

Working Smoke and CO Alarms: The Save of a Lifetime

Overview

Task Context

Students will learn about the importance of installing and maintaining smoke and carbon monoxide alarms in the home.

Description

Students will draw a plan of their home indicating where smoke alarms are located. Discussion will establish the importance of installing and maintaining the alarms in their homes.

Expectations

Grade 4	Grade 5	Grade 6
<p>4p3 • use living skills to address personal safety and injury prevention;</p> <p>4e27 • read a variety of fiction and non-fiction materials (e.g., short novels, myths, biographies, short articles) for different purposes;</p> <p>4e29 • read independently, using a variety of reading strategies;</p> <p>4e56 • contribute and work constructively in groups;</p> <p>4e66 • listen to others and stay on topic in group discussion;</p>	<p>5p3 • apply strategies to deal with threats to personal safety (e.g., in response to harassment) and to prevent injury (e.g., from physical assault);</p> <p>5e22 • read a variety of fiction and non-fiction materials (e.g., novels, short stories, biographies, editorials) for different purposes;</p> <p>5e24 • read independently, selecting appropriate reading strategies;</p> <p>5e49 • contribute and work constructively in groups;</p> <p>5e61 • contribute ideas to help solve problems, and listen and respond constructively to the ideas of others when working in a group;</p>	<p>6p3 • use basic prevention and treatment skills (e.g., basic first aid) to help themselves and others;</p> <p>6e23 • read a variety of fiction and non-fiction materials (e.g., novels, short stories, poetry, myths, articles) for different purposes;</p> <p>6e25 • read independently, selecting appropriate reading strategies;</p> <p>6e48 • ask and answer questions to obtain and clarify information;</p> <p>6e51 • contribute and work constructively in groups;</p>

Groupings

Students Working As Whole Class

Students Work in Small Groups

Teaching / Learning Strategies

Discussion

Guided Reading

Notes to Teacher

The following materials will be needed:

- pencils
- blank floor plan grid (1 or 2 blank floor plan grids per student)
- copies of one of the Information Sheets provided (one per group of 4 or 5 students)
- copies of the Summary Sheet for Group Work (one per student)

Teaching / Learning

1. Teachers ask students to use the blank floor plan grid provided to draw floor plans of their homes indicating where smoke alarms and carbon monoxide alarms are located.
2. Teachers divide the class into groups of 4 or 5 and ask students to share and compare their drawings and the information about alarms in their homes.
3. Teachers ask each group to come to a consensus about the correct placement of smoke and CO alarms.
4. Each group shares their conclusion with class.
5. Teachers provide each group with a copy of either the information sheet, "Working Smoke Alarms Save Lives" or "Carbon Monoxide Safety".
6. Each groups reads their information sheet and completes the summary sheet provided.
7. Groups that read about smoke alarms are paired with groups that read about carbon monoxide alarms to share information.
8. Teachers lead a discussion about the importance of installing and maintaining both types of alarms.
9. Teachers and students discuss any information that students found interesting or did not previously know.

