

DCI: Ecosystems: Interactions, Energy, and Dynamics

3.LS2.C: Ecosystem Dynamics, Functioning, and Resilience

When the environment changes in ways that affect a place's physical characteristics, temperature, or availability of resources, some organisms survive and reproduce, others move to new locations, yet others move into the transformed environment, and some die. (3-LS4-4)

DCI: Biological Evolution: Unity and Diversity

3.LS4.A: Evidence of Common Ancestry and Diversity

Some kinds of plants and animals that once lived on Earth are no longer found anywhere. (3-LS4-1)

DCI: Biological Evolution: Unity and Diversity

3.LS4.A: Evidence of Common Ancestry and Diversity

Fossils provide evidence about the types of organisms that lived long ago and also about the nature of their environments. (3-LS4-1)

DCI: Biological Evolution: Unity and Diversity

3.LS4.B: Natural Selection

Sometimes the differences in characteristics between individuals of the same species provide advantages in surviving, finding mates, and reproducing. (3-LS4-2)

DCI: Biological Evolution: Unity and Diversity

3.LS4.C: Adaptation

For any particular environment, some kinds of organisms survive well, some survive less well, and some cannot survive at all. (3-LS4-3)

DCI: Biological Evolution: Unity and Diversity

3.LS4.D: Biodiversity and Humans

Populations live in a variety of habitats, and change in those habitats affects the organisms living there. (3-LS4-4)

Science and Engineering Practice

Analyzing and Interpreting Data

Analyzing data in 3–5 builds on K–2 experiences and progresses to introducing quantitative approaches to collecting data and conducting multiple trials of qualitative observations. When possible and feasible, digital tools should be used. Analyze and interpret data to make sense of phenomena using logical reasoning. (3-LS4-1)

Science and Engineering Practice

Constructing Explanations and Designing Solutions

Constructing explanations and designing solutions in 3–5 builds on K–2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems. Use evidence (e.g., observations, patterns) to construct an explanation. (3-LS4-2)

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). Construct an argument with evidence. (3-LS4-3)

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-LS4-4)

Crosscutting Concept

Cause and Effect

Cause and effect relationships are routinely identified and used to explain change. (3-LS4-2), (3-LS4-3)

Crosscutting Concept

Scale, Proportion, and Quantity

Natural objects and/or observable phenomena exist from the very small to the immensely large or from very short to very long time periods. (3-LS4-1)

Crosscutting Concept

Systems and System Models

A system can be described in terms of its components and their interactions. (3-LS4-4)