



Earth Science Week Competition

'Build your own seismograph'

This year Earth Science Week will be celebrated from October 9 - 15 and the theme is "Geoscientists Explore our Earth".

Geoscience Australia operates the networks that observe earthquakes and tsunamis. Our stations and networks are essential to a worldwide network that monitors global events and Earth's processes.

An earthquake occurs when the stresses caused by plate movements are released. It is a ground shaking event.

A [seismograph](#) records the vibrations (seismic waves) caused by earthquakes and produces a [seismogram](#). A seismogram is simply the recording of these seismic waves, detected by a seismograph. Accurate interpretation of the seismogram tells us not only a lot about the earthquake but also about the nature and composition of planet Earth.

Aim: To design and make a simple working model seismograph. You may work alone or build a seismograph as a class project.

Method:

1. Draw a labelled plan of your model

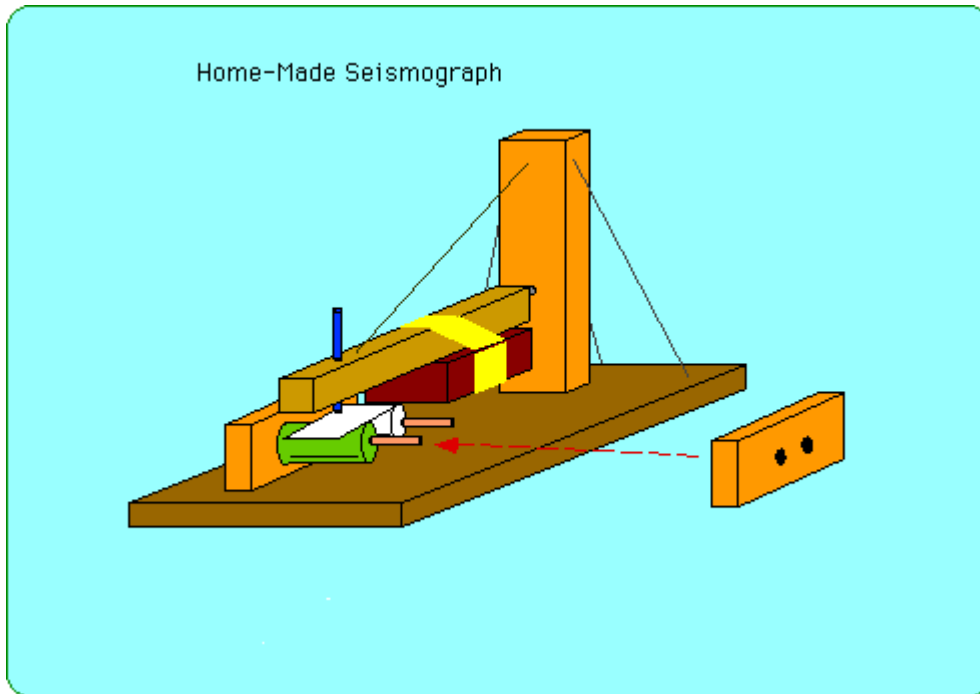
Your model should be able to:

- determine the relative magnitude (size) of each vibration it measures;
- measure vibrations such as jumping up and down continuously for one minute;

For inspiration look at some websites for assistance:

<http://www.usyd.edu.au/su/SCH/school/Seismograph/menu.html>

<http://cse.ssl.berkeley.edu/lessons/indiv/davis/hs/Seismograph.html>



2. Make a seismograph using your design. Please use recycled materials.

Results:

Test out your seismograph. Compare your model with others and record your findings.

Judging:

Your seismograph, method and results must be delivered by hand to:

Kate List (ph: 6249 9571) Manager Education Centre, Geoscience Australia,
cnr Terrabomberra Ave and Hindmarsh Drive Symonston by 5pm on Monday
October 10 for judging during Earth Science Week.

Prizes will be awarded for the best and / or most interesting seismograph

- by individual
- by class.