

IT'S UP TO YOU!

A Fire Awareness Curriculum for Middle School

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February 2005

Funded by a FY '02 FEMA Assistance to Firefighters Grant
Produced by the Office of State Fire Marshal

ACKNOWLEDGMENTS

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Judith Okulitch, MS, OSFM, lesson development
James Cloutier, cover design and illustrations
Pat McAbreay, Sight and Sound Services, video components

Special thanks to:

Vernadyne Anderson, for the lesson on earthquakes
Clayton Augustine, for guidance on the appropriateness of the lessons
Jess Bogli, for help with Department of Education Health Standards
Jeff Bonebrake and Debbie Brenneman, for the safe campfire lesson
Sarah Bordac and Tess Jouis, The Center for Media Literacy, for the media lessons
Traci Cooper, for the mind mapping lesson
Laura Drager, for proofreading the curriculum
Oregon Fire Marshals Association, fiscal agent
Scott Rice, for realistic home fire sprinkler scenario
Jeremy Richardson, for proofing the arson statutes
Michelle Turner, for development of *Westhome Siren* and general support
Pacific Northwest Wildfire Coordinating Group, for use of movie slides
Pilot testing done by Shirley Betournay, Mark Evoniuk, Carolyn Koskela
Rachel Lizio-Katzen, Cheryl McClure, Jennifer Pursell
Alyssa Waltermire, student, for reviewing the lessons
Bob Wright, for his support

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Why fire 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.

Fire hits us where we live. Every year, roughly three-fourths of all structure fires in Oregon occur in the places we call home...houses, apartments, condos, mobile homes, even houseboats.

Oregonians experience the largest dollar loss fires in businesses and institutions, but it is in the home where most fires occur and where fire injures and kills most of its victims.

Because your home is your private space, it doesn't get inspected by local firefighters as businesses often do. This means that you are responsible for fire safety in the places called home. People who live in multifamily housing, such as condominiums or apartments, are responsible for the safety of their neighbors as well. Multifamily housing is a place where a resident can do everything to be safe, but still be at the mercy of their neighbor's behavior.

Most of the fires occurring in the home are the result of human behavior, the things that people do...or don't do. The responsibility for home fire safety rests squarely on the shoulders of the individuals living in the home.

Education about fire-safe practices empowers individuals to act more safely and responsibly in their homes.

Why fire education specifically for youths in middle school?

Every year over a thousand youths under the age of eighteen use and misuse fire in Oregon. These fires, when they get out of control, can cause thousands of dollars of property loss, injuries and, tragically, even death. Youth-set fires cost the community financially and emotionally.

In addition, juvenile arson is on the rise. It is a fast-growing juvenile crime. Nationally, over fifty percent of all arson arrests are youths under the age of eighteen. In Oregon, the percentage of arson arrests for youths has ranged from forty-two percent to a high of sixty-two percent.

So what do we know?

Oregon data show that youths who set the majority of fires are between the ages of ten and fourteen. These youths attend our middle schools. In 2000, the Institute on Violence and Destructive Behavior at the University of Oregon conducted a survey of 1,500 students in grades seven and eight. The reasons students reported for setting "unsupervised" fires include:

- just for fun (35%)
- because they wanted to destroy something (31%)
- because they were bored (29%)
- to see what would happen (25%)
- peer group pressure (12%)
- because they were angry (10%)
- wanted attention (8%)

The data clearly show that if we are going to reduce the incidence of youth-set fires, we must take a proactive approach and teach youths in middle school about the reality of fire, how the media influences their attitudes and behaviors toward fire, the physical and legal consequences of misusing fire and how to make responsible and safe decisions in prevention and survival. The developmental stage of middle school youths makes this an appropriate and crucial stage to teach analytical thinking and decision-making skills around safety practices.

GOAL

The goal of this curriculum is to help middle school youths develop critical thinking skills and learn to make responsible choices about fire and life safety.

SEQUENCE OF LESSONS

Unit 1 - Fire and the Media 1

Unit 2 - Fire Science

Unit 3 - Fire Prevention

Unit 4 - Survival Skills

Unit 5 - Responsibility

Unit 6 - Fire and the Media 2

Core concepts

Accurate knowledge about fire is essential.

Human-caused fires can be prevented.

Fire and life safety survival skills can be learned.

Fire and life safety is a personal responsibility.

ANATOMY OF THE CURRICULUM

Unit objectives and skills

Included in the curriculum: Video lesson components in both VHS and DVD format, activity cards for role play and mind-mapping activities, and supplemental materials for each lesson.



