

Fungi

Section 21–1 The Kingdom Fungi (pages 527–529)

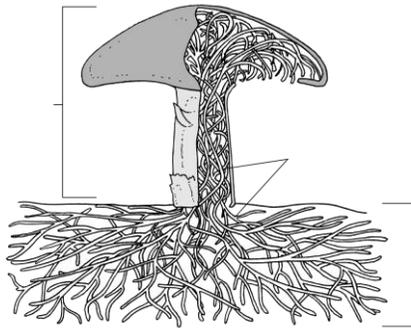
This section describes the defining characteristics of fungi. It also describes the internal structure of a fungus and explains how fungi reproduce.

What Are Fungi? (page 527)

1. Circle the letter of each sentence that is true about fungi.
 - a. They are heterotrophs.
 - b. They have cell walls.
 - c. They are photosynthetic.
 - d. They are eukaryotic.
2. The cell walls of fungi are made of a complex carbohydrate called _____.
3. How do fungi digest their food?
4. Is the following sentence true or false? Some fungi are parasites.

Structure and Function of Fungi (pages 527–528)

5. Which group of fungi are not multicellular?
6. What are hyphae?
7. In some fungi, what divides the hyphae into cells containing one or two nuclei?
8. What is a mycelium?
9. What is a fruiting body of a fungus?
10. Label the parts of the fungus.



Reproduction in Fungi (pages 528–529)

11. Is the following sentence true or false? Most fungi can only reproduce asexually.
12. How does asexual reproduction occur in fungi?
13. In some fungi, spores are produced in structures called _____.
14. Sexual reproduction in fungi usually involves two different _____.

15. What is a gametangium?
16. Circle the letter of each sentence that is true about sexual reproduction in fungi.
- The zygote is often the only diploid cell in the fungus's entire life cycle.
 - Mating types are called male and female.
 - Gametes of both mating types are about the same size.
 - One mating type is a "+" (plus) and the other is a "-" (minus).

How Fungi Spread (page 529)

17. Why do molds seem to spring up in any location that has the right combination of moisture and food?
18. For a fungal spore to grow, where must it land?

Section 21–3 Ecology of Fungi (pages 537–542)

This section explains what the main role of fungi is in natural ecosystems. It also describes problems that parasitic fungi cause and describes the kinds of symbiotic relationships that fungi form with other organisms.

All Fungi Are Heterotrophs (page 537)

- Fungi cannot manufacture their own food because they are _____.
- What are saprobes?

Fungi as Decomposers (page 538)

- Fungi recycle nutrients breaking down the bodies and wastes of other .
- How do fungi break down leaves, fruit, and other organic material into simple molecules?

Fungi as Parasites (pages 538–539)

- Parasitic fungi cause serious plant and animal _____.
- Circle the letter of each example of a fungal plant disease.
a. wheat rust b. corn smut c. thrush d. mildews
- What happens when the fungus that causes athlete's foot infects other areas of the body?

Symbiotic Relationships (pages 540–542)

- Lichens and mycorrhizae are both examples of what kind of symbiotic relationships?
- What are lichens?
- What benefits do the fungus and the photosynthetic organism derive from the association in a lichen?
- What are mycorrhizae?
- Why is the presence of mycorrhizae essential for the growth of many plants?