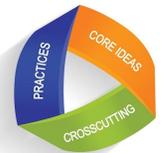




Hoop House Greenhouse



<u>Performance Expectations</u>	<u>Connections Between EP&Cs, CCCs, and SEPS</u>	<u>Clarifications for DCIs</u>	<u>Relevant EEI Units Middle School Elementary School</u>
<p>K-LS1-1 Use observations to describe patterns of what plants and animals (including humans) need to survive.</p> <p>K-ESS2-2 Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.</p> <p>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.</p> <p>K-PS3-1 Make observations to determine the effect of sunlight on Earth’s surface.</p> <p>2-LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats.</p> <p>3-LS4-3 Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.</p> <p>3-ESS2-1 Represent data in tables and graphical displays to describe typical weather conditions</p>	<p style="text-align: center;">Targeted Environmental Principles & Concept(s)</p> <p>Principle III: Natural Systems Change in Ways that People Benefit from and can Influence Natural systems proceed through cycles that humans depend upon, benefit from, and can alter.</p> <p>Concept A. Natural systems proceed through cycles and processes that are required for their functioning.</p> <p>Concept B. Human practices depend upon and benefit from the cycles and processes that operate within natural systems.</p> <p>Concept C. Human practices can alter the cycles and processes that operate within natural systems.</p> <p style="text-align: center;">Targeted Crosscutting Concept(s)</p> <p>Cause and Effect Systems Structure and Function</p>	<p style="text-align: center;">Targeted Disciplinary Core Idea(s)</p> <p>K-LS1-1 Organization for Matter and Energy Flow in Organisms All animals need food in order to live and grow. They obtain their food from plants or from other animals. Plants need water and light to live and grow.</p> <p>K-ESS2-2 Biogeology Plants and animals can change their environment.</p> <p>K-ESS3-3 Human Impacts on Earth Systems; Developing Possible Solutions 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; 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.</p> <p>K-PS3-1 Conservation of Energy and Energy Transfer Sunlight warms Earth’s surface.</p> <p>2-LS4-1 Biodiversity and Humans There are many different kinds of living things in any area, and they exist in different places on land and in water.</p> <p>3-LS4-3 Adaptation For any particular environment, some kinds of organisms survive well, some survive less well, and some cannot survive at all.</p> <p>3-ESS2-1 Weather and Climate Scientists record patterns of the weather across different times and areas so that they can make predictions about what kind of weather might happen next.</p>	<p>K: A Day in My Life; The World Around Me</p> <p>2: Flowering Plants in Our Changing Environment; From Field to Table</p> <p>3: Structures for Survival in a Healthy Ecosystem; Living Things in Changing Environments</p> <p>4: Plants: The Ultimate Energy Resource</p> <p>5: Earth’s Water; Changing States: Water, Natural Systems, and Human Communities; Precipitation, People, and the Natural World; Our Water: Sources and Uses</p>

One Cool Earth (OCE) supports the integration of Next Generation Science Standards (NGSS) three dimensional learning and the Environmental Principles & Concepts (EP&Cs) in their lesson planning. In recognition of A Blueprint for Environmental Literacy and the California State Board of Education, OCE uses the *CA Science Framework*.

<p>expected during a particular season.</p> <p>3-ESS3-1 Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard.</p> <p>4-ESS3-2 Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.</p> <p>5-ESS2-1 Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.</p> <p>5-ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the Earth’s resources and environment.</p> <p>MS-ESS2-4 Develop a model to describe the cycling of water through Earth’s systems driven by energy from the sun and the force of gravity.</p>	<p style="text-align: center;">Targeted Science and Engineering Practice(s)</p> <p>Asking Questions and Defining Problems Developing and Using Models Planning and Carrying Out Investigations Engage in Argument from Evidence Construct Explanations and Design Solutions</p>	<p>3-ESS3-1 Natural Hazards A variety of natural hazards result from natural processes. Humans cannot eliminate natural hazards but can take steps to reduce their impacts.</p> <p>4-ESS3-2 Developing Possible Solutions Testing a solution involves investigating how well it performs under a range of likely conditions.</p> <p>5-ESS2-1 Earth Materials and Systems Earth’s major systems are the geosphere (solid and molten rock, soil, and sediments), the hydrosphere (water and ice), the atmosphere (air), and the biosphere (living things, including humans). These systems interact in multiple ways to affect Earth’s surface materials and processes. The ocean supports a variety of ecosystems and organisms, shapes landforms, and influences climate. Winds and clouds in the atmosphere interact with the landforms to determine patterns of weather.</p> <p>5-ESS3-1 Human Impacts on Earth Systems Human activities in agriculture, industry, and everyday life have had major effects on the land, vegetation, streams, ocean, air, and even outer space. But individuals and communities are doing things to help protect Earth’s resources and environments.</p> <p>MS-ESS2 The Roles of Water in Earth’s Surface Processes Water continually cycles among land, ocean, and atmosphere via transpiration, evaporation, condensation and crystallization, and precipitation, as well as downhill flows on land. (MS-ESS2-4) Global movements of water and its changes in form are propelled by sunlight and gravity. (MS-ESS2-4)</p>	<p>8: Agricultural and Industrial Development in the United States (1877–1914)</p>
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