

# WHAT CAN YOU DO?

## A Fire Awareness Curriculum for Grades 1 - 2

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## IN MEMORY OF A SPECIAL FRIEND

Rex Jeffries was a strong advocate for fire prevention education. He passed away in 2005. A memorial fund established in his name underwrote the *Fire's Use Throughout History* timeline for the curriculum.

Rex had a long and distinguished career in the fire service, beginning with service in the navy as a firefighter on an aircraft carrier. He continued his fire service career in Roseburg, Oregon, and then became the Estacada fire chief. In 1980 he joined Tualatin Valley Fire

and Rescue, where he retired in 1997 while serving as their assistant fire marshal. The following July he joined the Office of State Fire Marshal, where he served as a “temporary” deputy state fire marshal for four years, “retiring” again in 2001.



## A NOTE TO OUR TEACHER-PARTNERS

Every hour of every school day in your classrooms you do the important work of preparing children for their lives as adults. Please include solid instruction about fire and life safety in that preparation.

In 2001, over 5,000 Oregon students in grades three through eight were surveyed about their knowledge of fire as part of a research study done for the Office of State Fire Marshal. Ninety-four percent of the students reported receiving fire safety education in their school. Overall, students who were taught fire safety performed better on the fire knowledge questions: 95 percent of them knew to stop, drop and roll if their clothes caught on fire (82 percent if they had received no fire education); 89 percent of them knew to crawl low and get out if they were in a smoke-filled room (72 percent if they had received no fire education).

Clearly, we are doing a good job of teaching basic life-saving maneuvers. To truly prepare our students, however, we must also teach them about the power of fire. We must help them acquire the skills necessary to prevent fires and to make responsible, fire-safe decisions. We must help them understand that fire has been a useful tool to human beings since time beyond history and that it must always be treated with profound respect. This curriculum, *What Can You Do?*, and its companion curriculum for middle school students, *It's Up to You!*, are written with all this in mind.

The reality of fire is that a home can quickly be engulfed in flames. The fire department, despite valiant efforts, may be unable to save it or people trapped within. Every day, somewhere in this country, fire department personnel fight fires at great risk to themselves. They have prepared and trained for just such an event and we are grateful for their commitment and heroism. Our responsibility, and this is the great lesson that should be communicated to our students, is to plan to prevent fires so that the fire department is never called to our homes because of our risky behavior, carelessness, lack of planning or poor decision making. When the engines roll, prevention has failed.

Let's work together to make dangerous acts by firefighters unnecessary. Let's work together to prepare students to take their places in our communities as fire-safe, fire-responsible adults.

Nancy Orr  
State Fire Marshal



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### 1

#### FIRE FACTS

##### Purposeful Fire Uses / Management of Fire

Community Helpers  
Timeline of Fire  
Reality of Fire

### 2

#### FIRE PREVENTION

##### Major Fire Causes / Prevention Activities

Safe/Unsafe for Children  
Investigation Stations  
Home Fire Hazards Search

### 3

#### FIRE SAFETY SOLUTIONS

Fire Safety Technology  
Smoke Alarms and Advocacy  
Technology Timeline  
Fire Safety Solutions

### 4

#### SURVIVAL SKILLS

##### Disaster Preparedness / Survival Skills

Survival Skills Stations  
Fire Escape Plan  
Disaster Preparedness Plan

### 5

#### FIRE SMART DECISIONS

##### Responsible Behavior Regarding Fire

Fire Story Starts  
Fire-safe Scenarios  
Fire-smart Fire-safe Skits  
Summer Fire Safety (bonus lesson)



### 6

#### NATIVE AMERICANS & FIRE

(Bonus Information)

## WHICH OREGON STATUTES SUPPORT FIRE EDUCATION?

### **ORS 336.071 Emergency drills and instruction; maintenance of exit doors.**

- (1) All schools are required to instruct and drill students on emergency procedures so that the students may respond to an emergency without confusion or panic. The emergency procedures shall include drills and instruction on fires and earthquakes. In addition, schools that are in a coastal zone shall include tsunami drills and instruction as part of the earthquake drills and instruction.
- (2) (a) Drills and instruction on fire emergencies shall include routes and methods of exiting the school building.
- (2) (b) Drills and instruction on earthquake emergencies shall include methods of “duck, cover and hold” during the earthquake. Drills and instruction on tsunami emergencies shall include immediate evacuation after an earthquake when appropriate or after a tsunami warning to protect students against inundation by tsunamis.
- (3) At least 30 minutes in each school month shall be used to instruct students on fire, earthquake, and, where appropriate, tsunami dangers and drills. At least two drills on earthquakes shall be conducted each year. In schools in a coastal zone, at least three drills on earthquakes and tsunamis shall be conducted each year.
- (4) All schools shall maintain all exit doors so that the doors can be opened from the inside without a key during school hours.
- (5) Units of local government and state agencies associated with emergency procedures training and planning shall assist schools in the instruction and drilling of students in emergency procedures.
- (6) As used in this section, “school” means any
- (6) (a) Kindergarten through grade eight public or private school; or
- (6) (b) Educational institution having an average daily attendance of 50 or more students.
- [1995 c.312 §2 (enacted in lieu of 336.072); 1997 c.521 §9]

\* \* \* \* \*

### **OAR 581-022-1210 District Curriculum**

- (1) Each school district shall provide a planned K-12 instructional program.
- (2) The planned K-12 instructional program shall be consistent with Common Curriculum Goals and academic content standards.
- (3) The school district shall also provide instruction in the areas identified in this division, including:
- (a) infectious diseases, including AIDS/HIV and Hepatitis B;
  - (b) prevention education in drugs and alcohol; and
  - (c) emergency plans and safety programs.
- (4) The school district shall also provide instruction in the areas identified and required in ORS 336.

### **1997 Uniform Fire Code**

#### Section 1302 - Reporting of Emergencies and False Alarms

1302.2 Reporting Emergencies. In the event a fire occurs or the discovery of a fire, smoke or unauthorized release of flammable or hazardous materials on any property occurs, the owner or occupant shall without delay report such condition to the fire department.

1302.3 False Alarms. False alarms shall not be given, signaled or transmitted or caused or permitted to be given, signaled or transmitted in any manner. See ORS 162.375.

## **WHY FIRE AWARENESS EDUCATION?**

More than 15,000 fires occur in Oregon each year. On average, forty Oregonians die in these fires and millions of dollars worth of property are lost. Most fires occur in the places we call home. Homes do not get inspected as buildings and institutions do. Therefore, people are responsible for home fire safety ... for self, family and neighbors.

## **WHY FIRE EDUCATION SPECIFICALLY FOR ELEMENTARY STUDENTS?**

An estimated 2,500 children age fourteen or younger were injured or killed in residential fires in 2002 according to the U.S. Fire Administration (USFA) 2005 report. Of these fire casualties, 70 percent were under the age of ten. Children continue to be a high-risk population in residential fires.

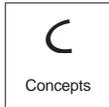
Home fires involving children are often preventable. Educating students and families about fire-safe practices empowers individuals to “be smart and be safe” in fire-threatening situations. It is imperative that students demonstrate conceptual understanding and practice related skills in fire awareness. It is imperative to teach this at the elementary level and to continue through middle school. State law (ORS.336.071) in Oregon requires age-appropriate K-8 fire awareness education.

## **WHY STANDARDS-BASED EDUCATION?**

Standards focus on essential concepts, skills and behaviors necessary for students to succeed and survive in the 21st century. Content standards indicate what students are expected to know and be able to do.

Content standards from health education, language arts and social sciences are infused throughout this curriculum. Following pages show some particular integrations in these areas.

# OREGON HEALTH EDUCATION STANDARDS



Students will comprehend **concepts** related to health promotion and disease prevention.



Students will **demonstrate** the ability to access valid health information and health promoting products and services.



Students will **demonstrate** the ability to practice health-enhancing behaviors and reduce health risks.



Students will **analyze** the influences of culture, media, technology and other factors on health.



Students will **demonstrate** the ability to use interpersonal communication skills to enhance health.



Students will **demonstrate** the ability to use goal setting to enhance health.



Students will **demonstrate** the ability to use decision making skills to enhance health.



Students will **demonstrate** the ability to advocate for personal, family and community health.

# INTEGRATION - HEALTH EDUCATION STANDARDS

The health education standards are identified as health skills in eight conceptual areas.

Unintentional Injury Prevention is the conceptual area where students acquire knowledge and skills necessary to be safe at home, at school and in the community, and how to get help in case of injury.

## Unintentional Injury Prevention

Common Curriculum Goals	Content Standards	Benchmark 1 (Grade 3)	Benchmark 2 (Grade 5)
Demonstrate accessing information, self-management, interpersonal communication, goal setting and decision making skills while understanding the components of injury prevention.	Explain how to prevent dangerous or risky behaviors that might lead to personal injury and how to respond to potentially unsafe situations at home, at school and in the community.	Identify safe behaviors when traveling to and from school and in the community.  <b><i>What Can You Do?</i></b> <b>Unit 2: Fire Prevention</b> <b>Unit 5: Fire Smart Decisions</b>	Identify ways to prevent fires and reduce the risk of injuries in case of fire.  <b><i>What Can You Do?</i></b> <b>Unit 2: Fire Prevention</b> <b>Unit 3: Fire Safety Inventions</b> <b>Unit 4: Survival Skills</b>
	Demonstrate ability to access valid health-related information.		Access information on the nature of fire, how fires start, fire's destructiveness, and how fires can be prevented.  <b><i>What Can You Do?</i></b> <b>Unit 1: Fire Facts</b> <b>Unit 2: Fire Prevention</b>
	Demonstrate self-management skills necessary to practice health-enhancing behaviors and reduce health risks.		
	Demonstrate ability to use interpersonal communication skills (verbal and non-verbal) to enhance health and safety.	Use decision-making model to avoid dangerous situations.  <b><i>What Can You Do?</i></b> <b>Unit 5: Fire Smart Decisions</b>	Demonstrate how to respond to peers who may pressure you to misuse fire or fireworks.  <b><i>What Can You Do?</i></b> <b>Unit 5: Fire Smart Decisions</b>

# INTEGRATION - SOCIAL SCIENCES STANDARDS

When studying social sciences, specifically history, students can make connections between past, present and future. The elementary fire awareness curriculum includes historical connections at the 3rd - 5th grade level.

Common Curriculum Goals	Common Curriculum Goals	Benchmark 1 (Grade 3)	Benchmark 2 (Grade 5)
<p><b>Historical skills</b> Interpret and reconstruct chronological relationships.</p>	<p>Understand, represent, and interpret chronological relationships in history.</p>	<p>Understand calendar time sequences and chronological sequences within narratives.</p> <p><b><i>What Can You Do?</i></b> <b>Unit 1: Fire Facts</b></p>	<p>Interpret data and chronological relationships presented in timelines and narratives.</p> <p><b><i>What Can You Do?</i></b> <b>Unit 1: Fire Facts</b> <b>Unit 3: Fire Safety Inventions</b></p>
<p>Understand, recognize and interpret change and continuity over time.</p>	<p>Interpret and represent chronological relationships and patterns of change and continuity over time.</p>		<p>Understand how history can be organized using themes, geography or chronology.</p> <p><b><i>What Can You Do?</i></b> <b>Unit 3: Fire Safety Inventions</b></p>

# INTEGRATION - LANGUAGE ARTS STANDARDS

The Oregon 2005 Literacy Initiative urges teachers to provide learning opportunities for students to achieve the following skills:

- Every K-3rd grade student will become a proficient reader.
- All 4th-12th grade students will meet measurable and increasingly complex reading, writing and speaking skills.

This elementary fire awareness curriculum includes activities and assessments to develop and strengthen reading, writing and speaking skills. A “Key Words and Concepts” list at the start of each unit includes vocabulary to be woven into first through fifth grade lessons. A “Do the Write Thing” graphic illustration is included with each unit to be used as a prompt for student writing activities and reflection. An extensive resource list is provided for teachers and students at the end of each unit.

<b>Common Curriculum Goals</b>	<b>Content Standards</b>	<b>Grades 3-4</b>	<b>Grade 5</b>
<b>Reading</b>	Listen to and read informational text.		
<b>Writing</b>		<i>What Can You Do?</i> Unit 1: Fire Facts	<i>What Can You Do?</i> Unit 1: Fire Facts
<b>Speaking</b>			



## **GOAL**

The goal of this curriculum is  
to teach fire awareness concepts to  
elementary students and provide them  
opportunities to practice skills for personal,  
family and community safety.

## **CORE CONCEPTS**

Age-appropriate knowledge about fire.

Learning and practicing skills.

Responsible decision-making.

# WHAT CAN YOU DO?

## Scope and Sequence

<b>UNIT TOPICS</b>	<b>Fire Facts</b>	<b>Fire Prevention</b>	<b>Fire Safety Inventions</b>	<b>Survival Skills</b>	<b>Fire-Smart Decisions</b>
Student will ...	...understand the role of fire and its impact on human life.	...recognize the components of fire prevention.	...identify the technology related to fire survival and suppression.	...identify survival skills for disasters such as fire, earthquakes & severe weather.	...recognize responsible behavior regarding fire.
<b>Grade 1-2</b>	<b>Community Helpers</b> Access information on fire station, staff, equipment and services. (AI)	<b>Safe/Unsafe for Children</b> Compare & contrast responsible fire use & misuse. (C)	<b>Smoke Alarms &amp; Advocacy</b> Demonstrate correct response to smoke alarm, test, advocate. (AV)	<b>Survival Skills Stations</b> Demonstrate steps for survival in home fire and earthquake. (SM)*	<b>Decision-Making Skills</b> Practice decision-making strategy and make fire-safe choices. (DM)
<b>Grade 3-4</b>	<b>Time line of Fire</b> Explore the uses of fire throughout history. (AI)	<b>Investigation Stations</b> Analyze the leading causes of home fires. (AI)	<b>Technology Timeline</b> Construct chronological sequences of fire suppression technology.	<b>Fire Escape Plan</b> Create home fire escape plan and earthquake survival plan. (C)*	<b>Fire-Safe Scenarios</b> Write decision-making dialogue. (DM)*
<b>Grade 5</b>	<b>Reality of Fire</b> Describe the physical characteristics of fire. (AI)	<b>Home Fire Hazards Search</b> Assess home fire hazards. (AV)	<b>Fire History Research</b> Research fire history. (AI)	<b>Disaster Preparedness</b> Develop and practice emergency plans. (SM)	<b>Fire Safe Fire Smart Skits</b> Communicate responsible decision-making. (IC)*

\*performance task for Health Education standards and assessment

# INFORMATION ABOUT THE CURRICULUM

## WHAT CONTENT IS COVERED?

age-appropriate, relevant and realistic content related to fire awareness and disaster preparedness with family, community and curriculum connections

## WHAT LESSON SEQUENCE SHALL I FOLLOW?

A scope and sequence is included. “A” lessons are designed for grades 1-2, “B” lessons for grades 3-4, and “C” lessons for grade 5. Review and further exploration of lessons from the previous year should be used as a bridge for the current lesson. Extended learning activities are suggested.

## WHAT IS THE TIME COMMITMENT FOR THE LESSONS?

Lessons are designed for a thirty minute class period. There are five lessons for each of the grades 1 through 5 and a summer safety lesson on fireworks and campfire safety appropriate for all grades. Lessons may be extended beyond thirty minutes depending on class interest and/or needs.

Performance tasks for State Health Education Standards may require additional class time.

## WHAT ABOUT SENSITIVE ISSUES?

It is important to consider both site-specific needs and student needs. A parent letter to be sent home before starting the curriculum suggests that parents contact the teacher with questions or concerns, such as a student experiencing a home fire or burn injuries.

## A SPECIAL OPPORTUNITY

Teachers are invited to submit exemplary student work for sharing via the *What Can You Do?* page on the Office of State Fire Marshal Web site.

Mail to: Office of State Fire Marshal  
Community Education Unit / What Can You Do? support  
4760 Portland Rd NE  
Salem OR 97305-1760

Email: [oregon.sfm@state.or.us](mailto:oregon.sfm@state.or.us) (Subject line: What Can You do?)

# HOW TO USE THE CURRICULUM

## REVIEW

Begin with reviewing the state standards in health education, language arts, and social sciences, since *WHAT CAN YOU DO?* is aligned with these standards. Oregon standards are included for reference with applicable *WHAT CAN YOU DO?* lessons.

## READ

The *Supplementary Materials* section contains *Teacher Notes* and lesson support materials such as work sheet masters. Reading the *Teacher Notes* is necessary to successfully use this curriculum. The core content of each lesson is provided in the *Teacher Notes* section. References to extra resources are included for some of the units if the teacher wishes to expand the lessons beyond the core content provided.

## PLAN

Use the scope and sequence as your framework for the five units that cover fire awareness education.

## *WHAT CAN YOU DO?*

is designed to be flexible at the elementary level. Teachers can easily cover the curriculum in a week or add days according to school and community opportunities. For example, a field trip to the fire station or arrangement for a mobile fire escape simulation to be scheduled at school would be a great extension to the fire safety lessons provided. Teachers may also include days needed to complete health education performance tasks and assessments at 3rd and 5th grade benchmark levels.