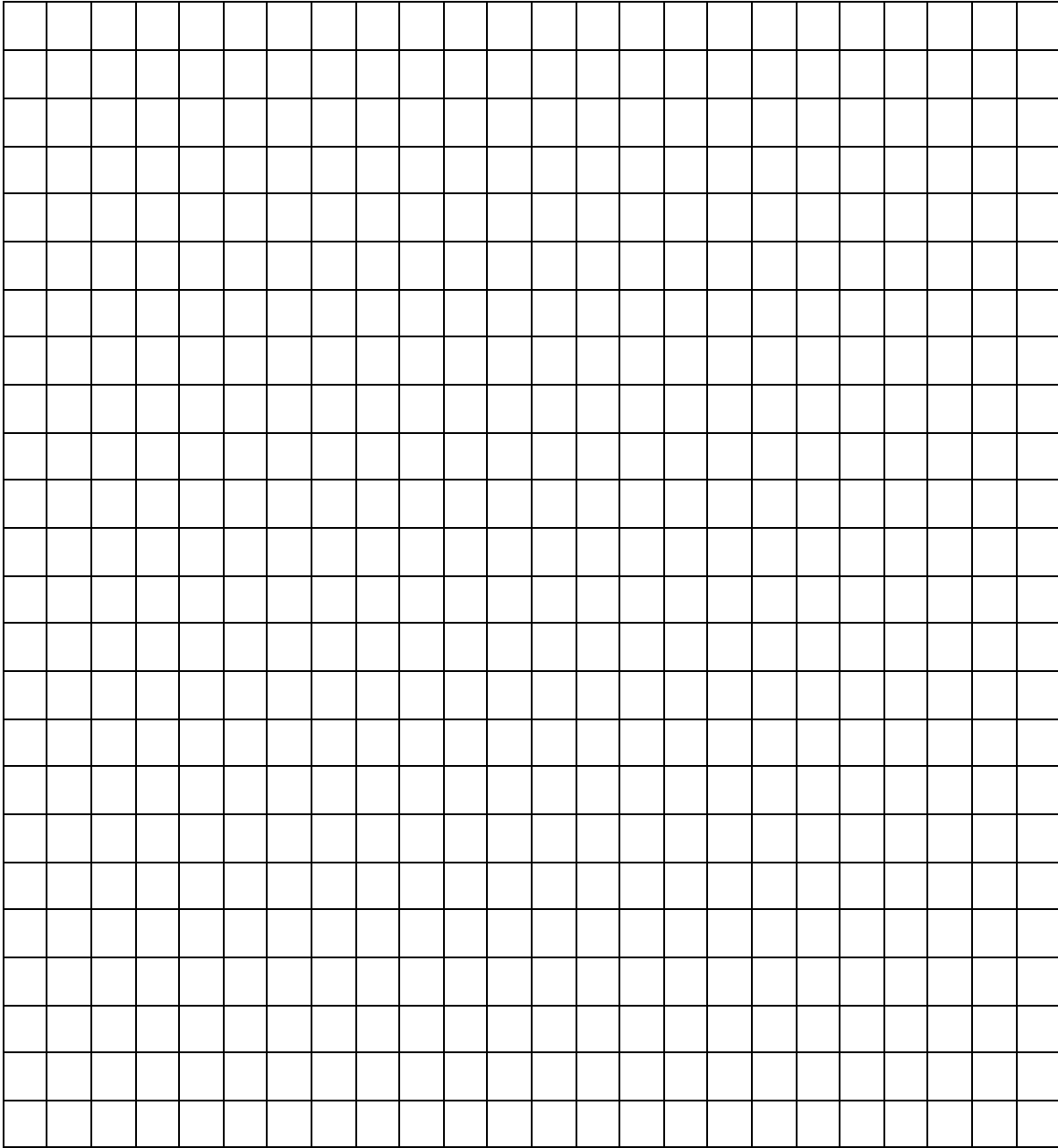
Home Connection

Copies of the information sheets, "Working Smoke Alarms Save Lives" and "Carbon Monoxide Safety" could be sent home to parents.

Resources

- blank floor plan grid
- information sheets, "Working Smoke Alarms Save Lives" and "Carbon Monoxide Safety"
- Summary sheet for group work

Floor Plan Grid



Practise Your Escape Plan

Information Sheet

Working Smoke Alarms Save Lives

All seasoned firefighters have heard the explanation, “The smoke alarm woke me up. I was able to wake the rest of the family and get them out just ahead of the fire.” A smoke alarm is the best early fire detection device available to the average homeowner.

Why are smoke alarms needed?

Fire spreads very quickly. A fire which burns for one minute in a house will grow to three times original size; eleven times its original size in four minutes; and fifty times its size in only six minutes.

90-95% of people who die in fires are killed by the smoke. Smoke is full of carbon monoxide. Carbon monoxide replaces the oxygen in our bodies and suffocates us. Many people think they will smell smoke and wake up. Actually, smoke puts you into a deeper sleep. People who are awakened by a fire have inhaled enough smoke that they can't think clearly. In their stupor, they make wrong decisions as they try to escape and are killed.

What kind of smoke alarm should I buy?

Both battery-powered and house current-powered smoke alarms do a good job. Make sure the one you choose has been tested by a nationally-recognized testing laboratory of approval of a recognized testing and certification organization like CSA (Canadian Standards Association).

How many smoke alarms do I need?

There should be at least one alarm on every floor of the house except attics, unless the attic space is used for sleeping. Additional alarms will increase the chance of early detection.

Where should I place a alarm?

Smoke alarms should be placed near bedrooms either on the ceiling—at least 15 to 30 centimetres away from the wall—or on the wall, 15 to 30 centimetres down from the ceiling. This allows the alarm to sense the smoke as it approaches the sleeping area.

What maintenance do smoke alarms require?

Test the alarm at least monthly by pushing the test button. Once a year vacuum the dust from alarm air vents. Battery operated alarms should have the battery replaced each year or when the low-battery warning sounds. Perhaps the best reminder to change your battery is when you change your clock in the fall: “Change Your Clock.....Change Your Battery”

Is there anything else I should do to make my home or cottage safer?

Yes! Hold practice drills with your whole family so they will know what to do if your alarm ever alerts you of an emergency. Install a carbon monoxide alarm as well. Keep a fire extinguisher handy.

Information Sheet

Carbon Monoxide

Carbon monoxide (CO) is a poisonous gas that you cannot see, smell or taste. It is produced by the incomplete burning of fuels such as natural gas, propane, heating oil, kerosene, coal, charcoal or wood. Improperly installed or poorly maintained appliances that run on these fuels may create unsafe levels of CO. Therefore, it is important that such appliances are installed and regularly maintained by trained service technician. In enclosed spaces such as your home, cottage or recreational vehicle, even a small amount of CO is dangerous.

Symptoms

Exposure to CO can cause flu-like symptoms such as headaches, nausea, dizziness, burning eyes, confusion, drowsiness and even loss of consciousness. In very severe cases, CO poisoning can cause death. Older people, people with heart or breathing problems, children and pets may experience the effects earlier than others.

At any time, if you or anyone else in your home is experiencing the symptoms of CO poisoning, get everyone out of the house and seek medical help. Call 911 or your local fire department.

Working Carbon Monoxide Alarms Save Lives

All carbon monoxide alarms should bear the seal of approval of a recognized testing and certification organization like CSA (Canadian Standards Association). At least one alarm should be installed at knee-height, near the sleeping area of your home, cottage and recreational vehicle. You may need more than one alarm if sleeping areas are on more than one level. Refer to the manufacturer's instructions for more information about proper use and maintenance of your alarms

If a CO alarm sounds in your home, cottage or recreational vehicle, open all doors and windows to ventilate. If you cannot find the problem and the alarm continues, leave the building and contact a qualified service technician to check your fuel-burning equipment.

Danger Signs

- Symptoms of CO poisoning
- Stale or stuffy air
- Smell of gas when the fuel-burning appliance turns on
- Pilot light on your fuel-burning appliance goes out
- Chalky white powder forms on the chimney or exhaust vent pipe
- Excessive moisture forms on windows and walls
- CO alarm sounds

Summary Sheet for Group Work

Type of Alarm: _____

Names of Students in group: _____

Why Have the Alarm?	Location of Alarm
Maintenance of Alarm	How many should I have? What kind should I buy?

Additional information we thought was interesting:

Things we did not know before: