

Sample Curriculum

Team SAFE-T

Grade 2

Lesson Plans and Activities
Developed for
Team SAFE-T

By

American Red Cross

Approved for Use in All
California Public Schools by the Board of Education

FIRE PREVENTION
AND SAFETY

K-2

LESSON PLAN

“Sound the Alarm ” Activity

“Call 9-1-1 ” Activity

KEY TERMS AND CONCEPTS

- fire alarm
- response
- rules
- escape plan
- escape route
- 9-1-1
- operator

PURPOSE

- To prepare the students to respond safely in case of fire.

OBJECTIVES

The students will—

- Practice responding to the sound of an alarm.
- List the rules of behavior for responding to an alarm.
- Set up and follow escape routes in response to an alarm.
- Practice calling 9-1-1 (or your area’s local emergency services number if it is not 9-1-1).

Teaching Note: It is critically important that your students and their families know how to call the fire department and other emergency services. In most areas of the United States, the emergency services telephone number is 9-1-1. If you live in an area that does not use 9-1-1, please make sure that your students memorize the local emergency services number and that you modify the lessons and activities to reflect the local number.

FIRE PREVENTION AND SAFETY K-2

“Sound the Alarm ” Activity

(set up: 5 minutes; conduct: 15 minutes)

Teaching Note: Before doing this activity, review your school’s procedures for evacuating. Doing this activity either soon before or soon after a school evacuation drill would increase the effectiveness of the activity.

1. Have the students talk about their experiences with fire alarms. How do they sound? Have different students try to sound like an alarm.
2. What do you do when you hear the alarm? As a class, review the rules for evacuating.

Answers will vary, but should include things like—

- Stop what you are doing.
- Be quiet and listen to the teacher for directions.
- Line up behind the teacher.
- Follow the steps for the school’s evacuation drill.
- Go to our assigned meeting place outside the building and stay there.

3. Discuss why the rules are important. Write the rules on the chart paper and post them for the students.

Teaching Note: Be sure to include and stress your school’s procedures for evacuating the building, going to the assigned meeting place outside, and accounting for every student by having the teachers take roll. Be sure to explain, that if the students are outside and the alarm goes off in the building, they should stay outside, go to their assigned meeting place, and stay there.

4. Tell the students that throughout the week you will ask different students to act like “alarms” for the class. Then, without telling the other students, ask one student to act like an alarm, either in the class or outside. When the “alarm” goes off, all the students should follow the evacuation drill procedures. Do this once or twice a day at different times and in different settings.
5. Explain to the students that their families should have rules about what to do at home if a smoke alarm goes off or if there is other reason to suspect a fire.

Materials: Chart paper and markers

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Wrap-up

Help the students transfer their concept of escape route to the route you take during emergency drills at school:

- Have them talk about the directions they follow to get out of the building when the fire alarm rings. Make sure they know where the emergency meeting place is outside. Work together to follow that route.
- Invite a school administrator to your class to discuss escape route plans for the school. If possible, the administrator should bring a large map of the school to show the students all the routes.
- Working with the administrator, discuss: Why is the route from their classroom the best escape route? Is it the fastest way outside? Does it have the fewest number of people in the hallways?
- Use the map to help the students find alternative routes in case their normal route is blocked. What is the second-best way out of the classroom? Why?

Home Connection

Encourage the students to talk with their families about the evacuation procedures they practiced at school. Have them find out what the procedures are at home. What are the two ways out of every room in their homes? Have them find out what the procedures are at family members' workplaces.

FIRE PREVENTION AND SAFETY K-2

“Call 9-1-1 ”Activity

(set up: 10 minutes; conduct: 30 minutes)

1. Help the students describe the correct sequence of events from the time they hear the alarm ring or when they realize there is a fire. You can create a flow chart of the process on the board as the students talk:

- Hear the alarm. (If you realize there is a fire, and no alarm is ringing, yell “fire.”)
- Stop what you are doing.
- Listen for directions if an adult is present.
- Follow the escape route.
- Go to the assigned meeting place.
- Call 9-1-1.

2. Work with the younger students to help them complete **Activity Sheet: Call 9-1-1**. You will need each student’s address from the school records. To help the students find cross streets, use a local road map.

Teaching Note: If the emergency number in your area is not 9-1-1, be sure to modify this activity and practice the correct number with your students.

Wrap-up

Using the completed activity sheet, have the students role play 9-1-1 calls using play phones or disconnected telephones. You or other students may take the role of the 9-1-1 operator.

Teaching Note: Be sure the students know that they should never “practice” calling 9-1-1 with a phone that is connected. Calling 9-1-1 is only for emergencies. To make sure that the students understand that calling 9-1-1 is not a game, tell them the story of “The Boy Who Cried Wolf.” Talk about the moral of the story and why it is so important to call for help only in an emergency. But, remember, if the students are in doubt about whether something is an emergency or not, they should call 9-1-1.

Home Connection

Send **Activity Sheet: Call 9-1-1** home with the students so all of their family members can practice.

Materials: Disconnected telephones or play phones & **Activity Sheet: Call 9-1-1**

Call 9-1-1

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Name _____

9-1-1 is the number to call when you need help in an emergency.

Step 1. Dial 9-1-1.