## CHECK FOR COMPREHENSION

Adapt lesson concepts and vocabulary to the abilities of your students.

## TEACH AND REFLECT

“Your space,” a reflection space for the teacher, is included with each lesson.

## NOTE:

Student folders are a suggested organizational tool.

Informational pieces to be sent home with the students are labeled “Home Connection.”

# ANATOMY OF THE CURRICULUM

Unit objectives and skills

**Included in the curriculum:** Video components in DVD format, timeline cards and timeline, supplemental materials for each lesson, and "Home Connection" life safety materials designed to go home with your students.

**Fire Prevention**

**Objectives**  
Student will recognize the components of fire prevention.

**Skills**  
• Student will compare and contrast responsible fire use and fire misuse.  
• Student will analyze leading causes and influences of home fires.  
• Student will assess home hazards.

**Introduction**  
Eight of the ten leading causes of home fires are human actions such as error, carelessness, or intent. Fire awareness education, fire extinguishing and fire code enforcement are critical components of the prevention. The best protection from fire-threatening fire is prevention. Children, adolescents and adults need to recognize the difference between responsible fire use or risky fire behavior.

A request for fire and fire starting tools is imperative. Matches and lighters are adult tools. Adult tools, whether matches, lighters, kitchen knives or yard tools with blades are dangerous when used by children. With increased understanding of responsible fire use, dangerous situations involving fire can be prevented. With information regarding causes of home fires and assessment of home hazards, lessons can be practiced rather than reactive regarding life-threatening and destructive fire.

**Key words and concepts**  
**Advisory** - writing or speaking in support of something  
**Combustible** - capable of burning  
**Fire code** - rules and standards for fire safety  
**Fire investigation** - study of the scene of a fire to determine "origin and cause" (where the fire started and what caused it)  
**Fire misuse** - using fire and fire tools as a toy or in an unsafe manner  
**Fire marshal** - fire service employee who works in several ways to prevent fires such as inspections, citizen education and code enforcement  
**Fire load** - (rated), such as match or lighter, used to start a fire  
**Flammable** - capable of burning  
**Hazard** - object or situation that may cause personal injury or property damage  
**Hazardous material** -  
**Responsible fire use** - age-appropriate and safe use of the fire and fire tools  
**Stay away, tell an adult** - catch phrase reminding children of the appropriate action to take when faced with potential danger

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Unit title

Basic introduction to the topic

Vocabulary used in the unit

The materials provided by the curriculum and the preparation required by the teacher are listed for each lesson.

Lesson activities are described

The lessons are designated:

A (Grades 1 & 2)

B (Grades 3 & 4)

C (Grade 5)

Lesson content is sequential: initial concepts are in A lessons. B and C lessons build in level of understanding on preceding lesson(s).

A space has been provided for teacher to place personal notes for the lesson.

**A SAFE/UNSAFE FOR CHILDREN**

**INTRODUCTION**  
Every day Americans experience the consequences of destructive fire. More than 15,000 fires occur in Oregon each year. On average, forty Oregonians lose their lives in these fires. The majority of structure fires are home fires caused by people.

Children are often at risk because of their curiosity about fire. They do not understand the power of fire and may experiment with it, causing injury, death and property damage. Home fires have been started by children as young as two handling matches or lighters. Reports indicate that by age twelve, 50 percent of all children have misused fire.

More detailed suggestions for the lessons are included in the Supplementary Materials section of this unit.

**NOTES:**

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**LESSON PLANS**  
Goal: Student will identify responsible behavior with fire tools.

**Materials provided:**

- Safety symbols/signs
- Safety/unsafe objects master
- Safe and Unsafe sign master
- Do the Write Thing work sheet
- Letter to parents/guardians
- C cards (in introductory section)

**Teacher preparation:**

**Grade 1**

- Review Teacher Notes, p. 12
- Make 8 copies each of Safe and Unsafe signs (one sign per page) for the lesson.
- Copy the self-made objects found in the home environment sheet as there is one object per page. Post them around the room.
- Student copies of Do the Write Thing work sheets

**Grade 2**

- Crayons

**Do the Write Thing prompt**

(Grade 1) Who is responsible for your safety at home?  
Describe in words and/or pictures how you work with others to be safe.

(Grade 2) Computer screen saver drawing of "safe/unsafe for children" message

**Extended activities**  
Individual or Class

- Draw pictures of signs in the school building that give fire safety messages: Exit, Fire Danger, Fire Extinguisher.

**Assessment**  
(C) concept

- Do the Write Thing reflection

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Content for each lesson is found in *Teacher Notes*.

A, B or C symbols coordinate the notes with the proper lesson.

Supplemental materials, such as work sheets, are included at the end of each unit.

**B TEACHER NOTES**

**DEPUTIZE THE STUDENTS**  
After defining investigation and the roles of fire investigator and fire marshal, you may wish to "deputize" the students as community fire investigators and/or fire marshals in preparation for the investigation stations.

**ROLE OF A FIRE MARSHAL**  
Fire marshals work in several ways to prevent fires. They inspect buildings to make sure that codes and laws related to fire safety are enforced. They work with builders and city planners when new buildings are being planned to make sure the buildings meet fire safety codes. They visit schools to teach fire safety.

**ROLE OF A FIRE INVESTIGATOR**  
Fire investigators determine where a fire started and what caused it (origin and cause). They collect evidence, interview witnesses and prepare reports on fires in cases where the cause may be arson or criminal negligence. They may testify in court.

They identify faulty products that may pose a fire hazard. For example, Oregon fire inspectors were the first to identify two faulty products that were responsible for fires: Mr. Coffee coffee maker and Cadet Walk Heater.

Both men and women have careers as fire investigators.

**INVESTIGATION STATIONS LESSON**  
The lesson provides real-life situations for students to explore the leading causes of fire in Oregon, practice problem-solving and suggest recommendations. As fire investigators, students paper clip the checkoff work sheet to the front of their What Can You Do? folder and color in the box when finished at each station. Station papers are placed inside student folder.

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**B COOKING FIRE SAFETY TIPS**

**Leading Causes of Home Fires**

Example	Number of Fires
House, random home or carelessness	950
Electrical (circuit breaker, overloaded circuit, worn cords)	280
Candles	238
Combustibles too close to heat source (heater, stove, etc.)	231
Cigarettes-caused fires	190
Children using fire starting tools	85

(Data from Oregon's Arson Report for 1998)

600  
550  
500  
450  
400  
350  
300  
250  
200  
150  
100  
50

Misery House Electrical Candles Combustibles & Heat Source Cigarettes Jars

31104 2  
King and Cardo Safety Tips

## TEACHING STRATEGIES/LESSON ACTIVITIES IN THE CURRICULUM

**Acrostic:** a composition in which sets of initial (or final) letters taken in order form a word, phrase, or regular sequence of the alphabet

**Brainstorming:** students generate many ideas on given topic

**Case study:** students analyze reports or written histories of a situation, identify problem and recommend solution(s)

**Concept/mind map/web:** visual technique that starts with a central idea and includes related ideas connected to the central idea

**Cooperative groups:** students work in small groups on given topic and/or task

**Demonstration:** use of support materials to provide visual examples and/or show how things work

**Discussion:** students contribute and build on ideas shared in class

**Do the Write Thing:** template used as teacher prompt on lesson content or student reflection. Used throughout the curriculum, a master is included in the Introductory Section

**Guest speaker:** resource for teacher and students who shares expertise and experience on specific topic/profession

**Jigsaw:** students within group(s) reads section of the whole (i.e. paragraph from article) to learn topic, then share information with others

**KWL:** visual diagram of thinking process connecting prior knowledge with current questions on topic and learning that actually occurs

**Peer teaching:** after students master concepts and skills, they teach other students

**Simulation:** students learn about and respond to real life experiences in structured setting, can be done rotating through stations

**Skits (role plays):** students act out specific roles/situations, using a script or improvising to reinforce concepts learned and to practice skills

**Surveys/inventories:** students gather and assess safety-related information

**Venn diagram:** visual diagram of two or more overlapping circles for comparing and contrasting

## WHAT IS “DO THE WRITE THING?”

Do the WRITE Thing is a language arts strategy that is woven throughout the curriculum to support literacy.

Do the WRITE Thing prompts (listed below) can be transferred onto a copy of the master to make a transparency or copies for the students.

### Unit 1

**A** (Grade 1, 2) Write and/or draw one example of a firefighter’s job.

### Unit 2

**A** (Grade 1) Who is responsible for your safety at home? Describe in words and/or pictures how you work with others to be safe.

(Grade 2) Draw a computer screen saver showing a “safe/unsafe for children” message.

**B** (Grade 3) Use the Home Fire Causes Table. Choose 3 of the causes and suggest ways to reduce the risk.

(Grade 4) If you were a fire marshal, write what you would do to help make your community a safe place to live?

### Unit 3

**A** (Grade 1, 2) Create a computer screen saver reminding families of smoke alarm use and maintenance.

**B** (Grade 3) Make a mind map of moving water to extinguish fire, including buckets, pumps, water storage methods, fire engines, fire sprinklers.

### Unit 4

**A** (Grade 1) Today I practiced survival skills. The survival skill I am most comfortable with is \_\_\_\_\_.

A skill I need to practice is \_\_\_\_\_.

### Unit 5

**A** (Grade 1, 2) Write and/or draw an example of yourself making a fire-safe decision using the STOP-THINK-GO strategy.



# DO THE WRITE THING

# Sample parent letter

date

Dear Parents/Guardians,

We will be studying fire awareness and disaster preparedness the week of \_\_\_\_\_. The research-based curriculum we'll be using is called ***What Can You Do?*** The goals are to teach age-appropriate concepts and to provide opportunities for students to practice skills for personal, family and community safety.

During the week, students will be given information and assignments to reinforce classroom lessons. These "home connections" support the importance of our working together to nurture healthy, smart and safe students.

Thank you for sharing the responsibility for fire prevention as well as preparing for and practicing what to do in threatening situations such as fire, earthquakes and floods.

If you have any questions or concerns, please contact me. If you can assist in the classroom on \_\_\_\_\_, please contact me.

teacher name

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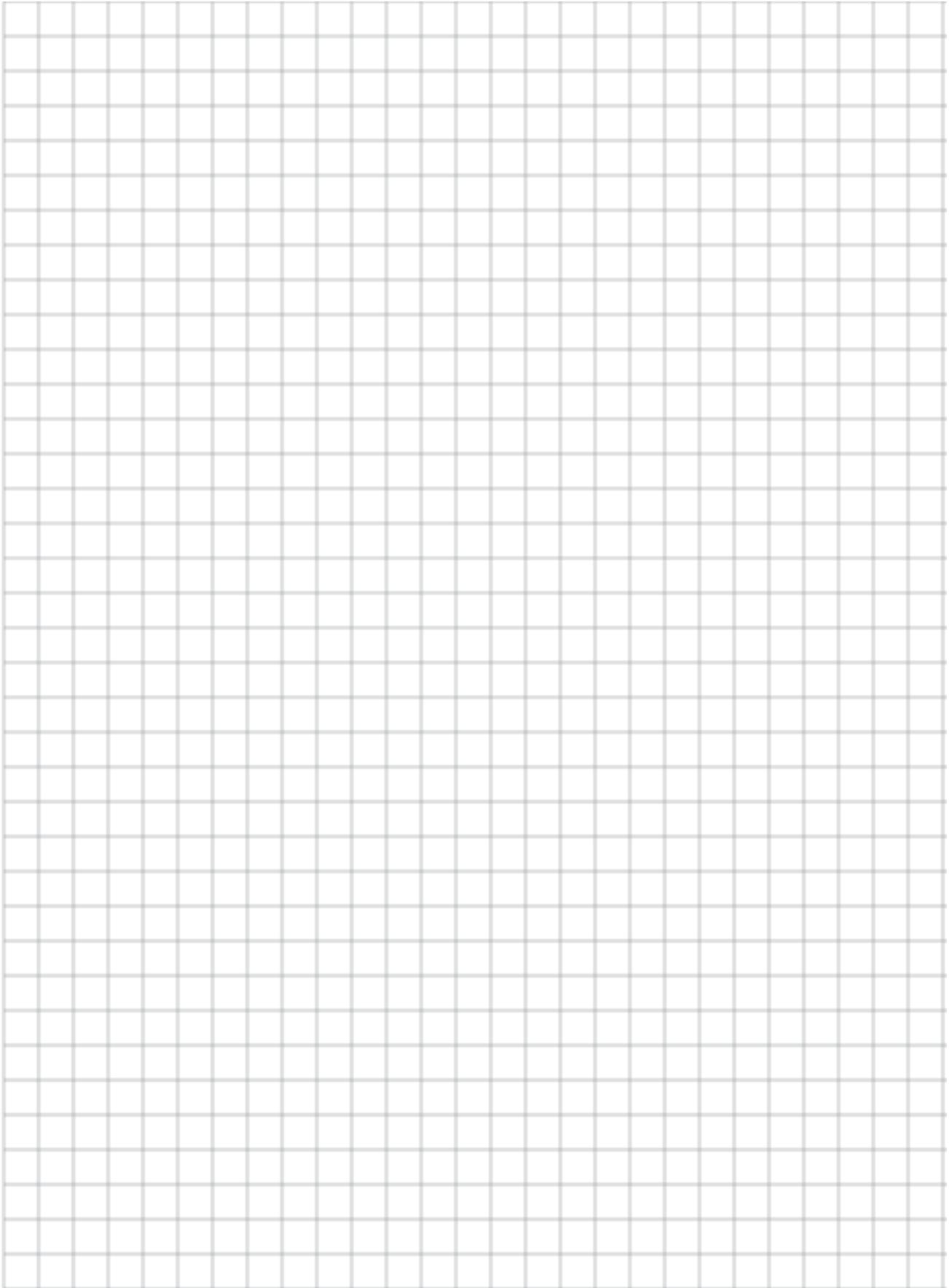
\_\_\_\_\_ Yes, I can assist in the classroom during the fire awareness and disaster preparedness unit.

\_\_\_\_\_  
parent/guardian name

\_\_\_\_\_  
date

This folder belongs to \_\_\_\_\_





# Scoring Guide for Accessing Information

# AI

<i>NHES#2: Students will demonstrate the ability to access valid health information and health-promoting products and services.</i>	
	<b>Source Validity</b>
<b>4</b>	Identifies a specific source of health information, products or services. Provides accurate and complete citations for the specific source(s).  Thoroughly evaluates each source to determine its validity and appropriateness (e.g. accessibility, affordability) to the given health situation. Clearly and accurately explains why the sources are valid and appropriate.
<b>3</b>	Identifies source(s) of health information, products or services. Citations for the source(s) are mostly accurate and complete.  Adequately evaluates source validity and appropriateness. Provides a general explanation of why the sources are valid and appropriate.
<b>2</b>	Identifies general source(s) of health information, products or services. Citations for the source(s) are inaccurate and/or incomplete.  Attempts to evaluate sources to determine their validity and appropriateness, but the evaluation is incomplete or flawed. Does not provide an effective explanation.
<b>1</b>	No source identified or cited.  Evaluation of source(s) is flawed. Cannot determine whether the source is valid — OR — does not attempt to evaluate sources to determine validity or appropriateness to the given health situation.

Goals or Action:

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# Scoring Guide for Advocacy

AV

<i>NHES#7: Students will demonstrate the ability to advocate for personal, family, and community health.</i>				
	<b>Health-enhancing position</b>	<b>Support for Position</b>	<b>Audience Awareness</b>	<b>Conviction</b>
<b>4</b>	Extremely clear, health-enhancing position.	Thoroughly supports position using relevant and accurate facts, data, and evidence.	Strong awareness of the target audience (e.g. the audience's perspective, interests, prior knowledge)	Displays strong and passionate conviction for position.
<b>3</b>	Generally clear, health-enhancing position.	Adequately supports position using facts, data, evidence; support may be incomplete and/or contain minor inaccuracies.	Adequate awareness of audience.	Displays conviction of position.
<b>2</b>	Unclear or conflicting positions.	Inadequately supports position, due to limited information, and/or some inaccuracy, irrelevant facts, data or evidence.	Some evidence of awareness of audience.	Displays minimal conviction for position.
<b>1</b>	No position stated OR position is not health-enhancing.	No accurate or relevant support for position is provided.	No evidence of audience awareness.	Conviction for position is not evident.

Goals or Action:

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# Scoring Guide for Concepts

C

<i>NHES#1: Students will comprehend concepts related to health promotion and disease prevention.</i>	
	<b>Comprehensiveness</b>
<b>4</b>	Completely and accurately describes relationships between behavior and health. Draws logical conclusion(s) about the connection between behavior and health.
<b>3</b>	Describes relationships between behavior and health with some minor inaccuracies or omissions. Draws a plausible conclusion(s) about the connection between behavior and health.
<b>2</b>	Description of relationship(s) between behavior and health is incomplete and/or contains significant inaccuracies. Attempts to draw a conclusion about the connection between behavior and health, but the conclusion is incomplete or flawed.
<b>1</b>	Inaccurate or no description of relationship(s) between behavior and health. Inaccurate OR no conclusion drawn about the connection between behavior and health.
	Thoroughly covers health topic, showing both breadth (wide range of facts and ideas) and depth (details about facts and ideas). Response is completely accurate.
	Mostly covers health topic, showing breadth and depth, but one or both less fully. Response is mostly accurate, but may have minor inaccuracies.
	Minimal coverage of health topic, showing some breadth but little or no depth. Response may show some inaccuracies.
	No coverage of health topic information. Little or no accurate information.

