymbiosis.
5. Compare and contrast mitosis & meiosis with respect to chromosome number.
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 contains lots of parasites?
11. Explain how bioluminescence is like a “burglar alarm.”
12. Briefly explain the lifecycle of the apicomplexan that causes malaria.
13. Provide two reasons why diatoms are important or interesting.
14. Why do brown algae stand out in a discussion of protists?
15. You are asked by a friend to explain the difference between protist and prokaryote. What would you say?

Bonus. What is conjugation? Is it the same as reproduction or fertilization?