

DCI: Earth and Human Activity

K.ESS3.A: Natural Resources

Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do. (K-ESS3-1)

DCI: Earth and Human Activity

K.ESS3.B: Natural Hazards

Some kinds of severe weather are more likely than others in a given region. Weather scientists forecast severe weather so that the communities can prepare for and respond to these events. (K-ESS3-2)

DCI: Earth and Human Activity

K.ESS3.C: Human Impacts on Earth Systems

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. (K-ESS3-3)

DCI: Earth and Human Activity

K.ETS1.A: Defining and Delimiting Engineering Problems

Asking questions, making observations, and gathering information are helpful in thinking about problems. (K-ESS3-2)

DCI: Earth and Human Activity

K.ETS1.B: Developing Possible Solutions

Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people. (K-ESS3-3)

Performance Expectation

K-ESS3-1: Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live.

Clarification Statement: Examples of relationships could include that deer eat buds and leaves, therefore, they usually live in forested areas; and, grasses need sunlight so they often grow in meadows. Plants, animals, and their surroundings make up a system.

Assessment Boundary: none

Performance Expectation

K-ESS3-2: Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.

Clarification Statement: Emphasis is on local forms of severe weather.

Assessment Boundary: none

Performance Expectation

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.

Assessment Boundary: none

Science and Engineering Practice

Asking Questions and Defining Problems

Asking questions and defining problems in K–2 builds on prior experiences and progresses to simple descriptive questions.

Ask questions based on observations to find more information about the designed world. (K-ESS3-2)

Science and Engineering Practice

Developing and Using Models

Modeling in K–2 builds on prior experiences and progresses to include using and developing models (i.e., diagram, drawing, physical replica, diorama, dramatization, or storyboard) that represent concrete events or design solutions.

Use a model to represent relationships in the natural world. (K-ESS3-1)

Science and Engineering Practice

Obtaining, Evaluating, and Communicating Information

Obtaining, evaluating, and communicating information in K–2 builds on prior experiences and uses observations and texts to communicate new information.

Read grade-appropriate texts and/or use media to obtain scientific information to describe patterns in the natural world. (K-ESS3-2)

Science and Engineering Practice

Obtaining, Evaluating, and Communicating Information

Obtaining, evaluating, and communicating information in K–2 builds on prior experiences and uses observations and texts to communicate new information.

Communicate solutions with others in oral and/or written forms using models and/or drawings that provide detail about scientific ideas. (K-ESS3-3)

Crosscutting Concept

Cause and Effect

Events have causes that generate observable patterns. (K-ESS3-2), (K-ESS3-3)

Crosscutting Concept

Systems and System Models

Systems in the natural and designed world have parts that work together. (K-ESS3-1)

Connection to Engineering, Technology, and Applications of Science

Influence of Science, Engineering, and Technology on Society and the Natural World

People depend on various technologies in their lives; human life would be very different without technology. (K-ESS3-2)

Connection to Engineering, Technology, and Applications of Science

Interdependence of Science, Engineering, and Technology

People encounter questions about the natural world every day. (K-ESS3-2)

Common Core State Standards for ELA/Literacy

Card Type name

RL.K.1 - Key Ideas and Details

With prompting and support, ask and answer questions about key details in a text. (K-ESS3-2)

Common Core State Standards for ELA/Literacy

Speaking & Listening

SL.K.3 - Continue a conversation through multiple exchanges.

Ask and answer questions in order to seek help, get information, or clarify something that is not understood. (K-ESS3-2)

Common Core State Standards for ELA/Literacy

Speaking & Listening

SL.K.5 - Presentation of Knowledge and Ideas

Add drawings or other visual displays to descriptions as desired to provide additional detail. (K-ESS3-1)

Common Core State Standards for ELA/Literacy

Card Type name

W.K.2 - Text Types and Purposes

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. (K-ESS3-3)

Common Core State Standards for Mathematics

Counting & Cardinality

K.CC - undefined

Counting and Cardinality (K-ESS3-1), (K-ESS3-2)

Common Core State Standards for Mathematics

Mathematical Practices

MP.2 - Reason abstractly and quantitatively

CCSS text (K-ESS3-1)

Common Core State Standards for Mathematics

Mathematical Practices

MP.4 - Model with mathematics

CCSS text (K-ESS3-1), (K-ESS3-2)