Step 2. When the operator answers, tell him or her what is wrong. Stay calm and speak slowly and clearly.

Step 3. Give the operator your complete address and the name of the cross street nearest to your home. If you live in an apartment building, tell the operator the name of the building.

Step 4. Tell the operator if anyone needs help.

Step 5. Answer all of the operator's questions as well as you can.

Step 6. Wait for the operator to hang up. Then, hang up and leave the phone line clear.

Note: The operators who answer 9-1-1 calls often ask the caller to stay on the line until emergency responders arrive. Always follow directions.

Call 9-1-1

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Directions: Work with your teacher to complete the form below so that you will be ready to call 9-1-1 in case of an emergency.

Name:

Address:

Nearest Cross Street:

Phone Number:

Note: Emergency call centers have very good equipment that usually shows the address of the phone that is used to call in. These centers may not be able to get location information if a cell phone is used. Regardless of what type of phone you are using, always give the complete street address and the cross street when you call 9-1-1.

FIRE PREVENTION
AND SAFETY

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LESSON PLAN 8

“Stop, Drop, and Roll ” Activity

“Crawl Low and Go ” Activity

“Review the Rules ” Activity

KEY TERMS AND CONCEPTS

- stop, drop, and roll
- smoke alarm
- outdoor meeting place
- evacuation drill
- escape route
- 9-1-1
- emergency
- fire extinguisher
- smoke
- flames
- heat

PURPOSE

- To help the students recognize and demonstrate fire safety rules and tools.

OBJECTIVES

The students will—

- Demonstrate “stop, drop, and roll” and “stay low and go” and identify when each is used.

“Stop, Drop, and Roll ” Activity

(set up: none; conduct: 15 minutes)

Teaching Note: Have the students practice one at a time or have them spread out in a large open area to avoid unintentional collisions due to enthusiastic rolling.

1. Discuss with the students possible ways clothing could catch fire. Explain that this is scary, but there are words they should remember:

- **STOP**—If you run, the fire will get bigger.
- **DROP**—Fall flat on the ground and cover your face with your hands to protect it.

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- **ROLL**—Keep your legs straight like a log and roll over and over to smother the fire.

2. In a large area of the classroom or on the playground, have the students practice "Stop, Drop, and Roll" until they are comfortable with it.

3. Gather the students together. Talk about how sometimes it is hard to remember rules if you are frightened. That is when you need a friend. Divide the students into pairs. This time, as they practice "Stop, Drop, and Roll," have one student pretend that his or her clothes have caught fire and he or she does not know what to do. Have the partner act as a buddy to help remember and act out "Stop, Drop, and Roll."

Teaching Note: Friends or bystanders are often the most helpful in a situation in which someone's clothing has caught fire. It is hard to remember the rules when you are frightened, no matter what age, but especially when you are young.

"Crawl Low and Go " Activity

(set up: 5 minutes; conduct: 20 minutes)

1. Tell the students that smoke rises and then "banks down," so the safest place to be in a room full of smoke is close to the floor.
2. Instruct four students to stand and hold the edges of a large blanket or sheet about four feet from the floor. The sheet represents smoke.
3. Have the other students sit under the sheet.
4. Have the standing students lower the sheet over the sitting students—just as smoke would bank.
5. Then have the students under the sheet crawl quickly on their hands and knees to escape, trying not to touch the sheet.

Materials:

- 1 or 2 large blankets or sheets
- Chart paper and markers

“Review the Rules ” Activity

(set up: none; conduct: 15 minutes)

1. Work with the students to make a list of Fire Safety Rules. Write these on chart paper that can be posted as appropriate on a Fire Safety Bulletin Board. Examples:

RULES

- Plan two ways out of each room.
- If you see smoke or fire in your first escape route, use your second way out.
- If you must exit through smoke, crawl low under the smoke to your exit.
- “Crawl Low and Go.”
- If a closed door feels warm, do not open it. Escape using your second way out.
- Get out fast—do not hide.
- Do not take time to pick up belongings or find pets.
- Call 9-1-1 from outside of your home.
- Know the location outside of your home where everyone will meet after escaping.
- Once you are out, stay out!

TOOLS

- Working smoke alarms should be inside and outside of each sleeping area, right outside the kitchen, and on each level of your home.
- For each smoke alarm, the test button should be used once a month and the batteries changed at least once a year.
- Learn how to crawl under smoke.
- Practice evacuation drills at school and at home.
- Know how to call 9-1-1.

2. Use this list as a reminder of fire safety. Add new ideas as students find out more information.

Wrap-up

Guide the students to practice “crawl low and go” at different intervals during the school day. Call out one to two names and then call out a scenario, such as “You’re in a smoke-filled room and need to get to the exit.”

Materials:

- **Activity Sheet: Fire Safety**

Fire Safety

Name _____

Directions: Work with all of your family to answer these questions.

