

Name \_\_\_\_\_

Date \_\_\_\_\_

## HOME/SCHOOL CONNECTION

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### Water on Surfaces

You have been working with water on different surfaces. Water will bead up on some surfaces and absorb into others.

List some surfaces that will **absorb** water.

List some surfaces that will **bead** water.

#### How much water will a surface absorb?

(Try using a household object such as a sponge, washcloth or paper towel.)

1. Start with a known amount of water in a container (ex: 50 ml).
2. Drop the dry object into the container. Make sure it is fully soaked.
3. Pull out the object and record the water remaining in the container.
4. Subtract that amount from the original volume. The difference is the amount of water that was absorbed.

Record your information in the table below.

Surface	Initial Water Volume (ml)	Final Water Volume (ml)	Amount of Water Absorption (ml)

\*Turn Over for Part Two\*

## Water in Soil

We know that soil is composed of rock particles and \_\_\_\_\_.

One important property of soil is its water content. Soil scientists often do tests to see how quickly water soaks into and passes through the soil. This is called **porosity**.

**Objective:** Test and compare the porosity of soil in two or more places around your home.

**Directions:** Use a trowel or metal spoon to dig a shallow hole in the soil, no deeper than the size of a soda can. Pour in a volume of water (ex: ½ liter) and measure how much time it takes the water to completely soak into the soil. Compare flower beds, gardens, edges of lawns, paths, sandboxes, etc. Keep track of the time needed to soak into different soils and analyze & compare your results. (*Remember to conduct a fair test by keeping the sizes of the holes and amounts of water the same!*)

**Data:**

Soil Location	Soil Description	Time It Takes For Water To Soak

**Conclusions:** Was there a difference in time that it took for the water to soak into the various soils? Why do you think you got the results that you did?