

Well, Are You Sure About That?

Theme: Layers of Earth

Curriculum Area: Earth Science

Activity:

- The Earth is our home planet, housing all life known to humankind. But we mainly only see the very top, or the surface of the Earth. While this is where the majority of life is, we will discover how the Earth is able to keep us all healthy, providing the necessary nutrients and materials needed for life. In this activity, we will search for a place that has a good amount of groundwater to build a well for our new house. There are different layers to the Earth. These are the soft top soil, which is the dirt upon which plants grow. The water table is water underneath the ground that we are able to drink. Soft sand/clay provide materials and nutrients needed for plants to grow. Harder rock is tough material that provides a good foundation. Using these layers to our knowledge, we will search for the best spot to build our new house and get water with our well!

Ages of Children: 8-9 years of age | 3rd grade

Materials Needed:

- Four different colors of Play-Doh
- Plastic Straws
- Paper
- Colored Pencils
- Pencil
- A small container

Developmental Objectives/Domains: By participating in this activity, children will:

1. Learn about scientific concepts such as the layering of various material compositions underneath the surface of the Earth.
2. Develop observational, classifying, and measuring skills.
3. Enhance their language arts skills with newly learned vocabulary, such as the “water table” and “top soil”.
4. Understand the geological importance of different areas to human value.

Procedure:

1. Ask the children questions about the ground (non-paved) outside, and discuss the facts.
2. Explain the scenario that the students are looking for a new area to build a house with decent access to a well, and relate the different layers of Earth to the different colors of Play-Doh.

3. Pass out containers to each student and provide them with the Play-Doh so they can begin layering their sample within the container.
4. Once the students have finished layering, pass out plastic straws and have them poke holes in a vertical fashion in different areas of their sample, each with a different straw.
5. Once 3 holes have been created, pull out the straws and squeeze out the play-doh within.
6. Students will observe the layering of play-doh and sketch it on paper to determine the best area with the most groundwater for their well.
7. Dispose the Play-Doh, straws, and rinse containers.
8. Have the students wash their hands.

References: <https://homeschool.rebeccareid.com/core-sampling-play-dough/>