Unit title

Basic introduction to the topic

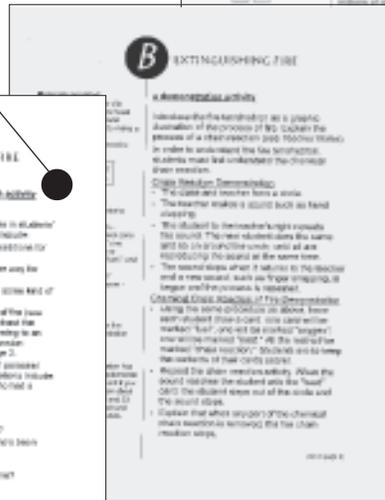
Vocabulary used in the unit

The lessons are designated with A (6th), B (7th), or C (8th). Lesson content is sequential: initial concepts are in A lessons. B and C lessons build in level of understanding on preceding lesson(s).

Lesson activities are described

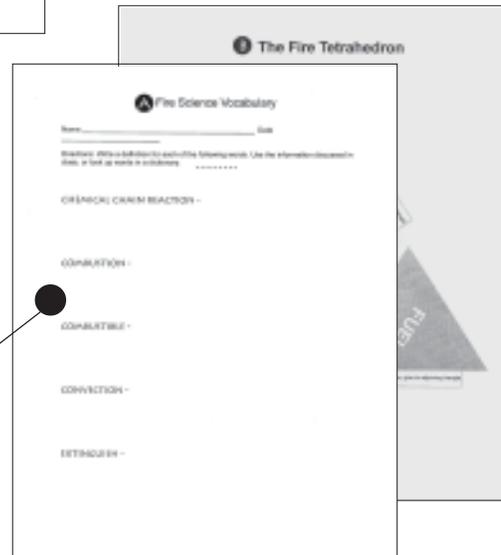


The materials provided by the curriculum and the preparation required by the teacher are listed for each lesson.



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.



INFORMATION ABOUT THE CURRICULUM

What content is covered in this curriculum? *It's Up to You!* begins (Unit 1) and ends (Unit 6) with a critical examination of media messages about fire. In Unit 1 students are introduced to the concept that “all media messages are constructed.” They will view video clips of fire scenes. In Unit 6 these video clips are viewed again. The media messages about fire in the clips are compared to the reality of fire that students have studied in Units 2 through 4.

Unit 2, *Fire Science*, teaches the physics of fire and Unit 3, *Fire Prevention*, concentrates on home fire sprinklers as an engineering solution to preventing fires. Using home fire sprinklers as the topic, students are encouraged to become advocates in their communities.

Unit 4, *Survival Skills*, covers earthquakes, tsunamis, fire in the wildland-urban interface, and the role of Community Emergency Response Teams (CERT) in the community.

Unit 5, *Responsibility*, teaches problem solving and refusal skills around fire issues through role-play activities. Students learn fire's impact on the community at large through a mind-mapping exercise. Oregon laws about fire and accountability are taught through a role-play activity.

What lesson sequence shall I follow? *A Middle School Scope and Sequence* is included in this introductory section. Please refer to it to see how planning could work. The teacher may choose to teach the curriculum using all the A lessons in Grade 6, the B lessons in Grade 7 and the C lessons in Grade 8. Or, specific units may be chosen as areas of concentration and the lessons delivered in sequence, A through C, at one grade level.

How long are the lessons? The lessons are designed to fit within a forty-five minute class period. They include an introduction that averages ten minutes, followed by a class activity.

This curriculum deals with serious issues. What should I be aware of? Some students may have a traumatic fire event in their past and you should be alert to that possibility. Discussions about fire and survival skills may create anxiety for some students. Assure students that we practice and prepare for dangerous situations, though the chances of one occurring are small. If an emergency should occur, we are much safer knowing the safe thing to do.

The curriculum's Web presence. The Office of State Fire Marshal's Web site will maintain a section for the curriculum so that it can be a “living” document. We invite you to send us successful student projects, lesson ideas or methods that worked for you, and names of movies that are useful for the media lessons. We'll put them on the Web for sharing. Find us at www.sfm.state.or.us.

HOW TO USE THE CURRICULUM

How do I use this curriculum? In order to use this curriculum, you need to familiarize yourself with the *Teacher Notes* section. The core content of each lesson is contained in the *Teacher Notes* and the lesson plans are built around this content. The *Teacher Notes* are by no means exhaustive. The content has been selected to be age-appropriate, relevant and realistic in quantity for teaching within a forty-five minute class period. A list of additional resources appears at the end of this introductory section if you and your class want to explore a topic in greater depth.

