



Be Disaster Safe 6–8

At Home



Visit the American Red Cross Web site
at www.redcross.org/disaster/masters

LESSON PLAN 9

Reduce Hazards and Communicate

Young people can lead their families' efforts to reduce hazards and follow an emergency contact plan.

Key Terms and Concepts

contacts
emergency

hazard
plan

prepare
unexpected

Purpose

To help the students and their families stay safe by reducing hazards and creating and following an emergency contact plan

Objectives

The students will—

- Determine ways families can be prepared for the unexpected, based on a fictional story.
- List the most common disasters in their area and conduct research to draft, critique and produce brochures to educate the public about reducing hazards.
- Use *Help Reduce Hazards* to guide their families in making a family disaster plan. (Home Connection)
- Identify preparedness steps the school has taken to reduce the hazards and to protect the students, as well as steps that could make the school better prepared. (Linking Across the Curriculum)
- List the reasons people need to communicate in an emergency situation and how this can be accomplished.
- Use local maps to discover specific data and make generalizations about the obstacles that could delay families uniting during emergencies; develop a list of important family contact information.
- Use *Family Contact Plan* and *My Yellow Pages* with their families to list important people and their contact information. (Home Connection)
- Use maps to discover pertinent information about out-of-town family contacts. (Linking Across the Curriculum)
- Use Internet mapping to measure distance, determine possible difficulties and plan alternate routes to bring family members together during an emergency or immediately following a disaster. (Linking Across the Curriculum)
- Research and conduct a roundtable discussion on the American Red Cross "Safe and Well List." (Linking Across the Curriculum)



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- Research to write a brochure that explains the importance of having a corded phone during an emergency. (Linking Across the Curriculum)

Activities

- “Reduce the Hazards”
- “Stay in Contact”



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Materials

- Chart paper and markers
- Poster board and markers
- Craft items
- *Help Reduce Hazards*, 1 copy per student (Home Connection)



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“Reduce the Hazards”

SET UP 5 minutes **CONDUCT** 50 minutes, plus research and production time


Social Studies: Personal Responsibility; Science: Health; Language Arts: Writing and Research

1. Tell the following story to the class:

The family had been away from home when the earthquake struck. When they walked into their home, they could see that all the cabinet doors in the kitchen were opened, and glasses and dishes were broken on the floor. The tall cabinet had fallen across the dining table and broken it, strewing their grandmother’s pretty porcelain statues in pieces across the floor. Pictures and mirrors were shattered on the floor in every room. In the parent’s bedroom their favorite picture lay across the bed; and the lamp, computer and DVDs were shaken off the desk.

They went down to the basement and saw that the electric water heater had pulled away from the wall, and the pipe had broken—water was flowing everywhere.

They all shook their heads, each one saying: “I didn’t expect this to happen.”

2. Ask the students to discuss what went wrong in this imaginary story. How could the family have been better prepared for the “unexpected”? (The kitchen cabinets could have had latches or locks so that the doors would not have opened, and the contents would not have spilled out. The tall cabinet could have been bolted to the wall stud so it would not have fallen over. All the pictures and mirrors could have been fastened securely to wall studs, the lamp and computer secured to the desk and the water heater secured to the wall.)
3. Explain that planning for the unexpected reduces the hazards when the unexpected occurs. Have the students list the most common risks their community faces, such as earthquakes, flash floods or hurricanes. Remind them that residential fire is the disaster most common to all communities.
4.  Divide the class into production teams. Have each team consider one disaster that could affect their community. Have the teams use the Internet to research the disaster or use the Background for the individual disasters on the *Masters of Disaster* CD-ROM to find the possible effects of the disaster and ways to reduce the hazards.



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5. Provide each production team with chart paper and markers. Have them use these to design an oversized mock-up of a community preparedness brochure that would help the public reduce the hazards and, therefore, reduce the impact of each disaster. Brochures might include statistics to explain the need for reducing the hazards as well as tips for making homes and families safer.



Wrap-Up

Ask the production teams to share their brochures.



Have the class critique each production mock-up, considering visual appeal, accurate and compelling information and easy-to-follow tips.

After the class review, have the production teams redo their mock-ups as large posters and post the finished products in the media center or present them at the next PTA meeting.



Home Connection

Distribute *Help Reduce Hazards* to each student. Ask them to use their class discussion and the information on the activity sheet in helping their families reduce the hazards at home to make any disaster scenario have a happier outcome. Have the students and their families go through the checklist and save the information as part of their family disaster plan.



Linking Across the Curriculum

Social Studies: Community; Science: Health

Guide the students to list the preparedness steps you, the class and the school have taken to reduce hazards to protect them. For example:

- They have participated in drills and evacuations.
- There are smoke alarms and sprinklers in the classroom.
- The bookshelves and cabinets are bolted to the wall.
- They keep the aisles clear.
- They know two ways to exit the classroom.
- There are no matches or candles in the classroom.

