

**Alignment of Project Learning Tree Curriculum**  
**to the**  
**History/Social Science Content Standards for California Public Schools**  
**and the**  
**California Education and the Environment Initiative's Environmental Principles and Concepts**  
**and Curriculum Units**

For more information about Project Learning Tree, contact Kay Antunez, California Department of Forestry and Fire Protection at (916) 653-7958 or [Kay.Antunez@fire.ca.gov](mailto:Kay.Antunez@fire.ca.gov) For information about the Education and the Environment Initiative, please visit [www.calepa.ca.gov/education/eei](http://www.calepa.ca.gov/education/eei)

**Introduction:**

The purpose of this document is to provide California educators who use Project Learning Tree materials with an easy cross reference to the grade and academic standards that aligns with California environmental principles and concepts and the Education and the Environment (EEI) units that were developed to teach them. . The EEI units were developed in support the mandate described in Assembly Bill 1548 (Pavley, Chapter 665, Statutes of 2003 and AB 1721 and Pavley, Chapter 581, Statutes of 2005) called the "Education and the Environment Initiative (EEI). Information about the EEI can be obtained at: <http://www.calepa.ca.gov/Education/EEI> .

This alignment was originally developed and reviewed by a team of Project Learning Tree partners. A biographical list of those participating in the alignment project appears at the end of this document. Funding was provided by the United States Environmental Protection Agency, Office of Environmental Education under agreement number NT-83272501-1 between the U.S. EPA and the University of Wisconsin-Stevens Point, the American Forest Foundation and the California Community Forests Foundation. Additional support was provided by the California Department of Forestry and Fire Protection. The contents of this document do not necessarily reflect the views and policies of the United States Environmental Protection Agency or The Board of Regents of the University of Wisconsin System, nor does mention of trade names or commercial products constitute endorsement or recommendation for use. Educators may photocopy these materials for the non-commercial purpose of educational advancement.

June 2010

Academic Content Standards	California Environmental Principles and Concepts	Project Learning Tree Activities	California Education and the Environment Initiative Curriculum Units
<b>Kindergarten</b>			
<b>K.4. Students compare and contrast the locations of people, places, and environments and describe their characteristics.</b>			
5. Demonstrate familiarity with the school's layout, environs, and the jobs people do there.	II. The long term functioning and health of terrestrial, freshwater, coastal and marine ecosystems are influenced by their relationships with human societies. CONCEPT A: Students need to know that direct and indirect changes to natural systems due to the growth of human populations and their consumption rates influence the geographic extent, composition, biological diversity, and viability of natural systems.	Schoolyard Safari (46); Plan an Ideal Community (55 variation); People, Places, Things (74)	Some Things Change and Some Things Stay the Same
<b>K.6. Students understand that history relates to events, people, and places of other times.</b>			
3. Understand how people lived in earlier times and how their lives would be different today (e.g., getting water from a well, growing food, making clothing, having fun, forming organizations, living by rules and laws).	II. The long term functioning and health of terrestrial, freshwater, coastal and marine ecosystems are influenced by their relationships with human societies. CONCEPT A: Students need to know that direct and indirect changes to natural systems due to the growth of human populations and their consumption rates influence the geographic extent, composition, biological diversity, and viability of natural systems.	Did you Notice? (95-var)	Some Things Change and Some Things Stay the Same
<b>1st Grade: A Child's Place in Time &amp; Space</b>			
<b>1.2. Students compare and contrast the absolute and relative locations of places and people and describe the physical and/or human characteristics of places.</b>			
4. Describe how location, weather, and physical environment affect the way people live, including the effects on their food, clothing, shelter, transportation, and recreation.	III. Natural systems proceed through cycles and processes that humans depend upon, benefit from and can alter. CONCEPT B: Students need to know that human practices depend upon and benefit from the cycles and processes that operate within natural systems. CONCEPT C: Students need to know that human practices can alter the cycles and processes that operate within natural systems.	Environmental Exchange Box (20)	People and Places
<b>1.4. Students compare and contrast everyday life in different times and places around the world and recognize that some aspects of people, places, and things change over time while others stay the same.</b>			
2. Study transportation methods of earlier days.	I. The continuation and health of individual human lives and of human communities and societies depend on the health of the natural systems that provide essential goods and ecosystem services. CONCEPT A: Students need to know that the goods produced by natural systems are essential to human life and to the functioning of our economies and cultures. CONCEPT B: Students need to know that the ecosystem services produced by natural systems are essential to human life and to the functioning of our economies and cultures.	On the Move -var (53);Did you Notice? (95)	On the Move

