

RAVEN CHAPTER 31 GUIDED NOTES: FUNGI

Raven 9th edition

1. How common are fungi on earth?

2. How do fungi acquire nutrients?

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

4. What is a mycelium?

5. How are fungi capable of digesting wood?

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

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

8. How do fungi contribute to an ecosystem?

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

a. _____

b. _____

c. _____

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

a. _____

b. _____

c. _____

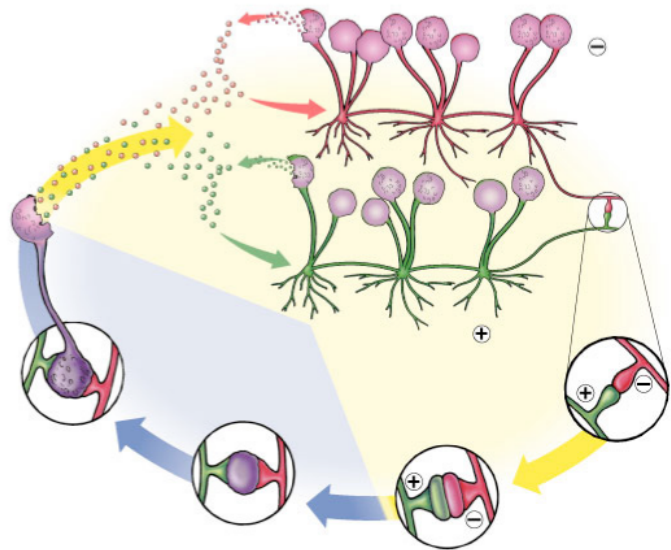
11. Describe the nature of these mutualistic symbioses:

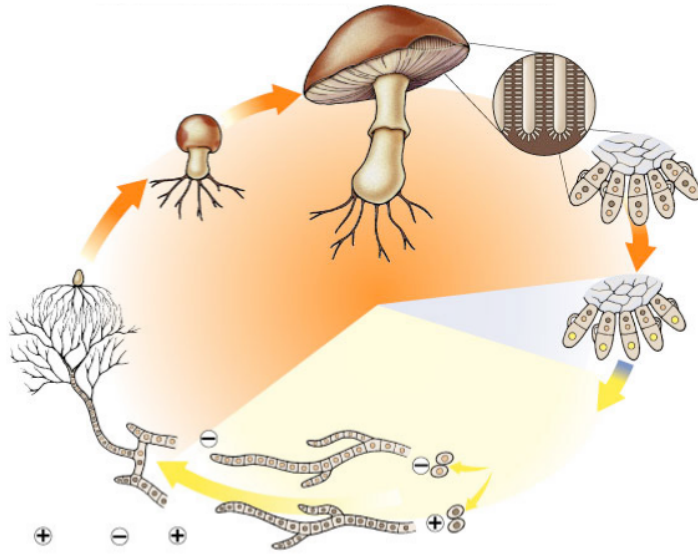
a. lichens

b. mycorrhizae

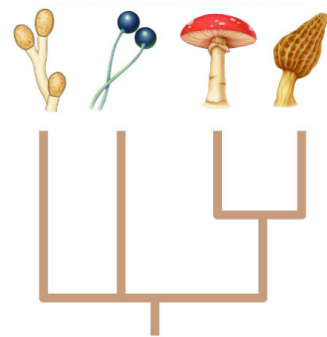
c. fungal gardens of leaf cutter ants

12. The next two diagrams 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.





13. Outline the key characteristics of each branch of the Kingdom Fungi as depicted on the diagram at the right. Include the name of the group, key characteristics, several examples of organisms in each division, and the approximate number of living species. Place the letters A, B, C, or D from the table below on the appropriate branch of the diagram to the right.



GROUP

CHARACTERISTICS

A.

B.

C.

D.