Have the students find and share other ways the school community could be better prepared.



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Materials

- Chalkboard and chalk or chart paper and markers
- Local street maps, 1 per group
- *Family Contact Plan*, 1 per student (Home Connection)
- *My Yellow Pages*, 1 per student (Home Connection)



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"Stay In Contact"

SET UP 10 minutes CONDUCT 55 minutes

Language Arts: Communication; Science: Health; Social Studies: Personal Responsibility and Community

TEACHING NOTE Before class, write the words "Emergency Communications" at the top of the chalkboard. Underneath, in separate columns, write "Communicate with Family" and "Communicate with Authorities."

1. Guide the students to list reasons they might need to communicate in an emergency situation. (Possible answers include—to let people know I'm safe; to find other family members if we're separated; to find out more about the situation; and to tell authorities about specific problems.) As students discuss the question, put the information in the correct column on the chalkboard.
2. Next to each reason, have the students discuss and list how this communication might occur. (Possible answers include—calling family members at emergency numbers; meeting family members; listening to radio for advisories from local officials; and calling 9-1-1.)
3. Divide the class into groups and give each group a large map of the city and several markers, a different color marker for each student. Have each student in the group mark the map to show some of the following points:
 - home
 - school
 - siblings' schools
 - parents' or guardians' workplaces
 - shops and restaurants
 - libraries
4. Have each group list facts based on the marks they put on the map. For example:
 - My family is in six different places while I'm at school.
 - One member of my family is on the road during most of the school day.
 - If you add all the miles between us, we are _____ miles apart during the day.
 - Since my dad works at home, we are only eight blocks apart during the day.



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5. Invite the groups to come back together and share their facts. What generalizations can they make about the ease or difficulty of communicating with family members in an emergency situation? What problems in communication might arise during an emergency? For example:

- Local telephone lines might be down.
- Cell phone systems might be overloaded or disrupted.
- Roads are closed and there's no way to get together with the family.
- Electricity is out and no one is sure when it will be restored.

Family members could be in so many different places that it would be difficult to let everyone know you are safe.



Wrap-Up

Have the students discuss how they would solve the problems presented. Based on the class discussion, students will determine that families must have a contact plan and the entire family must know how to follow it. Remind students that there are always communication disruptions during disasters, but when families are prepared, these disruptions are less worrisome.



Divide the class into small groups and provide just a few minutes to develop a list of the most important information to be included in a family contact plan—contact names, alternate contacts, contacts away from the emergency area, home and work phone numbers, cell phone numbers, e-mail addresses and meeting places.

TEACHING NOTE This contact plan is set up for family members to keep in touch with each other. Lesson Plan 3 in *Be Disaster Safe* can be used to help students call 9-1-1 or other authorities in case of an emergency.



Home Connection

It is important to have accurate and up-to-date information to help guide the students in contacting family in case of an emergency. Everyone in the family must know how to stay in touch. Distribute *Family Contact Plan* and *My Yellow Pages* to each student. Have students complete the activity sheets with their families as part of their family disaster plans.



Linking Across the Curriculum

Social Studies: Geography and Personal Responsibility

On a map of the United States, have the students find and mark where their out-of-town family contacts live. Ask the students to discuss—

- Does your contact live in a different time zone? What problems could this cause?
- Could the contact's city be experiencing the same emergency conditions? Why or why not?



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- What might be a backup plan if there's a problem getting in touch with the contact?
- What information would you leave on an answering machine?
- Is there a way to pick up information from that answering machine?

Social Studies: Mapping; Science: Technology; Mathematics: Measurement

For this activity you will need Internet access and a printer.



Use an Internet mapping program to help the students map routes throughout the community—

- From their homes to school
- From the school to their parents' workplaces
- From their siblings' schools to their school
- From the school to their outside-the-neighborhood family meeting place

Using these maps, have the students calculate distances and discuss barriers, such as bridges that might be unsafe during a flood or major intersections where traffic lights could be out because of power outages. Discuss distances and difficulties that might occur when family members are trying to meet during an emergency or after a disaster.

Challenge the students to use the maps to discover alternate routes from place to place and be able to describe them clearly in terms of miles, turns and landmarks.

Social Studies: Community; Language Arts: Research



Despite efforts to get together and stay together during a large disaster, often friends and family are separated and unsure of each other's safety. Ask an interested group of students to find out about the American Red Cross "Safe and Well List" at

<https://disastersafe.redcross.org/Default.aspx>. Have them report to the class on their findings via a roundtable discussion of the facts they have found.

Science: Technology and Physical Science; Language Arts: Research



Challenge interested students to conduct research to develop an informational brochure that explains why it is important to have at least one corded phone that plugs directly into the phone line.

