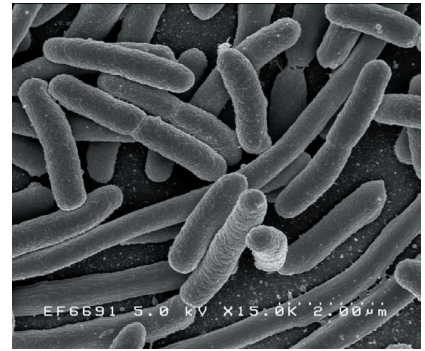




## Dirt Life



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

### Protocol

1) With your partner, collect a soil sample in a Ziploc bag. The other two students in your group will collect another soil sample from another location. Label the Ziploc bags #1 and #2. Label where each soil comes from, and with your names.

2) Observe the soil samples. Use a hand lens to help you see the soil better.

In complete sentences,

- describe soil sample #1:

- describe soil sample #2:

- describe what is different about the two samples:

3) Put a pinch of the soil into the tube with water. Make your pinch the same size as your group partners are using.

4) Put the cap back on and shake the tube.



5) With an eyedropper, transfer three drops of water to the nutrient agar Petri dish. *Gently* spread the drop around, without damaging the agar. Be careful not to touch or breathe on the agar plate. Quickly cover the dish.

6) Label the dish on the bottom with your name, date, and sample number.

7) Carefully carry your Petri dish to the incubation area. Be sure the lid does not fall off. Make a hypothesis. **What do you think is going to happen on the culture media plates?**

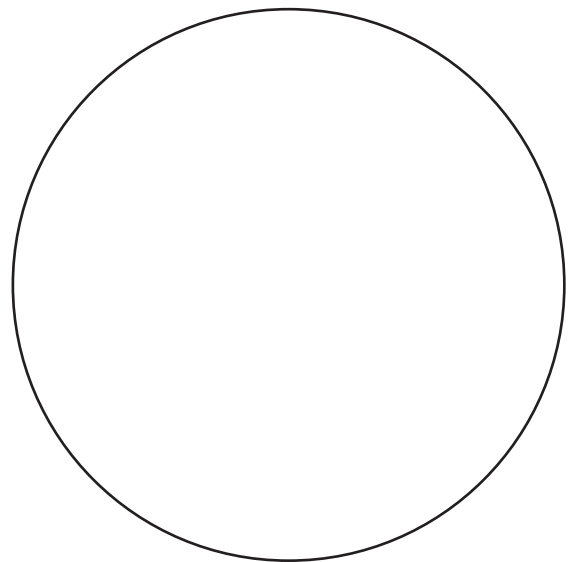
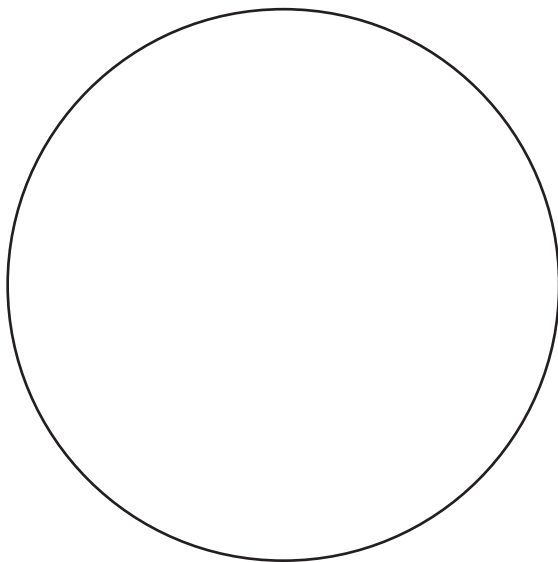
Make a hypothesis. **How is your plate #1 going to look different from plate #2?**

### Seven days later

1) For each soil sample, find the Petri dishes that you and your partner made. Do not open the dishes.

2) Draw your Petri dishes.

