

Name: \_\_\_\_\_

### Section 21-1 The Kingdom Fungi (old book pgs 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? (pg 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. What is a mycelium? \_\_\_\_\_  
\_\_\_\_\_
8. Why is a mycelium well suited to absorb food? \_\_\_\_\_  
\_\_\_\_\_
9. What is the fruiting body of a fungus? \_\_\_\_\_  
\_\_\_\_\_
10. What is a fairy ring? \_\_\_\_\_
11. Why does a fairy ring form? \_\_\_\_\_  
\_\_\_\_\_

#### How Fungi Spread (pg 529-36)

12. Why do molds seem to grow in any location that has the right combination of moisture and food? \_\_\_\_\_  
\_\_\_\_\_
13. Is the following sentence true or false? The spores of many fungi scatter easily in the wind. \_\_\_\_\_
14. For a fungal spore to grow, where must it land? \_\_\_\_\_  
\_\_\_\_\_
15. How are fungi classified? \_\_\_\_\_
16. Why is it dangerous to eat wild mushrooms? \_\_\_\_\_

### Section 21-3 Ecology of Fungi (pages 537-542)

17. Fungi cannot manufacture their own food because they are \_\_\_\_\_
18. What are saprobes? \_\_\_\_\_

#### Fungi as Decomposers (pg 538)

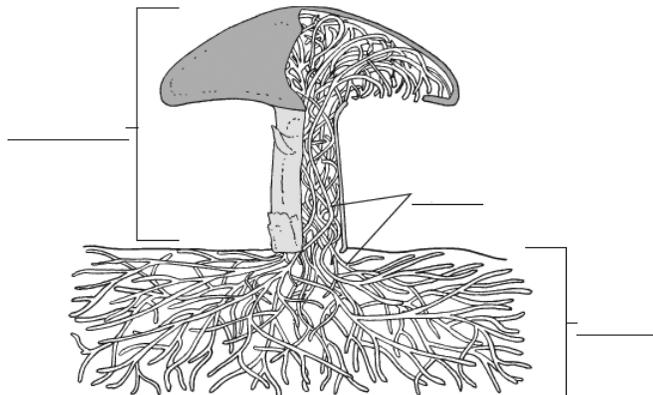
19. Fungi recycle nutrients breaking down the bodies and wastes of other \_\_\_\_\_
20. How do fungi break down leaves, fruit, and other organic material into simple molecules? \_\_\_\_\_  
\_\_\_\_\_

**Fungi as Parasites (pg 538-539)**

21. Parasitic fungi cause serious plant and animal \_\_\_\_\_
22. Circle the letter of all examples of fungal plant diseases.
- a. Wheat rust                      b. Corn smut                      c. Thrush                      d. Mildews
23. One fungus that can infect the areas between the human toes, causes an infection known as \_\_\_\_\_
24. What happens when the fungus that causes athlete's foot infects other areas of the body? \_\_\_\_\_
- \_\_\_\_\_

**Symbiotic Relationships (pgs 540-542)**

25. Lichens and mycorrhizae are both examples of what kind of symbiotic relationship? \_\_\_\_\_
26. What are lichens? \_\_\_\_\_
- \_\_\_\_\_
27. What is the photosynthetic organism in a lichen? \_\_\_\_\_
28. Where do lichens grow? \_\_\_\_\_
29. What benefits do the fungus and the photosynthetic organism derive from the association in a lichen? \_\_\_\_\_
- \_\_\_\_\_
30. What are mycorrhizae? \_\_\_\_\_
31. Why is the presence of mycorrhizae essential for the growth of many plants? \_\_\_\_\_
- \_\_\_\_\_
32. Label the parts of the fungus using the following terms: Hyphae, Fruiting body, Mycelium



**Word Wise** - complete the sentences by using one of the words below.

- |               |             |             |            |
|---------------|-------------|-------------|------------|
| Fruiting Body | Rhizoid     | Penicillium | Pathogenic |
| Lichen        | Mycorrhizae | Mycelium    | Hyphae     |
33. A root like hypha of a zygomycete (bread mold) is a(an) \_\_\_\_\_
34. A symbiotic association between a fungus and a photosynthetic organism is a(an) \_\_\_\_\_.
35. The reproductive structure that develops from mycelia growing underground is a(an) \_\_\_\_\_.
36. The body of a multicellular fungus composed of many hyphae tangled together into a thick mass is a(an) \_\_\_\_\_
- \_\_\_\_\_
37. Associations of plant roots and fungi are \_\_\_\_\_
38. *Cordyceps* is a \_\_\_\_\_ fungal disease that kills grasshoppers.
39. The mold that produces an antibiotic \_\_\_\_\_
40. Multicellular fungi are composed of tiny filaments called \_\_\_\_\_