

DCI: Earth and Human Activity

3.ESS3.B: Natural Hazards

A variety of natural hazards result from natural processes. Humans cannot eliminate natural hazards but can take steps to reduce their impacts. (3-ESS3-1)

Performance Expectation

3-ESS3-1: Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard.

Clarification Statement: Examples of design solutions to weather-related hazards could include barriers to prevent flooding, wind resistant roofs, and lightning rods.

Assessment Boundary: none

Science and Engineering Practice

Engaging in Argument from Evidence

Engaging in argument from evidence in 3–5 builds on K–2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world(s).

Make a claim about the merit of a solution to a problem by citing relevant evidence about how it meets the criteria and constraints of the problem. (3-ESS3-1)

Crosscutting Concept

Cause and Effect

Cause and effect relationships are routinely identified, tested, and used to explain change. (3-ESS3-1)

Connection to Nature of Science

Science Is a Human Endeavor

Science affects everyday life. (3-ESS3-1)

Connection to Engineering, Technology, and Applications of Science

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

Engineers improve existing technologies or develop new ones to increase their benefits (e.g., better artificial limbs), decrease known risks (e.g., seatbelts in cars), and meet societal demands (e.g., cell phones). (3-ESS3-1)

Common Core State Standards for ELA/Literacy

Reading Informational Text

RI.3.1 - Key Ideas and Details

Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers. (3-ESS3-1)

Common Core State Standards for ELA/Literacy

Card Type name

W.3.1 - Text Types and Purposes

Write opinion pieces on topics or texts, supporting a point of view with reasons. (3-ESS3-1)

Common Core State Standards for ELA/Literacy

Card Type name

W.3.7 - Research to Build and Present Knowledge

Conduct short research projects that build knowledge about a topic. (3-ESS3-1)

Common Core State Standards for Mathematics

Mathematical Practices

MP.2 - Reason abstractly and quantitatively

CCSS text (3-ESS3-1)

Common Core State Standards for Mathematics

Mathematical Practices

MP.4 - Model with mathematics

CCSS text (3-ESS3-1)