

Soil Particle Game

1. Students are divided into 4 groups: sand, silt, clay and water.
 - a. “Sand” students should spread out on the playing area at least arms distance apart.
 - b. “Silt” students should stand only elbow distance apart.
 - c. “Clay” students should stand close, almost touching.
2. With just the “sand” students in the playing area, direct the “water” students to try to pass through. Do the same with the “silt” and the “clay”.
3. Discuss the differences. Why was it so easy to pass through the sand, and not the clay?
4. What can we do to keep the water in the sand and help it flow through the clay?
 - a. Grow plants. The roots from the plants will help loosen the clay soil and hold the sandy soil in place.
5. Play each round again. Add two trees to the mix. Trees may reach out and touch the water in order to stop it.
6. What else may help with this?
 - a. Animals living in the soil, such as worms, ants and millipedes.
7. Play each round again, but before each round pick a worm to burrow a tunnel through the group to open up a little space.

Wrap Up

1. Why is soil important? Soil is often referred to as the “foundation of life” because nearly every material we use comes from it.
2. Why is soil important to human beings? Prompt them to think about what comes out of soil: food, clothing materials, and so forth. We build our houses and schools on soil. Soil filters our water.
3. How might different soil types affect human lifestyle in that area? The soil composition determines what kinds of plants and crops grow best in each area and therefore which resources are available.