**2nd Grade: People Who Make A Difference**

<b>2.2. Students demonstrate map skills by describing the absolute and relative locations of people, places, and environments.</b>			
<p>4. Compare and contrast basic land use in urban, suburban, and rural environments in California.</p>	<p>II. The long term functioning and health of terrestrial, freshwater, coastal and marine ecosystems are influenced by their relationships with human societies. CONCEPT C: Students need to know that the expansion and operation of human communities are influenced the geographic extent, composition, biological diversity, and viability of natural systems.</p>	<p>Did You Notice (95)</p>	<p>California's Lands - Then and Now</p>
<b>2.4. Students understand basic economic concepts and their individual roles in the economy and demonstrate basic economic reasoning skills.</b>			
<p>1. Describe food production and consumption long ago and today, including the roles of farmers, processors, distributors, weather, and land and water resources.</p>	<p>II. The long term functioning and health of terrestrial, freshwater, coastal and marine ecosystems are influenced by their relationships with human societies. CONCEPT A: Students need to know that direct and indirect changes to natural systems due to the growth of human populations and their consumption rates influence the geographic extent, composition, biological diversity, and viability of natural systems. CONCEPT B: Students need to know that the methods used to extract, harvest, transport, and consume natural resources influence the geographic extent, composition, biological diversity, and viability of natural resources.</p>	<p>We All Need Trees-part B (13); Pass the Plants Please (16); Three Cheers for Trees (30); A Forest of Many Uses (31); Trees for Many Reasons (89)</p>	<p>From Field to Table</p>
<p>2. Understand the role and interdependence of buyers (consumers) and sellers (producers) of goods and services.</p>	<p>I. The continuation and health of individual human lives and of human communities and societies depend on the health of the natural systems that provide essential goods and ecosystem services. CONCEPT C: Students need to know that the quality, quantity, and reliability of the goods and ecosystem services provided by natural resources are directly affected by the health of those systems.</p>	<p>Three Cheers for Trees (30); A Forest of Many Uses (32); A Tree for Many Reasons (89)</p>	<p>The Dollars and Sense of Food Production</p>
<p>3. Understand how limits on resources affect production and consumption (what to produce and what to consume).</p>	<p>I. The continuation and health of individual human lives and of human communities and societies depend on the health of the natural systems that provide essential goods and ecosystem services. CONCEPT C: Students need to know that the quality, quantity, and reliability of the goods and ecosystem services provided by natural resources are directly affected by the health of those systems.</p>	<p>A Few of My Favorite Things (15); Three Cheers for Trees (30); A Forest of Many Uses (32); Trees for Many Reasons (89)</p>	<p>The Dollars and Sense of Food Production</p>

**3rd Grade: Continuity and Change**

**3.1. Students describe the physical and human geography and use maps, tables, graphs, photographs, and charts to organize information about people, places, and environments in a spatial context.**

<p>1. Identify geographical features in their local region (e.g., deserts, mountains, valleys, hills, coastal areas, oceans, lakes).</p>	<p>I. The continuation and health of individual human lives and of human communities and societies depend on the health of the natural systems that provide essential goods and ecosystem services. CONCEPT A: Students need to know that the goods produced by natural systems are essential to human life and to the functioning of our economies and cultures. CONCEPT B: Students need to know that the ecosystem services produced by natural systems are essential to human life and to the functioning of our economies and cultures.</p>	<p>Environmental Exchange Box (20-a)</p>	<p>The Geography of Where</p>
<p>2. Trace the ways in which people have used the resources of the local region and modified the physical environment (e.g., a dam constructed upstream changed a river or coastline).</p>	<p>I. The continuation and health of individual human lives and of human communities and societies depend on the health of the natural systems that provide essential goods and ecosystem services. CONCEPT A: Students need to know that the goods produced by natural systems are essential to human life and to the functioning of our economies and cultures. CONCEPT B: Students need to know that the ecosystem services produced by natural systems are essential to human life and to the functioning of our economies and cultures.</p>	<p>Who Works in this Forest? (34); People, Places, Things (74)</p>	<p>The Geography of Where</p>