Goals or Action:

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# Scoring Guide for Decision-making\*

DM

NHES#6: Students will demonstrate the ability to use goal-setting and decision-making skills to enhance health.

## Use of a Decision-Making Process

Reaches a health-enhancing decision using a decision-making process consisting of the following steps:

- Identifies a situation that poses a health risk.
- Examines a *comprehensive* set of alternative courses of action.
- *Fully* evaluates the positive and negative health consequences of each alternative course of action.
- Decides on a health-enhancing course of action.

Reaches a health-enhancing decision using a decision-making process consisting of the following steps:

- Identifies a situation that poses a health risk.
- Examines *some* alternative courses of action.
- Evaluates *some* of the positive and negative health consequences of each alternative course of action.
- Decides on a health-enhancing course of action.

Reaches a decision that is health-enhancing. The decision-making process is incomplete or contains flaws. For example:

- May or may not identify a situation that poses a health risk..• Does not examine alternative courses of action.
- Fails to evaluate the positive and negative health consequences of alternative course of action.
- Decides on a health-enhancing course of action.

Does not reach a health-enhancing decision due to an ineffective decision-making process. Steps of the decision-making process are not evident.

\* The two skills of *goal-setting* and *decision-making* are embedded in National Health Education Standard #6. For the purposes of analyzing student work, separate rubrics have been developed.

Goals or Action:

# Scoring Guide for Goal-setting\*

# GS

NHES#6: Students will demonstrate the ability to use goal-setting and decision-making skills to enhance health.	
	<b>Implementation</b>
<b>4</b>	<b>Goal Statement</b>  Clear and complete goal statement that explicitly states long-term health benefits.
<b>3</b>	Goal-setting plan is characterized by: <ul style="list-style-type: none"><li>• An achievable goal, directly leading to long-term health benefits.</li><li>• Logical, sequential steps.</li><li>• A process for assessing progress.</li></ul>
<b>2</b>	Goal-setting plan is characterized by: <ul style="list-style-type: none"><li>• An achievable goal.</li><li>• Logical steps, but may be incomplete.</li><li>• A process for assessing progress, but may be incomplete.</li></ul>
<b>1</b>	Goal-setting plan is characterized by: <ul style="list-style-type: none"><li>• Unrealistic goal or one that would not lead to long-term health benefits.</li><li>• Insufficient recognition of steps.</li><li>• No process for assessing progress identified.</li></ul>
	No goal-setting plan is stated, or plan is vague or unrealistic.

\* The two skills of *goal-setting* and *decision-making* are embedded in National Health Education Standard #6. For the purposes of analyzing student work, separate rubrics have been developed.

Goals or Action:

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# Scoring Guide for Interpersonal Communication

IC

<b>NHES#5: Student will demonstrate the ability to use interpersonal communication skills to enhance health.</b> <b>Communication Strategies</b>				
<b>4</b>	<p>Thoroughly uses appropriate verbal/nonverbal communication strategies* to enhance the health of self and others:  <i>*such as ...</i></p> <table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top;"> <p><b>Skills</b></p> <ul style="list-style-type: none"> <li>• Negotiation skills</li> <li>• Refusal skills</li> <li>• Conflict management skills</li> </ul> </td> <td style="vertical-align: top;"> <p><b>Behaviors</b></p> <ul style="list-style-type: none"> <li>• Eye contact</li> <li>• Clear message</li> <li>• “I” messages</li> <li>• Respectful tone</li> </ul> </td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> <li>• Body language</li> <li>• Expressing needs, wants, feelings</li> <li>• Restating other points of view</li> <li>• Suggesting an alternative</li> </ul> </td> </tr> </table>	<p><b>Skills</b></p> <ul style="list-style-type: none"> <li>• Negotiation skills</li> <li>• Refusal skills</li> <li>• Conflict management skills</li> </ul>	<p><b>Behaviors</b></p> <ul style="list-style-type: none"> <li>• Eye contact</li> <li>• Clear message</li> <li>• “I” messages</li> <li>• Respectful tone</li> </ul>	<ul style="list-style-type: none"> <li>• Body language</li> <li>• Expressing needs, wants, feelings</li> <li>• Restating other points of view</li> <li>• Suggesting an alternative</li> </ul>
<p><b>Skills</b></p> <ul style="list-style-type: none"> <li>• Negotiation skills</li> <li>• Refusal skills</li> <li>• Conflict management skills</li> </ul>	<p><b>Behaviors</b></p> <ul style="list-style-type: none"> <li>• Eye contact</li> <li>• Clear message</li> <li>• “I” messages</li> <li>• Respectful tone</li> </ul>	<ul style="list-style-type: none"> <li>• Body language</li> <li>• Expressing needs, wants, feelings</li> <li>• Restating other points of view</li> <li>• Suggesting an alternative</li> </ul>		
<b>3</b>	<p>Uses mostly appropriate verbal/nonverbal communication strategies* to enhance the health of self and others.</p>			
<b>2</b>	<p>Attempts to use verbal/nonverbal communication strategies* to enhance the health of self and others, but the selected strategy may be inappropriate or ineffectively employed.</p>			
<b>1</b>	<p>Rarely or never uses appropriate verbal/nonverbal communication strategies* to enhance the health of self and others</p>			

Goals or Action:

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# Scoring Guide for Analyzing Influences

INF

<i>NHES#4: Students will analyze the influence of culture, media, technology, and other factors on health.</i>	
4	Fully recognizes relevant influence(s) (internal and/or external). Accurately and completely explains how the influence(s) impacts personal, family and/or community health practices and behaviors.
3	Recognizes relevant influence(s). Provides a general explanation of how the influence(s) impacts personal, family and/or community health practices and behaviors.
2	Recognizes influence(s) but does not provide an effective explanation of how the influence(s) impacts personal, family and/or community health practices and behaviors.
1	No relevant influence(s) is identified. Explanation is missing or reveals a misunderstanding of the impact of the influence(s).

Goals or Action:

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# UNIT 1

## FIRE FACTS

### Scope and Sequence



#### COMMUNITY HELPERS

##### **Activity 1 / Grade 1**

Teacher-led discussion of firefighter

##### **Activity 2 / Grade 2**

Teacher-led discussion of paramedic



#### TIMELINE OF FIRE

##### **Activity 1 / Grade 3**

Concept map and timeline by era

##### **Activity 2 / Grade 4**

Concept map and timeline by category



#### REALITY OF FIRE

##### **Grade 5**

Jigsaw and reality of fire from scenarios

If your school has several teachers using this curriculum, lesson plans, supporting teacher notes & student work sheets are available for download by grade level at the Office of State Fire Marshal Web site: [www.oregon.gov/OSP/SFM/Curriculum\\_for\\_Grades\\_1-8.shtml](http://www.oregon.gov/OSP/SFM/Curriculum_for_Grades_1-8.shtml)



# Fire Facts

## Objectives

Student will understand the role of fire and its impact on human life.

## Skills

### Grades 1 & 2

- Student will identify fire station staff, equipment and services to the community.

### Grades 3 & 4

- Student will analyze the roles of fire throughout history.

### Grade 5

- Student will describe the characteristics of fire.

## Introduction

Fire is critical to human survival on earth. For hundreds of years, it has been used as a tool to heat and light our homes as well as cook our food. Fire has also caused destruction, injury, and death.

Most fires are caused by human carelessness. Knowledge about fire and fire safety and respect for fire's power are imperative.

This unit will familiarize students with the training and equipment firefighters use to take care of themselves and their community; students will explore the positive role of fire throughout history; and students will learn that fire is fast, fire is hot, fire is dark and fire is deadly. The reality of fire and its potential harm are discussed as functional knowledge.

## Key words and concepts

**Apparatus** - vehicles used when fighting fire

**Dangers of fire** - fast, hot, dark, deadly

**Energy** - the ability to do work

**Engineer** - member of fire crew, drives and maintains fire engine

**Fire chief** - in charge of fire crew at fire station and scene of fire

**Firefighter** - member of fire crew, responsible for firefighting, maintaining equipment, and fire prevention

**Forest fire** - fire area of land covered densely with trees

**Fossil fuel** - coal, oil or gas formed from the organic remains of prehistoric plants and animals

**Fuel** - combustible material such as wood, paper, fabric, grease

**Nonrenewable energy** - energy sources that get used up and aren't renewed in a long time (oil, coal, wood)

**Paramedic** - person trained to handle medical emergencies

**Passive solar** - use of the natural movement of heat and air (rather than mechanical methods) to maintain comfortable temperatures in a building. Active solar uses mechanical aids such as solar panels

**Renewable energy** - energy sources that do not get used up (sun, wind)

**SCBA** - Self Contained Breathing Apparatus

**Structural fire** - residential or building fire

**Smoke** - a gaseous product that arises from a burning substance

**Solar energy** - use of the energy hitting earth as sunlight

**Sun energy** - energy from sun stored in plants or fuels like coal and wood

**Turnout Clothes** - protective clothing worn when fighting fire



## COMMUNITY HELPERS

### INTRODUCTION

With these lessons, students will be introduced to the role of the fire department in the community, either by a guest firefighter in the classroom or through a teacher-led discussion. There are many excellent books on the subject and several are recommended in the resource section at the end of this unit. More detailed suggestions for the lessons are included in the *Supplementary Materials* section of this unit.

NOTES:

# LESSON PLANS

Goal: Student will identify fire station staff, equipment and services provided by the fire department to the community.

## Materials provided:

- Graphic of Chief (found in introductory section)
- Do the Write Thing work sheet (in introductory section)
- Drawings of firefighter (Grade 1) and paramedic (Grade 2)
- AI rubric (in introductory section)

## Teacher preparation:

### Grade 1

- Review Teacher Notes, p. 13
- Student folder for each student (may paste copy of Chief on front)
- Copies of drawings of firefighter (& transparency)
- Crayons

### Grade 2

- Review Teacher Notes, p.14
- Copies of drawings of paramedic (& transparency)
- Crayons

## Do the Write Thing prompt



Write and/or draw one example of a firefighter's job.

## Extended activities

### Individual

- Silent reading from classroom book collection (see resource list)

### Class

- As a follow-up to the lesson, invite a firefighter to the classroom.
- Field trip to fire station
- Thank you note to firefighter/ fire station

## Grade 1

### teacher-led class discussion of firefighter

Teacher-led discussion on community helpers. Ask students what their parents do and if they wear uniforms to work. Can you think of community helpers who wear uniforms to work?

Introduce the firefighter (Chief) from *What Can You Do?* Chief is a community helper who wears a special uniform when responding to a fire.

Teacher-led discussion of the firefighter gear shown on the drawing of the firefighter — why each piece is needed. Have students color the turnouts yellow, the helmet red, the boots black, etc.

Discuss the responsibilities of the firefighter as a community helper (see *Teacher Notes*.)

## Grade 2

### teacher-led class discussion of paramedic

Repeat Grade 1 activity, discussing the paramedic. On average in Oregon, 90 percent of fire department responses are non-fire. What is this average in your community? Numbers can be obtained from your local fire department.

## Assessment

### (AI) accessing information

- Students will illustrate one example of a firefighter's job on Do the Write Thing work sheet.
- Students may also write and illustrate one example of a fire station's services to the community (to be included in a class book of community helpers).



# *Supplementary materials*





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## TEACHER NOTES

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### ROLE OF THE FIREFIGHTER

A firefighter responds to many hazardous situations. He or she is trained to put out fires in buildings, vehicles and in the out-of-doors. Many calls to the fire department involve accidents, and firefighters are trained to rescue people in dangerous situations. A firefighter may receive specialized training in responding to hazmat (short for hazardous materials) incidents where there is an oil or chemical spill or release. They may perform rescues in lakes, rivers or on ice. They are called to help in all sorts of situations—people even call them to rescue a cat that has climbed too high in a tree. In Oregon in a typical year, over 90 percent of fire department responses for help are non-fire.

### CLASSROOM VISIT OF GUEST FIREFIGHTER

In order to get the most from the visit, it is recommended that the teacher structure the visit ahead with the guest by planning the topics to be covered.

A discussion of turnouts, worn by firefighters when they fight fires, is usually of great interest to children. If you decide to focus the lesson on turnouts, it's a good idea to ask your guest to carry them, rather than arriving dressed in them. Stress that turnouts are a uniform that is only worn when fighting fires, and are not the everyday wear of a firefighter.

Fire is hot, dark, fast and deadly. As the guest dons each piece of equipment, he/she should explain its purpose and how it helps protect against fire. The last piece of equipment to be put on will likely be the SCBA. This mask transforms the appearance of the firefighter into what may seem a frightening apparition. Because young children often hide during a fire, an important point to be made is that the firefighter—in all this strange-looking gear—is there to help them escape if they are ever trapped in a fire. They should not hide.



## TEACHER NOTES

### ROLE OF THE PARAMEDIC

A paramedic is a professional who works for the fire department or for a hospital emergency department. He or she receives special training so they have the necessary skills to help if someone is sick or injured. They usually arrive in an ambulance or a fire engine and they give immediate help while the sick or injured person is taken to the hospital.

They work by authority of a doctor and under his or her direction. They are trained and permitted to perform some procedures independently. At other times they consult with a doctor via phone or radio before giving medical assistance.

Some of their skills include cardiac support such as for heart attack, stroke, or low blood pressure; help with accidental injuries; breathing assistance; help for a woman having a baby; and giving drugs that help with heart emergencies, pain, and severe nausea and vomiting.

### CLASSROOM VISIT OF PARAMEDIC

In order to get the most from the visit, it is recommended that the teacher structure the visit ahead with the guest by planning the topics to be covered.

You may wish to have a brief discussion with the class before your guest's visit about the role of a paramedic. If students have questions they would like to ask the guest about his/her job, go over them with your guest ahead of the visit.

A discussion of the guest's training to perform the job and how they work with doctors will probably be of interest.

A cautionary note: some of the cases paramedics respond to are grim. With children this young, it would be best to stress the paramedic's role as a helper in time of sickness or accident.

# A

## FIREFIGHTER'S GEAR (key to drawing)

**Turnouts** (coat and pants) - Made of fire-resistant fabric to protect from extreme heat. Reflective stripes are sewn on to make firefighter more visible.

(Note: A station uniform is worn to the station. When going to a fire, turnouts are worn over it. The station uniform should have no parts that will ignite, melt, drip or separate when exposed to 500° for five minutes.)

**Flashlight** - Light and batteries are designed to withstand high temperatures, water and chemicals and still function properly. Strong light projection to cut through smoke, gas, water, and dust.

**Boots** - Resistant to burns and blows. Safety toes and puncture-resistant sole.

**SCBA mask and airpack** - Self contained breathing apparatus provides breathable air to protect from smoke, toxic fumes and hot gases.

**Axe** - Used for quick entry or to open holes in building to vent fire.

**Gloves** - Fire-resistant. Protect from heat and sharp objects.

**Helmet** - Fire-resistant with brim and extra long brim in back. Protects from heat and falling objects. A hood that is fire-resistant goes under it to protect ears, neck and parts of face not protected by SCBA mask.

