Finding the Density of Earth

Summary

Students will use rock samples to determine the density of Earth.

Main Core Tie

SEEd - Grade 7

Strand 7.2: CHANGES TO EARTH OVER TIME Standard 7.2.4

Time Frame

1 class periods of 60 minutes each

Group Size

Small Groups

Materials

rocks of different densities such as basalt, granite, slate, iron (can be a nail, utensil or tool).
triple-beam balance
water
graduated cylinder

- Student worksheet

Instructional Procedures

Ask students if it is possible to measure the density of an object as large as Earth. Give them a chance to talk to one another for a brief time and see if they can answer it. They may think about finding mass and volume but those are difficult measurements and calculations. They may decide that samples from various places in Earth could be used to represent the whole.
Show them the rocks you have gathered and read the introduction.
Indicate the location of materials and read the procedures with students.
Allow time to work.
Ask students to post their results on the board for Earths density and see how close they come to 5.5 g/cc.

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

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