**3.2. Students describe the American Indian nations in their local region long ago and in the recent past.**

<p>2. Discuss the ways in which physical geography, including climate, influenced how the local Indian nations adapted to their natural environment (e.g., how they obtained food, clothing, tools).</p>	<p>I. The continuation and health of individual human lives and of human communities and societies depend on the health of the natural systems that provide essential goods and ecosystem services. CONCEPT A: Students need to know that the goods produced by natural systems are essential to human life and to the functioning of our economies and cultures. CONCEPT B: Students need to know that the ecosystem services produced by natural systems are essential to human life and to the functioning of our economies and cultures.</p>		<p>California Indian People-Exploring Tribal Regions</p>
--	--	--	--

**3.5. Students demonstrate basic economic reasoning skills and an understanding of the economy of the local region.**

<p>1. Describe the ways in which local producers have used and are using natural resources, human resources, and capital resources to produce goods and services in the past and the present.</p>	<p>I. The continuation and health of individual human lives and of human communities and societies depend on the health of the natural systems that provide essential goods and ecosystem services. CONCEPT A: Students need to know that the goods produced by natural systems are essential to human life and to the functioning of our economies and cultures. CONCEPT B: Students need to know that the ecosystem services produced by natural systems are essential to human life and to the functioning of our economies and cultures.</p>	<p>We All Need Trees (13); A Forest of Many Uses (32); Then and Now (40)</p>	<p>California's Economy - Natural Choices</p>
---	--	--	---

<p>2. Understand that some goods are made locally, some elsewhere in the United States, and some abroad.</p>	<p>I. The continuation and health of individual human lives and of human communities and societies depend on the health of the natural systems that provide essential goods and ecosystem services. CONCEPT A: Students need to know that the goods produced by natural systems are essential to human life and to the functioning of our economies and cultures. CONCEPT B: Students need to know that the ecosystem services produced by natural systems are essential to human life and to the functioning of our economies and cultures.</p>	<p><a href="#">We All Need Trees (13)</a>; <a href="#">Environmental Exchange Box (20)</a>; <a href="#">A Forest of Many Uses (32)</a>;</p>	<p>California's Economy - Natural Choices</p>
<p>3. Understand that individual economic choices involve trade-offs and the evaluation of benefits and costs.</p>	<p>I. The continuation and health of individual human lives and of human communities and societies depend on the health of the natural systems that provide essential goods and ecosystem services. CONCEPT A: Students need to know that the goods produced by natural systems are essential to human life and to the functioning of our economies and cultures. CONCEPT B: Students need to know that the ecosystem services produced by natural systems are essential to human life and to the functioning of our economies and cultures.</p>	<p><a href="#">A Forest of Many Uses-part A (32)</a>; <a href="#">Trees for Many Uses (89)</a></p>	<p>California's Economy - Natural Choices</p>
<p><b>4th Grade: California: A Changing State</b></p>			
<p><b>4.1. Students demonstrate an understanding of the physical and human geographic features that define places and regions in California.</b></p>			
<p>3. Identify the state capital and describe the various regions of California, including how their characteristics and physical environments (e.g., water, landforms, vegetation, climate) affect human activity.</p>	<p>I. The continuation and health of individual human lives and of human communities and societies depend on the health of the natural systems that provide essential goods and ecosystem services. CONCEPT A: Students need to know that the goods produced by natural systems are essential to human life and to the functioning of our economies and cultures. CONCEPT B: Students need to know that the ecosystem services produced by natural systems are essential to human life and to the functioning of our economies and cultures.</p>		<p>Reflections of Where We Live</p>
<p>5. Use maps, charts, and pictures to describe how communities in California vary in land use, vegetation, wildlife, climate, population density, architecture, services, and transportation.</p>	<p>I. The continuation and health of individual human lives and of human communities and societies depend on the health of the natural systems that provide essential goods and ecosystem services. CONCEPT A: Students need to know that the goods produced by natural systems are essential to human life and to the functioning of our economies and cultures. CONCEPT B: Students need to know that the ecosystem services produced by natural systems are essential to human life and to the functioning of our economies and cultures.</p>	<p><a href="#">Rain Reasons (29) California student pages</a></p>	<p>Reflections of Where We Live</p>

