



EARTHQUAKES WITH DR ALEX COPLEY

TALKING POINTS

- 1) What impacts can earthquakes have on communities? (See Introduction, p1 of article)
- 2) Why is it important to consider potential earthquakes when building towns and cities? (See Introduction, p1 of article)
- 3) What is an earthquake? (See 'What is an earthquake and what causes them?' - p1)
- 4) In your own words, describe why earthquakes commonly occur along plate boundaries. (See 'What is an earthquake and what causes them?' - p1)
- 5) Why would studying earthquakes help town planners and construction companies? (See 'Why do scientists monitor earthquakes?' - p1)
- 6) What techniques and methods do scientists like Alex use to study previous earthquakes, and help prepare for future events? (See 'How do scientists monitor earthquakes?' - p 2)

ACTIVITIES YOU CAN DO AT SCHOOL, COLLEGE OR AT HOME

CAN YOUR HANDMADE STRUCTURES WITHSTAND AN EARTHQUAKE?

Use toothpicks and marshmallows, or straws and plasticine, or ice-block sticks and a hot glue gun to construct a model of a building. Your goal is to make the building model as earthquake-proof as possible. To test it, you'll need a large amount of set jelly in a tray. Place your model on top of it and shake the tray from side to side to simulate an earthquake. Observe how your structure performs, and most importantly, what could be done to make it more earthquake resistant.

BUILD A SEISMOGRAPH

A seismograph is a piece of equipment used to measure to movement caused by earthquakes. Why not make one from regular household items? There are several websites with instructions to help you do that. Search 'make your own seismograph' with your preferred search engine. For example, here's one from Science World:
www.scienceworld.ca/resources/activities/make-your-own-seismograph

RESEARCH AN EARTHQUAKE

Select a significant earthquake from the past 50 years. Create a 2-minute video presentation, or 'news report', outlining the details of the earthquake (i.e. what, where, when, why and how). Include interviews with friends or family who can pretend to be eye witnesses or experts in seismology (you may have to help them understand a thing or two about earthquakes!).