

# Shake-Out Survivor

**Putting Down Roots, pp. 20 - 23, 32 - 34**

**Idaho State Standards:**

8th/9th Earth Science 5.1, 5.3

**Objectives:**

Students will:

1. Play a game to determine their preparedness under emergency conditions.
2. Recognize the importance of advanced planning for personal or family emergency response.

## RATIONALE

This activity is designed to help students understand how their life could change unexpectedly following an earthquake or other major natural hazard. Earthquakes in Idaho are inevitable; how someone responds to the aftermath of an earthquake will be determined by their preparedness. The Federal Emergency Management Agency (FEMA) and state and local emergency planners have determined that individuals should plan to be self-supporting for a minimum of 72 hours (3 days) following a major disaster. How well a person is able to be self-supporting is determined by conditions following a major disaster and their personal/family preparedness plan.

## FOCUS QUESTION(S):

- What are the critical emergency supplies one needs to survive for 72 hours after a natural disaster?
- If an earthquake happened when you were home by yourself what would you do?
- What would a disaster preparedness plan involve?

## TEACHING CLUES AND CUES

Group students into teams of 2-3. Each team will roll the die to determine the conditions that apply to them after an earthquake. The purpose of the game is to encourage students to think about how they would respond to conditions imposed upon them during an emergency. Groups should write down each condition determined by the roll of their dice. Students can either write a report or present their scenario to the class and explain how they would handle (survive) the situation. You may want to challenge the students by having them roll their die twice for each of the columns.

## MATERIALS: for teacher

- Copies of the "Shake-Out Survivor" instructions, pp. 116 - 117 for each student
- Dice: one per group

## for student groups

- "Shake-Out Survivor" game instructions, pp. 116 - 117
- Dice: one per group
- Paper and pen or pencil

## PROCEDURE:

### Teacher Preparation

Read pp. 20-23 and pp. 32-34 of *Putting Down Roots in Earthquake Country*. This will give you the background to question students about their decisions. Make copies of the game instructions for the students. Decide how you will group students for this activity.

### A. Introduction

Instruct the students that they will be playing a game to determine conditions for their group's earthquake scenario before, during, and after a major event. The conditions that will exist for each group will be different and will be determined by the roll of a die. How they respond is subject to these conditions. Instruct students that they will be preparing a report or presentation that justifies the choices they made under the conditions of their team's scenario.

### B. Lesson Development

1. Have students read pages 20-23 from *Putting Down Roots*.
2. Each team should begin playing the game by shaking the die to determine whether students are alone or with a younger sibling.
3. Roll a second time to determine what type of dwelling students live in.
4. Roll a third time to determine the time of day the event occurs and the weather conditions during the event.
5. Roll once for each of the six categories: Dwelling, Medical, Communication, Water/Gas/Electricity, Transportation, and Miscellaneous. Each roll of the die imposes conditions upon the player for which they must account in their survival.
6. Players will write a report or prepare a presentation to describe what they would do under the conditions imposed.

### C. Conclusion

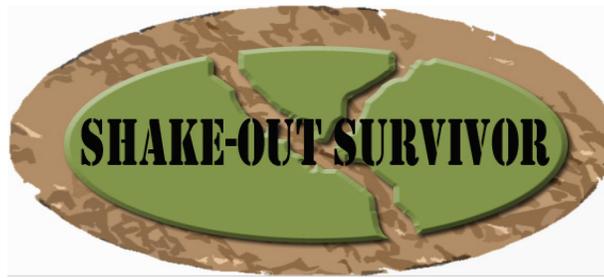
At the next class meeting, set aside time for a debriefing of student reactions to what they have learned. Pose the following questions to each team of students:

- Is your plan or response realistic? Is it comprehensive (does it take everything into consideration)?
- Did you have the resources to implement your plan?
- What were some of the limiting factors in your survival?

### Adaptations and Extensions

If your area is one of low seismicity or is susceptible to other natural hazards, you may rework the game to address other types of major disasters, such as flooding, wildfire, or major winter storms. Contact the Idaho Bureau of Homeland Security at [Citizen.corp@bhs.idaho.gov](mailto:Citizen.corp@bhs.idaho.gov) to get information, maps and/or guest speakers. You may also send your request to

Idaho Bureau of Homeland Security  
Attn: Citizen Corps Coordinator  
4040 Guard St., Bldg. 600  
Boise, ID 83705-5004  
208-422-3040



## The Game

**The Event:** An earthquake with a magnitude of 6.5 has just occurred. At the moment, you are unhurt. No adults are at home with you. Roll your die three times to determine the basic conditions under which you will play for the rest of the game. The first roll will determine your scenario. The second roll will determine the type of dwelling you live in and the third roll will determine the time of day, the temperature, and weather trend at the time that the earthquake occurred. Note: the Federal Emergency Management Agency has determined that a person should be prepared to fend for themselves for a minimum of 72 hours (3 days) following a major natural disaster in the event that help from first responders is delayed or unavailable.