What's in the white box attached to the front cover? Unit 4 contains a problem-solving activity (Lesson C) on community disaster response. The cards for this lesson are in the white box. Unit 5 contains a mind-mapping activity (Lesson B) and a role-play activity about legal consequences (Lesson C). Cards for these activities are included in the white box. Originals of the cards are also included within Units 4 and 5 so they can be copied if, for any reason, you need to make new cards.

Help! My class has raised questions I'm not prepared to answer. It's inevitable. Classes will bring up something that is unanticipated because they are curious and see things with fresh eyes. This is a good thing and one of the reasons teaching is seldom boring. Admit it when you don't know something and, if there is time and the issue seems worth pursuing, research the question with the class. Student curiosity is really an opportunity and curiosity-driven learning is often the most meaningful and lasting of all.

Fire science and home fire sprinkler technology (the fire prevention unit) may be new to you. Your local fire department is a ready resource for these lessons. Partner with someone from the department and let their expertise supplement your presentation of the lessons. The Office of State Fire Marshal is working with Oregon fire departments to familiarize them with the fire science and fire prevention units and there should be someone in your area prepared to assist you.

What teaching style shall I use? Good teaching is an art, a collaboration between teacher and students. Please feel free to personalize the way you deliver the lessons to suit your style and the needs of your class. You know your class best.

What should I know about the clips from videos? All the clips show only fire scenes. The clips themselves are PG-13 even if the clips come from movies that may be R-rated. You should preview the clips before showing them and you may wish to send an explanatory note home to parents obtaining their permission.

MIDDLE SCHOOL SCOPE AND SEQUENCE

UNIT TOPICS	Fire & the Media 1	Fire Science	Fire Prevention	Survival Skills	Responsibility	Fire & the Media 2
6th grade A	All media messages are constructed... <i>View media examples - movie clips & commercial.</i>	Introduction to the science of fire... <i>Compare Hollywood version to reality.</i>	Knowledge of home fire sprinklers... <i>Debate sprinkler myths versus reality.</i>	Earthquakes, facts and survival skills... <i>Explore earthquakes' power and geology</i>	Responding to peer pressure... <i>Role play fireworks scenarios.</i>	Analysis of media.
7th grade B	Review sixth grade lesson & repeat using different visuals.	Fire science concepts... <i>Chain reaction and extinguishing fire group activity.</i>	Benefits of home fire sprinkler systems... <i>Calculate savings to home owner & community, or building beyond city services - making decisions.</i>	Wildland Urban Interface... <i>Critical consideration of movie slides.</i>	Impact of fire on the community... <i>Mind mapping activity, 3 scenarios provided</i>	Media message development... <i>Creation of a PSA for a younger audience.</i>
8th grade C	Review sixth grade lesson & repeat using different visuals.	Analysis of the leading causes of home fires... <i>Prevention & personal responsibility using Westhome Siren newspaper.</i>	Advocate for home fire sprinklers... <i>Advocacy product such as letter to city council, local newspaper or PowerPoint presentation.</i>	Community disaster response... <i>Introduction to the role of the CERT (Community Emergency Response Team)</i>	Legal consequences of misusing fire... <i>Students assume the roles of judge, police officer and accused as they learn the legal impact of intentionally-set fires.</i>	Media message development... <i>Create a PSA for an adult audience.</i>

WHAT 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 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]

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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. This curriculum also meets Oregon health and education benchmark standards.

INTEGRATION - HEALTH EDUCATION

The study of health education prepares students to make healthy decisions and take health actions on matters concerning personal, family and community health. The goal of health education is that students become health-literate—that is, have the ability to obtain, interpret, and understand—basic health information and services. More importantly, they will have the competence to use such information and services in ways which are health-enhancing.

It's Up to You! meets many health education standards in unintentional injury prevention.

The standards below were adopted on February 17, 2005, by the State Board of Education.

Unintentional Injury Prevention

Common Curriculum Goals	Content Standards	Benchmark 2 (Grade 5)	Benchmark 3 (Grade 8)
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 ways to prevent fires and reduce the risk of injuries in case of fire. <i>It's Up to You!</i> Unit 3, Fire Prevention	
	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. <i>It's Up to You!</i> Unit 2, Fire Science Unit 3, Fire Prevention	Identify rules and laws intended to prevent injuries. <i>It's Up to You!</i> Unit 5, Responsibility
	Demonstrate self-management skills necessary to practice health-enhancing behaviors and reduce health risks.		Demonstrate personal responsibility to follow safety related rules. <i>It's Up to You!</i> Unit 5, Responsibility
	Demonstrate ability to use interpersonal communication skills (verbal and non-verbal) to enhance health and safety.	Demonstrate how to respond to peers who may encourage you to misuse fire or fireworks. <i>It's Up to You!</i> Unit 5, Responsibility	

INTEGRATION - SCIENTIFIC INQUIRY

Scientific inquiry: Use interrelated processes to pose questions and investigate the physical and living world.

