



SLOWER

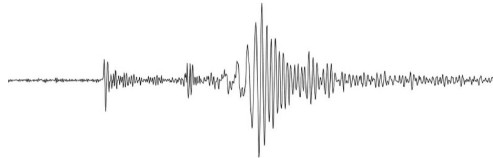
To determine why seismic waves move slowly through sand.

Materials

- Paper Towel
- Inner Paper Towel Tube
- Uncooked Rice
- Rubber band

Procedure

- Cover one end of the tube with paper towel sheet.
- Secure the paper towel to the tube with the rubber band.
- Fill tube with rice.
- Use your fingers to push down on the rice. Try to push the rice down and out through the paper towel.



Seismic waves can be created by the sudden breaking of rock within the earth or an explosion. The energy from these waves can be recorded with a seismograph.

Results

The rice is not pushed through the bottom of the tube. The rice moves very little.

Why?

Sand particles, like the rice, move in all directions when pushed. Vibrations from seismic waves move more slowly through sand because the forward energy of the wave moves in different directions as the sand particles move outward in all directions.

This activity was adapted from the book *Earth Science for Every Kid*.