**4.2. Students describe the social, political, cultural, and economic life and interactions among people of California from the pre-Columbian societies to the Spanish mission and Mexican rancho periods.**

<p>1. Discuss the major nations of California Indians, including their geographic distribution, economic activities, legends, and religious beliefs; and describe how they depended on, adapted to, and modified the physical environment by cultivation of land a</p>	<p>I. The continuation and health of individual human lives and of human communities and societies depend on the health of the natural systems that provide essential goods and ecosystem services. CONCEPT A: Students need to know that the goods produced by natural systems are essential to human life and to the functioning of our economies and cultures. CONCEPT B: Students need to know that the ecosystem services produced by natural systems are essential to human life and to the functioning of our economies and cultures. CONCEPT C: Students need to know that the quality, quantity, and reliability of the goods and ecosystem services provided by natural systems are directly affected by the health of those systems.</p>	<p>Tipi Talk (75)-California Student Pages; The Native Way (90)</p>	<p>California Indian People and Managing Natural Resources</p>
<p>6. Discuss the role of the Franciscans in changing the economy of California from a hunter-gatherer economy to an agricultural economy.</p>	<p>II. The long-term functioning and health of terrestrial, freshwater, coastal, and marine ecosystems are influenced by their relationships with human societies. CONCEPT B: Students need to know that methods used to extract, harvest, transport and consume natural resources influence the geographic extent, composition, biological diversity, and viability of natural systems. CONCEPT C: Students need to know that the expansion and operation of human communities influences the geographic extent, composition, biological diversity, and viability of natural systems. CONCEPT D: Students need to know that the legal, economic, and political systems that govern the use and management of natural systems directly influence the geographic extent, composition, biological diversity, and viability of natural systems.</p>		<p>Cultivating California</p>

**4.3. Students explain the economic, social, and political life in California from the establishment of the Bear Flag Republic through the Mexican-American War, the Gold Rush, and the granting of statehood.**

<p>3. Analyze the effects of the Gold Rush on settlements, daily life, politics, and the physical environment (e.g., using biographies of John Sutter, Mariano Guadalupe Vallejo, Louise Clapp).</p>	<p>II. The long term functioning and health of terrestrial, freshwater, coastal and marine ecosystems are influenced by their relationships with human societies. CONCEPT A: Students need to know that direct and indirect changes to natural systems due to the growth of human populations and their consumption rates influence the geographic extent, composition, biological diversity, and viability of natural systems. CONCEPT B: Students need to know that the methods used to extract, harvest, transport, and consume natural resources influence the geographic extent, composition, biological diversity, and viability of natural resources. CONCEPT C: Students need to know that the expansion and operation of human communities influences the geographic extent, composition, biological diversity, and viability of natural systems. CONCEPT D: Students need to know that the legal, economic, and political systems that govern the use and management of natural systems directly influence the geographic extent, composition, biological diversity, and viability of natural systems.</p>		<p>Boom with a View: Witnessing the Gold Rush</p>
--	--	--	---

**5th Grade: United States History and Geography: Making a New Nation**

**5.4. Students understand the political, religious, social, and economic institutions that evolved in the colonial era.**

