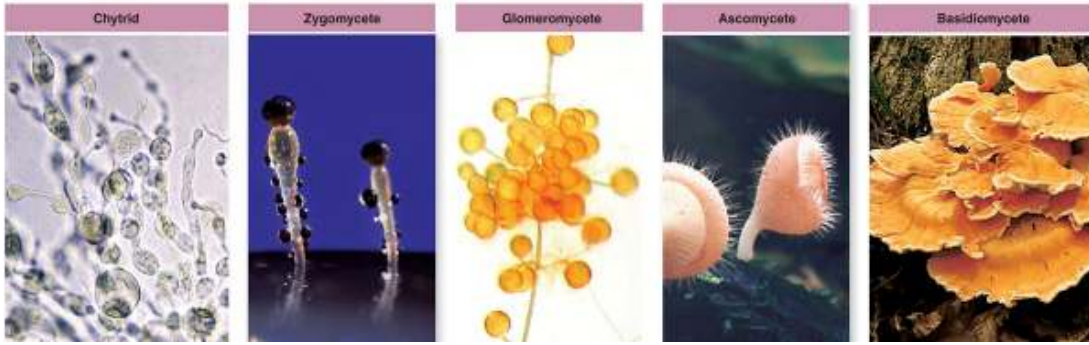


Chapter 31 – Fungi



1. How do fungi acquire nutrients?

2. Because of their mode of nutrition, fungi have evolved what structure to provide for both extensive surface area for absorption and rapid growth?

3. What is a mycelium?

4. How are fungi capable of digesting wood?

5. How does cell division in fungi differ from prokaryotes and from the other eukaryotes?

6. How do the cell walls of fungi differ from the cell walls of plants?

7. How do fungi contribute to an ecosystem?

8. Give three examples of how fungi are beneficial to humans.

a. _____

b. _____

c. _____

9. Give three examples of how fungi are harmful to plants and animals.

a. _____

b. _____

c. _____

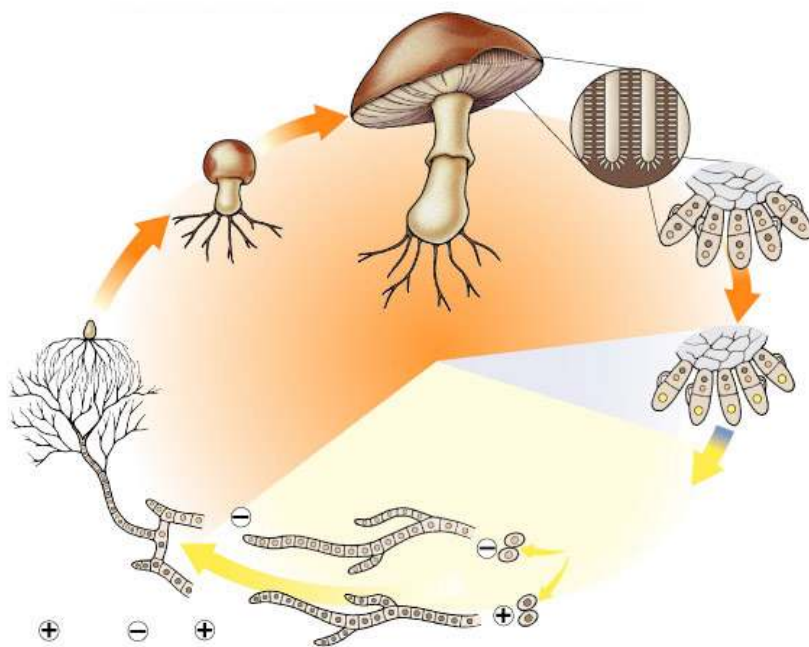
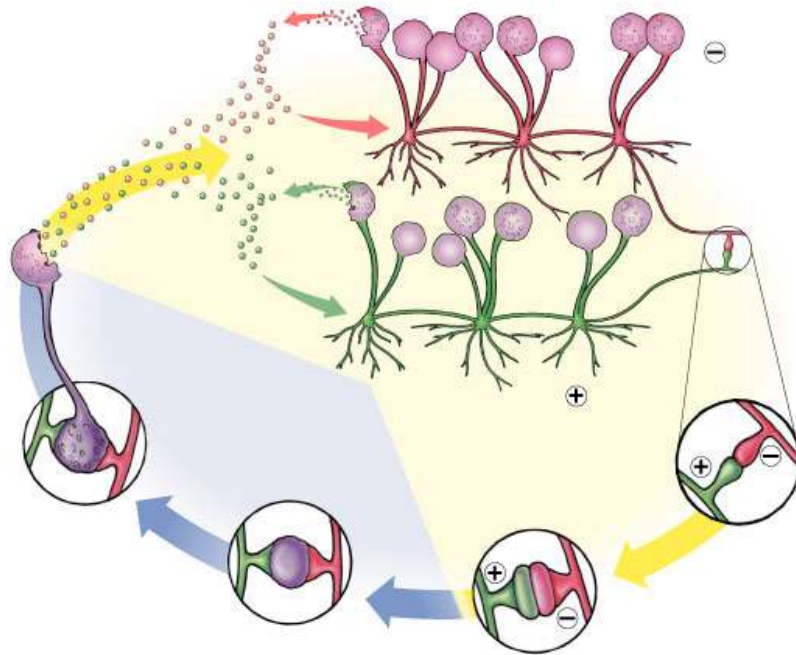
10. Describe the nature of these mutualistic symbioses:

a. **Lichens** _____

b. **Mycorrhizae** _____

c. **Fungal gardens of leaf cutter ants** _____

11. The diagrams below depict the life cycles of the Zygomycetes and the Basidiomycetes. They illustrate the varied reproductive strategies of the fungi. Label the two diagrams and add the terms **monokaryotic**, **dikaryotic**, **diploid**, and **haploid** to the appropriate stages to describe the state of the nucleus and the cell's genome.



12. Outline the key characteristics of each branch of the Kingdom Fungi.

Branch	Characteristics	Examples
Chytrids		
Zygomycetes		
Glomeromycetes		
Ascomycetes		
Basidiomycetes		
Deuteromycetes		