

## Activity 4: What Powers the Move? for grades 3-8 with K-2 variations (pp. 39 – 44 in Energy & Society Kit)

**Subject Area: Language Arts**

### **Strand: Reading**

**Standard 2:** The student constructs meaning from a wide range of texts.

#### **Benchmarks:**

- **Grades K-2:** No applicable benchmarks.
- **Grades 3-5:** Reads text and determines the main idea or essential message, identifies relevant supporting details and facts, and arranges events in chronological order. [LA.A.2.2.1]
- **Grade 3-5:** Recognizes the use of comparison and contrast in a text. [LA.A.2.2.7]
- **Grades 6-8:** Determines the main idea or essential message in a text and identifies relevant details and facts and patterns of organization. [LA.A.2.3.1]

### **Strand: Writing**

**Standard 2:** The student writes to communicate ideas and information effectively.

#### **Benchmarks:**

- **Grades K-2:** No applicable benchmarks.
- **Grades 3-5:** Writes notes, comments, and observations that reflect comprehension of content and experiences from a variety of media. [LA.B.2.2.1]
- **Grades 3-5:** Writes for a variety of occasions, audiences and purposes. [LA.B.2.2.3]
- **Grades 3-5:** Uses electronic technology, including word-processing, software and electronic encyclopedias, to create, revise, retrieve, and verify information. [LA.B.2.2.4] \*
- **Grades 6-8:** Writes text, notes, outlines, comments, and observations that demonstrate comprehension of content and experiences from a variety of media. [LA.B.2.3.1]
- **Grades 6-8:** Uses electronic technology including databases and software to gather information and communicate new knowledge. [LA.B.2.3.4] \*

### **Strand: Listening, Viewing, and Speaking**

**Standard 1:** The student uses listening strategies effectively.

#### **Benchmarks:**

- **Grades K-2:** Listens for a variety of informational purposes, including curiosity, pleasure, getting directions, performing tasks, solving problems, and following rules. [LA.C.1.1.1]
- **Grades 3-5:** Listens and responds to a variety of oral presentations, such as stories, poems, skits, songs, personal accounts, informational speeches. [LA.C.1.2.1] \*
- **Grades 3-5:** Responds to speakers by asking questions, making contributions, and paraphrasing what is said. [LA.C.1.2.5]

- **Grades 6-8:** Listens and uses information gained for a variety of purposes, such as gaining information from interviews, following directions, and pursuing a personal interest. [LA.C.1.3.1]

**Standard 2:** The student uses viewing strategies effectively.

**Benchmarks:**

- **Grades K-2:** Determines the main idea in a nonprint communication. [LA.C.2.1.1]
- **Grades 3-5:** Determines the main concept and supporting details in nonprint media message. [LA.C.2.2.1]
- **Grades 6-8:** Determines main concept, supporting details, stereotypes, bias, and persuasion techniques in a nonprint message. [LA.C.2.3.1]

**Standard 3:** The student uses speaking strategies effectively.

**Benchmarks:**

- **Grades K-2:** Speaks clearly and at a volume audible in large-or small-group settings. [LA.C.3.1.1]
- **Grades 3-5:** Speaks clearly at an understandable rate and uses appropriate volume. [LA.C.3.2.1]
- **Grades 3-5:** Speaks for specific occasions, audiences, and purposes, including conversations, discussions, projects, and informational or imaginative presentations. [LA.C.3.2.3]
- **Grades 3-5:** Participates as a contributor and occasionally acts as a leader in a group discussion. [LA.C.3.2.5]
- **Grades 6-8:** Asks questions and makes comments and observations that reflect understanding and application of content, processes, and experiences. [LA.C.3.3.2]
- **Grades 6-8:** Speaks for various occasions, audiences, and purposes, including conversations, discussions, projects, and informational, persuasive, or technical presentations. [LA.C.3.3.3]