## PARAMEDIC'S GEAR (key to drawing)

**Heart monitor** - Used to record the heart's rhythms to find out if the heart is having problems.

**Oxygen bag**- Used to provide oxygen to a person who is having trouble breathing.

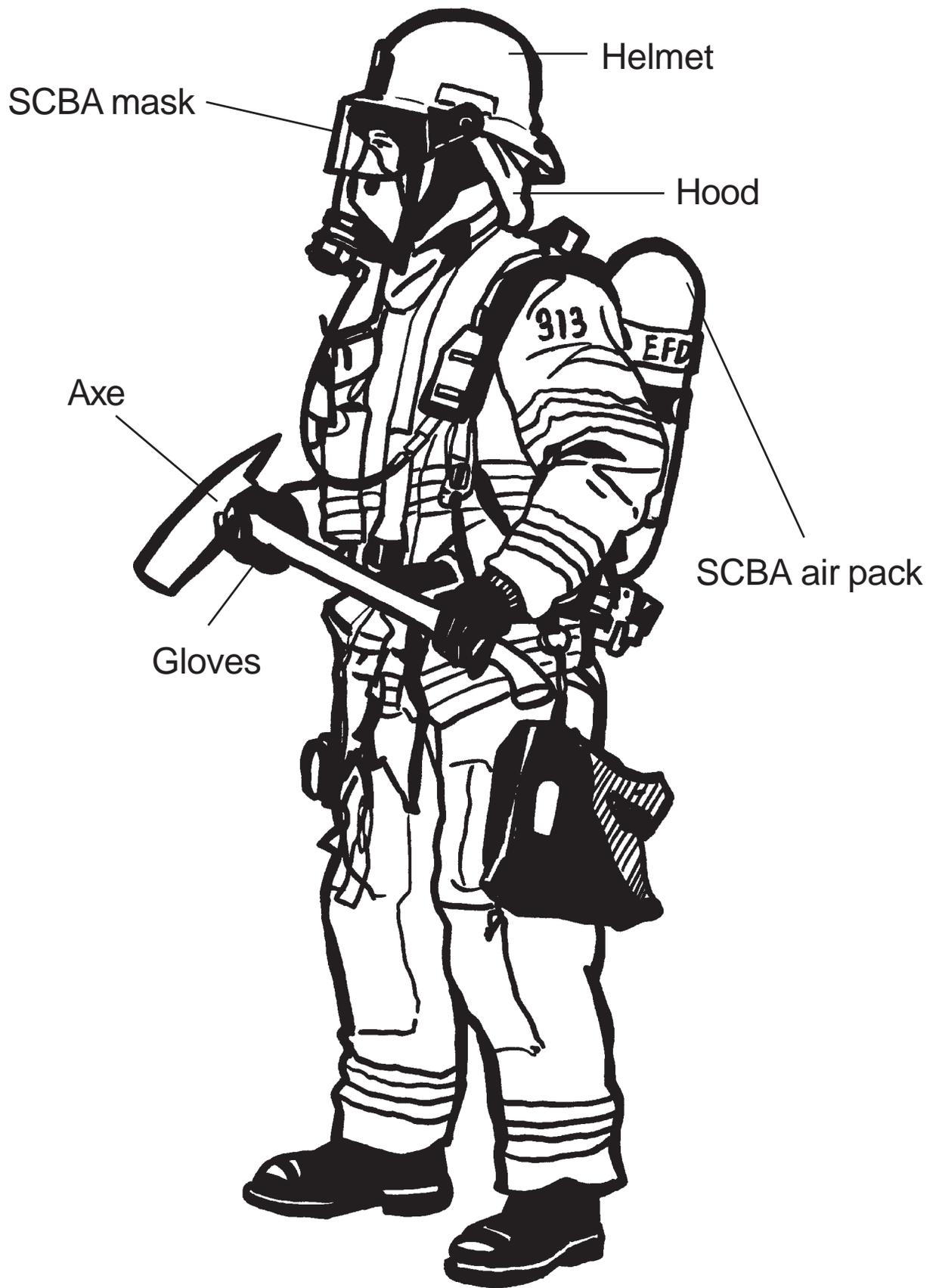
**Medical kit** - Contains an assortment of medications that enable the paramedic to give assistance with situations such as heart attacks and stroke, low blood pressure, nausea, pain, accidental injuries and childbirth.

A

# THE FIREFIGHTER'S EQUIPMENT

**Directions:** Explain why the firefighter needs each piece of his equipment.





A

# THE PARAMEDIC'S EQUIPMENT

Directions: Explain why the paramedic needs each piece of his equipment.



# UNIT 2

## FIRE PREVENTION

### Scope and Sequence



SAFE / UNSAFE FOR CHILDREN

**Activity 1/Grade 1**

Safety team

**Activity 2/Grade 2**

Computer screen savers



INVESTIGATION STATIONS

**Activity 1/Grade 3**

Problem-solving stations 1, 3, 5

**Activity 2/Grade 4**

Problem-solving stations 2,4,6



HOME FIRE HAZARDS SEARCH

**Grade 5**

Home fire inspection survey

If your school has several teachers using this curriculum, lesson plans, supporting teacher notes & student work sheets are available for download by grade level at the Office of State Fire Marshal Web site: [www.oregon.gov/OSP/SFM/Curriculum\\_for\\_Grades\\_1-8.shtml](http://www.oregon.gov/OSP/SFM/Curriculum_for_Grades_1-8.shtml)



# Fire Prevention

## Objectives

Student will recognize the components of fire prevention.

## Skills

- Student will compare and contrast responsible fire use and fire misuse.
- Student will analyze leading causes and influences of home fires.
- Student will assess home hazards.

## Introduction

Eight of the ten leading causes of home fires are human actions such as error, carelessness, or intent.

Fire awareness education, fire engineering and fire code enforcement are critical components of fire prevention.

The best protection from life-threatening fire is prevention. Children, adolescents and adults need to recognize the difference between responsible fire use or risky fire behavior.

A respect for fire and fire-starting tools is imperative. Matches and lighters are adult tools. Adult tools, whether matches, lighters, kitchen knives or yard tools with blades are dangerous when used by children.

With increased understanding of responsible fire use, dangerous situations involving fire can be prevented. With information regarding causes of home fires and assessment of home hazards, families can be proactive rather than reactive regarding life-threatening and destructive fire.

## Key words and concepts

**Advocacy** - writing or speaking in support of something

**Combustible** - capable of burning

**Fire code** - rules and standards for fire safety

**Fire investigation** - study of the scene of a fire to determine "origin and cause" (where the fire started and what caused it)

**Fire misuse** - using fire and fire tools as a toy and/or in an unsafe manner

**Fire marshal** - fire service employee who works in several ways to prevent fires such as inspections, citizen education and code enforcement

**Fire tool** - object, such as match or lighter, used to start a fire

**Flammable** - capable of burning

**Hazards** - objects or situations that may cause personal injury or property damage

**Hazmat** - abbreviation of "hazardous materials"

**Responsible fire use** - age-appropriate and safe use of fire and fire tools

**Stay away: tell an adult** - catch phrase reminding children of the appropriate action to take when faced with potential danger



## SAFE/UNSAFE FOR CHILDREN

### INTRODUCTION

Every day Americans experience the consequences of destructive fire. More than 15,000 fires occur in Oregon each year. On average, forty Oregonians lose their lives in these fires. The majority of structure fires are home fires caused by people.

Children are often at risk because of their curiosity about fire. They do not understand the power of fire and may experiment with it, causing injury, death and property damage. Home fires have been started by children as young as two years old handling matches or lighters. Reports indicate that by age twelve, 50 percent of all children have misused fire.

More detailed suggestions for the lessons are included in the *Supplementary Materials* section of this unit.

NOTES:

# LESSON PLANS

Goal: Student will identify responsible behavior with fire tools.

## Materials provided:

- Safety symbols/signs
- Safe/unsafe objects master
- Safe and Unsafe sign master
- Do the Write Thing work sheet
- Letter to parents/guardians
- C rubric (in introductory section)

## Teacher preparation:

### Grade 1

- Review Teacher Notes, p. 12
- Make 8 copies each of Safe and Unsafe signs (one sign per page) for the teams.
- Copy the safe/unsafe objects found in the home environment so there is one object per page. Post them around the room.
- Make student copies of Do the Write Thing work sheets

### Grade 2

- Crayons

## Do the Write Thing prompt



(Grade 1) Who is responsible for your safety at home?

Describe in words and/or pictures how you work with others to be safe.

(Grade 2) Draw a computer screen saver showing a “safe/unsafe for children” message.

## Extended activities

### Individual or Class

- Draw pictures of signs in the school building that give fire safety messages: Exit, Fire Danger, Fire Extinguisher.

## Grade 1

### safety team

Present the safety symbols/signs provided. Ask students if they are familiar with what the signs represent and where they are to be found.

Ask students who is responsible for their safety. They may answer, “myself, my parents, my teachers, community helpers like police, firefighters and the American Red Cross.”

Discuss importance of self-responsibility and responsibility for the safety of others.

Assign class to safety teams of 2-4 students per team. Have teams search classroom for areas or objects that are safe (or unsafe) for work and play. Teams identify areas/objects by placing the safe or unsafe signs provided.

Discuss areas/objects to stay away from and concept of “Stay Away: Tell an Adult.” Practice concept, especially with fire tools.

## Grade 2

### computer screen savers (Do the Write Thing)

Review safe/unsafe for children concept. Have students make drawings that could become computer screen savers of the message. Using crayons, have students apply crayons richly for vibrant colors. Completed drawings may be sent to the Office of State Fire Marshal for sharing on the *What Can You Do?* Web page. Or, they could be scanned and used on the school’s resource/media center computers.

## Assessment

### (C) concept

- Do the Write Thing reflection



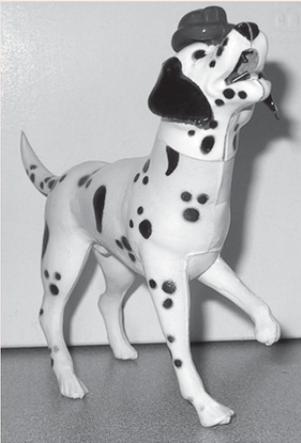
# *Supplementary materials*

## **A** TEACHER NOTES

### **SAFE/UNSAFE FOR CHILDREN**

Children should be taught at an early age to recognize fire-creating tools such as matches and lighters as tools for adult use only. They should be taught to “stay away” and “tell an adult” if they encounter matches or lighters.

To further confuse the issue, many cigarette lighters look deceptively like toys, as you can see from the photos below. Many of them light up and/or emit sounds when used, making them even more attractive to children.



Lighters such as these are readily available and used in many homes.

### **HOME CONNECTION**

Parents/guardians bear the ultimate responsibility for keeping their children safe. This is especially true for younger children. A sample letter about home fire safety and young children is on page 9. It can be copied and sent home.



## Sample letter for home connection



Dear Parent or Guardian,

Your child is studying fire safety skills in school. He or she is learning that objects such as matches and lighters are adult tools, not toys for children.

Suggestions to keep your family fire-safe:

1) **Keep matches and lighters in a place inaccessible (preferably locked) to children.**

Children experimenting with fire are often the cause of fires.

2) **Plan to awaken your child/children in the event of a fire.**

Studies have shown that children often sleep through a sounding fire alarm.

3) **Have working smoke alarms inside each bedroom and outside each sleeping area.**

Local fire departments may have smoke alarm giveaway programs.

4) **Have a home fire escape plan and practice it.**

Plan two ways out of every room and a meeting place outside.

5) **Unsupervised children are more likely to experiment with fire.**

6) **The leading causes of home fires are cooking fires, electrical fires, cigarettes and combustibles too close to a heat source.**

For further information about home fire safety, the Office of State Fire Marshal has a booklet, *The Bear Facts*, available for download on its Web site. Designed for parents with young children, the booklet gives fire safety tips for many common household situations. *The Bear Facts* is available at [http://egov.oregon.gov/OSP/SFM/docs/Comm\\_Ed/JFSI/JFSI\\_DL\\_2005/Bear\\_Facts\\_About\\_Home\\_Fire\\_Safety\\_English.pdf](http://egov.oregon.gov/OSP/SFM/docs/Comm_Ed/JFSI/JFSI_DL_2005/Bear_Facts_About_Home_Fire_Safety_English.pdf)



Safety Symbols





Safety Symbols





Safety Symbols

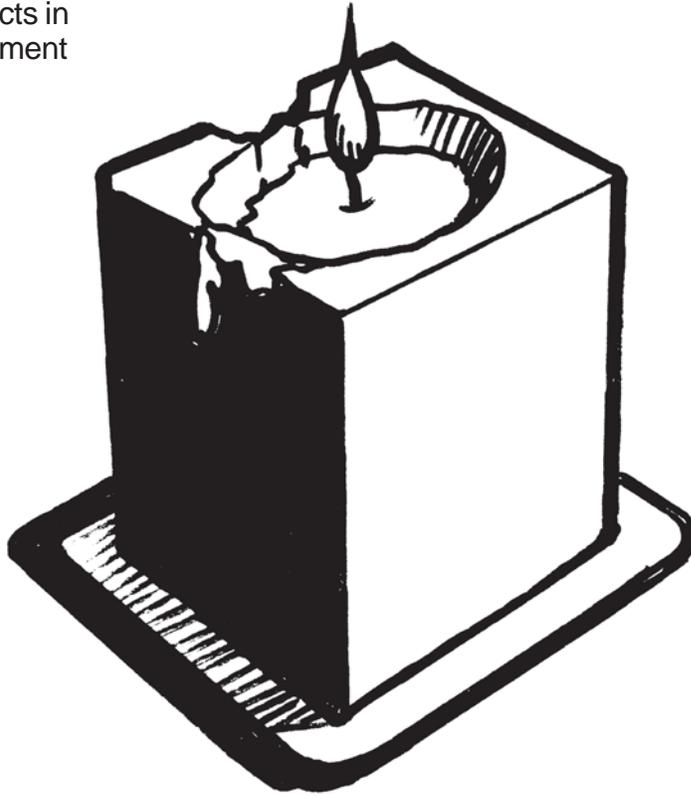






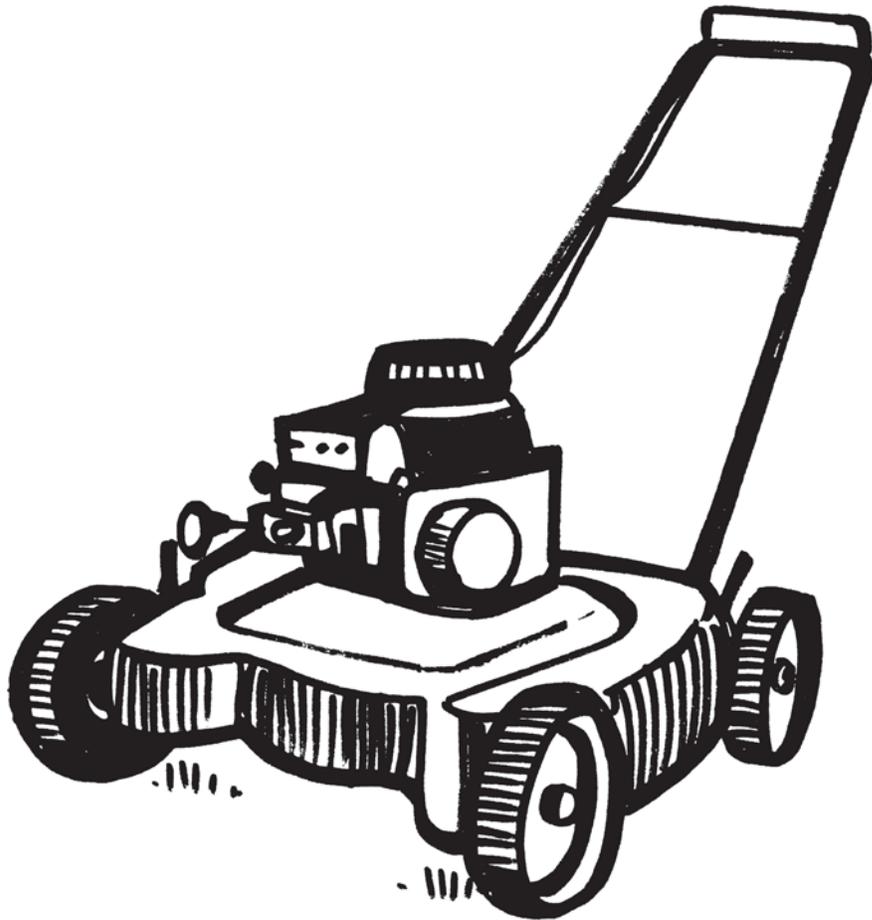
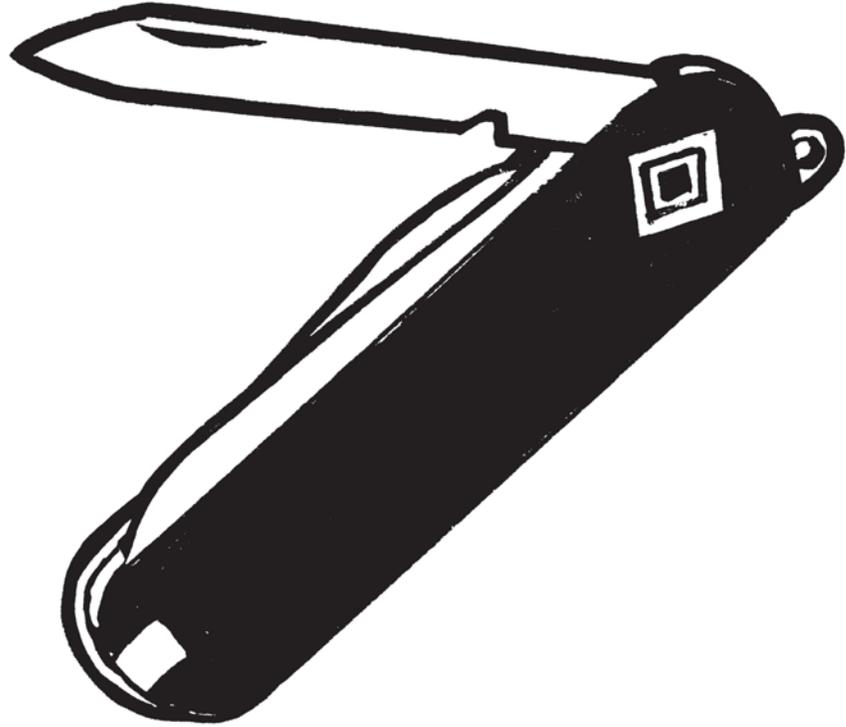


