

TABLETOP TOWN

Ecuador Earthquake Youth Activity—middle or high school

SUPPLIES:

Table(s), with enough space for all groups to build houses

Building materials set 1:

Gumdrops (20)

Spaghetti noodles (1/2 box)

Building materials set 2:

Popsicle sticks (20-30)

Tape

Building materials set 3:

Cards (1 deck)

Play-Doh (1 small container)

Building materials set 4:

Legos or blocks

ACTIVITY:

- Divide youth into small groups (2-4 youth).
- Give each group a set of building materials. If you have more than 4 groups, you can duplicate the material sets. Make sure the majority of groups have “unstable” building materials such as cards or spaghetti noodles and gumdrops.
- Challenge the groups to build houses on the tabletops. Each group can determine the size and style of their house, so long as they use only the provided materials.
- When all the groups are finished (or after the allotted building time has passed), gather the group around the table. Have each group describe their house and talk about how they built it. Ask each group why they chose the design they did. Compare the various houses and the challenges of using the different building materials. Discuss which houses would be most likely to survive an earthquake.
- Tell the following story:

“This is our newly founded town of Iglesia Mesa. It’s not on the map, but it is just a few miles outside the city of Pedernales, Ecuador.

Around midday on April 16, 2016, the ground shook ever so slightly (thump the tabletop gently)—not an uncommon thing in Iglesia Mesa. After all, Ecuador sits atop a fault line where the Nazca plate is subducting, or being forced below, the South American plate. Minor earthquakes are common. Most people did not even notice it had happened.

That evening, though, the ground shook again, and this time everyone noticed (shake the table—hard enough that some of the houses fall or sustain damage)! The 7.8 magnitude

earthquake caused many buildings to crumble, killing hundreds of people instantly and trapping hundreds more in the debris. Over the next couple days, aftershocks caused more damage, destabilized more buildings, and made it difficult for emergency crews to help survivors (shake the table again a couple of times, less forcefully).”

- Take a moment for youth to make observations about what happened to their houses—which houses fell, which survived, and what it might have been like to be inside them when the earthquake hit.

NOTE for discussion: Earthquake-resistant construction can make a big difference in the level of destruction sustained during an earthquake. In the city of Pedernales, Ecuador many of the buildings were older, and had what Kit Miyamoto, a California Seismic Safety Commissioner, called “brittle buildings,” which will crumble during the movement of an earthquake. In areas with high rates of poverty, poor construction makes houses even more vulnerable. The April 16th earthquake was so strong that even newer earthquake-resistant buildings. The strength of the earthquake, combined with its location and the construction of many of the buildings led to the extreme destruction of April 16.th

- Continue the discussion by turning to response and hope:
“Our church has been responding to the people of Ecuador, helping them to start recovering from this disaster. The United Church of Christ and the Christian Church (Disciples of Christ) issued a joint appeal, urging our churches to raise \$500,000 to support psychological care for survivors and to provide resources for rebuilding. As our local partners help people repair and rebuild their houses, they will use earthquake-resistant techniques so the new homes will be safer for the next earthquake.”

