

My Sandbox

Summary

Students will find the density of sorted sediments, predict how they will layer and mix them in a jar of water to see how they settle. Objective 1: Observe and describe the sorting of Earth materials in a mixture based on density and particle size.

Main Core Tie

SEEd - Grade 7

[Strand 7.2: CHANGES TO EARTH OVER TIME Standard 7.2.2](#)

Time Frame

1 class periods of 70 minutes each

Group Size

Small Groups

Materials

- 3-4 different sized sifters (plastic craft mesh normally used for needle work or rugs works well and comes in a variety of sizes)
- poorly sorted sand (has grains with different sizes)
- hand lens
- beaker
- 4-5 square pieces of aluminum foil
- bucket or plastic shoe box
- ruler
- graduated cylinder
- triple beam balance
- 4-5 baby food jars
- large jar or plastic bottle with lid
- timer
- [My Sandbox worksheet](#)

Instructional Procedures

Prepare the materials for the lab. If using the plastic craft mesh for the sifters, you may want to reinforce the sides by hot gluing craft sticks on the sides.

Hand out the [student sheet](#) and go over the procedures with students. Give students time to write a hypothesis.

Give students time to conduct the lab. Students may need an additional day to complete the lab, so make sure to consider where lab groups can easily store their materials.

Help the students name their sediments. The smallest particles will be clay or silt, followed by sand then pebbles or gravel. More exact nomenclature can be used but is not the purpose of this activity.

Once students have completed the lab, give them time to work on the Analysis Questions and Conclusion. Review the questions and conclusion with students to check for understanding and student learning.

If you do not have sifters, you can use pre-sorted soil and skip this step.

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

[Utah LessonPlans](#)