



## SPRING | Soil Types

### Dig In: Discovering the Soil Beneath Your Feet

#### Summary:

Soil comes in all types: sandy, rocky, clay, wet, dry, hot, and everything in between. Gardeners will have the opportunity to examine different textures and properties of soil as they use their hands to explore what different growth mediums feel like in wet and dry conditions.

#### Before Visiting the Garden:

**Gather:** One scoopful of sand, clay (available at a craft store), and rocks, four pie pans or other flat pans, a shovel, water bottle

**Explore:** The garden! Look up *Rivers and Tides* by Andy Goldsworthy (images available here: <http://visualmelt.com/Andy-Goldsworthy>)

**Read:** *Dirt, The Scoop on Soil* By Natalie M. Rosinsky, Illustrated by Sheree Boyd

#### In the Garden:

Just like human beings, seeds need to be able to breathe, drink water, and “eat” nutrients from the soil. Take a handful of soil from the garden bed. Squeeze it.

#### Observations:

- Does it feel gritty? Does it quickly fall apart? Then, we may have sandy soil.
- Did you find any rocks? Were they big or small? If there are lots of rocks, we may have rocky soil.
- Is it a reddish color? Does it feel squishy? Does it stick together or feel slick? If yes, you may have clay soil.
- Is it dark and soft? Does it squish a little but not clump? If your soil is not sandy, rocky, or clay, you may have loam!

#### Questions to Explore:

- What do you think a seed needs to grow?
- Describe a handful of the soil in this garden.
- Compare the soil to the different items we brought with us. What do you notice?
- Which soil type do you think our plants will like best?

#### Activity:

Soil acts differently depending on if it is dry or wet.

1. Lay out your four pie plates. Place each material, including one scoop of garden soil, onto the individual pans.
2. Run your hands through the dry mediums noticing how they feel.
3. Now spread the sand in your pie plate and add some water. Can you trace your name in the sand? Can you write the alphabet?
4. Try this with the clay and loam as well.
5. What can you do with the rocks? Can you stack them?

All soils are composites, made up of many things, and each component of the soil helps plants with their different jobs—getting food and water, breathing, building solid roots, and growing.

#### Beyond the Garden | Soil Hunting in Your Habitat

Where do you live? Are there any beaches, mountains, canyons, or farm fields in your area? Grab a notebook or camera and explore your neighborhood. What do you see? What type of soil is most common? Can you draw or capture a photo of the types of plants you see? Record your observations in your notebook.

#### Continue Exploring | Supporting Materials

Local Department of Natural Resources (DNR): Check here for info about your local green spaces.

US Geologic Survey: <http://education.usgs.gov/>

Junior Master Gardener Resources: <http://jmgkids.us/>