Measuring Mass and Volume

Summary

Students will learn to measure mass and volume of common objects.

Main Core Tie

SEEd - Grade 6

Strand 6.2: ENERGY AFFECTS MATTER

Time Frame

2 class periods of 60 minutes each

Group Size

Individual

Materials

balances

graduated cylinders

beakers

rulers

overflow cups (optional)

Objects to measure such as wooden blocks, clay pieces, marbles, rocks, glass of colored water.

- Student Sheet

Instructional Procedures

You may wish to assemble kits of measurable objects for each student group or have the students pass the same objects around the room. Either way, it is nice to be able to discuss and compare results. This is possible If the objects are the same from group to group, "Hook" the students with a demonstration of volume using 3 different shaped 1 liter (or larger) flasks or beakers. Ask the students if they hold the same amount or have the same volume. Ask them to predict which might hold the greatest volume of water. Fill one of the containers with water and demonstrate by pouring the water from it to another flask that the volumes are the same (or not). Continue pouring from one flask to the other until they have all been compared. Read through the student sheet with students and explain the 3 ways volume can be calculated. (I x w x h for cubic or rectangular shapes, water displacement for irregularly shaped objects or direct measurement for liquids) Do a few practice problems to provide examples. Demonstrate the use of the balance.

Show students an object they will measure and ask them to make a prediction on it's mass and volume.

Allow students time to make their measurements. Compare results as a class if possible. Students can write their results on the board for each object and see how close their findings are.

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

Utah LessonPlans