Think About It

1. Do you regularly check your home for fire hazards?
2. Do you have smoke alarms on every level of your home, inside and outside all sleeping areas, and right outside the kitchen?
3. Do all members of the family know what your smoke alarms or building fire alarms sound like?
4. Do you test and clean your smoke alarms monthly?
5. Do you change your smoke alarm batteries once a year?
6. Is there at least one fire extinguisher in your home and does everyone old enough know how to use it?
7. Does your family have a fire escape plan posted in full view?
8. Does everyone know two ways out of every room in your home?
9. Does everyone know what "crawl low and go" means?
10. Does everyone know to get out quickly and stay out?
11. Does everyone know NOT to hide in case of fire?
12. Is everyone aware of where the family meeting place is outside of your home?
13. Does everyone in your family know how to call 9-1-1 after safely getting out of your home?
14. Has your family practiced a fire drill at home in the last six months?
15. When you have visitors, do you show them the fire escape plan and make sure they understand the rules?
16. If babysitters come to your home, do you instruct them in what to do in case of fire?

Background for the Teacher

Fire prevention and preparedness education can decrease the number of harmful fires and lessen the adverse effects of fire on young children and their families. Your role in providing students and their families with information about fire and with messages about how to prevent fire and what to do if one occurs is vitally important. With this Fire Prevention and Safety curriculum, you can help your students and their families stay safe.

WHY TALK ABOUT FIRE?

Residential fire is the fifth leading cause of unintentional death due to injury in the United States. Fires and burns also rank as the number one cause of residential death for children under the age of 15.

Roughly 85 percent of all fire deaths occur in residential structures, such as homes, dormitories, barracks, and hotels. The majority of fatal fires occur at night when people are likely to be less alert. Nearly one-half of reported residential fire deaths occur between 11:00 p.m. and 6:00 a.m.

Most structure fires are preventable, including arson fires. More than half (54 percent) of the people arrested in 1999 for arson were under 18 years of age. With education and counseling, fire-setting behavior can be prevented or deterred.

According to the National Fire Protection Association (NFPA), in the year 2002, 2,670 people died in reported home fires in the United States—roughly seven people per day. In addition, thousands of people were injured, many of them hospitalized for severe burns and some disfigured for life. Victims are disproportionately young children or older adults. One-third of the fire-related deaths of young children result from children playing with fire.

In residential fires, asphyxiation kills nearly five times more people than burns. Fire consumes the oxygen in the air, while increasing the concentration of deadly carbon monoxide and other toxic gases in the atmosphere. Inhaling carbon monoxide can cause loss of consciousness or death within minutes.

The heat from a fire exceeds anything to which a person is normally exposed. A fully developed room fire has temperatures over 1,100° F (593° C).

FACTS ABOUT FIRE

Fire is uncontrolled burning. All fires start with ignition, which occurs when sufficient levels of fuel, heat, and oxygen exist simultaneously. Ignition occurs when the temperature rises high enough to produce a flame. A chemical reaction takes place when the “fire triangle” of oxygen, fuel and heat is present.

Any combustible/flammable substance is considered to be a fuel. Fuels come in many forms:

- Gases (for example, methane, propane) are the easiest to burn because gas and oxygen can mix easily, and the resulting heat from combustion leads to further burning.
- Liquids (for example, gasoline, diesel fuel, kerosene) ignite above the surface of the fuel in the vapor created when heat is applied.
- Solids (for example, wood, coal, plastics, paper, cotton) burn when heat from a fire decomposes the fuel into vapor that mixes with oxygen.

Fuels are everywhere in our homes—in bedding, furniture, curtains, walls, floors, etc. When all the fuel is used up, a fire will go out.

Oxygen must be present for combustion to occur. A colorless gas, oxygen comprises nearly 21 percent of Earth’s atmosphere. The combustion of fuel and oxygen gives off heat. More available oxygen accelerates combustion. If the oxygen is removed, the fire will go out.

Heat is essential to fire, and it must be high enough to spark ignition. During a fire, heat moves away from the flame and into an adjacent area where there is fresh fuel. Remove the heat and the fire will go out.

Principles of physics, chemistry, and fluid flow are at work in fire. Smoldering occurs when burning is slow, without flames. When burning is extremely fast, as when a gas leak mixes with air, an explosion can occur. Fire that is burning faster than smoldering, but slower than an explosion, is a flaming fire. A continuous chemical reaction between particles of fuel and oxygen, fire spreads because of heat transfer. The chemical reaction will cease and the fire will go out if the fuel or heat or oxygen is removed.

Heat transfer—the movement of heat—is important in a fire. Movement occurs in three ways: conduction, convection, and radiation.

- Conduction—Heat is transferred through a solid surface from a heated to an unheated area (for example, a hand touching a hot solid surface).
- Convection—Heat is transferred by moving particles of liquids or gases, from a heat source to a cooler area (for example, heat from boiling water in a flow of steam).

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- Radiation—Heat is transferred by electromagnetic waves (for example, heat from a space heater that can be felt without touching the heater).

During a fire, a plume of hot, smoky air rises from the flames. In an enclosed space, like a room, hot smoke transfers heat to the ceiling and walls by convection. The fire radiates heat to other parts of the room. Hot smoke radiates heat downward toward the floor and the entire room is involved very quickly.

As the smoky gas layer becomes hotter, it radiates more and more heat to the rest of the materials in the room and everything that can burn suddenly ignites. This is called flashover. At this point, the fire spreads to other rooms and is extremely difficult to control.