### Scenario:

Roll an even number (2, 4, 6): Home alone

Roll an odd number (1, 3, 5): Home with a younger sibling

### Dwelling: you live in a

Roll an even number (2, 4, 6): Single family home

Roll an odd number (1, 3, 5): Multiple family home (apartment)

### Time and Temperature:

Roll 1: 8:00 a.m., 10°F and rising

Roll 2: 8:00 a.m., 50°F and rising

Roll 3: 12:00 noon, 70°F and rising

Roll 4: 12:00 noon, 30°F and falling

Roll 5: 4:00 p.m., 90°F and rising

Roll 6: 4:00 p.m., 40°F and falling

Roll the die one more time for each of the six categories below to determine which conditions you will need to apply to your scenario. For example, if you roll a 2 for the dwelling category and a 1 for the Medical category, your scenario will include the conditions "Chimney has fallen through the roof" and "No First Aid/CPR training." Repeat for each of the remaining categories.

*Optional Challenge:* roll twice for each category.

### Dwelling

- 1 - Dwelling must be evacuated
- 2 - Chimney has fallen through the roof
- 3 - Neighbors' dwelling is on fire
- 4 - Family has a pet
- 5 - Exterior doors blocked/jammed
- 6 - Dwelling located on floodplain

### Medical

- 1 - No First Aid/CPR training
- 2 - Medicine needs refrigeration
- 3 - Neighbor trained in First Aid/CPR
- 4 - Neighbor or sibling bleeding
- 5 - Hospital damaged/evacuated
- 6 - 911 response not an option

### Communication

- 1 - Cell phone works, but battery is low
- 2 - Internet, TV, and land lines are down
- 3 - No radio or working flashlight
- 4 - Cell phone charger missing
- 5 - Have a working radio and flashlight
- 6 - Have a family emergency plan

### Water, Gas, Electricity

- 1 - Public water supply contaminated
- 2 - Electricity is out
- 3 - Smell of natural gas is detected
- 4 - Water lines under house burst
- 5 - Gas line is broken outside home
- 6 - Water main is broken on street, no water to house

### Transportation

- 1 - Train wreck blocking road
- 2 - Car gas tank is close to empty
- 3 - Car cannot be moved
- 4 - Public transportation not running
- 5 - Gasoline pumps at service station unable to pump gas
- 6 - Car keys cannot be found

### Miscellaneous

- 1 - Have working fire extinguisher
- 2 - Have \$10 in cash
- 3 - Limited canned food supply in house
- 4 - Canal/reservoir/dam leaking
- 5 - Unable to contact parents
- 6 - Family pet ran away

**Now that you have all the conditions that resulted from the earthquake, prepare a report that describes what you would do to care for yourself--and, if applicable, a sibling-- immediately after the earthquake and for the next 72 hours. Make sure you take into consideration the time of day, weather conditions, and weather trends.**

### **Aftershock!!**

An aftershock has occurred 5 hours later and is larger than the 6.5 that occurred earlier. It has started to rain/snow (depending on your temperature conditions). Roll the die once for each of the categories to determine what additional conditions now exist. If you roll a condition that is already in place in your scenario, roll again. **Note: prior conditions still apply.**

#### **Dwelling**

- 1 - Dwelling must be evacuated
- 2 - Chimney has fallen through the roof
- 3 - Neighbors' dwelling is on fire
- 4 - Family has a pet
- 5 - Exterior doors blocked/jammed
- 6 - Dwelling located on floodplain

#### **Medical**

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**Describe how these new conditions have changed the way you would respond to your survival?**

**24 Hours later: Roll the die one more time to add one of the conditions below to your scenario:**

- 1 - You have injured, possibly broken, your arm
- 2 - The canal/dam has failed; flooding is imminent in your area
- 3 - Due to a ruptured petroleum or natural gas pipeline, a large fire has broken out in the street
- 4 - Your next door neighbor has no food or water
- 5 - Outside temperatures have dropped 20°F
- 6 - Closest emergency shelter is full (no room for you & sibling). You are sent to another shelter.

**Describe how your situation has changed and how you will respond for the next 48 hours.**