**Subject Area: Social Studies**

**Strand: Time, Continuity, and Change (History)**

**Standard 1:** The student understands historical chronology and the historical perspective.

**Benchmarks:**

- **Grades K-2:** No applicable benchmarks.
- **Grades 3-5:** Understands how individuals, ideas, decisions and events can influence history. [SS.A.1.2.1]
- **Grade 3-5:** Understands broad categories of time in years, decades, and centuries. [SS.A.1.2.3]
- **Grade 6-8:** Understands how patterns, chronology, sequencing (including cause and effect), and the identification of historical periods are influenced by frames of reference. [SS.A.1.3.1]
- **Grades 6-8:** Knows how to impose temporal structure on historical narratives. [SS.A.1.3.3] \*

**Strand: People, Places, and Environments (Geography)**

**Standard 2:** The student understands the interactions of people and the physical environment.

**Benchmarks:**

- **Grades K-2:** Knows the role that resources play in our daily lives. [SS.G.2.1.4]
- **Grades 3-5:** Understands how human activity affects the physical environment. [SS.B.2.2.3]
- **Grades 6-8:** Understands how the interaction between physical and human systems affects current conditions on Earth. [SS.B.2.3]

**Strand: Production, Distribution, and Consumption (Economics)**

**Standard 1:** The student understands how scarcity requires individuals and institutions to make choices about how to use available resources.

**Benchmarks:**

- **Grades K-2:** No applicable benchmarks.
- **Grades 3-5:** Understands that all decisions involve opportunity costs and that making effective decisions involves considering the costs and benefits associated with alternative choices. [SS.D.1.2.1]
- **Grades 3-5:** Understands that scarcity of resources requires choices on many levels, from the individual to societal. [SS.D.1.2.2]
- **Grades 6-8:** No applicable benchmarks.

**Subject Area: Science**

**Strand: Energy**

**Standard 2:** The student understands the interaction of matter and energy.

**Benchmarks:**

- **Grades K-2:** No applicable benchmarks.
- **Grades 3-5:** Recognizes the costs and risks to society and the environment posed by the use of nonrenewable energy. [SC.B.2.2.2]
- **Grades 6-8:** No applicable benchmarks.

**Strand: Processes that Shape the Earth**

**Standard 2:** The student understands the need for protection of the natural systems on Earth.

**Benchmarks:**

- **Grades K-2:** No applicable benchmarks.
- **Grades 3-5:** No applicable benchmarks.
- **Grades 6-8:** Knows the positive and negative consequences of human action on the Earth's system. [SC.D.2.3.2]

## **Strand: The Nature of Science**

**Standard 1:** The student uses the scientific processes and habits of mind to solve problems.

### **Benchmarks:**

- **Grades K-2:** No applicable benchmarks.
- **Grades 3-5:** Knows that to work collaboratively, all team members should be free to reach, explain, and justify their own individual conclusions. [SC.H.1.2.3]
- **Grades 3-5:** Knows that to compare and contrast observations and results is an essential skill in science. [SC.H.1.2.4]
- **Grades 3-5:** Knows that a model of something is different from the real thing, but can be used to learn something about the real thing. [SC.H.1.2.5]
- **Grades 6-8:** No applicable benchmarks.

**Standard 3:** The student understands that science, technology, and society are interwoven and interdependent.

### **Benchmarks:**

- **Grades K-2:** No applicable benchmarks.
- **Grades 3-5:** Understands that people, alone or in groups, invent new tools to solve problems and do work that affects aspects of life outside of science. [SC.H.3.2.1]
- **Grades 3-5:** Knows that before a group of people build something or try something new, they should determine how it may affect other people. [SC.H.3.2.3]
- **Grades 3-5:** Knows that through the use of science processes and knowledge, people can solve problems, make decisions, and form new ideas. [SC.H.3.2.4]
- **Grades 6-8:** Knows that technological design should require taking into account constraints such as natural laws, the properties of the materials used, and economic, political, social, ethical, and aesthetic values. [SC.H.3.3.4]

**Note** – Benchmarks followed by a star (\*) are only met when Integrating Music and Dance, Enrichment, and/or Assessment activities are conducted.