
Read chapter 20.2 in your text, pages 535-543. Fill in the blanks (or answer the questions) below using the information you have read.

Division Zygomycota

1. Give an example of a member of phylum/division zygomycota.

scientific name - _____

common name - _____

2. Zygomycetes reproduce _____ by producing _____ .

3. The hyphae of zygomycetes do _____ form _____ .

4. Types of hyphae:

direction of growth & function:

1.) _____ .

2.) _____ .

3.) _____ .

5. Unfavorable environmental conditions, such as drying out, cause them to reproduce _____ by forming special type of spores called _____ .

6. When sexual reproduction occurs, instead of having "male" and "female" hyphae, they have _____ and _____ strains.

Division Ascomycota

7. Ascomycota is the _____ of fungi.

8. Ascomycotes are also known as _____ .

This is because they have tiny _____ structures called an _____ which hold their spores when reproducing sexually.

These spores are called _____ .

9. When ascomycotes reproduce asexually, specialized hyphae called _____ grow up from the mycelium. These develop spores known as _____ .

10. Common ascomycotes include:

- blue-green, red, and brown _____ that grow on _____ in your fridge.
- those that cause plant diseases such as ergot of rye.
- edible forms such as _____ and _____ .
- cup fungus (shown in figure 20.9B)
- and the most economically important ascomycote: _____ .

11. Yeast:

- _____ - cellular
- rarely produce _____
- usually reproduce _____ by _____ .
- are _____ and _____ sugars to produce _____ and ethyl _____ .

12. Name 3 uses for yeast:

Division Basidiomycota

13. Give 7 examples of Basidiomycotes mentioned in the text.

14. Basidiomycotes have _____ -shaped hyphae called _____ that produce spores known as _____ .

15. Basidiomycotes are known as the _____ fungi.

Refer to figure 20.11 p.539.

16. What we call a "mushroom" is a _____ of the fungus.
Most of the fungus is _____ and _____ .

17. Most types of mushrooms have _____ reproductive stages in their life cycle.

18. Why are spores of mushrooms produced above ground?

Division Deuteromycota

19. Deuteromycota are also known as the "Imperfect fungi" because

Deuteromycetes have _____ known _____ stage in their life cycle.

They only reproduce _____ .

20. Describe several ways Deuteromycetes are used.

21. Deuteromycetes are not always useful.

- They also cause diseases such as ringworm, athlete's foot, and infections of the hair and nails.
- They also cause plant diseases such as black spot on roses.

Mutualism: Fungi that live with other organisms

22. _____ is a mutualistic relationship in which a fungus lives _____ with a _____.

23. Most fungus that form _____ are _____, but some are _____ .

24. In a mycorrhizal relationship, the _____ of the fungus grow around or into the plant's _____. How does this benefit the plant?

25. How does the fungus benefit in a mycorrhizal relationship?

26. A _____ is a symbiotic relationship between a fungus, usually and _____, and a _____ or a _____

_____, which is an _____.

27. Lichens need only _____, _____, and _____ to grow.

28. The _____ partner provides the _____ for _____ organisms.

29. The fungus provides _____ and _____ and _____ them from changes in _____.

30. Lichens are found _____.

31. Lichens are _____, because they are often the first to _____.

32. They live in a variety of habitats such as in arid _____, on bare _____, on _____ peaks, and in the arctic _____.

33. They are an important food source to large animals such as _____ and _____.

34. Lichens are also an important indicator of _____.

How?