



DIY ACTIVITY

SHAKE TABLE GRADES K-2

SUMMARY

- Make a shake table to test different building designs!
- Time Required: 30 minutes
- Difficulty: Medium
- Cost: \$0-5

MATERIALS NEEDED

- 2 Textbooks
- 4 Marbles
- 2 Large rubber bands
- 30 Sugar cubes

PROCEDURE

 **AS A CLASS, WATCH THE *GENERATION GENIUS* TIMESCALE OF EARTH'S EVENTS VIDEO.**

1. Use two large rubber bands to secure two textbooks together.
2. Place four marbles in-between the two books.
3. Make sure the marbles are close to the corners but will not fall out when shaking.
4. On top of the books, build a sugar cube house that's three cubes high and three cubes wide.
5. Now push and pull on the top book to simulate an earthquake.
6. Try building structures of different sizes and shapes to see which one is best.

WHAT IS GOING ON HERE?

A shake table can help engineers build earthquake-proof buildings. Buildings that are tall will shake more than buildings that are close to the ground. With this in mind, engineers can use what they learned from using a shake table to change designs to keep buildings from falling down and hurting people during an earthquake.