A Safe/unsafe objects in the home environment

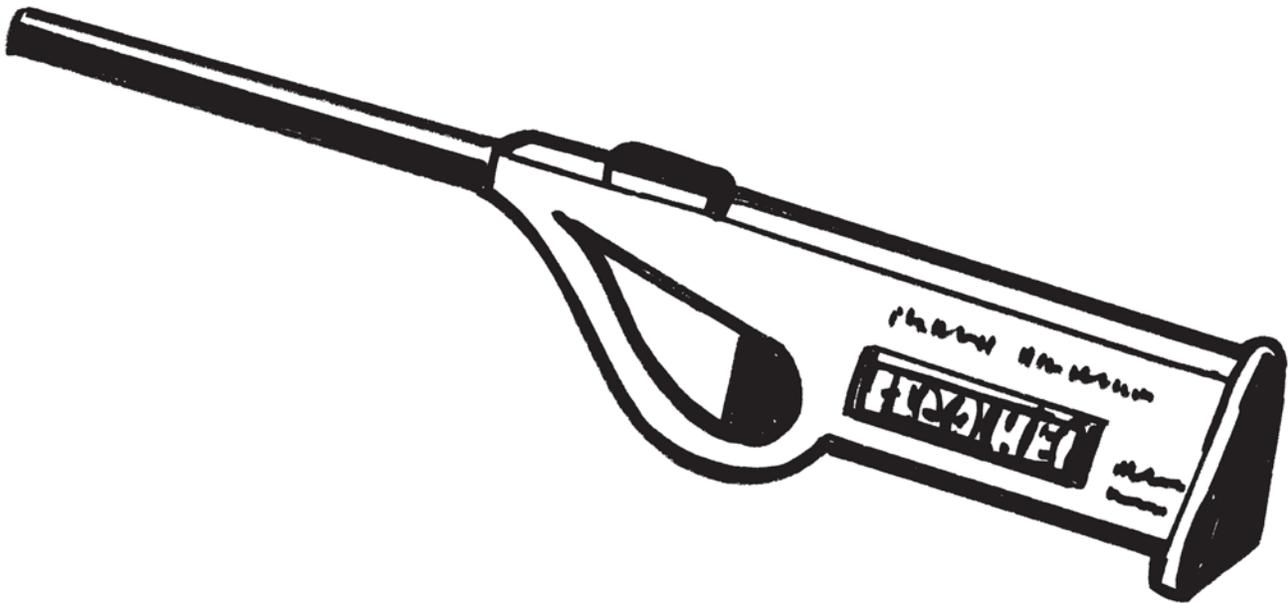


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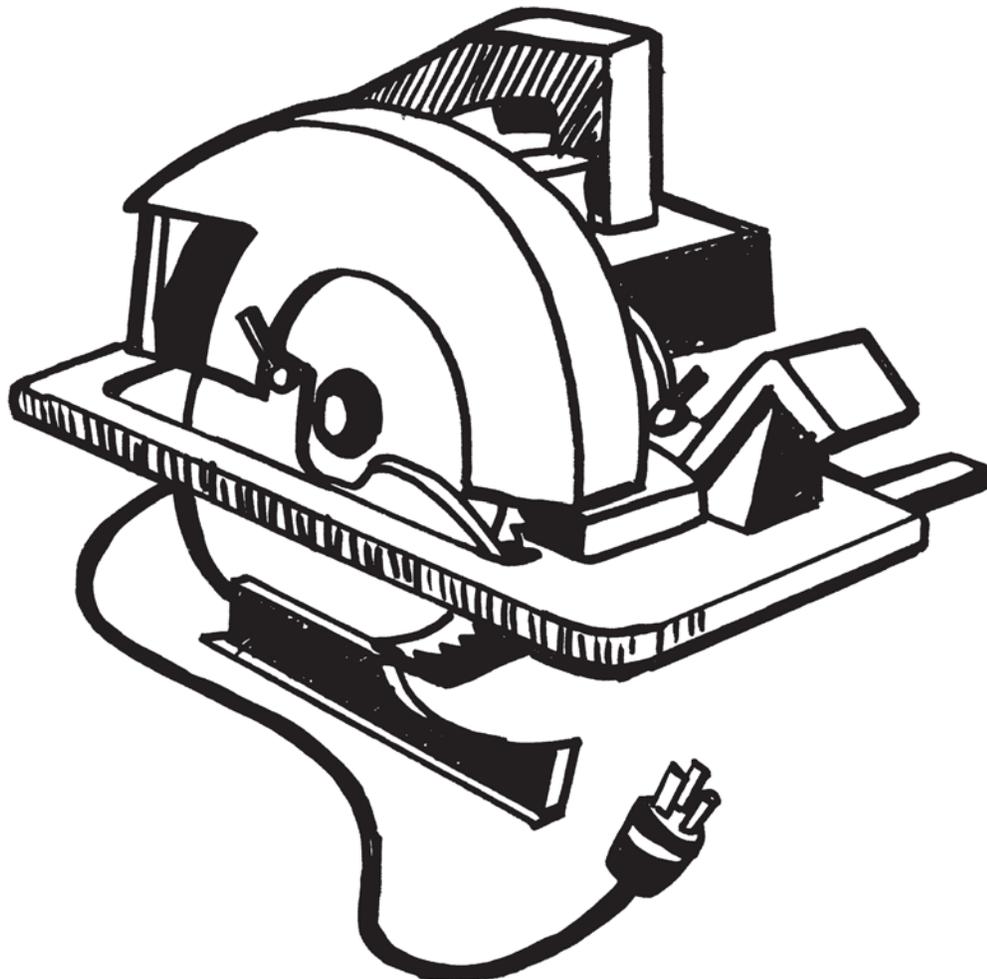
Safe/unsafe objects in  
the home environment



A Safe/unsafe objects in the home environment

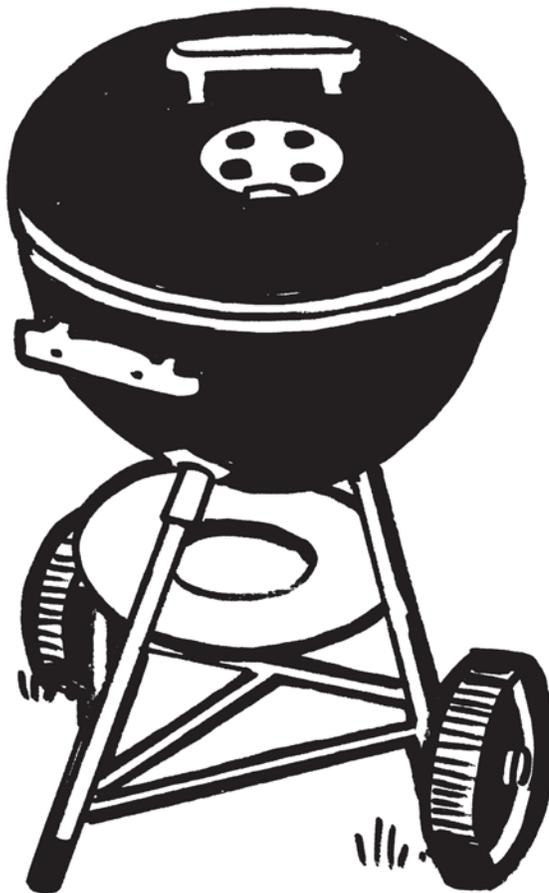
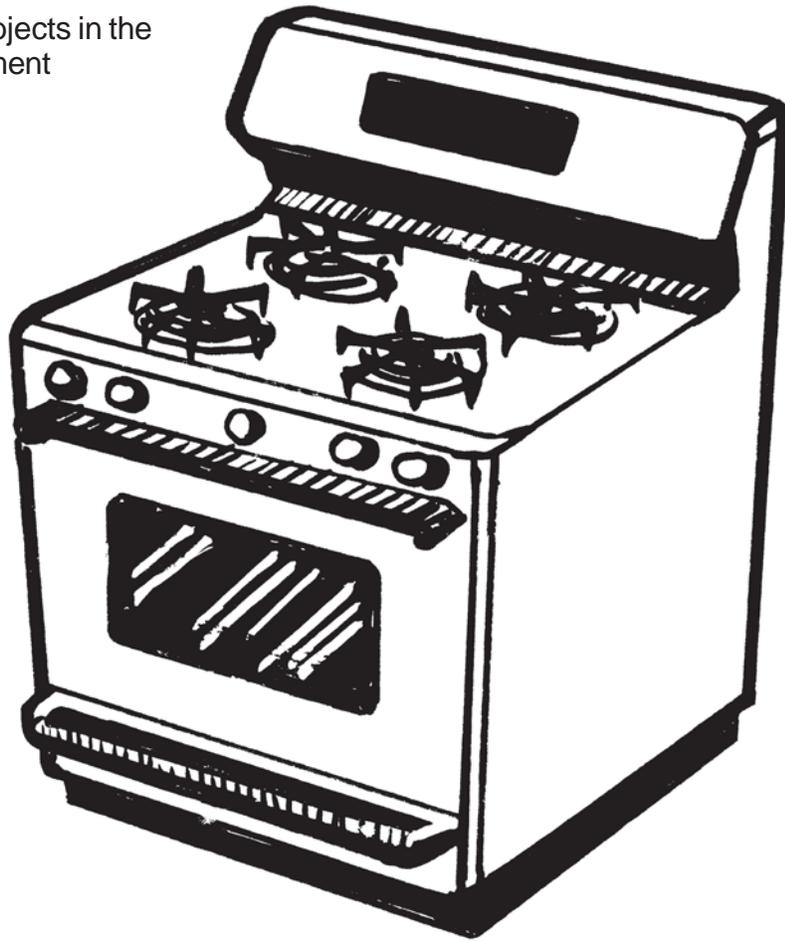


**A** Safe/unsafe objects in the home environment



A

Safe/unsafe objects in the home environment





**Safe**



**Unsafe**

# UNIT 3

## FIRE SAFETY INVENTIONS

### Scope and Sequence

**A**

**SMOKE ALARMS AND ADVOCACY**

**Activity 1/Grade 1**

What to do if a smoke alarm sounds

**Activity 2/Grade 2**

Case studies, collecting data and graphs

**B**

**FIRE SUPPRESSION TECHNOLOGY**

**Activity 1/Grade 3**

Fire suppression technology mind map

**Activity 2/Grade 4**

Specialized fire suppression methods

**C**

**FIRE HISTORY RESEARCH**

**Grade 5**

KWL brainstorming, recording, research

If your school has several teachers using this curriculum, lesson plans, supporting teacher notes & student work sheets are available for download by grade level at the Office of State Fire Marshal Web site: [www.oregon.gov/OSP/SFM/Curriculum\\_for\\_Grades\\_1-8.shtml](http://www.oregon.gov/OSP/SFM/Curriculum_for_Grades_1-8.shtml)



# Fire Safety Inventions

## Objectives

Student will advocate for use and maintenance of smoke alarms.

## Skills

### Grades 1 & 2

- Student will demonstrate correct response to smoke alarm, know how to test one and will advocate for their use.

### Grades 3 & 4

- Student will explore the development of fire-suppression technology over time and construct chronological sequences.

### Grade 5

- Student will research a selected fire history topic.

## Introduction

The responsibility for preventing fires that cause injury or death is first and foremost a personal one. Yet, fire happens. Every 74 seconds, a home burns. Eight out of ten fire deaths in the United States occur in the home.

The physical, emotional, and financial consequences of fire have led to increasingly sophisticated fire warning and fire suppression technology over the years. Smoke alarms, sprinkler systems, fire-resistant materials and fire-fighting equipment have become life-saving inventions of the 21st century.

Smoke alarms and home fire sprinklers cut the risk of dying in a home fire by 82 percent. Even though smoke alarms are required in every home, they're designed to detect, not control, a fire. Home fire sprinklers provide the next level of protection and fight fires immediately. They can contain, and even extinguish, a fire. It's like having a firefighter in your home twenty-four hours a day, seven days a week.

The intent of this unit is to provide information that may help protect families and homes from fires.

## Key words and concepts

**Bucket brigade** - a line of people who pass buckets up and down the line to move water from a water source to a fire or fire engine

**Cistern** - an underground tank for storing water

**Cross-section** - a piece of something cut off at right angles to its length

**Fire sprinklers** - water-carrying devices in the wall or ceiling that spray water when they sense a fire near them. (Only the fire sprinkler(s) nearest to the fire activate.)

**Fire suppression equipment** - is used to extinguish fires

**Fire warning equipment** - alerts when fire or smoke is present

**Innovation** - a new idea, method or device

**Smoke alarm** - an alarm that emits a sound or bright, flashing light as a warning when it detects smoke

**Technology** - use and knowledge of tools and crafts

**Water main** - a pipe for carrying water



## SMOKE ALARMS & ADVOCACY

### INTRODUCTION

Smoke alarms are critical to home fire safety because they alert us to fire in its early stages. Even more important, they can alert us to a fire when we are most vulnerable—when we are asleep at night.

In 2004, according to the Office of State Fire Marshal, 80 percent of Oregon’s forty-one fire fatalities occurred in homes. The majority of the home fire victims died in homes without a working smoke alarm. The alarms were not working, usually because batteries were dead, disconnected or missing.

The presence of a working smoke alarm doubles your chances of surviving a fire.

More detailed suggestions for this lesson are included in the *Supplementary Materials* section of this unit.

NOTES:

# LESSON PLANS

Goal: Student will demonstrate correct response to smoke alarm and advocate for their use and maintenance.

## Materials provided:

- Smoke alarm PSAs (on DVD)
- Case study: Smoke Alarm Saves Westhome Resident
- ADV rubric (in introductory section)

### Grade 1

- Smoke Alarm Information (Home Connection)

### Grade 2

- Smoke Alarm Take-Home Survey
- Do the Write Thing (master)

## Teacher preparation:

- Review Teacher Notes, p. 13

### Grade 1

- Smoke alarm
- Copies of Smoke Alarm Information sheet

### Grade 2

- Smoke alarm
- Copies of Smoke Alarm Take-Home Survey
- Large graph, colored paper strips, adhesive or tape "stickies"

## Do the Write Thing prompt



Create a computer screen saver reminding families of smoke alarm use and maintenance.

(Teachers are invited to submit these to OSFM for publication on Web site.)

## Extended activities

### Individual

- Advocate for smoke alarm use in school newsletter.

### Class

- Read Smoke Alarm Saves Westhome Resident and have class discuss what went right.

## Grade 1

### what to do if a smoke alarm sounds

Ask students if they know what smoke alarms are for, what they sound like, and what they should do if one goes off. Explain the purpose of a smoke alarm. Model testing a smoke alarm by using a real one. Do the smoke alarm sound discrimination exercise described in the *Teacher Notes*.

Show the "What To Do" smoke alarm PSA (on curriculum DVD) and review smoke alarm safety tips illustrated in the PSAs (see *Teacher Notes*).

Send Smoke Alarm Information sheet home with students.

## Grade 2

### collecting data and graphs

Prior to the lesson, have students collect information about the presence or absence and number of smoke alarms in their homes. A take-home survey is provided.

Model testing a smoke alarm. Show the smoke alarm PSAs provided on curriculum DVD and review smoke alarm safety tips (See *Teacher Notes*.)

Using the prepared graph and student take-home surveys, develop the graph to show the number of homes that have smoke alarms and the number with one, two, three or more alarms. (See the *Teacher Notes* for more lesson suggestions.)

## Assessment

### (ADV) advocacy

- Do the Write Thing computer screen savers.



# *Supplementary materials*





## TEACHER NOTES

### INTRODUCTION

Smoke alarms are early warning equipment that alert when fire or smoke is present, giving people valuable time to escape from a burning building. A working smoke alarm can double a family's chances of surviving a fire.

### SMOKE ALARM SAFETY TIPS

Smoke alarms save lives, but only when they are working. Show the two short PSAs about smoke alarms (on curriculum DVD) to introduce summary discussion. The messages students should learn from this lesson are:

- 1) Smoke alarms have a distinctive sound. Students should learn to recognize the sound and the proper reaction to it.
- 2) When a smoke alarm sounds, people should quickly exit the house and call 9-1-1 from a cell phone or a neighbor's house;
- 3) Batteries should NEVER be removed from an alarm to be used for something else (such as toys), or to silence an alarm that is sounding nuisance alarms (such as when toast is burning). Instead, open doors and windows to clear the smoke. Newer smoke alarms have a "hush" feature — pressing the hush button will cause the alarm to beep once a minute for up to fifteen minutes and then it will reset itself.
- 4) Family should gather at a predetermined meeting place outside.

### SMOKE ALARM SOUND DISCRIMINATION EXERCISE

Collect several items that make a sound such as bicycle bell, hand bell, empty glass and spoon to strike it with, teacher's desk bell, clicker, buzzer, etc. Out of sight of the children (behind the desk, for example) sound these in random order, interspersing other sounds with the smoke alarm sound. Have class raise their hands ONLY when they hear the smoke alarm.

