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)

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)

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)
Mathematical Practices
MP.2 - Reason abstractly and quantitatively
CCSS text (3-ESS3-1)

Mathematical Practices
MP.4 - Model with mathematics
CCSS text (3-ESS3-1)