



# Ancient Agriculture



<u>Performance Expectations</u>	<u>Connections Between EP&amp;Cs, CCCs, and SEPS</u>	<u>Clarifications for DCIs</u>	Relevant EEI Units
<p><b>K-LS1-1</b> Use observations to describe patterns of what plants and animals (including humans) need to survive.</p> <p><b>K-ESS2-2</b> Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.</p> <p><b>K-ESS3-3</b> 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><b>2-PS1-3</b> Make observations to construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object.</p> <p><b>2-ESS2-3</b> Obtain information to identify where water is found on Earth and that it can be solid or liquid.</p> <p><b>3-LS4-4</b> Make a claim about the merit of a solution to a problem caused when the environment</p>	<p style="text-align: center;"><b>Targeted Environmental Principles &amp; Concept(s)</b></p> <p><b>Principle III: Natural Systems Change in Ways that People Benefit from and can Influence.</b> Natural systems proceed through cycles that humans depend upon, benefit from, and can alter.</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> <hr/> <p style="text-align: center;"><b>Targeted Crosscutting Concept(s)</b></p> <p>Structure and Function Systems</p>	<p style="text-align: center;"><b>Targeted Disciplinary Core Idea(s)</b></p> <p><b>K-LS1-1 Organization for Matter and Energy Flow in Organisms</b> 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><b>K-ESS2-2 Biogeology</b> Plants and animals can change their environment.</p> <p><b>K-ESS3-3 Human Impacts on Earth Systems</b> 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.</p> <p><b>2-PS1-3 Structure and Properties of Matter</b> Different properties are suited to different purposes. A great variety of objects can be built up from a small set of pieces.</p> <p><b>2-ESS2-3 The Roles of Water in Earth’s Surface Processes</b> Water is found in the ocean, rivers, lakes, and ponds. Water exists as solid ice and in liquid form.</p> <p><b>3-LS4-4 Ecosystem Dynamics, Functioning, and Resilience; Biodiversity and Humans</b> 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;</p>	<p>K: The World Around Me; A Day in My Life; Some Things Change and Some Things Stay the Same</p> <p>1: Surviving and Thriving; Finding Shelter; People and Places</p> <p>2: The Earth Rocks; California’s Lands: Then and Now; From Field to Table; The Dollars and Sense of Food Production</p> <p>3: Structures for Survival in a Healthy Ecosystem; Living Things in Changing Environments; The Geography of Where We Live; California’s Economy: Natural Choices</p> <p>4: The Flow of Energy Through Ecosystems; Reflections of Where We Live; California Indian Peoples and</p>

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<p>changes and the types of plants and animals that live there may change.</p> <p><b>3-5-ETS1-2</b> Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.</p> <p><b>4-ESS2-2</b> Analyze and interpret data from maps to describe patterns of Earth’s features.</p> <p><b>4-ESS3-2</b> Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.</p> <p><b>5-ESS2-1</b> Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.</p> <p><b>5-ESS2-2</b> Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.</p> <p><b>5-ESS3-1</b> Obtain and combine information about ways individual communities use science ideas to</p>	<p style="text-align: center;"><b>Targeted Science and Engineering Practice(s)</b></p> <p>Planning and Carrying out Investigations Asking Questions and Defining Problems</p>	<p>Populations live in a variety of habitats, and change in those habitats affects the organisms living there.</p> <p><b>3-5-ETS1-2 Developing Possible Solutions</b> Research on a problem should be carried out before beginning to design a solution. Testing a solution involves investigating how well it performs under a range of likely conditions; At whatever stage, communicating with peers about proposed solutions is an important part of the design process, and shared ideas can lead to improved designs.</p> <p><b>4-ESS2-2 Plate Tectonics and Large-Scale System Interactions</b> The locations of mountain ranges, deep ocean trenches, ocean floor structures, earthquakes, and volcanoes occur in patterns. Most earthquakes and volcanoes occur in bands that are often along the boundaries between continents and oceans. Major mountain chains form inside continents or near their edges. Maps can help locate the different land and water features areas of Earth.</p> <p><b>4-ESS3-2 Natural Hazards; Developing Possible Solutions</b> A variety of natural hazards result from natural processes. Humans cannot eliminate natural hazards but can take steps to reduce their impacts; Testing a solution involves investigating how well it performs under a range of likely conditions.</p> <p><b>5-ESS2-1 Earth Materials and Systems</b> 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</p>	<p>Management of Natural Resources; Cultivating California</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> <p>6: The Dynamic Nature of Rivers; Paleolithic People: Adapting to Change; River Systems and Ancient Peoples; Agricultural Advances in Ancient Civilizations; Egypt and Kush: A Tale of Two Kingdoms</p>
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<p>protect the Earth’s resources and environment.</p> <p><b>MS-ESS2-4</b> 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>organisms, shapes landforms, and influences climate. Winds and clouds in the atmosphere interact with the landforms to determine patterns of weather.</p> <p><b>5-ESS2-2 The Roles of Water in Earth’s Surface Processes</b> Nearly all of Earth’s available water is in the ocean. Most fresh water is in glaciers or underground; only a tiny fraction is in streams, lakes, wetlands, and the atmosphere.</p> <p><b>5-ESS3-1 Human Impacts on Earth Systems</b> 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><b>MS-ESS2-4 The Roles of Water in Earth’s Surface Processes</b> Water continually cycles among land, ocean, and atmosphere via transpiration, evaporation, condensation and crystallization, and precipitation, as well as downhill flows on land; Global movements of water and its changes in form are propelled by sunlight and gravity.</p>	
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