Continued on page 14

## CHARTING CLASS SMOKE ALARM PRESENCE (GRADE 2)

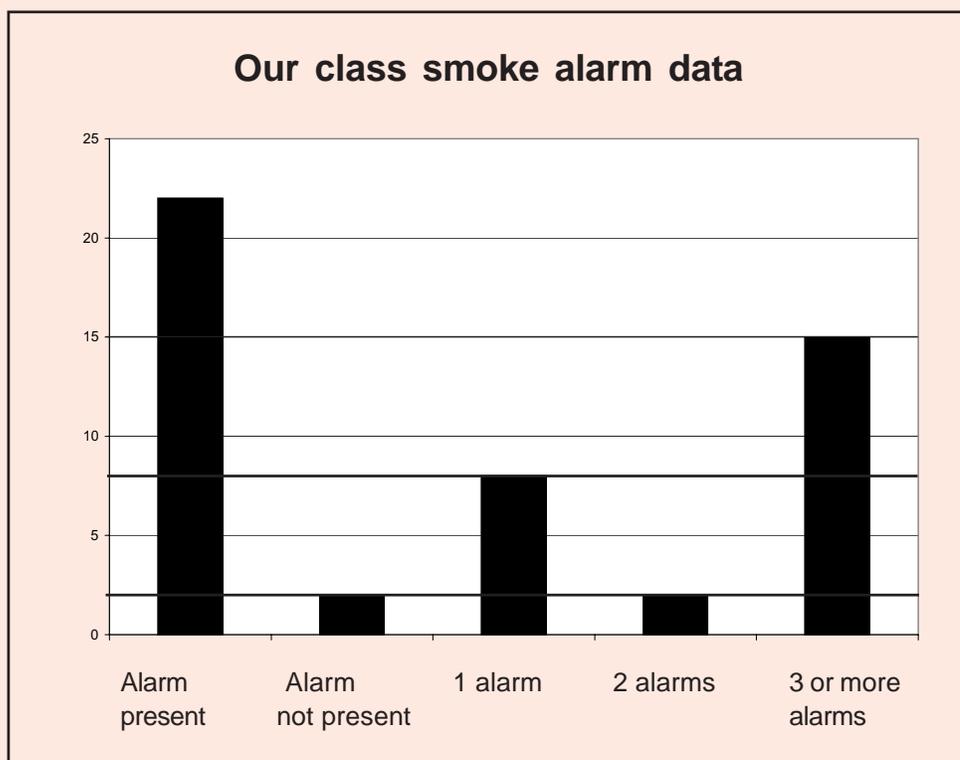
Prepare a large graph for the class and add the data as the students provide the results of their surveys (a photo of a simple example is included). You may wish to have strips of colored paper as wide as the bars on the graph cut into horizontal strips.

Students place one strip in a bar as appropriate—for example, when a student says "yes, his home has smoke alarms," then one colored paper strip would be placed in the "yes" column. As students add their strips, the graph's bars will be constructed.

Do the Write Thing activity. Have students explain key findings and advocate for use of smoke alarms by illustrating one smoke alarm safety tip.

*Note to the teacher: If a student reports having NO smoke alarms in the home, your local fire department may have a smoke alarm giveaway program. Or contact the Oregon Office of State Fire Marshal, Community Education Unit.*

### SAMPLE BAR GRAPH FOR GRADE 2 LESSON



# A

## About the smoke alarm animations found on the *What Can You Do?* DVD

These 30 second made-for-TV spots, are both catchy and informative. They are a great introduction to the topics of testing your smoke alarm and what to do if the smoke alarm sounds.

### FIND YOUR FINGER



This spot:

- 1) Demonstrates the proper way to test a smoke alarm.
- 2) Illustrates the test button.
- 3) Suggests regular testing.
- 4) Shows inserting the battery and recommends changing batteries as needed. Ask the local fire department if necessary.

### WHAT TO DO



This spot:

- 1) Illustrates what NOT to do if the smoke alarm sounds.
- 2) Illustrates what TO do if the smoke alarm sounds:
  - a) Evacuate using the family fire escape plan.
  - b) Don't stop to gather belongings.
  - c) Meet at a predetermined outside location.



## SMOKE ALARM SURVEY (grade 2)

Does your home have working smoke alarms?

\_\_\_\_\_ yes      \_\_\_\_\_ no

Where are the smoke alarms located?

\_\_\_\_\_ on every level      \_\_\_\_\_ outside sleeping areas

\_\_\_\_\_ inside bedrooms      \_\_\_\_\_ kitchen      \_\_\_\_\_ other

How many smoke alarms does the home have?

\_\_\_\_\_ alarms

## SMOKE ALARM SURVEY (grade 2)

Does your home have working smoke alarms?

\_\_\_\_\_ yes      \_\_\_\_\_ no

Where are the smoke alarms located?

\_\_\_\_\_ on every level      \_\_\_\_\_ outside sleeping areas

\_\_\_\_\_ inside bedrooms      \_\_\_\_\_ kitchen      \_\_\_\_\_ other

How many smoke alarms does the home have?

\_\_\_\_\_ alarms



Dear Parent or Guardian,

Your child has just completed a smoke alarm fire safety lesson in school.

The lesson stressed the importance of working smoking alarms to family safety.

Students also discussed the importance of leaving the home immediately, going to a predetermined meeting place outside, and using a cell phone or a neighbor's phone to dial 9-1-1 to call the fire department from outside the house.

This would be a good time for your family to talk about your home escape plan in the event of a fire and to decide on a family meeting place outside.



**HOME FIRE  
SAFETY**  
IS UP TO YOU!

## A working smoke alarm is your best life insurance.

**Oregonians die in fires every year because they don't have a working smoke alarm. If your home has battery-powered ionization smoke alarms, these tips are for you.**

### **How should I protect my family and my neighbors?**

- Be sure your smoke alarms have a 10-year long-life battery and a hush button.
- Install alarms on every level, outside each sleeping area and in every bedroom. Vacuum them monthly.

### **How does the hush button work?**

- If the smoke alarm goes off and there is no fire (i.e. burning toast), push the hush button. It will beep once a minute for up to 15 minutes, then reset itself.
- **Do not remove the battery!**
- Open the windows and/or doors to clear the smoke.

### **What if my alarm is making a chirping noise?**

- Replace it with a new smoke alarm that has the 10-year long-life battery and hush button.

### **What if my alarm has the 10-year battery and hush button and it makes a chirping noise?**

- Return it to the manufacturer and install a new one.

### **What else should I do?**

- Replace smoke alarms that are over 10 years old.
- Test and replace nonworking alarms.

### **I am a renter. What do I need to know about smoke alarms?**

- The landlord-tenant laws in Oregon require landlords to provide working smoke alarms and forbid tenants from disabling them.
- If you are the renter, you are responsible for maintaining working smoke alarms. Not maintaining, or disabling a smoke alarm, puts you, your family and your neighbors at risk.

### **Is there anything else I should know?**

- YES! Many children can and will continue to sleep after a smoke alarm goes off. It is your responsibility to plan for this and awaken them.

***Your fire department has more information  
to help you prevent a fire.  
Call them or visit [www.oregon.gov/OSP/SFM](http://www.oregon.gov/OSP/SFM)***



## Una alarma de humo que funciona es el mejor de la veda.

Los residentes del estado de Oregon se mueren en los fuegos cada ano porque no tienen una alarma de humo que funciona. Si su casa tiene una alarma de humo que tiene batería aquí están unas extremidades que puede seguir:

### ¿Como puedo proteger mi familia y mis vecinos?

- Asegurase que sus alarmas de humo tienen una batería de 10 años y un botón de "Hush."
- Las alarmas necesitan ser instaladas en cada piso de la casa y afuera de cada dormitorio y adentro de cada dormitorio. Necesita aspirar las alarmas de humo cada mes.

### ¿Como trabaja el botón de "Hush"?

- Si la alarma suena y no hay un fuego, empuje el botón. La alarma va a sonar una vez por 15 minutos y después se reajustara. (Por ejemplo: pan tostado)
- **¡No quite la batería!**
- Abre las ventanas y/o las puertas para despajar el humo.

### ¿Que pasa si mi alarma de humo hace un ruido seguido?

- Necesito reemplazar su alarma con una nueva que tiene una batería de diez años y un botón de "Hush."

### ¿Que pasa si mi alarma de humo tiene una batería de diez años y un botón de "Hush" y todavía hace un ruido seguido?

- Necesita regresarlo al fabricante y instale una nuevo.

### ¿Que mas debo de hacer?

- Reemplaza las alarmas de humos que tienen más de 10 años.
- Pruebe las alarmas y reemplaza todas las alarmas que no funcionan.

### ¿Si soy un inquilino, que necesito saber sobre las alarmas de humo?

- Las leyes del propietario y el inquilino en el estado de Oregon requieren a los propietarios proporcionar una alarma que funciona y prohibir los inquilinos de inhabitarlos.
- Si usted es el inquilino, usted es responsable de mantener las alarmas de humo. No manteniendo o inhabilitando las alarmas de humo pone su familia y sus vecinos en peligro.

### ¿Hay also mas que debo de saber?

- ¡Si! Muchos niños continúan dormidos después que suena la alarma. Es su reponsabilidad de planear para este caso y de despertarlos.

*Su departamento de los bomberos tienen mas información para ayudarle prevenir los fuegos. Llámales o visita en el Internet al [www.oregon.gov/OSP/SFM](http://www.oregon.gov/OSP/SFM)*

**¡Recuerda que la seguridad de fuego es su responsabilidad!**



**HOME FIRE  
SAFETY**  
IS UP TO YOU!



## SMOKE ALARM SAVES WESTHOME\* RESIDENT

**Note: This is an extra second grade lesson which could be used as a means of assessing what students have learned.**

A working smoke alarm most likely saved the life of a Westhome resident during an early morning house fire, according to Fire Marshal Casey Jones, Westhome Fire Department.

Nellie Smith was awakened by a smoke alarm about 1 a.m. She immediately left the house and called 9-1-1 on her cell phone. Firefighters responded from the Westhome Fire Hall just three blocks away.

Quick detection of the fire and a fast response resulted in only interior damage to the home. The wall behind the wood stove was damaged.

The fire was controlled within an hour and no injuries were reported.

Smith moved into the rental home a month ago. At that time, smoke alarms were checked, according to Ken Allen, the property owner.

"We found batteries missing from

one alarm and another alarm completely gone," Allen said. "We replaced these and we are really pleased that they worked when they were needed."

"The property owner and renter did a great job checking the batteries and smoke alarms before an actual fire occurred," Fire Marshal Jones said. "Checking the alarms very possibly saved Smith's life and definitely saved the home. With the early alert the fire department was able to quickly put out the fire."

Fire Marshal Jones recommends that smoke alarms be placed on every level of the home, outside each sleeping area and in every bedroom.

---

### WHAT WENT RIGHT?

- 1) The smoke alarm was working.
- 2) The smoke alarm gave Smith an early warning so she could escape from the house fire.
- 3) Smith immediately left the house and called 9-1-1, using her cell phone.
- 4) The Westhome Fire Department responded quickly.
- 5) The home owner and renter checked the smoke alarms ... replacing missing batteries and one whole alarm.
- 6) The smoke alarm was audible from Smith's bedroom.

\*Westhome is a fictitious town in Oregon.

# UNIT 4

## SURVIVAL SKILLS

### Scope and Sequence

**A**

#### SURVIVAL SKILLS STATIONS

##### **Activity 1/Grade 1**

Fire survival skills demonstrations & stations

##### **Activity 2/Grade 2**

Earthquake survival skills practice

**B**

#### FIRE ESCAPE PLAN

##### **Activity 1/Grade 3**

Creating fire escape plans

##### **Activity 2/Grade 4**

Earthquake survival plans for the home

**C**

#### DISASTER PREPAREDNESS PLAN

##### **Grade 5**

Demonstration, discussion, disaster plan and kit

If your school has several teachers using this curriculum, lesson plans, supporting teacher notes & student work sheets are available for download by grade level at the Office of State Fire Marshal Web site: [www.oregon.gov/OSP/SFM/Curriculum\\_for\\_Grades\\_1-8.shtml](http://www.oregon.gov/OSP/SFM/Curriculum_for_Grades_1-8.shtml)



# Survival Skills

## Objectives

Student will identify and practice survival skills for disasters such as fire, earthquake or severe weather.

## Skills

### Grades 1 & 2

- Student will demonstrate steps for survival in home fire and earthquake.

### Grades 3 & 4

- Student will create home fire escape and earthquake survival plans.

### Grade 5

- Student will develop and practice emergency plans.

## Introduction

Disasters can strike quickly and without warning. In Oregon, the disasters most likely to occur are home and wildland fires, earthquakes, flooding and severe weather. Such disasters can be even more traumatic when adults and children don't know what to do.

Consequently, it is important to know and to practice survival skills. Knowing what to expect geographically and practicing emergency plans in homes, workplaces, and communities can make a difference in emergency situations.

## Key words and concepts

**9-1-1** - the phone number to dial in Oregon for help

**Disaster** - event such as fire or flood that happens suddenly and causes suffering and loss

**Disaster kit** - assembled supplies to help people cope in case of sheltering at home or evacuation caused by a disaster.

**Disaster plan** - a written plan of how to respond to a disaster.

**Dispatcher** - person who receives 9-1-1 calls about fires and other emergencies, then routes calls to local fire or police station.

**Drop, Cover, Hold on** - sequence of steps to protect self from earthquake injury.

**Earthquake** - sudden, rapid shaking of earth caused by shifting of earth's crust.

**Evacuate** - to leave a place in an organized way for protection from unsafe conditions.

**Preparedness** - being ready for disaster by planning and practicing survival skills.

**Reactive skills** - learned reactions and immediate response for safety and survival.

**Severe weather** - destructive, localized storms.

**Stop, Drop, Roll** - sequence of steps to extinguish fire on clothing

**Tsunami** - one or more huge ocean waves caused by earthquakes.



## SURVIVAL SKILLS STATIONS

### INTRODUCTION

In order to become a reactive skill where students learn to react and immediately respond to threatening situations such as fire, survival skills and sequencing of steps need to be practiced. This unit covers skills that elementary students will practice to demonstrate proficiency.

More detailed suggestions for the lessons are included in the *Supplementary Materials* section of this unit.

NOTES:

# LESSON PLANS

Goal: Student will demonstrate steps for survival in home fires or earthquakes.

## Materials provided:

- Positive news story
- Stop, Drop, and Roll (master)
- Emergency information work sheet (Home Connection)
- Survival Skills Performance Checklist master
- Do the Write Thing (master)
- SM rubric (in introductory section)

## Teacher preparation:

Grade 1

- Review Teacher Notes, p. 17
- A news story with positive outcome
- Stop, Drop, and Roll transparency
- Felt flames
- 2 cardboard doors
- 8 1/2" x 11" card stock
- Prop telephones
- Survival Skills Performance Checklist

## Do the Write Thing prompt



Today I practiced survival skills.

The survival skill I am most comfortable with is ...

A skill I need to practice is ...

## Grade 1

### fire survival skills demonstrations and stations

Explain that this lesson is about being safe if you are ever in a fire.

Read a news story with positive outcome.

Teacher-led class discussion of *Survival Skills Performance Checklist* (immediate response for safety and survival). Review sequence of skills for each station (transparency master provided).

### **Survival skills stations**

Choose three students to demonstrate expectations and skills that the class will be practicing at three survival skills stations.

Divide class into four groups.

Fourth group can be completing emergency information worksheet at their desks.

Parent volunteers recommended for stations.

### **Stop, Drop, and Roll**

Describe a scenario or two (sleeve catches fire from reaching across stove or sweatshirt catches fire from being too close to campfire) then demonstrate the proper sequence of skills.

### **Crawl low under smoke**

Explain that smoke inhalation is even more life-threatening than a burn. Smoke is poisonous to breathe. It's the cause of most deaths in home fires so it's important to practice escaping from fire and smoke.

Describe a home fire scenario (smoke alarm sounds while in bedroom) then demonstrate the proper sequence of skills (or ask an agile student volunteer to do so).

Continued on page 6

### **Extended activities**

#### **Individual**

- Teach skills to family.

#### **Class**

- Schedule all hazards house trailer (if available from local fire station) to be at school site for home fire escape simulation.

### **Calling 9-1-1**

Emphasize that emergency calls for home fires should be made from outside the house, either with a cell phone or from a neighbor's house.

List student examples of emergencies that should be reported to 9-1-1.

Describe and demonstrate reporting a home fire from the neighbor's house. Demonstrate the proper sequence of skills.

### **Assessment**

#### **(SM) self-management**

Students practice self-management and survival skills as they rotate through stations.

After everyone has gained confidence with practice, they will go to stations with available space to complete the *Survival Skills Performance Checklist*.

**Materials provided:**

- Drop, Cover, and Hold (master)
- Earthquake Simulation Script

**Teacher preparation:**

- Review Teacher Notes, p. 24
- Drop, Cover, and Hold transparency
- Props to create earthquake simulation effects (such as pencils, books and other objects to drop, chairs to rattle and slide, pencils and cardboard or other hard objects to provide the scratching noise of trees)

**Extended activities****Individual**

- Locate the safest places to Drop, Cover and Hold at home.

**Class**

- Imagine that an earthquake has occurred and students and teachers must remain in the school for three days until outside help arrives. Brainstorm a list of supplies needed for the class to survive.

