



## Natural Gas Safety Classroom Presentation – 3<sup>rd</sup>-5<sup>th</sup> Grades

### Alignment to Colorado Academic Standards

The Natural Gas Safety program has been designed to support 2009 Colorado Department of Education Academic Standards, 2010 Common Core State Standards, Prepared Graduate Competencies, and 21<sup>st</sup> 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 natural gas and its consequences can help students recognize danger and take action.	<ul style="list-style-type: none"> <li>✓ Properties of natural gas</li> <li>✓ Prevention of emergencies</li> <li>✓ Why natural gas is dangerous</li> <li>✓ Use of awareness and 5 senses</li> </ul>
3	Prevention & Risk Management	Apply personal safety knowledge and skills to prevent and treat intentional or unintentional injury	Allow students to take actions in natural gas emergencies to prevent injury or assist someone.	<ul style="list-style-type: none"> <li>✓ Learn the “3 S’s” of detecting natural gas</li> <li>✓ Know what actions to take if there is a natural gas leak</li> <li>✓ Help and warn others of a leak</li> </ul>
3	Physical Science	Matter exists in different states such as solids, liquids, and gases and can change from one state to another by heating & cooling	Apply an understanding of atomic and molecular structure to explain the properties of matter.	<ul style="list-style-type: none"> <li>✓ Natural gas is a flammable gas, made of methane and hydrocarbons, occurring naturally underground, used as fuel.</li> <li>✓ Natural gas can change from a gas to a liquid (LNG)</li> <li>✓ Natural gas can be stored</li> </ul>
4	Life Science	Comparing fossils to each other or to living organisms reveals features of prehistoric environments and provides information about organisms today	Nonliving components are cycled and recycled through ecosystems. Fossils are evidence of past life & environments.	<ul style="list-style-type: none"> <li>✓ Fossil fuels are derived from once living organisms deep in the earth</li> <li>✓ Understanding fossil origins can help us to understand how we use them today.</li> </ul>

4	Prevention & Risk Management	Apply personal safety knowledge and skills to prevent and treat intentional or unintentional injury	Allow students to take actions in natural gas emergencies to prevent injury or assist someone.	<ul style="list-style-type: none"> <li>✓ Learn the “3 S’s” of detecting natural gas</li> <li>✓ Know what actions to take if there is a natural gas leak</li> <li>✓ Help and warn others of a leak</li> </ul>
5	Comprehensive Health	Develop and apply a decision-making process for avoiding situations that could lead to injury	Prevent natural gas & CO emergencies and apply action-oriented techniques to ensure safety for self & others.	<ul style="list-style-type: none"> <li>✓ Understand the dangers of natural gas and CO</li> <li>✓ Apply understanding to a decision-making process for safety</li> </ul>
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"> <li>✓ Define the difference of renewable and non-renewable energy</li> <li>✓ Understand the variety of energy resources provided by the earth</li> <li>✓ Limited energy resources should affect the choices of individuals and communities.</li> </ul>