<p>1. Understand the influence of location and physical setting on the founding of the original 13 colonies, and identify on a map the locations of the colonies and of the American Indian nations already inhabiting these areas.</p>	<p>V. Decisions affecting resources and natural systems are based on a wide range of considerations and decision-making processes. CONCEPT A: Students need to know the spectrum of what is considered in making decisions about resources and natural systems and how those factors influence decisions.</p>		<p><b>Human Settlement and the Natural Regions of the Eastern Seaboard</b></p>
---	---	--	--

**5.8. Students trace the colonization, immigration, and settlement patterns of the American people from 1789 to the mid-1800s, with emphasis on the role of economic incentives, effects of the physical and political geography, and transportation systems.**

<p>4. Discuss the experiences of settlers on the overland trails to the West (e.g., location of the routes; purpose of the journeys; the influence of the terrain, rivers, vegetation, and climate; life in the territories at the end of these trails).</p>	<p>V. Decisions affecting resources and natural systems are based on a wide range of considerations and decision-making processes. CONCEPT A: Students need to know the spectrum of what is considered in making decisions about resources and natural systems and how these influence decisions. CONCEPT B: Students need to know the process of making decisions about resources and natural systems, and how the assessment of social, economic, political, and environmental factors has changed over time.</p>	<p>A Look at Lifestyles (92)</p>	<p><b>Nature and Newcomers: Overland Trails and Settlers Experience the American West</b></p>
--	---	----------------------------------	---

**6th Grade: World History and Geography: Ancient Civilizations**

**6.1. Students describe what is known through archaeological studies of the early physical and cultural development of humankind from the Paleolithic era to the agricultural revolution.**

<p>1. Describe the hunter-gatherer societies, including the development of tools and the use of fire.</p>	<p>II. The long-term functioning and health of terrestrial, freshwater, coastal, and marine ecosystems are influenced by their relationships with human societies. CONCEPT B: Students need to know that methods used to extract, harvest, transport, and consume natural resources influence the geographical extent, composition, biological diversity, and viability of natural systems. CONCEPT C: Students need to know that the expansion and operation of human communities influences the geographic extent, composition, biological diversity, and viability of natural systems.</p>	<p>People of the Forest (17)</p>	<p>Paleolithic People: Tools, Tasks, and Fire</p>
<p>2. Identify the locations of human communities that populated the major regions of the world and describe how humans adapted to a variety of environments.</p>	<p>III. Natural systems proceed through cycles that humans depend upon, benefit from, and can alter. change in ways that people benefit from and can influence. CONCEPT B: Students need to know that human practices depend upon and benefit from the cycles and processes that operate within natural systems.</p>	<p>People of the Forest (17)</p>	<p>Paleolithic People: Adapting to Change</p>

**6.2. Students analyze the geographic, political, economic, religious, and social structures of the early civilizations of Mesopotamia, Egypt, and Kush.**

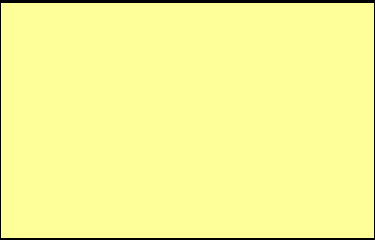
<p>1. Locate and describe the major river systems and discuss the physical settings that supported permanent settlement and early civilizations.</p>	<p>III. Natural systems change in ways that people benefit from and can influence. CONCEPT A: Students need to know that natural systems proceed through cycles and processes that are required for their functioning. CONCEPT B: Students need to know that humans depend upon and benefit from the cycles and processes that operate within natural systems.</p>	<p>By the Rivers of Babylon (94)</p>	<p>River Systems and Ancient Peoples</p>
<p>2. Trace the development of agricultural techniques that permitted the production of economic surplus and the emergence of cities as centers of culture and power.</p>	<p>III. Natural systems change in ways that people benefit from and can influence. CONCEPT B: Students need to know that humans depend upon and benefit from the cycles and processes that operate within natural systems.</p>	<p>By the Rivers of Babylon (94)</p>	<p>Agricultural Advances in Ancient Civilizations</p>