You might imagine that the water and power have been cut off. What then?

**Grade 2****earthquake survival skills practice**

Lead class discussion about what students would hear and feel if an earthquake occurred.

Explain that you are going to talk through an imaginary earthquake to help them understand what might happen during a real one. Display the transparency of *Drop, Cover, and Hold* and direct students to practice the following actions:

1. Get under the table or desk.
2. Turn away from the windows.
3. Put both hands on the back of your neck.
4. If your desk or table moves, hold onto the legs and move with it.

Appoint helpers for the simulation. Ask one student to flick the lights on and off several times, and then turn them off. Appoint another to act as timer for this activity. Designate students to help create earthquake sound effects such as:

rattling glass            trees scraping the building  
scraping desks        people shouting  
opening drawers      bricks falling  
barking dogs        doors banging shut  
books falling        hanging plant falling

Read the Earthquake Simulation Script. Direct the students at their desks to follow Drop, Cover, and Hold instructions during the simulation while helpers provide effects as indicated.

Repeat the simulation a second time, selecting different students to provide the effects, so that each student has an opportunity to practice the Drop, Cover, and Hold procedure.

Take time to let students reflect on the experience. As a class, identify safe and unsafe places in the classroom.



# *Supplementary materials*





## TEACHER NOTES

### INTRODUCTION

In order to become a skill where students learn to react and immediately respond to threatening situations such as fire and earthquake, survival skills and sequencing of steps need to be practiced. This unit covers skills that elementary students will practice to demonstrate proficiency.

By fourth grade, students will complete performance tasks that meet health education standards in unintentional injury prevention (Benchmark 2). Fifth grade students will explore disasters other than fire and develop family disaster plans.

Home and community connections are encouraged.

### STOP, DROP, & ROLL

Stop, drop, and roll is a reactive skill that should be taught at the earliest possible age. The skill requires explanation and demonstration that does not arouse fear.

#### Sequence of skills ...

- **STOP** where you are. Never run.
- **DROP** quickly to the ground. Cover your face with your hands. Hold your breath so you don't breathe in the fire. Lie flat on the ground.
- **ROLL** back and forth over the flames to extinguish the fire.

Continued on page 18



## TEACHER NOTES

### CRAWL LOW

Escaping to safety from a fire is another necessary skill for students to practice. However, this skill requires more than learning to react. Students must make decisions about the safest route.

Using the cardboard doors and felt flames that you have created, make a survival skill station for the Crawl Low activity.

#### Sequence of skills ...

- **Don't open the door** if you see smoke coming from under the door.
- **Check for heat.** Touch closed door with back of hand.
- **Decide best escape route.**
  - 1) If the door is cool, open it and crawl on your hands and knees to safety.
  - 2) If the door is hot, do not open the door. Crawl to a window for safe escape. If window escape is not possible, open the window and shout "FIRE!"
- **Stay at the family meeting place outside.**



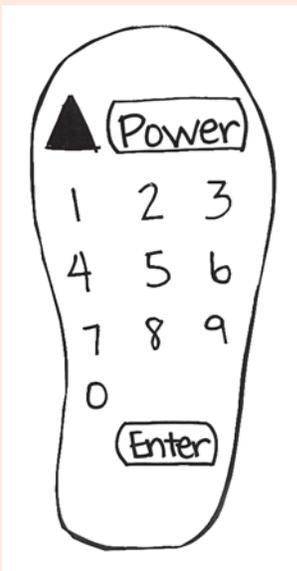
## TEACHER NOTES

### CALLING 9-1-1

Fast reporting of a fire is critical. Delayed reporting is frequently a factor in multiple-fatality fires. Children are often the first to discover or even cause a fire. To improve reporting, students must know how to report an emergency. Calling 9-1-1 with confidence and clarity is practiced throughout this unit. Students should be encouraged to practice their home fire escape with family.

#### Sequence of skills ...

- **If there is a fire in the house, exit immediately and make the 9-1-1 call from the neighbor's or outside, using a cell phone.**
- **Listen for dial tone**
- **Press 9-1-1**
- **Report emergency to operator**
- **Clearly say your name and address**
- **Explain details of emergency**  
(such as: fire in the kitchen spreading to family room, family is out of the house)
- **Stay on phone until told to hang up**



#### LESSON IDEA FOR TEACHING 9-1-1

Students can make prop telephones by tracing their shoe on cardstock and copying example of cordless phone. They can practice calling 9-1-1 with a partner (one student reporting the emergency and the other student acting as the operator).



## Boy rescues brother from smoke-filled home

A 7-year-old boy rescued his toddler brother from their smoke-filled Westhome-area house last week.

Mrs. Miller was outside hanging up the laundry and Mr. Miller had left for work. It was a school holiday.

Brian Miller, age 7, and his 3-year-old brother, Joel, were eating breakfast when Brian smelled smoke. A toaster had jammed. It set books and papers which were resting near the toaster on fire. Smoke rapidly filled the home.

Brian knew exactly what to do. He showed his little brother how to crawl low under smoke and the two escaped. Then the two boys ran to the neighbor's house and Brian asked them to call 9-1-1 to report the fire to the fire department.

The fire department arrived and extinguished the fire. Most of the damage to the home's contents was caused by the thick smoke.

Brian was commended by Westhome Fire Marshal Evans for his quick thinking. Brian said, "We practiced crawling low under smoke and calling 9-1-1 from a neighbor's house last week in school. I remembered what to do."

Mrs. Miller told a reporter that she looked up from hanging the laundry in time to see the smoke and Brian and his brother running to the neighbor's house as they had been taught. She joined them at the neighbor's house. Mrs. Miller said, "I am so proud of Brian and thankful that my children are safe."

Note to teacher: This story was taken from a newspaper article about a real fire. Names and ages have been changed. Although this home fire had a positive outcome, a serious error in judgment was made by whoever left the books and papers near the toaster. See if your class is mentions this.

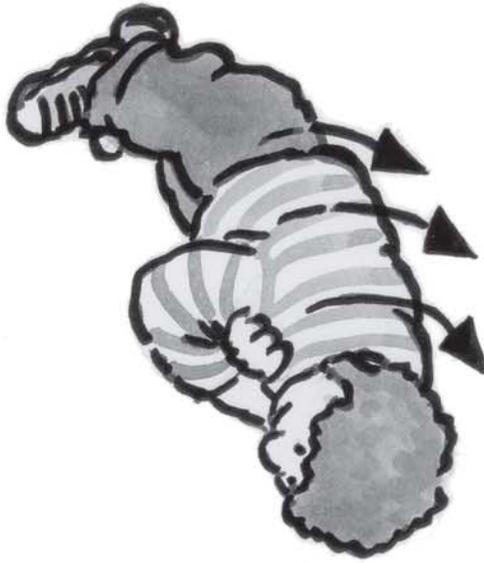
A



**STOP**



**DROP**



**ROLL**



## EMERGENCY PHONE NUMBERS

My family name \_\_\_\_\_

My phone number \_\_\_\_\_

My address \_\_\_\_\_

My town \_\_\_\_\_



Ambulance



Fire



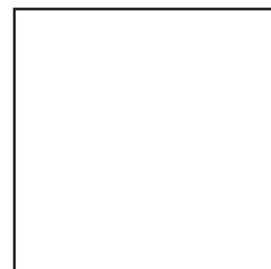
Police/Sheriff



Mother



Father



Other



# SURVIVAL SKILLS PERFORMANCE CHECKLIST

NAME \_\_\_\_\_

Student demonstrates safe, quick escape from a burning house with the following steps:

\_\_\_\_\_ stays calm

\_\_\_\_\_ stays calm

\_\_\_\_\_ stays low to ground in smoke

\_\_\_\_\_ stays low to ground in smoke

\_\_\_\_\_ touches closed door with back of hand

\_\_\_\_\_ touches closed door with back of hand

\_\_\_\_\_ **COOL** door - opens and crawls to safety

\_\_\_\_\_ **HOT** door - crawls to window

\_\_\_\_\_ waits outside at family meeting place

\_\_\_\_\_ escapes through window or shouts for help

\_\_\_\_\_ waits outside at family meeting place

Student demonstrates immediate response to fire on clothing with the following steps:

\_\_\_\_\_ stays calm

\_\_\_\_\_ stops

\_\_\_\_\_ drops

\_\_\_\_\_ rolls

\_\_\_\_\_ rolls until fire is extinguished

\_\_\_\_\_ gets help

Student demonstrates making an emergency phone call with the following steps:

\_\_\_\_\_ stays calm

\_\_\_\_\_ tells operator there's an emergency

\_\_\_\_\_ clearly says his/her name and address

\_\_\_\_\_ clearly explains details of the emergency

\_\_\_\_\_ stays on the phone until operator says it's okay to hand up.



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## TEACHER NOTES

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### DURING AN EARTHQUAKE

The topic of earthquakes may generate fear in your students. Tell them that fear is a normal reaction to danger. By planning ahead and learning to react appropriately, we can prepare ourselves to help ourselves and others make our homes and schools safer.

Students need to practice in order to react promptly and safely. They must be able to recognize the signs of an earthquake, know the safest places to shelter and know and be able to perform the proper actions.

#### **Recognizing the signs of an earthquake ...**

- a gentle shaking
- objects wobbling on shelves
- plants and light fixtures swaying
- or, a violent jolt
- a low, perhaps very loud, rumbling noise
- shaking; floor seems to be moving beneath you
- noise of moving and falling objects as the earthquake strengthens
- shattering glass
- banging doors and creaking walls

#### **Recognizing the safest places to shelter ...**

##### **Indoors**

Anything that can move, fall or break when the ground starts to shake is an earthquake hazard.

- Safe spots: under heavy pieces of furniture, such as a desk or sturdy table; under support archways; and against inside walls.
- Danger spots: near windows that could break; tall heavy furniture that could topple; hanging objects that could fall on you; breakables or heavy objects that are kept on high or open shelves; and near mirrors.

## **Outdoors**

- Safe spots: in the open, away from buildings and power lines; in a hilly area, away from rocks and debris that could fall; if at the beach, uphill and inland.
- Danger spots: in a city, near buildings, trees, street lights and utility wires; in a hilly area, near slopes or cliffs; at the beach, near the water.

### **When no shelter is available ...**

Move to an inside wall. Kneel next to the wall, facing away from windows.

Bend head close to knees, cover sides of head with elbows and clasp hands behind neck. If a coat is available, hold it over your head for protection from flying glass and ceiling debris.

### **Drop, Cover and Hold ...**

At the first signs of an earthquake, crouch under a desk or table, tuck your head and cover your neck with your hands unless your shelter moves and you need to hold onto its legs and move with it.

Note: This lesson has been excerpted from *Earthquake Safety Activities for Children and Teachers*, FEMA 527 August 2005. If you wish to expand earthquake learning activities with your class, this excellent curriculum can be found in its entirety at <http://www.fema.gov/plan/prevent/earthquake/pdf/fema-527.pdf>.



## EARTHQUAKE SIMULATION SCRIPT

Imagine that you hear a low, rumbling, roaring sound. The noise builds, getting louder and louder for a few seconds. Then, Wham! There's a terrific jolt. You feel like someone suddenly slammed on the brakes in the car, or like a truck just rammed into the side of the building.

The floor seems to be moving beneath you. It's hard to stand up, or even stay in your seat. If you do stand up, you might feel like you're riding a bicycle down stairs. When you walk, it's like trying to walk on a trampoline or a water bed. You hear someone say, "Earthquake! Drop, Cover and Hold!"

■ **I want all of you at your desks to take cover as quickly and quietly as you can, right now. Please listen very carefully. The shaking and commotion may last about sixty seconds or a little longer. We'll have our timer count off the seconds for as long as the earthquake lasts. (The timer may begin counting softly now.)**

The building is creaking and rattling. Books are falling from the bookcase. Hanging lamps and plants are swaying. Suddenly a pot falls to the floor and smashes, and the plant spills. A window pane just shattered and glass is falling to the floor. The table is sliding too.

■ **Be sure to stay in the drop, cover and hold position under your desk. If your desk is moving, grab the legs and move with it.**

You hear noises outside. Dogs are barking. Cats are meowing. A baby is crying. People are shouting and screaming. The shaking is making church bells ring. You hear crashing sounds from brick chimneys and other loose parts of the building falling to the ground. Trees outside are swaying and scraping against the walls.

Inside the room, pictures are moving on their nails. Oh! That one just fell off the wall and crashed to the floor. The desk drawers are sliding open. The lights begin to flicker on and off ... they just went out! Now the door swings back and forth on its hinges. Bang! It slams shut. There's silence now. Just as suddenly as the noise and shaking began, the room grows quiet.

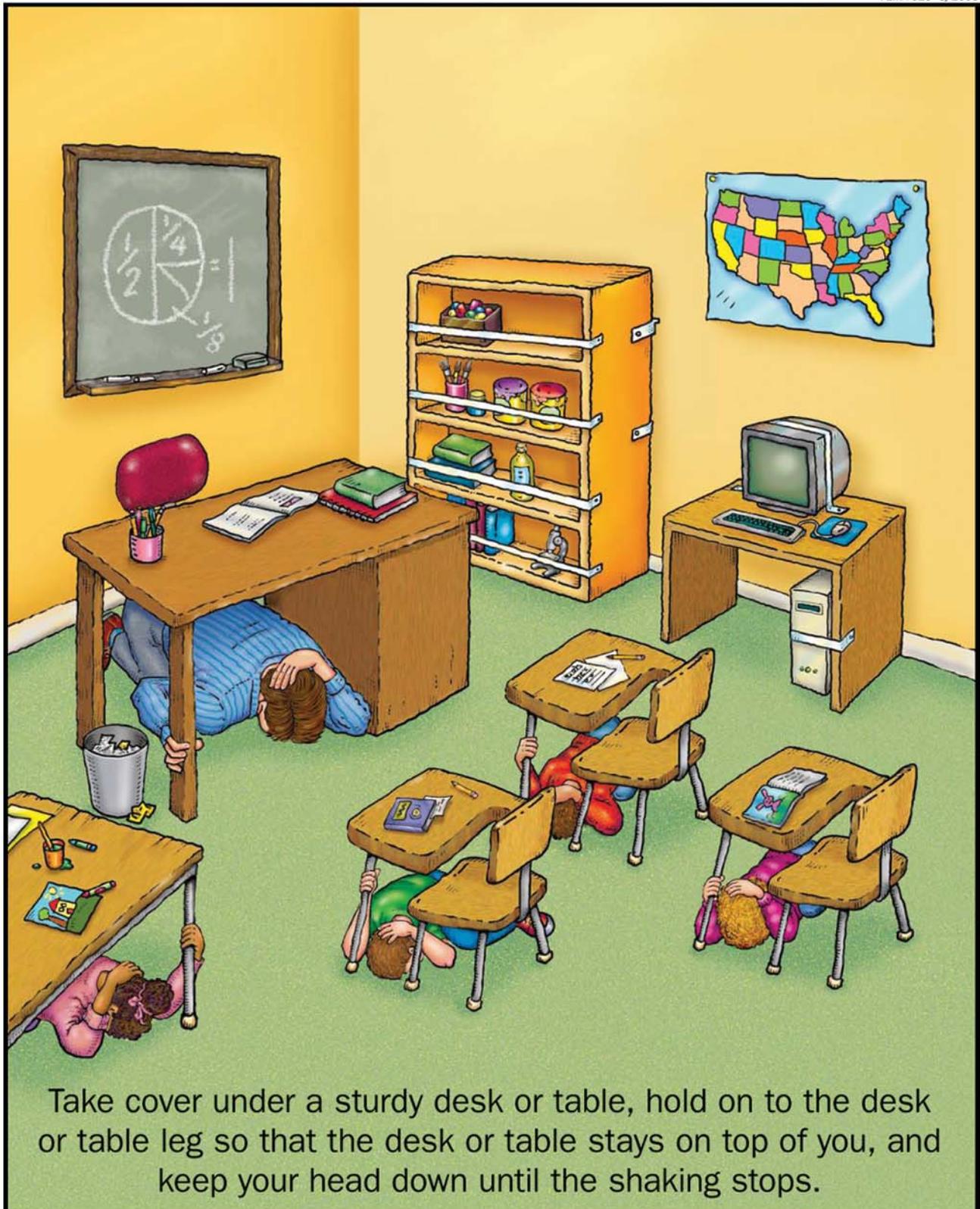
■ **(The timer can stop counting now.) Please, everyone, get back in your seats. It is important to remain very quiet and wait for instructions. When it is safe to leave the building, I am going to lead you outside to an open space. Stay together and be ready to take cover again at any moment because the shaking may start again. Sometimes other quakes, called aftershocks, occur after the damaging earthquake has stopped.**

*HELP: Hands-on Earthquake Learning Package, California Edition (1983). Environmental Volunteers, Inc.*

When earthquake shaking begins . . .

# Drop, Cover, and Hold

FEMA 529 9/2005



## A RESOURCES

Pendziwol, Jean. *No Dragons for Tea: Fire Safety for Kids (and Dragons)*. Kids Can Press, 2001. (If available, this story can be read instead of the positive news story provided.)

