

Risk Watch® Electrical Safety Lesson Plans

Grades 3-4

Understand the Science of Electricity

Lesson Plan: "Don't Blame the Cow!"

Objectives

1. Identify electricity as a tool.
2. Identify what is and is not run by electricity.

Preparation

1. Print the pictures provided.
2. Mount on cardboard

Procedure

Discuss the following information with the students:

Don't Blame the Cow

"One dark night, when people were in bed, Old Mrs. O'Leary lit a lantern in her shed: The cow kicked it over, winked its eye, and said, There'll be a hot time in the old town tonight."

*Quoted in the Chicago Evening Post
Author anonymous*

Traditionally, the Great Chicago Fire, which began on Oct. 8, 1871, has been blamed on a cow owned by Patrick and Catherine O'Leary. Legend has it that the cow kicked over a kerosene lamp, the lamp ignited nearby hay, and a fire occurred. Over 250 people died in this fire and nearly \$200 million worth of damage occurred.

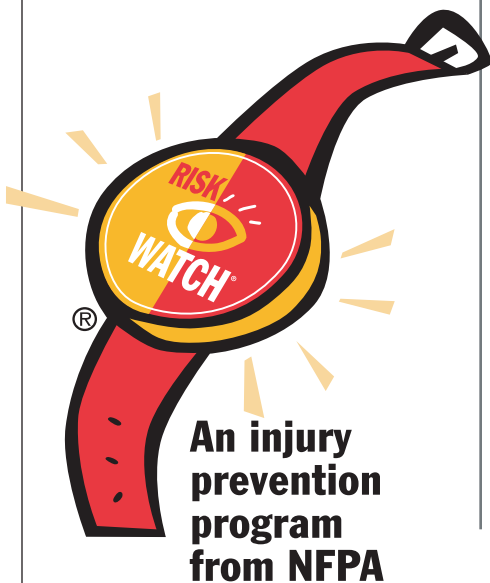
Whether Mrs. O'Leary's cow kicking over a lantern that caused the Great Chicago Fire is a true story or not, there are many, many ways that a fire can start. A common way fires start today is through the misuse of electricity.

It would be easy enough to blame Mrs. O'Leary's cow for starting the fire, but truth be known, people are often to be blamed for the fires.

If Mrs. O'Leary had moved the lantern from within kicking distance of the cow, or had the lantern not been so near flammable hay, a different story might be known today.

Toasters, lamps, coffee pots, and electric blankets often get the same treatment today that Mrs. O'Leary's cow received for "starting the fire." Your mission today will be:

1. Review the ways electrical fires begin.
2. Complete the "Don't Blame the Cow!" Electrical Safety Hunt.
3. Write a friendly letter to parents / caregivers telling what you've found after completing the "Don't Blame the Cow!" Electrical Safety Hunt. Make suggestions of what could be changed.



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**“Don’t Blame the Cow!”
Electrical Safety Hunt**

Using this checklist, ask a grown-up to help inspect your home. If you find unsafe item, check off “Needs Fixed” and ask the grown-up to correct the hazards to help make your home safer.

Electrical Safety Rule	Good	Needs Fixed
1. Electrical appliances are used away from water	<input type="checkbox"/>	<input type="checkbox"/>
2. Electrical cords are in good condition.	<input type="checkbox"/>	<input type="checkbox"/>
3. Safety caps are placed in outlets to protect toddlers	<input type="checkbox"/>	<input type="checkbox"/>
4. Electrical outlets have one plug in each of the two outlets.	<input type="checkbox"/>	<input type="checkbox"/>
5. Electrical cords are run safely.	<input type="checkbox"/>	<input type="checkbox"/>
6. Electrical appliances that get hot are kept away from things that could burn (light bulbs, heaters, toasters).	<input type="checkbox"/>	<input type="checkbox"/>
7. Small appliances are unplugged when not in use.	<input type="checkbox"/>	<input type="checkbox"/>
8. A multipurpose fire extinguisher is kept in the home.	<input type="checkbox"/>	<input type="checkbox"/>
9. Extension cords are for temporary use only, not plugged in and left in place.	<input type="checkbox"/>	<input type="checkbox"/>
10. Grown-ups carry appliances by the handles not the cord.	<input type="checkbox"/>	<input type="checkbox"/>



“Don’t Blame the Cow!” Electric Safety Tips

Check electrical cords for wear and tear. Faulty wires are a fire hazard. Look closely at plugs and connections for nicks and cuts.

Unplug a cord by pulling on the plug, not the cord.

Pulling on the cord can loosen a connection or break the cord. This can allow electricity to escape and become dangerous.

Keep items that could burn away from electrical appliances that get hot - light bulbs, heaters, and toasters.

To be safer, it is important to unplug small appliances that are not in use.

Occasionally, even electrical small appliances that are turned off start a fire. Electricity continually runs in electrical wires in the walls of our homes. Unplugging small appliances when not in use is a good idea.

Find a safer way. Do not run electrical cords through doorways, under rugs, or around pipes. This could damage the cord’s insulation - the protective outer cover. This could start a fire.

Some older homes do not have proper wiring to handle all of today’s electrical equipment.

Be aware of signs that a home is not wired properly:

- Dimming lights when an appliance goes on
- Motors slowing down
- Frequently blown fuses or tripped circuit breakers
- Toasters and irons not heating properly
- A shrinking television picture

A coin in a fuse holder is unsafe. Adults should be reminded to get an electrician when the power keeps going out. A fuse must be replaced with one of the exact same size as the one that has gone out.

The purpose of a fuse is to turn off the homes current when the electrical load becomes too heavy. By putting coins in the fuse holder or using the wrong fuse, protection is removed. Electrical wires in the house may overheat and start a fire.

Always be dry before touching anything electrical. Have dry hands before turning on a light switch, the heater in the bathroom, the garbage disposal. Water is an excellent conductor of electricity. If the human body touches electricity and water at the same time, it can become a conductor of the electricity.