<p>6. Discuss the main features of Egyptian art and architecture.</p> <p>8. Identify the location of the Kush civilization and describe its political, commercial, and cultural relations with Egypt.</p>	<p>II. The long-term functioning and health of terrestrial, freshwater, coastal, and marine ecosystems are influenced by their relationships with human societies. CONCEPT A: Students need to know that direct and indirect changes to natural systems due to the growth of human populations and their consumption rates influence the geographic extent, composition, biological diversity, and viability of natural systems. CONCEPT B: Students need to know that methods used to extract, harvest, transport, and consume natural resources influence the geographical extent, composition, biological diversity, and viability of natural systems. CONCEPT D: Students need to know that the legal, economic, and political systems that govern the use and management of natural systems directly influence the geographic extent, composition, biological diversity, and viability of natural systems.</p>		<p><b>Egypt and Kush: A Tale of Two Kingdoms</b></p>
<p><b>6.5 Students analyze the geographic, political, economic, religious, and social structures of the early civilizations of India.</b></p>			
<p>1. Locate and describe the major river system and discuss the physical setting that supported the rise of this civilization.</p>	<p>III. Natural systems change in ways that people benefit from and can influence. CONCEPT A: Students need to know that natural systems proceed through cycles and processes that are required for their functioning. CONCEPT B: Students need to know that humans depend upon and benefit from the cycles and processes that operate within natural systems.</p>		<p><b>The Rivers and Ancient Empires of China and India</b></p>
<p><b>6.6 Students analyze the geographic, political, economic, religious, and social structures of the early civilizations of China.</b></p>			
<p>1. Locate and describe the origins of Chinese civilization in the Huang-He Valley during the Shang Dynasty.</p>	<p>III. Natural systems change in ways that people benefit from and can influence. CONCEPT A: Students need to know that natural systems proceed through cycles and processes that are required for their functioning. CONCEPT B: Students need to know that humans depend upon and benefit from the cycles and processes that operate within natural systems.</p>		<p><b>The Rivers and Ancient Empires of China and India</b></p>
<p><b>7th Grade- World History and Geography: Medieval and Early Modern Times</b></p>			
<p><b>7.2 Students analyze the geographic, political, economic, religious, and social structures of the civilizations of Islam in the Middle Ages.</b></p>			
<p>5. Describe the growth of cities and the establishment of trade routes among Asia, Africa, and Europe, the products and inventions that traveled along these routes (eg. Spices, textiles, paper, steel, new crops) and the role of merchants in Arab society</p>	<p>II. The long-term functioning and health of terrestrial, coastal, and marine ecosystems are influenced by their relationships with human societies. CONCEPT C: Students need to know that the expansion and operation of human communities influences the geographic extent, composition, biological diversity, and viability of natural systems</p>	<p>Paper Civilizations (93); C68</p>	<p><b>Arabic Trade Networks: Growth and Expansion in the Middle Ages</b></p>
<p><b>7.3 Students analyze the geographic, political, economic, religious, and social structures of the civilizations of China in the Middle Ages.</b></p>			
<p>5 Trace the historic influence of such discoveries as tea, the manufacture of paper, wood-block printing, the compass, and gunpowder.</p>	<p>I. The continuation and health of individual human lives and of human communities and societies depend on the health of the natural systems that provide essential goods and ecosystem services. CONCEPT A: Students need to know that the goods produced by natural systems are essential to human life and to the functioning of our economies and cultures.</p>	<p>Make Your Own Paper (51)</p>	<p><b>Genius Across the Centuries</b></p>
<p><b>7.6 Students analyze the geographic, political, economic, religious, and social structures of the civilizations of Medieval Europe.</b></p>			

3. Understand the development of feudalism, its role in the medieval European economy, the way in which it was influenced by physical geography (the role of the manor and the growth of towns), and how feudal relationships provided the foundation of politi

V. Decisions affecting resources and natural systems are based on a wide range of considerations and decision-making processes. CONCEPT A: Students need to know the spectrum of what is considered in making decisions about resources and natural sytems and how thsoe factors influence decisions. CONCEPT B: Students need to know the process of making decisions about natural resources and natural systems, and how the assessment of social, economic, political, and environmental factors has changed over time.