American Red Cross. *Masters of Disaster: Fire Safety and Prevention*.  
<http://www.redcross.org/disaster/masters/firesafety/index.html>

## B C RESOURCES

Ball, Jacqueline. *Wildfire! The 1871 Peshtigo Firestorm*. Bearport, 2005.

Brunelle, Lynn. *Earthquake! The 1906 San Francisco Nightmare*. Bearport, 2005.

Ingram, Scott. *Tsunami! The 1946 Hilo Wave of Terror*. Bearport, 2005.

Masoff, Joy. *Emergency*. New York: Scholastic, 1999.

Watts, Claire. *Rescue*. DK Publishing.

American Red Cross. *Masters of Disaster: In the Aftermath (Disaster Recovery)*.  
<http://www.redcross.org/disaster/masters/aftermath/>

American Red Cross. *Masters of Disaster: Facing Fear*  
<http://www.redcross.org/disasters/masters/facingfear/>

National Safe Kids Campaign  
<http://www.safekids.org>

# UNIT 5

## FIRE SMART DECISIONS

### Scope and Sequence



#### DECISION MAKING SKILLS

##### Activity 1/Grade 1

STOP-THINK-GO signs and stories

##### Activity 2/Grade 2

STOP-THINK-GO stories



#### FIRE-SAFE SCENARIOS

##### Activity 1/Grade 3

STOP-THINK-GO scenarios

##### Activity 2/Grade 4

STOP-THINK-GO performance task



#### FIRE-SMART ABOUT PEER PRESSURE

##### Grade 5

Interpersonal communication role-play

If your school has several teachers using this curriculum, lesson plans, supporting teacher notes & student work sheets are available for download by grade level at the Office of State Fire Marshal Web site: [www.oregon.gov/OSP/SFM/Curriculum\\_for\\_Grades\\_1-8.shtml](http://www.oregon.gov/OSP/SFM/Curriculum_for_Grades_1-8.shtml)



# Fire Smart Decisions

## Objectives

Student will recognize and practice responsible behavior regarding fire.

## Skills

### Grades 1, 2, 3 & 4

- Student will practice decision making strategy to make fire-safe choices.

### Grade 5

- Student will use communication skills to help self and others in unsafe situations relating to fire.

## Introduction

Too many children and adolescents die in fires every year. Carelessness or equipment failure are the causes of some of these fires. Children and adolescents also cause fires. Many are curious and engaging in high-risk behavior whether experimenting with matches, lighters or fireworks. Others are setting fires as a way to deal with emotional issues. They may be crying out for help or responding to peer pressure.

Youth-set fires are preventable. Prevention and intervention programs include important educational components such as functional knowledge and skills.

Using various fire scenarios, students will practice a decision-making strategy for personal safety.

## Key words and concepts

**Assertiveness** - clearly communicating thoughts and feelings without negatively impacting another

**Communication skills** - ability to use words and actions to convey information

**Consequence** - positive or negative result from a personal action

**Decision-making skills** - process to follow to evaluate choices and take action

**Misusing fire** - using fire in a way that it was not intended

**Negative peer pressure** - feeling compelled by someone to act in a certain way that may be dangerous

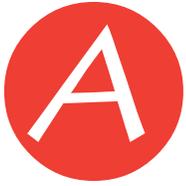
**Negotiation skills** - ability to use words and actions to settle an issue

**Peer** - a person your own age

**Positive peer pressure**- feeling compelled by someone to act in a positive or safe way

**Refusal skills** - ability to use words and actions to refuse to act in a negative or unsafe way

**STOP-THINK-GO** - a decision-making model



## DECISION-MAKING SKILLS

### INTRODUCTION

Children often are curious about and experiment with fire. Every human-caused fire begins with a risky decision. In this unit, students will differentiate between responsible and high-risk behaviors, then practice the decision-making and communication skills necessary for responding to situations in which fire is involved.

Fire safety awareness for summer events and activities such as Fourth of July celebrations and camping is also included with this unit.

More detailed information for the lessons is included in the *Supplementary Materials* section of this unit.

NOTES:

# LESSON PLANS

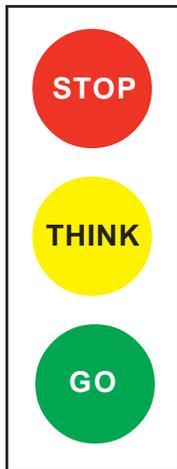
Goal: Student will practice decision-making strategy for personal safety.

## Materials provided:

- Story starts
- DM rubric (in introductory section)

## Teacher preparation:

- Review Teacher Notes, p. 13
- Make STOP-THINK-GO example
- Red, yellow, green paper circles
- White paper
- Glue
- Copies of Do the Write Thing



## Do the Write Thing prompt



Write and/or draw an example of yourself making a fire-safe decision using the STOP-THINK-GO strategy.

## Extended activities

### Individual

- Write and/or draw a fire-safe decision.

### Class

- Review, role play and practice STOP-THINK-GO decision-making strategy.

## Grade 1

### STOP-THINK-GO signs and stories

Share teacher example of STOP-THINK-GO sign with students. Explain that it's a strategy for decision-making. Explaining the process and discuss examples when this strategy will help students to make smart and safe decisions.

Provide instructions and materials for students' STOP-THINK-GO signs and have students make their signs.

Use story starts: Matches on table; Smoke in kitchen; Smoke alarm sounds.

Practice decision-making process with class

- discuss STOP (identify problem)
- discuss THINK (options/possible outcomes)
- discuss GO (decision)

## Grade 2

### STOP-THINK-GO stories

Review decision-making strategy introduced in Activity 1. Discuss examples of using the strategy to reach good decisions — ask students for real-life incidents.

Use story starts: Fourth of July; Summer camping trip; Camp-out.

Practice decision-making process with class

- discuss STOP (identify problem)
- discuss THINK (options/possible outcomes)
- discuss GO (decision)

## Assessment

### (DM) decision making

- Write and/or illustrate a fire-safe decision using STOP-THINK-GO.



# *Supplementary materials*





## TEACHER NOTES

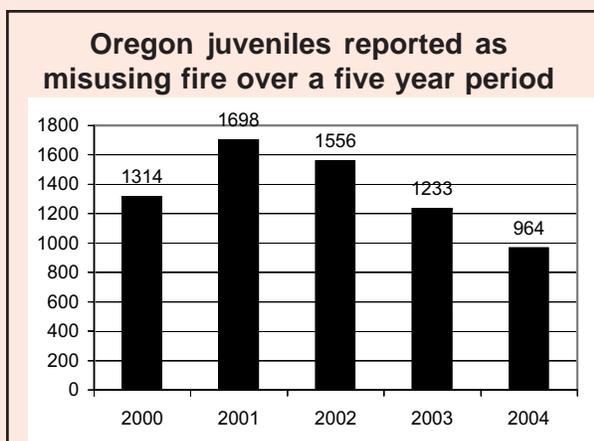
### INTRODUCTION

Curiosity can lead to unintentional firesetting ... some children want to know what fire is and what it does. They may have easy access to matches or lighters and they may be poorly supervised. In most cases, the firesetting behavior stops if the children are caught and if the situation is brought to the attention of interventionists. Some children set fires intentionally as a cry for help or to cope with personal issues and/or social pressures.

Children do not understand the power of fire and the dangers to life and property that it presents. They frequently believe they can control it.

Prevention education in elementary and middle schools is a proactive approach. This curriculum, and the companion middle school curriculum *It's Up to You!*, focus on fire safety skills, prevention education and personal responsibility.

If a student in your classroom needs help with firesetting behavior, call the Office of State Fire Marshal for a referral to intervention services in your area. Many communities have juvenile firesetter intervention networks in place. These partnerships offer coordinated services by fire departments, schools and other youth services to children who are misusing fire (and their families).



This chart shows the number of juveniles misusing fire who were reported to the Office of State Fire Marshal. Further information about children's use of fire can be found in an Oregon research study, *The Fire Interest Survey*.\*

*Fire Interest Survey*, prepared by Brandi Simonsen and Michael Bullis, University of Oregon Institute on Violence and Destructive Behavior, in partnership with the Juvenile Firesetter Intervention Unit, Office of State Fire Marshal. Available online at [http://www.sfm.state.or.us/JFSI/fire\\_interest\\_survey\\_report.htm](http://www.sfm.state.or.us/JFSI/fire_interest_survey_report.htm).



## FIRE STORY STARTS (grade 1)

### Matches on table

One day matches are on the table at your grandparents' house. Your younger sister, who is curious about fire, grabs the matches. **What can you do?**

### Smoke in kitchen

You're in your bedroom and the smoke alarm sounds. Your door is open. You see and smell smoke coming from the kitchen. **What can you do?**

### Smoke alarm sounds

You're in the family room when the smoke alarm sounds. Your little brother is with you. He wants to get his favorite toys. **What can you do?**

## FIRE STORY STARTS (grade 2)

### Fourth of July

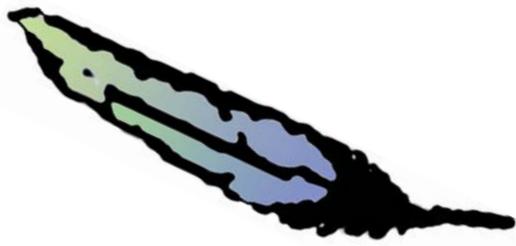
You're at a Fourth of July party and there's a box of sparklers for kids. One of the kids at the party is anxious to light the sparklers and runs off to find matches. **What can you do?**

### Summer camping trip

On a summer camping trip, your dad tells you to get some more logs for the campfire because the fire is getting low. Then he goes to visit friends at the campsite next to yours and your campfire is nearly out. **What can you do?**

### Camp-out

During a camp-out, you're trying to roast marshmallows but it doesn't seem like you're close enough to the campfire, so you move closer. Suddenly, the sleeve of your sweatshirt catches on fire. **What can you do?**



**A**s this curriculum was being written, a wealth of information about Native Americans and fire surfaced.

Archeological evidence exists that Native Americans used fire to alter their environment long before written history recorded these activities.

Myths about the theft of fire are part of the oral tradition of many tribes, pointing to the importance of fire to the tribes' comfort and survival.

Many school districts cover Native Americans as a regular part of their curriculum. Native Americans' use of fire is an important and interesting part of the whole story and the information that was collected during the writing of the curriculum has been placed in this bonus section for convenience.





## THEFT OF FIRE

This Yurok Indian myth beautifully illustrates the important role that fire has in the lives of human beings. The myth was found in *Yurok Myths* by A. L. Kroeber, published in 1976 by the University of California Press. It is used by permission of the Estate of A. L. Kroeber. We are grateful for the permission.

Sky-Owner and others talked long. They planned how fire was to be obtained for human beings. Fire-Owner kept it. He lived across the ocean. Then they spoke long how they could get it. Sky-Owner said, "I cannot do it. Perhaps you can." One of them said, "Let us take it away by gambling." So Sky-Owner said, "Yes, take it away from him that way if you can. I cannot."

At last Bald Eagle said, "I will get it. Who will go with me? Who is the swiftest runner?" Coyote said, "I am the best. I will run with it." Now they went. On every ridge they left one person. Bald Eagle said, "They will follow us. It is only in this way that we can escape. When one of us is tired, the next one will take the fire." Beyond Coyote he put Deer; beyond him, Fisher; and then Duck.

Bald Eagle said, "I will go and gamble. When it is nearly morning, I will sing this song." Then he sang. "After I have sung. I will hiccup ten times. Then I will stir the fire hard so the sparks fly. You must listen for that song."

Then he did as he had said. He gambled and sang and hiccuped and stirred the fire, and the sparks flew up. Coyote caught them and ran. All those there shouted and pursued. They did not overtake Coyote. When he was tired, Deer took the fire and ran in big jumps. Then Fisher ran with it, and then Duck. So they escaped with the fire.

But when they arrived, Duck had no more fire in his hands: it had gone out. Then he took sticks of willow and rubbed one in his hands (on the other) for a long time. He made a little smoke. He kept twirling. At last he got fire.

Now they were all glad. They made fire in the sweat house and fire in the house. Now they all could swim. They learned to swim far and well and like it. When they became cold in the water, they went to the fire. Women also were glad. Every morning they bathed in the creek. If they were cold they warmed themselves at the fire. So they do now. If they had got no fire, no one could bathe or get mussels in the ocean.

## ROLE OF FIRE TENDER

Here you will find a description of the Native American sweat house ceremony and the role of fire tender. The careful attitude toward the use of fire is instructive as we consider the use of fire in human society. Fire's useful role and the necessary caution around it should be thought of as two sides of a coin ... each incomplete without the other.

Many Native American tribes have the tradition of the sweat house, a ceremony used to purify the participants physically and spiritually.

Rocks are heated until glowing in a fire. When the rocks are hot enough, they are moved into a fire pit in the center of a sweat house. The sweat house is built of wooden ribs and a covering. With the rocks in place, the structure's openings are closed and water is poured on the hot rocks to produce steam. As the heat and steam accumulate in the sweat house the people participating sweat profusely as they sing and pray.

The person who is designated to guard and maintain the fire is known as the "fire tender." This is a great honor and a serious responsibility.

Fire tenders learn that fire is like a mischievous child ... that you must not turn your back on it, lest it escape, causing trouble.

As one fire tender takes the place of another, a ritual query and response takes place. The fire tender who is handing off the responsibility asks, "Are you watching?"

The fire tender taking his place replies, "Yes, I am watching."

# HOW DID NATIVE AMERICANS USE FIRE?

Before Spanish explorers, missionaries and settlers came to North America, Native Americans — also known as indigenous people, and first nations/ first people — used fire to intentionally alter the natural environment to their benefit. Henry T. Lewis, who has written more on the subject of Native Americans' use of fire than anyone else, counted at least seventy reasons. Others writing on the subject have listed fewer.

Some of the major uses are listed below. The summary has been excerpted with permission from an essay by Gerald W. Williams, Ph.D., Historical Analyst, USDA Forest Service, July 15, 2003. The essay is available on the Web at <http://www.fs.fed.us/fire/fmt/Bibliography/Introduction.doc>. The document has a more comprehensive discussion of Native Americans' use of fire and an excellent bibliography of more resources.

- **Hunting.** Fire was used to drive large game such as deer, elk and bison into areas where hunting was easier. Sometimes fire was used to drive game over cliffs or into narrow canyons, rivers or lakes where they could be killed more easily. Torches were used to find deer and fish. Smoke was used to force raccoons and bears from their dens.
- **Growing Food.** Fire was used to clear areas for growing food; prevent shrubs and trees from growing back while fields were resting; increase the yield of berries such as strawberries, raspberries and huckleberries; and clear areas under oak trees to make gathering acorns easier.
- **Insect Collection.** Fire was used to collect and roast crickets and grasshoppers. Smoke was used to drive bees from nests, aiding in honey collection.
- **Pest Management.** Fire helped to keep the numbers of pests such as rodents, poisonous snakes, flies and mosquitoes down.
- **Range Management.** Fire encouraged the growth of new grasses for grazing animals and kept the area from growing back to shrubs and trees.
- **Fireproofing.** Native Americans knew how to fight fire with fire. Fires were deliberately set near settlements and other special areas. If a fire moved through the area it might go out when reaching the already burned area because there was no fuel.

- **Warfare and Signaling.** Fires were purposely set in fighting enemies: a cleared area was hard to hide in; fires were used to destroy enemy property; fires were set during an escape to camouflage movement; large fires were set to notify others of enemy movements and gather forces for fighting.
  - **Economic Extortion.** Some tribes burned large areas to prevent settlers and traders from finding game. They would then trade with them for dried meats.
  - **Clearing Areas for Travel.** Keeping trails open and free from brush was important for travel and safety.
  - **Tree Felling.** Trees were important for building structures and canoes. Before axes were available through trade, Native Americans used fire to kill trees. One method: drill two intersecting holes in a trunk, put charcoal in one hole and let the smoke escape out the other. The other method involved circling a tree with fire at the base, “girdling” it and eventually killing it.
  - **Clear Riparian Areas.** A riparian area is land near water. Clearing brush made hunting for beaver, muskrats, moose and waterfowl easier.
- 

**Native Americans as shown on the timeline ...** Entries about Native Americans in the timeline cards for Lesson B are summarized below. These entries are integrated into the timeline as a whole, but you may wish to consider them separately in conjunction with a lesson on Native Americans.

#### TO SIGNAL

- Native Americans used smoke signals to alert tribes about possible enemies or to gather forces to combat enemies.

#### TO HUNT

- Native Americans used fire to drive animals they were hunting into places where they could be killed easily. They also used fire to create open grassy areas where animals would graze. This made hunting easier.

#### TO MANAGE THE ENVIRONMENT

- Native Americans used fire to clear brush near streams. New grasses and tree sprouts grew, creating food for moose, beavers, muskrats and waterfowl. Indians used the animals and birds for food and fur.
- Native Americans used fire to clear ground for growing food and to increase yield of berries.
- Native Americans used fire to clear an area to create a fireproof area around settlements and medicine plants.
- Native Americans used fire to clear areas for travel.
- Native Americans used fire to manage pests. Fire reduced the number of black flies, mosquitos, rodents and poisonous snakes.