



Electric Safety Classroom Presentation – 3rd-6th Grades

Alignment to Colorado Academic Standards

The Electrical Safety Program has been designed to support 2009 Colorado Department of Education Academic Standards, 2010 Common Core State Standards, Prepared Graduate Competencies, and 21st Century Learning Skills.

| Grade | Colorado Academic Standard | Prepared Graduate Competency | Concept | Colorado Springs Utilities Educational Messages |
|-------|--------------------------------|---|--|---|
| 3 | Prevention & Risk Management | Identify ways to prevent injuries at home, in school, and in the community | Knowing the dangers of electricity and its consequences can help students recognize when there is danger and take action. | <ul style="list-style-type: none"> ✓ Properties of electricity ✓ Prevention of emergencies ✓ Why electricity is dangerous ✓ Use of safety awareness |
| 3 | Prevention and Risk Management | Apply personal safety knowledge and skills to prevent and treat intentional or unintentional injury | Instruct students to take actions in electrical emergencies such as calling 911 and applying a decision-making process for avoiding situations that could lead to injury. | <ul style="list-style-type: none"> ✓ Learn the dangers of electricity ✓ Prevent electricity accidents and emergencies at home and play ✓ Know what actions to take if there is an emergency with electricity ✓ Help and warn others |
| 4 | Physical Science | Energy comes in many forms such as light, heat, sound, magnetic, chemical and electrical | Students can identify and describe the variety of energy sources. Describe the energy transformation that takes place in electrical circuits where light, heat, sound and magnetic efforts are produced. | <ul style="list-style-type: none"> ✓ Electricity is... ✓ Electricity can be transformed ✓ Properties of electricity ✓ How electricity is generated and delivered to us |
| 4 | Physical Science | Show that electricity in circuits requires a complete loop through which current can pass | Learn a practical approach and exercise that is important to the fundamentals of electricity. | <ul style="list-style-type: none"> ✓ Better understand circuits and electric currents ✓ Modify or diagram an electrical circuit ✓ Observe electric current transference |

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| 4 | Physical Science | Identify and describe the variety of energy sources | Various forms of energy (light, heat, sound, magnetic, chemical, electric, kinetic) | <ul style="list-style-type: none"> ✓ Electricity will be identified as one source of energy ✓ Students will understand electricity transformation from the source where it is produced |
| 5 | Comprehensive Health | Develop and apply a decision-making process for avoiding situations that could lead to injury | Prevent electrical emergencies indoors and outdoors; apply action-oriented techniques to ensure safety for self & others. | <ul style="list-style-type: none"> ✓ Understand the dangers of electricity ✓ Apply understanding to a safety decision-making process ✓ Recognize electric danger signs |
| 5 | Earth Systems Science | Earth and sun provide a diversity of renewable and nonrenewable resources | Describe how humans are dependent on the diversity of resources provided by Earth & Sun | <ul style="list-style-type: none"> ✓ Define the difference of renewable and non-renewable energy ✓ Understand the variety of energy resources provided by the earth ✓ Limited energy resources should affect the choices of individuals and communities. |
| 6 | Comprehensive Health | Demonstrate ways to advocate for safety, and prevent unintentional injuries. | Demonstrate the ability to identify and correct safety hazards at home, in school, and in the community. | <ul style="list-style-type: none"> ✓ Demonstrate ways to and prevent unintentional injury from electrical hazards, indoors and outdoors. |
| 6 | Physical Science | Apply an understanding that energy exists in various forms, and its transformation and conservation occur in processes that are predictable and measurable. | Students know and understand common properties, forms, and changes in matter and energy. | <ul style="list-style-type: none"> ✓ Understand the generation, transmission and distribution of electricity as an energy source. |

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