

Name _____

A Visit to the Microbe Zoo

To get to the Microbe Zoo, click on Start, My Computer, scommon, Hill folder, and then select the Microbe Zoo icon.

Welcome to the Microbe Zoo. Here you'll have a chance to learn more about the microbes in our world. *All* the information you need to answer the questions is found in each part of the Microbe Zoo. This means you need *carefully* read the information in each Section.

Have fun learning about the Microbe Zoo.

Let's start our visit at Dirtland. *To get there, click on the Dirtland sign.*

1. How many microbes are there in one gram of dirt?

2. How many different species are found in that gram of dirt?

Click on Ag Acres

3. There are five different diseases listed that are caused by fungus, viruses, and bacteria. List these diseases, what microorganism causes it, and what it does to the plant.

Disease	Type of Microorganism	What it does
Rust fungi		
Rhizoctonia		

<i>Agrobacterium tumefaciens</i>		
<i>Burkholderia cepacia</i>		

Page down to Microbial Fertilizer, select Root Cellar.

4. Define symbiosis.

5. What are the two things Mycorrhizal fungi that help plants absorb?

a. _____

b. _____

Click on the back arrow to return to Ag Acres.

6. Complete the table.

Bacterium	Kills Which Insects (flies, beetles, etc.)
<i>Bacillus thuringiensis</i>	

Click on the back arrow to return to Dirtland and select Compost Pile

7. The microbes that are heat lovers are called _____.

8. Fungi live on _____ and _____ in the compost pile.

9. Are there any Styrofoam™ eating microbes? _____

10. What does *Alcaligenes eutrophus* make?

Click on the back arrow to return to Dirtland. Select Home Sweet Home

11. What creatures lurk in your couch and what do they eat?

12. What type of bacteria live in your hot water heater?

13. Describe Sick Building Syndrome (SBS) and explain how microbes help deal with the problem.

14. What are the microbes growing on your shower curtain called?

Click on the back arrow to return to Dirtland. Select House of Horrors

15. This bacterium sucks the life juices (cytoplasm) out of another bacterium called *Chromatium* (don't worry, it won't attack you). What is its name?

16. The Strangler Fungus catches and kills _____.

Go to the top of the page and select Snack Bar

17. List the four foods made by microbes listed in the third sentence.

a. _____

b. _____

c. _____

d. _____

18. _____ is used in making bread.

19. List the three microbes that are used to make chocolate.

a. _____

b. _____

c. _____

20. This dairy product is made from fermented milk. *Lactobacillus* bacteria give it a slightly sour taste.

At the top of the page, select Animal Pavilion and then Habitat on Humanity

21. You have more bacterial cells in or on your body than you have human cells.

a. True

b. False

22. What is the acid formed by *Streptococcus* bacteria?

23. What is the name of the bacteria who is the main culprit and gives you cavities?

24. How do bacteria create cavities?

25. Why are there very few microbes in your stomach?

26. Name the bacterium that causes ulcers.

27. Each gram (about a thimble-full) from the large intestine contains up to how many microbes?

28. This bacterium, found in your intestines, crowd out harmful microbes so they can't grow. What is the name of the bacterium? Why do travelers take capsules filled with this bacterium?

29. What are the vitamins made by *E. coli*?

30. What is the name of the bacterium that produces methane gas in your intestines?

31. List the two bacteria that live on the skin and what they do.

a. _____

b. _____

Click on the back arrow to return to Animal Pavilion and select Poo Corner

32. How many disease causing microbes are carried in poop?

33. Explain what the following microbes could do to you:

a. *Vibrio cholera* - _____

b. *Salmonella typhi* - _____

c. *Giardia lamblia* - _____

At the top of the page, select Water World and then Pond

34. These two green microbes are found closest to the top of a pond.

a. _____

b. _____

35. Waters contain a huge variety of algae including...

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

g. _____

36. Heterotroph means _____.

