

GRADE LEVEL
Middle School

SCIENCE CONTENT STATEMENT ADDRESSED

The Earth is Constantly Moving

Changes in the surface of Earth are examined using data from the rock record and through the understanding of plate tectonics and the interior of Earth.

OVERVIEW

Students design a prototype of a building and see if will survive an earthquake. Students prototypes will be tested on a "shake" table. (Making a shake table can be done by the teacher in advance OR a Maker challenge as well. Simple Shake Tables can easily start with paper towel rolls, or styrofoam balls, you get the idea!)



QUAKAPOLIS

MATERIALS

- Students will only use materials found in the Makerspace that day.
- Shake table

PROCEDURE

- Using only materials available in the Maker area students will design a prototype of a building that will survive an earthquake.
- Students should work in pairs.
- Students will draw a sketch of their prototype first.
- After each "earthquake" students have 5 minutes to reflect and make any changes.

POST-PROJECT CLASSROOM DISCUSSION/ACTIVITIES

During construction, how did you test the strength and stability of your structure?

During construction, what strategies did you use to strengthen the weaker areas? Why?