

# MAKE-A-QUAKE

## Required:

Lego bricks with base

Jenga blocks

Sturdy table

Macbook or iPad with (free to download) seismograph app

Blue tack

**Ages:** Five plus, but adults will often join in!

## Optional:

Activity sign (provided)

Computer displaying recent earthquake locations

## Set-up

Put the loose lego and jenga on the table, with the Macbook/iPad (secured with blue tack) standing next to them. Check the seismometer app is on the best setting. The computer screen displaying recent earthquakes should be nearby – a lot of older children and adults will ask about this.



## What to do

Ask the kids to build a house of lego and a house of jenga. While they're busy building, ask if they know what an earthquake is, and what happens to buildings when the ground shakes. Tell them what seismometers (like the Macbook /iPad) do, and how an earthquake appears as waves on the screen. Then get them to pound on the table to make an "earthquake" (smaller children might need a bit of help!). The earthquake will register on the screen, and the houses will be damaged.



## Useful links

[earthquake.usgs.gov/earthquakes/map/](http://earthquake.usgs.gov/earthquakes/map/)  
[Earthquake.usgs.gov/learn/kml/php](http://Earthquake.usgs.gov/learn/kml/php)  
[www.iris.edu/seismon/](http://www.iris.edu/seismon/)

## Tips

- Read through the Disaster Zone poster on earthquakes, and the earthquakes section of the Deadly Slideshow if you need to brush up on earthquake facts. For even more information, look through the Deadly Quiz!
- Wooden tables make more noise, and so are a bit more fun! Metal tables will hurt your hands if you have to bang on them all day!
- Some kids (and adults) try to build a jenga house to withstand the earthquake. Use this to talk about how building techniques are just as important as materials.
- The Macbook/iPad can be moved up and down, side to side, or forward and backward to show the different directions waves travel in. Ask which motion does more damage to buildings (the last two).
- Use pictures (included in the Deadly Slideshow) to talk about earthquake-proof buildings old (Hagia Sophia) and new (Transamerica Pyramid). Mention that very few places have earthquake-proof buildings because they are expensive (the UK does not have them).

