

MAINE SCIENCE AND ENGINEERING STANDARDS

K-ESS3 Earth and Human Activity

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

Further explanation: Examples of relationships could include that deer eat buds and leaves and therefore usually live in forested areas and that grasses need sunlight so they often grow in meadows. Plants, animals, and their surroundings make up a system. Examples could include coastal tidepools, humans in Maine live in insulated buildings for protection during cold months, or uninsulated structures during warm months (e.g. camping in a tent). Examples of animals that migrate include monarch butterflies, ducks, Canada geese, etc.

Developing and Using Models, Natural Resources, Systems and System Models

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

Further explanation: Emphasis is on local forms of severe weather. Examples could include local forms of severe weather (flooding, ice, blizzards, heat, etc.) and checking the weather forecast to determine proper clothing to wear.

Asking Questions and Defining Problems, Obtaining, Evaluating, and Communicating Information, Natural Hazards, Defining and Delimiting an Engineering Problem, Cause and Effect

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.

Further explanation: Examples of human impact on 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. Examples could also include what we can do to clean public areas (e.g. beaches, parks, lakes, trails, etc.).

Obtaining, Evaluating, and Communicating Information, Developing Possible Solutions, Human Impacts on Earth Systems, Cause and Effect