FIRE PREVENTION

Home fires are almost always preventable. Everyone must constantly be aware of the possibility of fire in the home and take positive measures to practice fire prevention daily. Children must know that matches and lighters are tools for adults. (Research by the National Fire Protection Association (NFPA) shows that children associate tools with adults.) Instruct children to tell an adult right away if they find matches or lighters or see someone playing with fire, matches, or lighters.

Children should also know that candles are a frequent cause of devastating fires in homes. Candles must be kept well away from any combustible/flammable items or materials and must never be left unattended. The increasing popularity of candle usage has led to a dramatic increase in the number of tragic fires. In case of a power outage, families should use flashlights for emergency lighting, not candles.

Fire Safety Checklists, which are specific to homes and individual rooms in the home, can be found at the end of this Background for the Teacher section. You may want to duplicate them for use in the classroom or send them home with your students.

ABOUT FIRE PREPAREDNESS

1. Develop a Family Disaster Plan

- Install and maintain smoke alarms inside and outside each sleeping area, right outside the kitchen, and on each additional level of your home, in accordance with local codes. Smoke alarms cut *nearly in half* your chances of dying in a home fire. Smoke alarms sense

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abnormal amounts of smoke or invisible combustion gases in the air. They can detect both smoldering and flaming fires. The National Fire Alarm Code® (NFPA 72) now requires hard-wired smoke alarms in new homes (both apartments and houses).

- Install carbon monoxide (CO) alarms following the manufacturer's instructions. It is especially important to have one near sleeping areas. Test and maintain them according to directions.
- Draw a floor plan of your home; mark two fire escape routes for each room. In thick, heavy, dark smoke it is easy to become disoriented. Creating a floor plan with two exits from each room greatly helps everyone understand the safest routes during an emergency.
- Consider escape ladders for sleeping areas on the second or third floor. Learn how to use them, and store them near the window. If smoke or fire blocks the main escape routes via stairs, the windows may be your only alternative. Escape ladders permit quick exits, reducing time spent in toxic environments.
- Burglar bars and locks that block outside window entry must be easy to open from the inside. If a key is required to open bars or locks, keep one near each window to use for escape. Quick-release devices are available for security bars. If smoke or fire blocks the main exit, you must be able to use alternative routes quickly. Fire deaths have occurred when people were trapped by security bars and were unable to get out while firefighters were unable to get in.
- Select a safe outside place for everyone to meet after escaping from a fire. Make sure it will be a safe distance from heat, smoke, and flames. Family members may use different escape routes, exiting on different sides of the home. Gathering at a specific meeting place right outside your home will quickly let you know who is out, and allow you to advise firefighters of who may need help and their probable locations inside.
- Conduct a home fire drill at least twice a year with all members of your family. Fires produce thick, dark smoke that irritates the eyes and breathing passages and can cause confusion. Practicing your plan makes your response more automatic, requiring less thinking and saving precious time during an emergency situation.
- Practice alerting other family members. Yell "Fire!" several times during your escape. In a real fire this will alert family members to get out.
- Practice a crawl-low escape from your bedroom, as if you were crawling under a layer of smoke. Fires produce many toxic gases. Some are heavy and sink low to the floor; others rise, carrying soot toward the ceiling. Crawling with your head at a level of one to two feet above the ground will provide the best air. Close doors behind you.

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- Practice evacuating blindfolded. In a real fire situation, the amount of smoke generated by a fire will most likely make it impossible to see.
- Learn to call 9-1-1 or your local emergency services number. After evacuating, you will need to call this number from a payphone, a cell phone, or a neighbor's phone.
- Teach family members to get out first, and then call for help from a neighbor's home or outside phone. Get out of your home, away from toxic smoke and gases. Use your neighbor's phone, a cell phone, or a pay phone.
- Teach children that it is a firefighter's job to rescue people and pets, not theirs. Their job is to get out quickly and stay out.
- Teach family members to tell the responding firefighters where they think their pet is. In many cases, pets are able to get out on their own. Only trained firefighters, who have proper breathing apparatus and protective clothing, should go into a burning or smoky building.
- Practice getting out of your home during the day and night. Fire can happen at any time. Practicing your routes at night will help you move more quickly should a fire strike in the dark.
- Remember, in case of a real fire, once you are out, stay out.
- Discuss fires with your family. All family members should know what to do in case they are not together. Discussing disaster ahead of time helps reduce fear and lets everyone know how to respond during a fire. Not discussing fires and other disasters in advance can lead to confusion during an emergency and more long-term emotional problems afterward. Develop a contact plan to use in case your family has a fire while a family member is out of town.

2. Protect Your Property

Install and maintain fire-prevention and fire-suppression equipment in your home.

- Smoke Alarms

Install smoke alarms inside and outside each sleeping area, right outside the kitchen, and on each level of your home, in accordance with local codes. If fire occurs inside the sleeping area, dangerous gases can cause deeper sleep. Smoke alarms inside the sleeping area will be more likely to wake you.

To maintain smoke alarms, vacuum cobwebs and dust from the mechanisms once a month.

Push the test button on each alarm once a month to make sure the alarm is working. If necessary, replace the batteries immediately. The test feature tests

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all electronic functions, and it is safer to use the test feature than to test the alarm with a controlled fire (matches, lighters, cigarettes).