Several of the lessons in *It's Up to You!* meet Scientific Inquiry standards.

Common Curriculum Goals

Benchmark 3 (Grade 8)

Forming the question/hypothesis

Formulate and express scientific questions or hypotheses to be investigated.

Based on observations and scientific concepts, ask questions or form hypotheses that can be explored through scientific investigations.

It's Up to You!
Unit 4, Survival Skills
Fire Marshal Survey &
Earthquake
experiments 1 & 2

Designing the investigation

Design safe and ethical scientific investigations to address questions or hypotheses.

Design a scientific investigation to answer questions or test hypotheses.

It's Up to You!
Unit 4, Survival Skills
Earthquake
experiments 1 & 2

Collecting and presenting data

Conduct procedures to collect, organize and display scientific data.

Collect, organize, and display sufficient data to support analysis.

It's Up to You!
Unit 4, Survival Skills
Earthquake
experiments 1 & 2

Analyzing and interpreting results

Analyze scientific information to develop and present conclusions.

Summarize and analyze data including possible sources of error. Explain results and offer reasonable and accurate interpretations and implications.

It's Up to You!
Unit 4, Survival Skills
CERT Teams activity & Earthquake
experiments 1 & 2

INTEGRATION - PHYSICAL SCIENCE

Physical Science: Understand structures and properties of matter and changes that occur in the physical world.

Several of the lessons in *It's Up to You!* meet Physical Science standards.

Common Curriculum Goals

Benchmark 3 (Grade 8)

Energy

Understand energy, its transformations, and interactions with matter.

Compare forms and behaviors of various types of energy.

It's Up to You!
Unit 2, Fire Science (Lesson B)

The Dynamic Earth

Understand changes occurring within the lithosphere, hydrosphere, and atmosphere of the Earth.

Describe the Earth's structure and how it changes over time.

It's Up to You!
Unit 4, Survival Skills (Lesson A)

INTEGRATION - ENGLISH/LANGUAGE ARTS

It's Up to You! integrates well with several standards in English and Language Arts. A few of them are provided below.

Common Curriculum Goals

Skill to Meet the Standard

Writing

Pre-write, draft, revise, edit and publish across the subject areas.

Identify audience and purpose.

It's Up to You!
Unit 4, Survival Skills (Lesson C)

Choose the form of writing that best suits the intended purpose.

It's Up to You!
Unit 4, Survival Skills (Lesson C)
Unit 6, Fire and the Media 2 (Lessons B, C)

Writing

Write narrative, expository and persuasive texts, using a variety of written forms...to express ideas appropriate to audience and purpose across the subject areas.

Write persuasive compositions.

It's Up to You!
Unit 4, Survival Skills (Lesson C)
Unit 6, Fire and the Media 2 (Lessons B, C)

(Continued on page 14)

INTEGRATION - ENGLISH/LANGUAGE ARTS (CONTINUED)

Common Curriculum Goals

Skill to Meet the Standard

Speaking/listening

Communicate supported ideas across the subject areas using oral, visual and multimedia forms in ways appropriate to topic, context, audience and purpose...

Support opinions with detailed evidence and with visual or media displays.

It's Up to You!

Unit 4, Survival Skills (Lesson C)

Speaking/listening

Evaluate the significance and accuracy of information and ideas presented in oral, visual and multimedia communications across the subject areas.

Identify and discuss persuasive and propaganda techniques used in television, including false and misleading information and stereotypes.

It's Up to You!

Unit 1, Fire and the Media 1

Unit 3, Fire Prevention (Lesson A)

Unit 4, Survival Skills (Lesson B)

Unit 6, Fire and the Media 2

Analyze how images, text, and sound in electronic journalism affect the viewer; identify the techniques used to achieve the effects in each instance.

It's Up to You!

Unit 1, Fire and the Media 1

Interpret and evaluate the various ways in which visual image-makers (e.g. graphic artists, illustrators, news photographers, film makers) communicate information and affect impressions and opinions.

It's Up to You!

