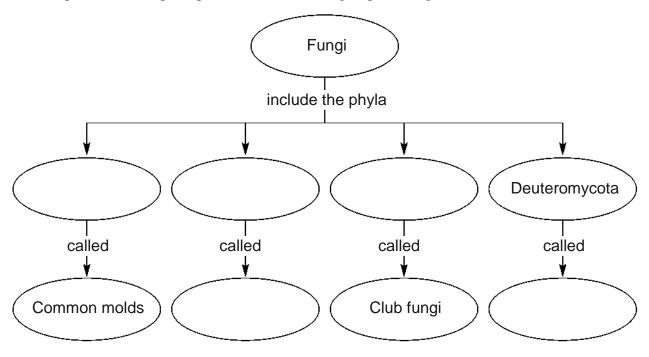
# Section 21-2 Classification of Fungi (pages 530-536)

# **C** Key Concept

• What are the characteristics of the four main phyla of fungi?

### **Introduction** (page 530)

1. Complete the concept map about the four main groups of fungi.



# The Common Molds (pages 530-531)

2.	What are zygomycetes?
	7.5

<b>3.</b> The resting spore formed during the sexual phase of the mold's life	cycle is called a(an)
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4.	Is the following sentence true or false? The hyphae of zygomycetes are generally
	divided by cross walls.

5.	What is the common name for <i>Rhizopus</i>	stolonifer?

#### KINDS OF HYPHAE

Kind	Description
Rhizoids	
Stolons	
	Hyphae that push up into the air and form sporangia at their tips

**<sup>6.</sup>** Complete the table about the kinds of hyphae of black bread mold.

Name	Class	Date		
7. Complete the flowchart abo	ut sexual reproduction in zyg	gomycetes.		
Two hyphae from different mating	types come together, forming			
	<b>—</b>			
Haploid gametes from the mating ty	pes fuse to form diploid zygotes, w	hich make up a single		
	<b>—</b>			
The zygospore eventually germinate	es, and a(an)	emerges.		
	<b>\</b>			
The sporangium reproduces asexua	ully by releasing	·		
<ul> <li>The Sac Fungi (pages 532-533)</li> <li>8. What is an ascus?</li> <li>9. Is the following sentence true or false? Ascomycetes make up the largest phylum in the kingdom Fungi.</li> <li>10. What occurs among sac fungi during asexual reproduction?</li> </ul>				
11. Complete the flowchart abo	ut sexual reproduction in asc	comycetes.		
Gametangia from two different matir	ng types	together.		
That fusion produces hyphae the	nat contain haploid	·		
The N + N hyphae produce a fruiting	g body, inside of which the	forms.		
	<b>V</b>			
Within the ascus, meiosis and mi	tosis occur to produce cells known	as		
	¥			
In a favorable environment, an as	scospore germinates and grows in	to a haploid		

12. Is the following sentence true or false? Yeasts are multicellular ascomycetes.

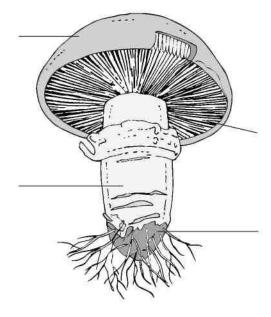
13. Why are yeasts classified as ascomycetes?

**14.** What process do yeasts carry out to obtain energy when they are in a nutrient mixture such as bread dough?

## The Club Fungi (pages 534-536)

**15.** From what does the phylum Basidiomycota get its name?

**16.** Label the parts of a mushroom.



- 17. Where are basidia found on a basidiomycete?
- **18.** The cap of a basidiomycete is composed of tightly packed \_\_\_\_\_\_.
- **19.** Is the following sentence true or false? The remarkable growth of mushrooms overnight is caused by cell enlargement.
- **20.** Circle the letter of each example of basidiomycetes.
  - **a.** puffballs
- **b.** shelf fungi
- c. rusts
- **d.** yeasts
- 21. Why should you never pick or eat any mushrooms found in the wild?

Nar	ne Class	Date
22.	Complete the flowchart about reproduction in basidiomyceto	es.
A	basidiospore germinates to produce a haploid primary	
_		
T	he mycelia of different mating types fuse to produce a(an)	·
_	<b>V</b>	
Α	fruiting body pushes above ground, forming a(an)	at the soil's surface.
_	•	
T	wo nuclei in each basidium fuse to form a diploid	
_		
E	ach zygote undergoes meiosis, forming clusters of diploid	
	e Imperfect Fungi (page 536)  The phylum Deuteromycota is composed of what fungi?	
24.	What is <i>Penicillium notatum</i> , and where does it grow natural	lly?
25.	What is produced from <i>Penicillium notatum?</i>	

## **Reading Skill Practice**

You can often increase your understanding of what you've read by making comparisons. A compare-and-contrast table helps you to do this. On a separate sheet of paper, make a table to compare the four main groups of fungi you read about in Section 21-2. For more information about compare-and-contrast tables, see Organizing Information in Appendix A of your textbook.