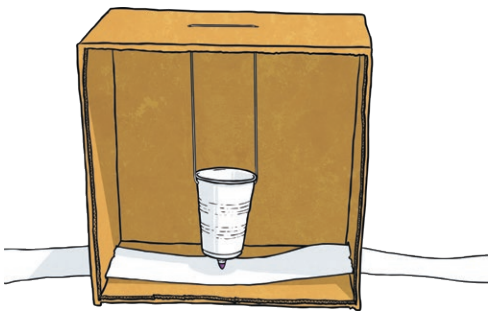


Seismograph

A seismograph is an instrument that measures and records seismic waves that move through the earth when there is an earthquake. Seismographs are securely fastened to the earth, so when the ground starts to shake the seismograph moves too. What doesn't move is a weight that hangs on a string inside the case. When there is an earthquake it draws a line to show how much the ground shook. Scientists use these drawings to find; the time the earthquake occurred, the epicentre (the location on the surface of the earth that is directly above where the earthquake originated), the depth below the earth's surface that the earthquake occurred and the amount of energy released by the earthquake. Scientists measure and record this data to learn more about earthquakes, tectonic plates, and the earth's layers.



You will need:

A plastic or paper cup

A pencil

String

Tape

A shoe box

A long strip of paper

Sand

Method

1. Place the box on its side with the open top facing you.
2. Cut two narrow horizontal slots about 5cm wide in the middle of the bottom edges of the box.
3. Slide the long strip of paper through these slots.
4. Make two holes in the centre at the top of the cardboard box.
5. Push the pencil about 2–3cm through the centre of the bottom of the cup.
6. Make two holes in the rim of the cup - one on either side.
7. Half fill the cup with sand to weight it down. You may need to put sticky tack around the pencil to stop sand falling out of the hole.

Seismograph

8. Tie the cup so it is hanging from the box and the pencil is just touching the bottom of the box.
9. Tape the box securely to the table.
10. Shake the table that the box is on and slowly pull the strip of paper so the pencil leaves a trail.

Richter scale:

a popular unit for measuring the magnitude of an earthquake.

