

## Dirt Lab

/10

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

Partner(s): \_\_\_\_\_



*Making observations is a fundamental part of studying science. Observations are made by using your senses (see, smell, taste, touch, hear). Scientists also use instruments to expand on their senses. Instruments make it possible for you to use your senses to their full advantage and to quantify your observations with measurements. Scientists record this information by taking notes and making sketches.*

### Safety:

- Never taste or eat anything in the science room.
- Wash your hands and equipment thoroughly after completing this activity
- Safety glasses and aprons must be worn

### Materials:

- 3 samples of dirt
- Pieces of paper to place under microscope
- Dissecting microscope
- Water
- Scoopula

### Problem:

Where do you think the three types of soil came from and why? They are all from around the school.  
(Give an educated guess with a reason each soil type)

- 1.
- 2.
- 3.

Answer these questions for each type of soil. This analysis will need to be carried out on a separate sheet of paper.

1. What is the general appearance of the sample (colour, how loose or compact, kind of particles, and so forth)
2. What does the sample feel like?
3. Is there any change to the sample when water is added. What change(s) do you observe?
4. What is the odor given off by the soil once wet?
5. Using a ruler give the approximate size of the particles in the soil.
6. What might the particles be made of (Use your own knowledge and the mineral samples at the front of the class to answer)
7. Draw the soils (Proper Scientific Drawings) under magnification on the back of the sheet in the space provided.
8. Based on all your observations look back at the original problem in this lab and re-answer where you believe the soil samples come from and why.
9. What senses did you use in this laboratory? Explain when and how you used them.
10. What senses did you not use? Why not?
11. What instrument(s) did you use to extend your senses?

Scientific Drawings must include:

1. Date/Time
2. Scale (Magnification)
3. Labels
4. Title
5. Drawing (No sketching... sorry artists)