**Managing Nature's Bounty: Fuedalism in Medieval Europe**

<b>7.7 Students compare and contrast the geographic, political, economic, religious, and social structures of the Meso-American and Andean civilizations.</b>			
1. Study the locations, landforms, and climates of Mexico, Central America, and South America and their effects on Mayan, Aztec, and Incan economies, trade, and development of urban societies.	I. The continuation of health of individual human lives and of human communities and societies depend on the health of the natural systems that provide essential goods and ecosystem services. CONCEPT A: Students need to know that the ecosystem goods produced by natural systems are essential to human life and to the functioning of our economies and cultures. CONCEPT B: Students need to know that the ecosystem services provided by natural systems are essential to human life and to the functioning of our economies and cultures.		Sun Gods and Jaguar Kings
3. Explain how and where each empire arose and how the Aztec and Incan empires were defeated by the Spanish.	V. Decisions affecting resources and natural systems are based on a wide range of considerations and decision-making processes. CONCEPT A: Students need to know the spectrum of what is considered in making decisions about resources and natural systems and how those factors influence decisions. CONCEPT B: Students need to know the process of making decisions about resources and natural systems, and how the assessment of social, economic, political, and environmental factors has changed over time.		Broken Jade and Tarnished Gold
<b>Eighth Grade U.S. History and Geography: Growth and Conflict</b>			
<b>8.4 Students analyze the aspirations and ideals of the people of the new nation.</b>			
1. Describe the country's physical landscapes, political divisions, and territorial expansion during the terms of the first four presidents.	II. The long-term functioning and health of terrestrial, freshwater, coastal, and marine ecosystems are influenced by their relationships with human societies. CONCEPT D: Students need to know that the legal, economic, and political systems that govern the use and management of natural systems directly influence the geographic extent, composition, biological diversity, and viability of natural systems.		Land Politics and Expansion in the Early Republic
<b>8.6 Students analyze the divergent paths of the American people from 1800 to the mid-1800s and the challenges they faced, with emphasis on the Northeast.</b>			

<p>3. List the reasons for the wave of immigration from Northern Europe to the United States and describe the growth in the number, size, and spatial arrangements of cities (e.g., Irish immigrants and the Great Irish Famine).</p>	<p>I. The continuation and health of individual human lives and of human communities and societies depend on the health of the natural systems that provide essential goods and ecosystem services. CONCEPT A: Students need to know that the goods produced by natural systems are essential to human life and to the functioning of our economies and cultures. CONCEPT C: Students need to know that the quality, quantity and reliability of the goods and ecosystem services provided by natural systems are directly affected by the health of those systems.</p>		<p>America Grows</p>
<p><b>8.8 Students analyze the divergent paths of the American people in the West from 1800 to the mid-1800s and the challenges they faced.</b></p>			
<p>4. Examine the importance of the great rivers and the struggle over water rights.</p>	<p>V. Decisions affecting resources and natural systems are based on a wide range of considerations and decision-making processes. CONCEPT A: Students need to know the spectrum of what is considered in making decisions about resources and natural systems and how those factors influence decisions. CONCEPT B: Students need to know the process of making decisions about resources and natural systems, and how the assessment of social, economic, political, and environmental factors has changed over time.</p>		<p>0 Struggles With Water</p>
<p><b>8.12 Students analyze the transformation of the American economy and the changing social and political conditions in the United States in response to the Industrial Revolution.</b></p>			
<p>1. Trace patterns of agricultural and industrial development as they relate to climate, use of natural resources, markets, and trade and locate such development on a map.</p>	<p>II. The long-term functioning and health of terrestrial, freshwater, coastal, and marine ecosystems are influenced by their relationships with human societies. CONCEPT A: Students need to know that direct and indirect changes to natural systems due to the growth of human populations and their consumption rates influence the geographic extent, composition, biological diversity, and viability of natural systems. CONCEPT C: Students need to know that the expansion and operation of human communities influences the geographic extent, composition, biological diversity, and viability of natural communities.</p>		<p>Agricultural and Industrial Development in the United States (1877-1914).</p>
<p>5. Examine the location and effects of urbanization, renewed immigration, and industrialization (e.g., the effects on social fabric of cities, wealth and economic opportunity, the conservation movement).</p>	<p>IV. The exchange of matter between natural systems and human societies affects the long-term functioning of both. CONCEPT A: Students need to know that the effects of human activities on natural systems are directly related to the quantities of resources consumed and to the quantity and characteristics of the resulting byproducts.</p>	<p>#NAME?</p>	<p>Industrialization, Urbanization, and the Conservation Movement</p>

