

Muddy Madness



Goals

To provide a messy place for play in the garden and a natural opportunity to experience an entire range of sensations.

Objectives

Students will understand and describe the various particles of soil and will make mud creations in the garden.

Materials

- Old containers, cups, and pans
- Large mixing spoons
- Plastic scoops
- Large tub for mixing mud
- Scrap lumber to form a small table for making mud sculptures
- Different types of soil in the garden (sand, clay, and silt)
- Journals

Time: 20-25 minutes

Background Information

To learn more about the soil found near your garden, visit the USDA Natural Resource Conservation Service website, <http://soils.usda.gov/>.

Use scrap lumber to build a small box that children can use for mud play activities. This will help keep the mud contained and can be set up anywhere. The best soil for playing in the mud has high clay content; this works great for making mud structures.

Introduction (3 min)

Students should be in pairs to briefly discuss what they know about soil and dirt. Students can then report out to the larger group their understanding of soil.

Activity Steps (15 – 20 min)

1. First have a discussion on different sizes of soil. If possible, tie this information into the prior knowledge the students discussed in the introduction activity. Have three buckets of soil—one with sand, one with clay and one with silt. Explain that soil texture is a soil property used to describe the relative proportion of different grain sizes of mineral particles in a soil. Particles are grouped according to their size, typically into clay, silt and sand. Soil texture classification is based on the fractions of soil particles present in a soil. What texture of soil is in your garden? Point out that humans have disturbed the soil by building roads and even garden beds, and it can be difficult to determine the original texture of city soil.
2. Pass around containers of the different soil types to let the children feel the differences of the three soil particles. Which one has the largest grain sizes? Which one sticks together

the most? Pour water into the buckets of soil to demonstrate how water infiltrates each type differently (sand has the largest particle size, letting water flow through the air spaces faster than the other soils).

3. Once the soils are saturated with water, allow the children to freely use their imaginations. Chances are your students will need little encouragement to play with mud.

Here are some fun things to do in the mud:

- Make mud pies and cakes. Use old containers to “bake” in, and different colored dirt. Once the mud pies and cakes are created, decorate with small pebbles or flowers.
- Make mud prints. Place mud-covered hands and feet on a clean sheet of paper to make an impression.
- Make mud houses. Use sticks for supports and invite garden critters to live in your house. You can also make mud bricks to build a larger structure.
- Draw in the mud with a stick.

Conclusion (3 min)

Have students describe and/or draw clay, silt, and sand in their garden journals.

Notes