**Sample #1.** Soil is from \_\_\_\_\_ **Sample #2.** Soil is from \_\_\_\_\_



Which plate has more colonies? \_\_\_\_\_

I see \_\_\_\_\_ different *kinds* of colonies.

The *colors* of the colonies vary. **Describe the colors** (see Word Bank on next page):

The *textures* of the colonies vary. **Describe the textures you see:**

The *shapes* of the colonies vary. **Describe the shapes you see:**

Is plate #1 different from plate #2? \_\_\_\_\_

Check your hypothesis from last week. **Is this what you expected?**

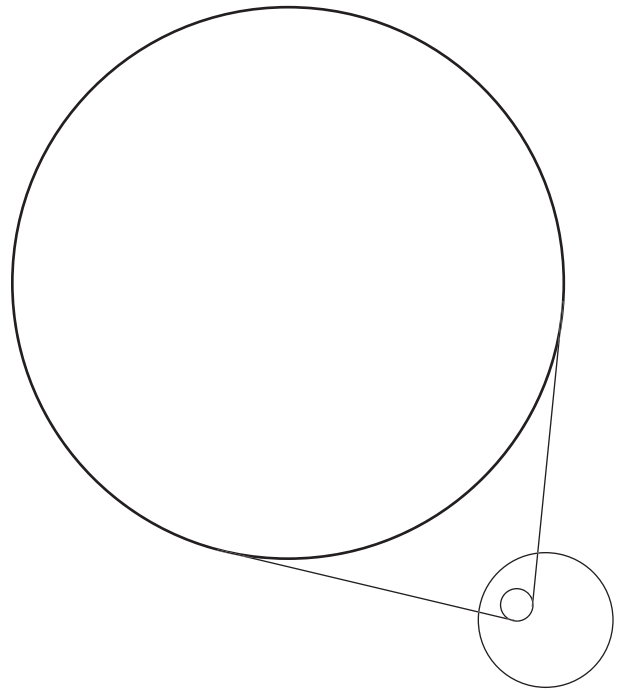
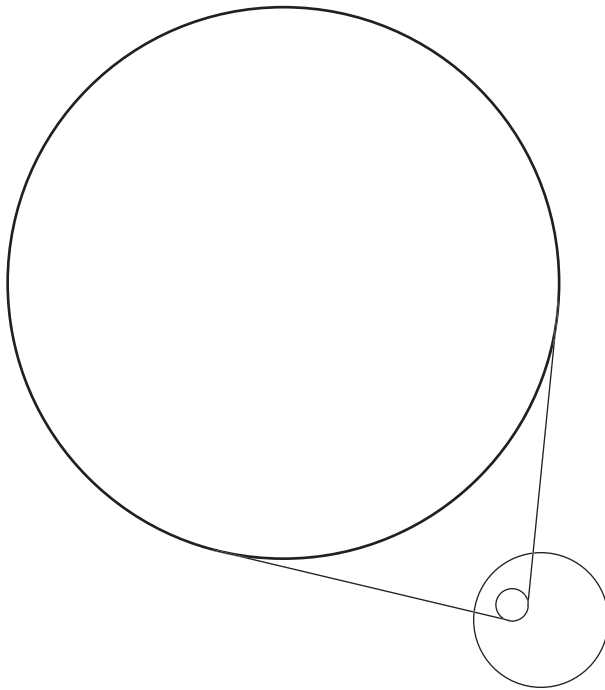
3) Using a microscope or a hand lens, look carefully at your soil culture.

4) Look for two very different colonies in your culture. **What makes them look different?**

Draw your two magnified cultures here:

Colony #1. Soil is from \_\_\_\_\_

Colony #2. Soil is from \_\_\_\_\_



### Word Bank

#### Colors

dark  
white  
brown  
beige  
red  
black  
clear  
spotted

#### Textures

smooth  
bumpy  
fuzzy  
shiny

#### Shapes

round  
oval  
circular  
long  
stringy