Make sure children know what your smoke alarm sounds like.

If you have battery-powered smoke alarms, replace the batteries at least once a year. Some agencies recommend that you replace batteries when the time changes from standard to daylight savings each spring and then back again in the fall: "Change your clock, change your batteries." Replacing batteries this often certainly will not hurt; however, data show that batteries will last at least a year, so more frequent replacement is not necessary. Also, Arizona, Hawaii, the eastern portion of Indiana, Puerto Rico, American Samoa, and Guam use daylight savings time.

Replace your smoke alarms every 10 years, as jointly recommended by the National Fire Protection Association, the U.S. Consumer Product Safety Commission, and the American Red Cross. Smoke alarms become less sensitive over time.

- Carbon Monoxide (CO) Alarms

Install carbon monoxide (CO) alarms following the manufacturer's instructions. It is especially important to have one near sleeping areas. Test and maintain them according to the manufacturer's instructions.

- Fire Extinguishers

Fire extinguishers are recommended for fire suppression at home. Consider having one or more in your home. All portable fire extinguishers for home use are now rated A-B-C, which means they can be used for different kinds of fires (wood, paper, grease, and electrical).

Get training from the fire department or the fire extinguisher manufacturer in how to use your fire extinguisher. Fire extinguishers from different manufacturers operate in different ways. Unless you know how to use your extinguisher, you may not be able to use it effectively. There is no time to read directions during an emergency. Only adults should handle and use extinguishers.

Install extinguishers high on the wall, near an exit, and away from heat sources. Extinguishers should be easily accessible to adults trained to use them and kept away from curious children. Heat may make the contents less effective or cause the extinguisher to lose its charge more quickly.

If you try to use a fire extinguisher on a fire and the fire does not die down immediately, drop the extinguisher and get out. Most portable extinguishers empty in 8 to 10 seconds.

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Look at your fire extinguisher at least once a year to ensure that it is properly charged. It will not work properly if it is not charged properly. Use the gauge or test button to check proper pressure. Follow the manufacturer's instructions for replacing or recharging your fire extinguisher. If the unit is low on pressure, damaged, or corroded, replace it or have it professionally serviced. Small fire extinguishers are designed for one-time use and cannot be recharged.

- Home Fire Sprinkler Systems

Home fire sprinkler systems complement the work of smoke alarms in the home, providing a way to fight flames immediately. In less time than it would take the fire department to arrive on the scene, home fire sprinklers can contain and even extinguish a fire, decreasing damage and the chance that deadly smoke and gases will reach you.

Sprinkler systems can also put out a fire when you are away from home, and, if they are connected to an alarm system, they could be set up to notify the fire department or an alarm monitoring service in case of fire.

Contrary to a popular myth, it is not true that if one sprinkler goes off, they all do. Each sprinkler head has an independent "fusible link," which melts at approximately 135° F (57° C). When a link melts, water comes out of its sprinkler. In most home fires, one or two sprinkler heads can control a fire.

IF A FIRE OCCURS

If you are in a burning house or building, implement your escape plan immediately. Get out as quickly and as safely as possible. The less time you are exposed to poisonous gases, the safer you will be.

- Use stairs or a fire escape. Do not use an elevator. Stay calm. Take responsibility. Go outside to your family meeting place.
- If you are escaping through a closed door, feel the door with the back of your hand before opening the door. If it is cool and there is no smoke at the bottom or top, open the door slowly. If you see smoke or fire beyond the door, close it and use your second way out. If the door is warm, use your second way out. It is a natural tendency to automatically use the door, but fire may be right outside. Feeling the door will warn you of possible danger.
- If you see smoke or fire in your first escape route, use your second way out. The less time you are exposed to poisonous gases or flames, the safer you will be.
- If you must exit through smoke, crawl low under the smoke to your exit. Fires produce many poisonous gases. Some are heavy and sink low to the floor; others rise carrying soot toward the ceiling. Crawling with your head at a level of one to two feet above the ground will provide the best air.
- Close doors behind you as you escape to delay the spread of the fire.
- If smoke, heat, or flames block your exit routes and you cannot get outside safely, stay in the room with the door closed. Open the window for ventilation and hang a bright-colored cloth or sheet outside the window so firefighters can find you. Wait by the window for help. The first thing firefighters do when they arrive at a fire is check for trapped persons. Hanging a sheet out lets them know where to find you. If there is a phone in the room, call 9-1-1 or your local emergency services number and tell the operator your situation and location.
- Once you are out, stay out!
- If someone is still inside, direct the firefighters to that person's probable location. You may also tell them about any pets that may still be inside. Firefighters are trained and equipped to enter burning buildings, you are not.
- Get out first, away from toxic smoke and gases, then call 9-1-1 or your local emergency services number. Use your neighbor's phone, a cell phone, or pay phone to call for help.
- Give first aid where needed after calling 9-1-1 or your local emergency services number. People who are seriously injured or burned should be transported to professional medical help immediately.

