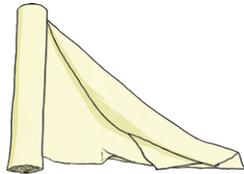


Earthquake Simulation

You will need:



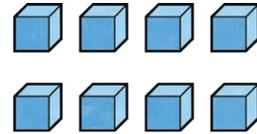
tray



two strips of
cloth longer than
the tray



soil



small blocks or
plastic houses
from a boardgame

Method:

1. Lay the strips of cloth beside each other inside the tray. Make sure each cloth is long enough to have some hanging over the sides of the tray. The strips of cloth need to be almost touching with no space between them. The cloth represents two different plates.
2. Place a layer of soil on top of the cloth strips inside the tray. This represents the Earth's crust.
3. Put the houses on top of the soil. Make sure you have some houses near or on top of where the strips of cloth almost meet.
4. At the same time, pull one of the overhanging cloth strips towards you and the other away. The 'fault line' will be shown and the effects on the Earth's crust and the houses will be similar to a real earthquake.

Safety Note:

Always wash your hands after touching soil. Keep soil away from your mouth and nose.

Changes:

Try pulling the strips of cloth in the same direction.

Speed up or slow down when you pull the strips of cloth.

Use scarves, long socks or cut up pantyhose instead of cloth.

Add some vegetation and cities with high-rise buildings to your simulation.

Explanation

The Earth's crust and the top of the mantle have about twenty tectonic plates, which are like jigsaw pieces covering the Earth. These plates are always moving and bumping into each other. The edges of the plates are called 'plate boundaries', which are made up of faults. These faults are where most of the world's earthquakes occur. As the plates move, the edges get stuck because they are not smooth, but the rest of the plate keeps moving. When the force is too much, it slips and bumps and that causes an earthquake. A bit like when you pull something which gets caught, you pull it some more until it comes free with a big force.

