

# Think Earth K–2 Standards Correlations

## Think Earth and Next Generation Science Standards

A *Framework for K–12 Science Education*, the basis for the *Next Generation Science Standards*, describes a progression of Disciplinary Core Ideas through grade band endpoints\*. The *Think Earth* units for kindergarten, first grade, and second grade directly address the following Disciplinary Core Ideas, leading students to the grade band endpoints for grades K–2.

### Disciplinary Core Ideas: Grade Band Endpoints for K–2

#### ESS2.E: BIOGEOLOGY

##### ***How do living organisms alter Earth’s processes and structures?***

By the end of grade 2: Plants and animals (including humans) depend on the land, water, and air to live and grow. They in turn can change their environment (e.g., the shape of land, the flow of water).

#### ESS3.A: NATURAL RESOURCES

##### ***How do humans depend on Earth’s resources?***

By the end of grade 2: Living things need water, air, and resources from the land, and they try to live in places that have the things they need. Humans use natural resources for everything they do: for example, they use soil and water to grow food, wood to burn to provide heat or to build shelters, and materials such as iron or copper extracted from Earth to make cooking pans.

#### ESS3.C: HUMAN IMPACTS ON EARTH SYSTEMS

##### ***How do humans change the planet?***

By the end of grade 2: Things that people do to live comfortably can affect the world around them. But they can make choices that reduce their impacts on the land, water, air, and other living things—for example, by reducing trash through reuse and recycling.

#### LS1.C: ORGANIZATION FOR MATTER AND ENERGY FLOW IN ORGANISMS

##### ***How do organisms obtain and use the matter and energy they need to live and grow?***

By the end of grade 2: All animals need food in order to live and grow. They obtain their food from plants or from other animals. Plants need water and light to live and grow.

### Specific Performance Expectations

#### Kindergarten

K-ESS3-3. Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.\* [Clarification Statement: Examples of human impact on the land could include cutting trees to produce paper and using resources to produce bottles. Examples of solutions could include reusing paper and recycling cans and bottles.]

\*For further details, see the [Framework](#) and [Appendix E—Progressions Within the Next Generation Science Standards](#).

## **Think Earth and the McREL Standards Compendium**

The [McREL online standards compendium](#) offers content standards and benchmarks, representing a synthesis of significant standards documents across every subject area. The *Think Earth* units for kindergarten, first grade, and second grade directly address the following McREL-listed standards at Level 1, Grades K–2.

### **Geography**

- Standard 14. Understands how human actions modify the physical environment
  1. Knows ways in which people depend on the physical environment (e.g., food, clean air, water, mineral resources)
- Standard 16. Understands the changes that occur in the meaning, use, distribution and importance of resources
  1. Knows the role that resources play in our daily lives (resources used to generate electricity; resources used to produce automobiles, medicines, clothing, and food)

### **Health**

- Standard 2. Knows environmental and external factors that affect individual and community health
  1. Knows sources and causes of pollution (e.g., air, ground, noise, water, food) in the community

### **Language Arts**

- Standard 7. Uses skills and strategies to read a variety of informational texts
  1. Reads a variety of informational texts (e.g., written directions, signs, captions, warning labels, informational books)
  2. Understands the main idea and supporting details of simple expository information
  3. Summarizes information found in texts (e.g., retells in own words)
  4. Relates new information to prior knowledge and experience
- Standard 8. Uses listening and speaking strategies for different purposes
  2. Asks and responds to questions (e.g., about the meaning of a story, about the meaning of words or ideas)
- Standard 9. Uses viewing skills and strategies to understand and interpret visual media
  1. Understands the main idea or message in visual media (e.g., graphics, animation, comic books, television)
  2. Uses a variety of strategies to predict content and meaning in visual media (e.g., uses knowledge of the structure of television programs: for cartoons, make predictions based on program length, experience that a resolution will be reached and that main characters will overcome difficulties to return to the next episode; uses knowledge of cause-and-effect relationships to predict plot development)
  6. Understands the similarities and differences between real life and life depicted in visual media (e.g., compares own family to families represented in television cartoons or films; knows that there is a difference between a character in a program and the actor)

## **Science**

- Standard 5. Understands the structure and function of cells and organisms
  1. Knows the basic needs of plants and animals (e.g., air, water, nutrients, light or food, shelter)
  2. Knows that plants and animals have features that help them live in different environments
- Standard 6. Understands relationships among organisms and their physical environment
  1. Knows that plants and animals need certain resources for energy and growth (e.g., food, water, light, air)

## **Technology**

- Standard 3. Understands the relationships among science, technology, society, and the individual
  3. Knows that man-made materials, products, and systems can affect the environment adversely, yet there are things that can be done to circumvent this process (e.g., disposing of waste properly, reusing old objects in new designs)

## Think Earth and Common Core State Standards: Kindergarten

[Common Core State Standards](#) in Reading, Speaking & Listening, Language, and Mathematics are addressed in the core *Think Earth* lessons for kindergarten. Additional standards are addressed through the various Additional Activities that follow each lesson and the Unit Follow-Up Activities.

### Think Earth Lessons

#### Reading: Informational Text

- CCSS.ELA-Literacy.RI.K.1 With prompting and support, ask and answer questions about key details in a text.
- CCSS.ELA-LITERACY.RI.K.2 With prompting and support, identify the main topic and retell key details of a text.
- CCSS.ELA-LITERACY.RI.K.3 With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.
- CCSS.ELA-Literacy.RI.K.7 With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).
- CCSS.ELA-LITERACY.RI.K.10 Actively engage in group reading activities with purpose and understanding.

#### Speaking & Listening

- CCSS.ELA-Literacy.SL.K.2 Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.

#### Language

- CCSS.ELA-Literacy.L.K.5a Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.
- CCSS.ELA-Literacy.L.K.5c Identify real-life connections between words and their use (e.g., note places at school that are colorful).

#### Mathematics: Measurement and Data

- CCSS.MATH.CONTENT.K.MD.B.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

### Think Earth Additional Activities

#### Writing

- CCSS.ELA-Literacy.W.K.2 Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.

## **Think Earth and Common Core State Standards: First Grade**

[Common Core State Standards](#) in Reading, Speaking & Listening, and Language are addressed in the core *Think Earth* lessons for first grade. Additional standards are addressed through the various Additional Activities that follow each lesson and the Unit Follow-Up Activities.

### Think Earth Lessons

#### Reading: Informational Text

- CCSS.ELA-Literacy.RI.1.1 Ask and answer questions about key details in a text.
- CCSS.ELA-LITERACY.RI.1.2 Identify the main topic and retell key details of a text.
- CCSS.ELA-LITERACY.RI.1.3 Describe the connection between two individuals, events, ideas, or pieces of information in a text.
- CCSS.ELA-LITERACY.RI.1.6 Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.
- CCSS.ELA-LITERACY.RI.1.7 Use the illustrations and details in a text to describe its key ideas.

#### Speaking & Listening

- CCSS.ELA-LITERACY.SL.1.2 Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

#### Language

- CCSS.ELA-LITERACY.L.1.5.C Identify real-life connections between words and their use (e.g., note places at home that are cozy).

### Think Earth Additional Activities

#### Speaking & Listening

- CCSS.ELA-LITERACY.SL.1.5 Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.

#### Mathematics: Measurement and Data

- CCSS.MATH.CONTENT.1.MD.C.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.