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- Stay out of fire-damaged homes until local fire authorities say it is safe to re-enter. Fire may have caused damage that could injure you or your family. There may be residual smoke or gases that are unsafe to breathe.
- Look for structural damage. Fire authorities may allow you to re-enter, but they may not have completed a thorough inspection. Look for damage that will need repair.
- Check that all wiring and utilities are safe. Fire may cause damage to inside walls and to utility lines not normally visible.
- Discard food that has been exposed to heat, smoke, or soot. The high temperatures of a fire and its by-products can make food unsafe.
- Contact your insurance agent. Take inventory before you discard damaged goods. Save receipts for money you spend relating to fire loss. Your insurance agent may provide immediate help with living expenses until you are able to return home and may also offer assistance for repairs.
- Remember that there are many resources to help you cope with your feelings after a fire. You may feel sadness, fear, and anxiety because of burns and injuries, loss of your personal belongings, and/or damage to your home. Explore your feelings about what has happened.
- Work with your family to make a plan to replace belongings lost to fire and smoke.
- Talk with your family, friends, clergy member, or school counselor about how to go on with your daily life, how to deal with your losses and/or injuries, and any other concerns you have.
- Investigate resources in your community that will help you return your life and your home to normal: your Red Cross chapter, other community disaster agencies, religious institutions, commercial businesses, and contractors, such as smoke-removal companies.

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IMPORTANT INFORMATION TO EMPHASIZE WITH CHILDREN

- Practice stop, drop, and roll. If your clothes catch on fire, know how to stop, drop, and roll. Stop what you are doing, drop to the ground, cover your face, and roll back and forth until the flames go out. DO NOT RUN—running makes the fire burn faster. (Note: Children tend to confuse this message with the “crawl low and go” message about how to exit a burning building. Make sure they understand that “stop, drop, and roll” is to be used only when clothing catches on fire.)
- Practice “crawl low and go.” If you must escape through smoke, crawl low, under the smoke. Fires produce many poisonous gases. Some are heavy and sink low to the floor; others rise, carrying soot toward the ceiling. Crawling with your head at a level of one to two feet above the ground will provide the best air. Close doors behind you.
- Practice getting out as safely and quickly as you can. The less time you are exposed to poisonous gases, heat, or flames, the safer you will be.
- Practice going to your family meeting place and then choosing one person to call 9-1-1 or your local emergency services number. Gathering in a specific location right outside your home will quickly let you know who is outside and allow you to tell firefighters who is still inside and their probable locations.
- Memorize the number to call in a fire or other emergency (9-1-1 or your local emergency services number).
- Remember, in a real fire, once you are out, stay out.
- It is a firefighter’s job to rescue people and pets, not your job. (Note: Often, children are concerned about the safety of their pets, so discuss this issue before a fire starts. In many cases, pets are able to get out on their own. Only trained firefighters, who have proper breathing apparatus and protective clothing, should go into a burning or smoky building.)
- Firefighters are our friends, and they will help in case of a fire. (Note: A firefighter wearing full protective gear can look frightening, and, if children do not know who is under all that equipment, they may try to hide from a firefighter during a fire. A visit to a fire station can help ease children’s fears.)

Attribution: Fire safety content above derived from *Talking About Disasters: Guide for Standard Messages*, produced by the National Disaster Education Coalition, Washington, D.C. The specific contributors of fire safety information include the American Red Cross, National Fire Protection Association, U.S. Fire Administration, and U.S. Consumer Product Safety Commission.

Fire Safety Checklists

THROUGHOUT THE HOME

- ❑ Install smoke alarms inside and outside each sleeping area, right outside the kitchen, and on each level of your home.
- ❑ Test smoke alarms once a month by pushing the test button on each alarm. If it does not work, replace the battery and test again. If it still does not work, replace the alarm.
- ❑ Clean dust and cobwebs away from smoke alarms monthly.
- ❑ Replace the battery in all smoke alarms at least once a year.
- ❑ Replace smoke alarms that are 10 or more years old.
- ❑ Install carbon monoxide (CO) alarms following the manufacturer's instructions. It is especially important to have one near sleeping areas. Test and maintain them according to directions.
- ❑ Draw a floor plan for each level of your home. Pick two ways out of each room. Practice escaping from each room twice a year.
- ❑ Post emergency numbers for local emergency services (usually 9-1-1) and the Poison Control Center (1-800-222-1222) near each telephone in your home.
- ❑ Plug only one plug into each electric outlet. Use only electrical equipment that is listed by Underwriter's Laboratories (UL) or Factory Mutual (FM).
- ❑ Keep electrical appliances, sockets, and cords dry and away from water. When electrical appliances, sockets, or cords get wet, circuits can become overloaded and spark, creating a fire.
- ❑ If you must use an extension cord, use one that is rated for what it will be bringing power to—check the ratings on the cord and on the equipment or lights it is powering. Cords with higher AWG (American Wire Gauge) ratings, such as #12 or #14, are preferred.
- ❑ Run extension cords only on top of floors and carpets—not under them.
- ❑ If an adult smokes, urge smoking outdoors only. If someone smokes indoors, provide large and deep ashtrays. Make sure all smoking materials are extinguished before leaving the room.

