

Fire: Prevention, Preparation, and Protection

Lesson Plan

Grade Level: 6-8

Curriculum Focus: Technology and Society

Lesson Duration: Three class periods

Student Objectives

- Brainstorm fire-related words and phrases.
- Discuss preventing fires, preparing for a fire, and protection from fire.
- Create fire-safety posters for the school.

Materials

- Discovery School video on *unitedstreaming: Water: Friend and Foe*
Search for this video by using the video title (or a portion of it) as the keyword.

Selected clips that support this lesson plan:

- Drawn to the Fire

- Computer with Internet access
- Print resources about fire safety
- Poster board, markers, paint, colored pencils, glue, scissors

Procedures

This lesson may be used to recognize National Prevention Week (annually the week in which October 9 falls). The observance is sponsored by the National Fire Protection Association (NFPA)

1. After watching the video, ask students to brainstorm words or phrases relating to fires and firefighters.
2. Explain that according to the National Fire Protection Association, a fire is reported every 15 seconds; in most cases, these fires are preventable. Make three columns on the board labeled PREVENT, PREPARE, and PROTECT. Ask students what they can do to prevent fires in their home. Record their answers under PREVENT. See below for examples:
 - Don't play with candles, lighters, or matches.
 - Keep flammable items away from stoves and hot appliances.
 - Clean the lint filter in your dryer after each load. (About 14,000 fires occur because of dryer problems each year.)

- Don't plug too many appliances into one outlet.
 - Unplug tools and appliances when not in use.
 - Don't place extension cords under rugs.
 - Make sure space heaters are at least three feet from furniture, drapes, or other flammable items.
 - Don't throw water on a grease fire; use salt, baking soda, or a fire extinguisher.
3. Ask students how they might prepare for a fire and record their responses under PREPARE. See below for examples:
- Install smoke alarms and test them regularly.
 - Develop and practice home fire drills.
 - Keep a fire extinguisher in the kitchen.
 - Keep a list of important numbers, including the fire department, near the phone.
4. Ask students how they would protect themselves if they were caught in a fire. Record their answers under PROTECT. See below for examples:
- Leave the house immediately.
 - Don't open a hot door. (To check, touch it quickly with the back of your hand.)
 - If there's smoke, crawl on the floor.
 - If your clothes catch fire, roll on the floor, but do not run
5. Tell students that they will work with a partner to create fire-safety posters for their school. Their first assignment is to consult fire-safety resources to find additional information about fire prevention, preparation, and protection.
6. Have students use print and Web resources in their research. The following Web sites may be helpful:
- Facts on Fire
<http://www.usfa.fema.gov/public/facts.shtm>
 - NFPA Fact Sheets
<http://www.nfpa.org/Research/NFPAFactSheets/NFPAFactSheets.asp>
 - Home Fire Safety
<http://www.cdc.gov/nasd/docs/d000701-d000800/d000707/d000707.html>
 - USFA Kids Page
<http://www.usfa.fema.gov/kids/>
 - Fire Prevention Week
http://www.nfpa.org/FPW/Kids_Area/kids_area.asp

- Fire-Safety Sites
http://www.education-world.com/a_sites/sites056.shtml
 - Fire Safety and Protection Tips
<http://www.firesafetytips.com/default.htm>
 - Fire Safety
<http://www.ou.edu/oupd/fslist.htm>
7. The main feature of the posters should be the message, written in clear, direct language and large, easy-to-read letters. Posters should also include an explanation, example, statistics, or other important information from the students' research, as well as a picture or diagram to help illustrate their message.
 8. Hang posters in a school hallway or the cafeteria during National Prevention Week. You may want to create three display sections: PREVENT, PREPARE, and PROTECT.

Assessment

Use the following three-point rubric to evaluate students' work during this lesson.

- **3 points:** Students actively engaged in class discussions; thoroughly researched their fire-safety message; created a poster that met all requirements, including a clear message, with an explanation, example, statistics, or other important information to support the message, and an engaging diagram or image.
- **2 points:** Students participated in class discussions; satisfactorily researched their fire-safety message; created a poster that met most requirements, including a clear message with an explanation, example, statistics, or other information to support the message, and an engaging diagram or image.
- **1 point:** Students did not participate in class discussions; incompletely researched their fire-safety message; created a poster that met few or no requirements and contained incorrect information, an unclear or unsupported message, and/or a diagram or image that was simplistic or not relevant to the fire-safety message.

Vocabulary

combustible

Definition: Able to catch fire or burn; flammable

Context: Stacks of newspapers can be extremely combustible.

fire triangle

Definition: The three elements that are necessary for a fire to burn: oxygen, heat, and fuel

Context: The element of fuel in the fire triangle is anything that burns, from gasoline to draperies.

smoke alarm

Definition: An electronic tool that detects smoke in the air and beeps to warn of a possible fire; also called a “fire detector”

Context: Smoke alarms should be installed near sleeping areas and on every level of your home.

Academic Standards

National Academy of Sciences

The National Science Education Standards provide guidelines for teaching science as well as a coherent vision of what it means to be scientifically literate for students in grades K-12. To view the standards, visit <http://books.nap.edu>.

This lesson plan addresses the following science standards:

- Science in Personal and Social Perspectives: Natural hazards; Risks and benefits

Mid-continent Research for Education and Learning (McREL)

McREL's Content Knowledge: A Compendium of Standards and Benchmarks for K-12 Education addresses 14 content areas. To view the standards and benchmarks, visit link:

<http://www.mcrel.org/compendium/browse.asp>

This lesson plan addresses the following national standards:

- Language Arts – Viewing: Uses viewing skills and strategies to understand and interpret visual media; Writing: Uses the general skills and strategies of the writing process, Gathers and uses information for research purposes

Support Materials

Develop custom worksheets, educational puzzles, online quizzes, and more with the free teaching tools offered on the Discoveryschool.com Web site. Create and print support materials, or save them to a Custom Classroom account for future use. To learn more, visit

- <http://school.discovery.com/teachingtools/teachingtools.html>

