



Kentucky Academic Standards Alignment

Aligned to standards from the Kentucky Department of Education.

Program Focus (K–2)

Students learn:

- How we use natural gas in everyday life
- How electricity powers homes
- How to stay safe around natural gas
- How to identify dangerous electrical situations

The performance uses storytelling, repetition, movement, and audience participation to reinforce learning.

SCIENCE (K–2)

Earth & Human Activity

- **K-ESS3-3** – Communicate solutions that reduce human impact on Earth.
- **2-ESS2-1** – Compare solutions to environmental challenges.

Engineering Design

- **K-2-ETS1-1** – Ask questions and define simple problems.
- **K-2-ETS1-2** – Develop simple solutions.

Standards Connection:

Students identify safety problems (gas leaks, downed power lines, unsafe heater placement) and practice appropriate responses:

- Leave the house if gas is smelled



- Tell a trusted adult
- Keep space heaters 3 feet away
- Stay away from power lines
- Only put plugs in outlets

SOCIAL STUDIES (K–2)

Civic Responsibility

- Understand that rules help keep people safe.
- Identify roles of community helpers.

Economics

- Recognize that goods and services meet needs.
- Understand that resources are limited.

Standards Connection:

Students learn that:

- Utility workers help keep communities safe
- Calling 8-1-1 prevents damage to underground utilities
- Natural gas is a limited resource that must be used wisely

ENGLISH LANGUAGE ARTS (K–2)

Reading Literature

- **RL.K–2.1** – Ask and answer questions about key details.
- **RL.K–2.2** – Retell stories and identify central message.
- **RL.K–2.3** – Describe characters and major events.



Speaking & Listening

- **SL.K-2.1** – Participate in collaborative conversations.
- **SL.K-2.2** – Recount key ideas presented orally.

Standards Connection:

Students:

- Identify characters (hero, villain, helpers)
 - Retell safety rules
 - Participate in repeated phrase: “Open your eyes, be safety wise!”
 - Demonstrate comprehension through audience interaction
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K-2 Learning Outcomes

Students will be able to:

- ✓ Name at least one appliance that uses natural gas
 - ✓ Identify one safe response to a gas leak
 - ✓ Explain one rule for electrical safety
 - ✓ Recognize that natural gas is a resource found in nature
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Program Focus (3-5)

Students deepen understanding of:

- Natural gas as a limited natural resource
- Energy transformation and electricity generation
- Engineering solutions to safety problems
- Civic responsibility related to public utilities



SCIENCE (3–5)

Energy

- **4-PS3-2** – Energy transfer through heat and electric currents.
- **4-PS3-4** – Energy conversion systems.

Earth & Human Activity

- **4-ESS3-1** – Protecting Earth’s resources.
- **5-ESS3-1** – Community use of science ideas to protect resources.

Engineering Design

- **3-5-ETS1-1, ETS1-2, ETS1-3** – Define problems, generate and evaluate solutions.

Standards Connection:

Students learn the energy transformation process:

Natural gas → heat → steam → turbine → generator → electricity

They evaluate safety procedures:

- Gas leak protocol
- Call 8-1-1 before digging
- Electrical hazard identification
- Fire prevention through proper heater placement



SOCIAL STUDIES (3–5)

Civics

- Describe the role of public service agencies.
- Explain how laws and services protect citizens.

Economics

- Explain scarcity and responsible resource allocation.
- Describe production and distribution of goods and services.

Geography

- Explain how natural resources influence human activities.

Standards Connection:

Students understand:

- Utility companies maintain safe infrastructure
- Public safety systems protect communities
- Energy production supports homes, schools, and businesses

ENGLISH LANGUAGE ARTS (3–5)

Reading Literature

- **RL.3–5.1** – Refer to text when explaining ideas.
- **RL.3–5.2** – Determine theme.
- **RL.3–5.3** – Analyze character actions and events.

Informational Text



- **RI.3–5.3** – Explain relationships between procedures and ideas.

Speaking & Listening

- **SL.3–5.1** – Engage effectively in discussions.
- **SL.3–5.4** – Report on a topic using appropriate facts.

Standards Connection:

Students:

- Analyze character motivations (responsibility vs. carelessness)
- Identify theme (safety, conservation, community responsibility)
- Explain procedural steps for safe energy use

3–5 Learning Outcomes

Students will be able to:

- ✓ Explain how natural gas can be converted into electricity
- ✓ Identify at least three electrical safety rules
- ✓ Describe proper response to a natural gas leak
- ✓ Explain why calling 8-1-1 before digging is important
- ✓ Discuss why conserving natural resources matters