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- ❑ Matches and lighters are tools for grownups. Keep these things on high shelves, away from where young children could reach them.
- ❑ Keep combustible/flammable items and materials, such as curtains, chairs, firewood, aerosols, at least three feet away from stoves, wood stoves, portable space heaters, furnaces, hot water heaters, clothes dryers, etc.
- ❑ Check upholstered furniture after parties for ashes that could be slowly smoldering and cause a fire later.
- ❑ Keep flammable liquids, such as gasoline or kerosene, in appropriately marked safety containers outdoors, preferably in a locked shed. If they must be stored indoors, keep them away from any source of flame, such as a hot water heater or furnace. Make sure that children cannot get to them.
- ❑ Have the heating system checked by a professional once a year to make sure it is in proper working order.
- ❑ Have chimney(s) and flue(s) inspected once a year by a professional and cleaned as recommended.
- ❑ Use a metal container with a tight-fitting lid for fireplace ash removal.
- ❑ Use flashlights for emergency lighting if you lose power. Do not use candles.
- ❑ If you use candles for decorative purposes, make sure that a responsible adult is in the room at all times when the candles are lighted and that the candles are extinguished before the last adult leaves.

KITCHEN

Follow all of the “Throughout the Home” recommendations plus:

When cooking . . .

- ❑ Turn pot handles inward so they will not be easily grabbed by small children or knocked over.
- ❑ Wear short sleeves or tight sleeves. Long, loose sleeves can catch fire.
- ❑ Keep items that could attract children, such as cookies or candy, away from the stove.

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- ❑ Stay in the kitchen when food is on the stove. If you have to leave for a minute, take a cooking spoon with you and hold it in your hand. This will remind you that you need to get back to the kitchen quickly.
- ❑ Use only microwave-approved containers inside a microwave—never anything made of metal or that has metal on it.

Generally in the kitchen . . .

- ❑ Keep storage areas above, below, and near the stove free of flammable/combustible items, including rags, paper towels, cleaning products, and aerosols.
- ❑ Keep appliances, like a toaster, blender, and food processor, unplugged when not in use.
- ❑ Keep a charged fire extinguisher in the kitchen. Responsible members of the family should get training from the fire department or the manufacturer in how to use it.

FAMILY/LIVING ROOM

Follow all of the “Throughout the Home” recommendations plus:

- ❑ Maintain open spaces around electronics, such as televisions, CD players, VCRs, and receivers, so they can stay cool. Do not block the air vents of these devices by placing newspapers, television listings, or other things on top of them.
- ❑ If you have a wood stove—
 - Make sure that the wood stove is installed following existing building codes and manufacturer’s instructions.
 - Check the chimney and stovepipe frequently during the heating season for creosote buildup, and clean them when necessary.
 - Keep combustible/flammable items and materials at least three feet away from the stove.
 - Use only the fuel specified for the wood stove.
 - Use a metal container with a tight-fitting lid for ash removal.
- ❑ If you have a fuel-burning heater, such as a kerosene heater—
 - Use only the proper fuel, such as K-1 kerosene.
 - Place the heater out of the path of traffic areas, such as doorways or hallways.
 - Store kerosene outdoors.
 - Use the heater in well-ventilated rooms only.

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- Turn off the heater while sleeping and make sure that someone is in the room when it is operating.
 - Keep the heater at least three feet away from combustible/flammable items or materials.
 - Dry wet clothing on a line or in a dryer, not on the heater.
- If you have a portable electric space heater—
- Keep the heater at least three feet away from combustible/flammable items or materials.
 - If you must use an extension cord, make sure it is marked #12 or #14 AWG (American Wire Gauge).
 - Place the heater on the floor.
 - Turn off the heater when people leave the room or are sleeping.

BATHROOM

Follow all of the “Throughout the Home” recommendations plus:

- Keep electric appliances, such as hair dryers and curling irons, unplugged when not in use.
- If you have a heat lamp, make sure that it is in good working order and the bulb is kept clean. Turn it off when no one is in the bathroom.
- If you have a portable heater in the room, keep combustible/flammable items and materials, such as towels, curtains, rugs, and aerosols, at least three feet away.

BEDROOM

Follow all of the “Throughout the Home” recommendations plus:

- Never smoke in bed. Smoking in bed leads to many home fires.
- Keep portable space heaters at least three feet away from bedding and other combustible/flammable items and materials.
- If you use an electric blanket, make sure it is turned off when you get out of bed.

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GARAGE, LAUNDRY ROOM, BASEMENT, UTILITY AND STORAGE AREAS

Follow all of the "Throughout the Home" recommendations plus:

- ❑ Dispose of trash and newspapers. Do not store them near a furnace, water heater, or other heat source.
- ❑ Store rags that have oil or grease on them in labeled and sealed non-glass containers (preferably metal).
- ❑ Have an electrician determine if fuses or circuit breakers are sufficient for your home's power needs. Have a professional replace or upgrade the system if necessary.
- ❑ Keep flammable liquids away from any source of heat or flame.

EARTHQUAKES

K - 2

“What Should I Do?” Activity

(set up: 5 minutes; conduct; 25 minutes)

1. Ask the students if they would know what to do if an earthquake started right now. Allow them to give answers.
2. Explain and demonstrate to the students the Drop, Cover, and Hold On procedure. This may be new, or they may have learned it incompletely.

Teacher Note: The point of Drop, Cover and Hold On is to take cover immediately in the closest, safest place. (For example, under a desk at school; under a sturdy table at home; against an interior wall in an office building. If you are in bed, stay there and protect your head with a pillow.)