Unit 1, Fire and the Media 1

Unit 3, Fire Prevention (Lesson A)

Unit 6, Fire and the Media 2

KEY TO VIDEO AND DVD

<p>UNIT 1 Fire and the Media 1</p>	<p>Unit 1 Lesson A TV Commercial The Patriot</p>
<p>UNIT 2 Fire Science</p>	<p>Unit 2 Lesson A Backdraft Actual house fire A Firefighter's Explanation Music Version 1 Music Version 2</p> <p>Unit 2 Lesson B Fire Concepts</p>
<p>UNIT 3 Fire Prevention</p>	<p>Unit 3 Lesson A Kindergarten Cop Lethal Weapon 4 How Fire Sprinklers Work Fire Sprinkler Demo</p> <p>Unit 3 Lesson B Water Usage Animation Fire Sprinkler Timeline</p> <p>Unit 3 Lesson C Fire Sprinkler Timeline Advocacy Interview</p>
<p>UNIT 4 Survival Skills</p>	<p>Unit 4 Lesson B I'm Concerned About Wildfire (movie slides) Campfires Recreational Area Off-Highway Vehicles (OHVs) Report Arson Survivable Space</p> <p>Unit 4 Lesson C CERT Teams</p>
<p>UNIT 5 (no video components)</p>	<p>N/A</p>
<p>UNIT 6 Fire and the Media 2</p>	<p>Unit 6 Lesson A Backdraft The Patriot Kindergarten Cop Lethal Weapon 4 TV Commercial</p>

LIST OF ADDITIONAL RESOURCES

American Red Cross - www.redcross.org

Unit 4 – Survival Skills
General Reference

“Burning Issues” an interactive fire science CD from Florida State University.

Florida Energy and Environmental Alliance
C2200 University Center
Florida State University
Tallahassee, FL 32306-2641
Unit 4 – Survival Skills

Consumer Products Safety Commission – www.cpsc.gov

General Reference

Department of Geology and Minerals Industries – www.oregongeology.com

Unit 4 – Survival Skills - *Oregon Earthquake and Tsunami Curriculum*, an excellent and complete curriculum from a science and geology perspective is available by calling (503) 731-4100 ext. 242.
General Reference

Federal Emergency Management Agency (FEMA) – www.fema.gov/kids, www.fema.gov

Unit 4 – Survival Skills
General Reference
<http://training.fema.gov/EMIWeb/CERT/overview.asp>
Unit 4 - Description of CERT
http://www.training.fema.gov/EMIWeb/cert/c_or.htm
Unit 4 - To see if there is a CERT in your community

www.firewise.com

Unit 4 – Survival Skills

www.firefree.org

Unit 4 – Survival Skills

Fire Department, local

Unit 2 – Fire Science
Unit 3 – Fire Prevention (Education, Enforcement, Engineering)
Unit 4 – Survival Skills
General Reference

Home Fire Sprinkler Coalition

<http://www.homefiresprinkler.org/hfsc.html>
Unit 3 - Fire Prevention

National Fire Protection Association – www.nfpa.org

Unit 2 – Fire Science
Unit 3 – Fire Prevention (Education, Enforcement, Engineering)
Unit 4 – Survival Skills
General Reference

National Interagency Fire Center - www.nifc.gov
General Reference

National Oceanographic & Atmospheric Administration – www.pmel.noaa.gov/tsunami
Unit 4 – Survival Skills

Office of Emergency Management – www.osp.state.or.us/oem
Unit 4 – Survival Skills
General Reference

Office of State Fire Marshal – www.sfm.state.or.us - 503-378-3473
Unit 2 – Fire Science
Unit 3 – Fire Prevention (Education, Enforcement, Engineering)
Unit 4 – Survival Skills
Annual Juveniles with Fire in Oregon report
Fire Interest Survey (a study of school-age children's normative behavior with fire)
General Reference

Oregon Association of Hospital and Health Systems – list of Oregon hospitals (find local hospital) –
www.oahhs.org/membership/orgmembers/htm
General Reference

Oregon Graduate Institute – www.ccalmr.ogi.edu/projects
Unit 4 – Survival Skills

Pacific Northwest Wildfire Coordinating Group
“Fire in the Pacific Northwest Ecosystem” an in-depth wildland fire curriculum.
Order from the US Forest Service Regional Office, 503-808-2100
Unit 4 – Survival Skills

Taming Fire, 1994, Scholastic Voyages of Discover, Scholastic Inc., New York.
Unit 2 – Fire Science

US Environmental Protection Agency – www.epa.gov/kidshometour/
General Reference

US Fire Administration – www.usfa.fema.gov, www.fema.gov
Unit 2 – Fire Science
Unit 4 – Survival Skills
General Reference

US Geological Survey – www.usgs.gov/index.html

Weather Channel – www.weather.com/safeside
Unit 4 – Survival Skills
General Reference