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

Terms (in addition to those in the questions below):

chitin, saprobe, mycelium, hypha, lichen, haploid, diploid, mitosis, meiosis, spore, sex, reproduction, mutualism, symbiosis, synapomorphy, spore

1. What are the three domains of life? How long ago did Eukarya arise? When in biogeological history did the Opisthokonts, including animals and fungi, last share a common ancestor? What are the four major groups of eukaryotes?
2. Draw a simple, but correct, phylogenetic tree with three terminal taxa: plants, animals, and fungi. Where would the protists fit?
3. What are three characteristics shared by animals and fungi that distinguishes them from other taxonomic groups?
4. How is absorptive nutrition different than what some other organisms do? What is meant by ‘extracellular digestion’?
5. True or false? Fungi are the only decomposers on earth.
6. Explain how the mycorrhizae mutualism works. What does each partner gain?
7. Why are hyphae so useful?
8. What would happen to life on earth if there were no decomposers like fungi? What groups of organisms can break down cellulose and lignin?
9. How does sexual reproduction differ from asexual?
10. What is meant by ‘alternation of generations’? Haplontic?
11. What is unique about the dikaryotic lifestage of many fungi?
12. Unicellular fungi that are not Chytrids are called __________.
13. Which fungal phylum has flagella and swimming sperm and is linked to amphibian die offs?
14. Which fungal phylum helps us produce lots of tasty foods like beer, bread, some cheeses – and provides us a common antibiotic.
15. Which fungal phylum do we typically eat on pizza and in salad. Are these tasty morsels haploid, diploid, or dikaryote?