3. Explain to the students that in the event of an earthquake they should-
 - **DROP:** Get under a desk or table, positioning as much of their body as possible under cover.
 - **COVER:** Cover their eyes by leaning their face against an arm as they hold on.
 - **HOLD ON:** Hold on to a leg of the desk or table. (Their hands should be about halfway between the floor and the top of the desk or table.)
4. Explain to the students that you want them to practice when you say “Drop, Cover and Hold On.”
5. Have the students drop. Keep them quiet. Once they have mastered the position, you (the teacher) should drop.

Teacher Note: The teacher should Drop, Cover and Hold On during every drill.

6. After 15 to 30 seconds in place, ask them to get up carefully and check themselves and their neighbors. Ask, “Is everyone all right?” Wait for their answers and look around to visually check the students and the room. Wait for composure.
7. Repeat the drill until the students have mastered it.

Home Connection

Distribute the Activity Sheet and have the students take the pictures home, color them and discuss and practice the procedure with their family. The next day in class, ask them to share their experiences practicing the procedure with their family.

Wrap Up

In the days following the activity, explain to the students that you may without warning say "Earthquake," and both teacher and students should implement the procedures learned here.

Hazard Hunt

Key Terms and Concepts

Hazard

Debris

Purpose

To have the students and their family identify conditions that increase hazards during an earthquake.

Objectives

Students will -

- Identify earthquake hazards in their classroom.
- Identify earthquake hazards in their home.

Activity

- "Hazard Hunt"

(set up: 10 minutes; conduct: 35 minutes)

1. Ask the students what they think harms people when an earthquake occurs. Allow them to express their ideas. After some discussion, tell the students that the movement of the ground during an earthquake seldom directly causes people to get hurt. Explain to them that most people are hurt from things falling on them.
2. Ask the students if they know what the word *hazard* means. (A source of danger.) After allowing them to give answers, explain the meaning of *hazard* and how it related to earthquakes.
3. Ask the students to help you make a list of the types of hazards that can result from an earthquake. As the students give you their ideas, write them on the chalkboard. Guide the students' responses towards the following:

Danger that can occur inside and outside of buildings:

- Falling brick from walls and chimneys.
- Falling roof shingles.
- Falling glass from broken windows.
- Collapsing walls.

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- Falling pieces of ceiling and light fixtures.
- Overturnd bookcases, furniture, and appliances.
- Falling objects from shelves and walls.

Other types of damage that can occur:

- Fires from broken gas lines and electrical wires.
- Flooding from broken water pipes.
- Toxic fumes from spilled chemicals.

Damage that can occur in and around the community:

- Downed power lines.
- Damage to bridges, highways and railroad tracks.
- Flooding from dam failures, damage to reservoir and water towers.
- Fires from spilled gasoline and other chemicals.
- Landslides.
- Water sloshing in pools, ponds, etc.

4. Explain to the students that there may be some hazards that we cannot correct. However, most can be corrected and fixed.
5. Distribute Activity Sheet: Classroom Hazard Hunt
6. Explain to the students that the picture contains many potential hazards. Have the students circle the hazards in the picture.
7. After the students have identified the hazards in the picture, review the items they circled to make sure they found all of the hazards shown.

(Activity Sheet Answers: Cabinets, bookcases, and wall shelves not secured to structural support. Heavy objects on shelves above the heads of students. Aquariums and other potentially hazardous displays located near seating areas. Unreinforced hanging light fixtures. Computer monitor, television and video/dvd recorders not fastened to stable platforms and on rolling carts without lockable wheels. Piano that is not secured against rolling. Wall mountings that are not secured to prevent them from swinging free. Hanging plants that are not in lightweight, unbreakable pots and are not fastened to closed hooks.)

8. Ask the students to examine their own classroom. Ask them to imagine what would happen if they picked up the classroom and shook it. What hazards can they find? Explain to the students that they are going to play a game called Hazard Hunt. Tell them that the hunt will be in the classroom and they are to identify things that might hurt them during an earthquake.

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9. Allow the students to walk around the room to search for hazards.
10. If appropriate, allow the students to correct the hazard (that is, to remove boxes and stored items from the top of a cabinet, tie cupboard doors shut, etc.)

Teaching Note: You may wish to help the students correct certain hazards or invite the custodian to bolt the bookcases to wall studs.

Home Connection

Explain to the students that they are going to conduct a home hazard hunt. Distribute Activity Sheet: Home Hazard Hunt.

Discuss each of the pictures with the students and ask them why the item pictured could be a hazard.

Explain to the students that-

- The activity sheet includes some, but not all, of the possible home earthquake hazards.
- Their home may not have all of the hazards shown on the activity sheet.

Go over the directions with the students so that they what they must do when they get home. Remind the students that they will need an adult at home to help them complete this worksheet.

Wrap Up

Have the students bring their completed Home Hazard Hunt activity sheet back to class. Discuss and list the hazards they found. Challenge the students to brainstorm ways to correct the hazards. If the adults at home are unwilling or unable to correct the hazards, acknowledge that some corrections are difficult to make. Also, sometimes people deny that there is a risk. Brainstorm about what students can do on their own and how they might overcome denial of facts.