

We must all become better prepared for major earthquakes and their aftermath, and also practice how to protect ourselves when they occur. While the potential earthquake hazards that surround us vary by location, everywhere in California is considered at high risk compared to the rest of the country. The purpose of the ShakeOut is not only to practice the Drop, Cover, and Hold On procedure, but to promote earthquake awareness/preparedness at work, school, and home.

WRITING ACTIVITY: My ShakeOut Story

BACKGROUND:

Major earthquakes can happen anywhere we work, study, live, or travel in California. The ShakeOut is our chance to practice how to protect ourselves and to become better prepared. We can keep disasters from becoming catastrophes through education that spreads awareness and practice that becomes instinct.

The goal of the ShakeOut Curriculum is to encourage students to actively participate in earthquake science learning, and to respond to the knowledge of earthquake risk in California through active emergency preparedness.

This particular activity will summarize the lessons that students have learned from completing the curriculum. The activity should be done after students have reviewed proper earthquake procedures and participated in an earthquake drill.

ACTIVITY:

Set-Up

Print out one copy of the ShakeOut Location Cards sheet, and cut out the cards into 42 individual slips of paper. Make enough copies of the ShakeOut Story – Brainstorming Worksheet and the My ShakeOut Story sheet to distribute to each of your students.

Procedure

- 1. Distribute one ShakeOut Location Card to each student. The location listed on the card determines the setting for each student's ShakeOut story.
- 2. Have the students fill out the brainstorming activity. Answer any questions students might have about their particular location.
- 3. After the students have brainstormed, have them write and illustrate their own ShakeOut Story that includes elements of the different earthquake science and preparedness lessons they have learned from completing the curriculum.

CONTENT:

This activity is based on the ShakeOut Scenario, a comprehensive study involving a hypothetical magnitude 7.8 earthquake along the southernmost San Andreas fault. Information on the ShakeOut Scenario earthquake can be found at: www.shakeout.org/scenario.

For the Brainstorming Worksheet:

Close your eyes and imagine this place. What do you see? List down everything that you see:

Encourage students to note both what exact items surround them in the room/location, and what is happening to these objects as they experience intense shaking. These are items that could be potential hazards. Also have the students note the reactions of other people in the area and what they are doing in response to the initial shaking. Incorporate earth science by having students discuss what is causing the intense shaking.

What is your first instinct? How do you react?

Have students truthfully determine what their response will be to an earthquake. If it is not to Drop, Cover, and Hold On, reiterate the importance of staying in one place to avoid injury from falling or flying objects. Recall the Safe Areas activity and guide students to determine proper emergency procedures and find areas protected from potential hazards (such as under sturdy furniture or near interior walls).

List down any emotions or thoughts that are going through your mind during the earthquake:

Varies based on the students.

What do you do once the earthquake stops?

Have students determine the extent of the damage from the earthquake, and whether they are trapped in rubble or have mobility. If the latter, encourage students to remember their emergency plans, grab their disaster supplies kits, and first ensure their personal safety before attending to others. If the former, remind students to protect their mouths, noses, and eyes from dust; apply pressure to wounds and try to elevate injured body parts to reduce bleeding; and signal for help by blowing a whistle or knocking loudly to save the energy that would otherwise be exerted by yelling. Once safe, students can help others and begin to check for injury and damage.

What are some problems? What has been damaged?

Potential problems may include: 1) Injury – bleeding, unconsciousness, sprains, fractures, burns, cuts, bruises; and 2) Damage – fires, gas leaks, torn electrical wiring, broken fixtures and appliances, downed power lines, fallen items, spills, weakened masonry.

What do you do to fix these problems? How do you prevent future earthquake damages?

<u>Injuries:</u> Check your first aid kit or the front pages of your telephone book for detailed instructions on first aid measures. If a person is bleeding, put direct pressure on the wound. Use clean gauze or cloth, if available. If a person is not breathing, administer rescue breathing. If a person has no pulse, begin CPR (cardiopulmonary resuscitation). Do not move seriously injured persons unless they are in immediate danger of further injury. Cover injured persons with blankets or additional clothing to keep them warm. Get medical help for serious injuries. Carefully check children or others needing special assistance.

Damage: Fire – If possible, put out small fires in your home or neighborhood immediately. Call for help, but don't wait for the fire department. Gas Leaks - Shut off the main gas valve only if you suspect a leak because of broken pipes or the odor or sound of leaking natural gas. Don't turn it back on yourself - wait for the gas company to check for leaks. The phone book has detailed information on this topic. Damaged Electrical Wiring - Shut off power at the main breaker switch if there is any damage to your house wiring. Leave the power off until the damage is repaired. Broken Lights and Appliances – Unplug these as they could start fires when electricity is restored. Downed Power Lines - If you see downed power lines, consider them energized and stay well away from them. Keep others away from them also. Never touch downed power lines or any objects in contact with them. Fallen Items -Beware of items tumbling off shelves when you open the doors of closets and cupboards. Spills - Use extreme caution. Clean up any spilled medicines, drugs, or other non-toxic substances. Potentially harmful materials such as bleach, lye, garden chemicals, and gasoline or other petroleum products should be isolated or covered with an absorbent such as dirt or cat litter. When in doubt, leave your home. Damaged Masonry – Stay away from chimneys and walls made of brick or block. They may be weakened and could topple during aftershocks. Don't use a fireplace with a damaged chimney. It could start a fire or let poisonous gases into your home.

<u>How to Prevent Future Earthquake Damages:</u> 1) Identify potential hazards in your home/classroom, such as hanging objects and large furniture, and begin to secure them. 2) Create a disaster preparedness plan so everyone knows what do before, after, and during an earthquake. 3) Prepare a disaster supplies kit and make sure it is easily accessible. 4) Identify potential building weaknesses and begin to fix them. 5) Protect yourself during an earthquake – Drop, Cover, and Hold On.

Encourage students to reflect on anything they might do differently next time to be better prepared.

For more information, see the Southern California Earthquake Center publication, *Putting Down Roots in Earthquake Country*, accessible online at: www.earthquakecountry.org.