The brochure needs to include the scientific differences between corded and cordless phones and why cordless phones cannot be used when the power is out.

"How Stuff Works" is an excellent online resource for this comparison.

- How Cordless Telephones Work
<http://www.howstuffworks.com/cordless-telephone1.htm>
- How Telephones Work
<http://www.howstuffworks.com/telephone.htm>



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Help Reduce Hazards

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Name _____

disaster, objects in your home can cause injury or damage. Anything that can move, fall, break or cause a fire is a home hazard.

Consider these points as you walk around your home and reduce the hazards:

Secure items that can shift or fall.

- ☐ Look in every room to see what could tip over or fall during an earthquake or if a child climbs on it.
- ☐ Attach tall furniture like bookcases and cabinets to wall studs.
- ☐ Secure televisions, computers and other heavy items to shelves or walls.
- ☐ Hang heavy objects, such as large pictures or mirrors, away from beds and chairs.
- ☐ Make sure that the water heater is strapped to studs.
- ☐ Install secure latches or locking devices on all cabinet doors.

Check for fire hazards.

- ☐ Keep lighters, matches and candles out of the reach of children.
- ☐ Keep space heaters and candles away from curtains and furniture.
- ☐ Never leave a lighted candle unattended or with children.
- ☐ Make sure that flammable items are away from heat sources—fireplaces, stovetops or lamps.
- ☐ Store hazardous and flammable materials on low shelves in locked cupboards, away from heat sources and children.





Help Reduce Hazards

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General safety:

- ☐ Keep hallways and stairs clear of obstacles to prevent tripping and to ensure easy evacuation.
- ☐ Keep electric cords and other obstacles away from evacuation paths.
- ☐ Make sure that there are two clear and safe exits from every room in your home.
- ☐ Place and maintain smoke alarms on each level of your home, inside and outside each bedroom and right outside the kitchen.
- ☐ Identify and secure any areas in your home that should be off-limits to children.
- ☐ Identify any areas outside your home that should be off-limits to children because of the danger of flood, flash flood or other hazards.

Keep this sheet as part of your family disaster plan.





Family Contact Plan

Page 1 of 1

Name _____

Staying in contact is part of any good family disaster plan. Go through the checklist below to make sure your family has correct information. Then, fill in *My Yellow Pages* with the names and numbers your family needs.

Everyone in our family knows—

- ☐ His or her full name, complete address, phone number and the nearest cross street to our home.
- ☐ The full name of our parent, guardian and/or adult caretaker.
- ☐ Our family's meeting places:
Outside our home (by a tree or streetlight) _____
Outside our neighborhood (at friend or relative's home) _____
- ☐ If there's an emergency, _____ will pick us up from school.
- ☐ Where I keep *My Yellow Pages*, all the important numbers I need to stay in contact. (backpack, school bag or wallet)

Everyone in our family understands—

- ☐ How to call 9-1-1 in an emergency. We know what a real emergency is. If there is a fire, we get out of the building BEFORE we call 9-1-1.
- ☐ Our family has a corded, touch-tone phone that does not require electricity, in case the power is out.
- ☐ We know that calling 9-1-1 from a cell phone means that the dispatcher may not have our location or be able to call us back. Even if our number has been cancelled or there are no more minutes in our plan, we can use a cell phone to call 9-1-1. The only thing to remember is to keep the cell phone charged—it won't work if the battery is dead.
- ☐ If there is an emergency during school, it could be quite awhile before someone from the family arrives. It's important to leave school only with adults designated on the school's emergency information sheet.
- ☐ If local phones don't work, our family will call our out-of-town emergency contact:

- ☐ If possible, and phones are not working, we can e-mail emergency contacts that are listed on *My Yellow Pages*.
- ☐ If the phones don't work, we need to be patient and remember that our family knows how to stay safe in an emergency.
- ☐ Everyone in the family must keep *My Yellow Pages* information up-to-date.

Keep this sheet as part of your family disaster plan.





My Yellow Pages

Page 1 of 1

Name _____

These are important phone numbers that all my family knows.

My emergency information

Name: _____ Phone: _____

Address: _____

Nearest cross street to my home: _____

Local emergency number is 9-1-1 or _____

Family members' contact information when I'm at school

Name: _____ Daytime Phone: _____

Cell: _____ E-mail: _____

Name: _____ Daytime Phone: _____

Cell: _____ E-mail: _____

Neighbor's, friend's or relative's contact information

Name: _____ Daytime Phone: _____

Cell: _____ E-mail: _____

Name: _____ Daytime Phone: _____

Cell: _____ E-mail: _____

Name: _____ Daytime Phone: _____

Cell: _____ E-mail: _____

Out-of-town contact's information

Name: _____ Daytime Phone: _____

Cell: _____ E-mail: _____

