



## CURIOSITY CENTER 1:

# SAND AND SOIL

### Materials

#### For Both the Dry Table and the Wet Table

- Curiosity Center signs: **Dry Sand, Dry Soil** and **Wet Sand, Wet Soil** ([pbskids.org/curiousgeorge/parentsteachers](http://pbskids.org/curiousgeorge/parentsteachers) Click on *Activities & More*, then *Curiosity Center Activities*.)
- bag of topsoil (not potting soil)
- bag of play sand
- disposable plastic dinner plates (2 per child, plus some extras; can be used with multiple children.)
- craft sticks and/or plastic forks

#### For Just the Wet Table

- small containers of water
- plastic eyedroppers (inexpensive, child-friendly sets can be ordered online or purchased at local school supply stores)
- bucket of water (or sink) and paper towels for cleaning hands
- bucket for dumping wet sand and soil
- Optional: *Curious George* magnifying lenses

### Handout

*Family Science Activities: Water, Mud, and Rocks* ([pbskids.org/curiousgeorge/parentsteachers](http://pbskids.org/curiousgeorge/parentsteachers) Click on *Activities & More*, then *Curiosity Center Activities*.)

### Background Photos

sandy desert, mud puddles, plants in garden soil, adobe houses, making adobe bricks, sand sculptures

### Science Concepts

- There are many different types of “dirt,” including sand and soil.
- Sand and soil look and feel different. They behave differently when mixed with water.
- When mixed with water, sand and soil can be used as building materials.

### Explorations

Set up a Dry Table and a Wet Table. Give a plate of sand and a plate of soil (small amount) to each child. At the Dry Table, these plates can be reused by the next group of children. At the Wet Table, the wet sand and soil will need to be dumped and new sand and soil provided for the next group of children.

#### At the Dry Table

Introduce kids to the sand and soil at the dry table. Have children look, smell, and touch as they compare. (Kids may want to use the magnifying lenses.) Ask:

- *What things can you see in the soil? What things can you see in the sand?*
- *What does the soil feel like? What does it smell like? How about the sand? Do you think you could tell the difference with your eyes closed?*
- *What happens when you squeeze the soil in your fist? Does it stay together? How about the sand? What could you add to sand to make it hold together better?*

Invite children to do the following things with the dry sand and soil, then talk about the results.

- Make tracks with fingers, stick, and fork
- Make a hill and dig a hole

#### At the Wet Table

Have the kids move to the Wet Table. Have them add drops of water to a plate of sand and a plate of dirt. Ask:

- *What do you notice?*
- *How does adding water change the look and feel of the soil? Of the sand?*
- *Try to make a mud pie with the soil. Do you need more water?*
- *Build something with the sand. Do you need more water?*
- *What happens if you add too much water? Try it.*

