Earthquake Test

Build a structure, shake it gently, and discover what helps it stay standing.

30-45 min | Medium

Your Challenge

Build a structure that can stay standing when the surface underneath it moves.

What You'll Need

- Blocks, cups, cardboard, or recycled materials
- Tray, pan, or flat piece of cardboard
- Tape

Talk About It

- What moved first?
- What helped your structure stay standing?
- Which design worked best?
- Why do engineers test buildings?
- What would you change next?

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Caregiver Tip

You do not need to give the answer. Ask a question, notice what happens, and let your child decide what to try next.

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Step-by-step activity guide

30-45 min | Medium

What to Do

1. Build a structure on a tray or movable surface.
2. Think about its height, base, shape, and supports.
3. Gently shake the tray.
4. Watch what happens.
5. Notice what moves first.
6. If it stays standing, try a slightly stronger shake.
7. Change one part of the structure.
8. Add supports or change the base.
9. Test again.

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Engineer Again

Try changing the base, supports, or height and compare the new result.