**10th Grade- World History, Culture, and Geography: The Modern World**

<b>10.3 Students analyze the effects of the Industrial Revolution in England, France, Germany, Japan, and the United States.</b>			
1. Analyze why England was the first country to industrialize. .	I. The continuation and health of individual human lives and of human communities and societies depend on the health of the natural systems that provide essential goods and ecosystem services. CONCEPT A: Students need to know that the goods produced by natural systems are essential to human life and to the functioning of our economies and cultures. CONCEPT B: Students need to know that the ecosystem services provided by natural systems are essential to human life and the functioning of our economies and cultures.		<b>Britain Solves a Problem and Creates an Industrial Revolution</b>
2. Examine how scientific and technological changes and new forms of energy brought about massive social, economic, and cultural change (e.g., the inventions and discoveries of James Watt, Eli Whitney, Henry Bessemer, Louis Pasteur, Thomas Edison).	II. The long-term functioning and health of terrestrial, freshwater, coastal, and marine ecosystems are influenced by their relationships with human societies. CONCEPT A: Students need to know that direct and indirect changes to natural systems due to the growth of human populations and their consumption rates influence the geographic extent, composition, biological diversity, and viability of natural systems. CONCEPT B: Students need to know that methods used to extract, harvest, transport, and consume natural resources influence the geographic extent, composition, biological diversity, and viability of natural systems. CONCEPT D: Students need to know that the legal, economic, and political systems that govern the use and management of natural systems directly influence the geographic extent, composition, biological diversity, and viability of natural systems.		<b>Growth of Population, Cities, and Demands</b>
3. Describe the growth of population, rural to urban migration, and growth of cities associated with the Industrial Revolution.		<b>The Waste Stream (MSW) Community Character, Mapping Your Community Through Time (Places We Live)</b>	
5. Understand the connections among natural resources, entrepreneurship, labor, and capital in an industrial economy.			<b>Britain Solves a Problem and Creates an Industrial Revolution</b>
<b>10.4 Students analyze patterns of global change in the era of New Imperialism in at least two of the following regions or countries: Africa, Southeast Asia, China, India, Latin America, and the Philippines.</b>			
1. Describe the rise of industrial economies and their link to imperialism and colonialism (e.g., the role played by national security and strategic advantage; moral issues raised by the search for national hegemony, Social Darwinism, and the missionary i	II. The long-term functioning and health of terrestrial, freshwater, coastal, and marine ecosystems are influenced by their relationships with human societies. CONCEPT C: Students need to know that the expansion and operation of human communities influences the geographic extent, composition, biological diversity, and viability of natural systems. CONCEPT D: Students need to know that the legal, economic, and political systems that govern the use and management of natural systems directly influence the geographic extent, composition, biological diversity, and viability of natural systems.		<b>New Imperialism: The Search for Natural Resources</b>

<p>3. Explain imperialism from the perspective of the colonizers and the colonized and the varied immediate and long-term responses by the people under colonial rule.</p>	<p>V. Decisions affecting resources and natural systems are based on a wide range of considerations and decision-making processes. CONCEPT A: Students need to know the spectrum of what is considered in making decisions about resources and natural systems and how those factors influence decisions. CONCEPT B: Students need to know the process of making decisions about resources and natural systems, and how the assessment of social, economic, political, and environmental factors has changed over time.</p>		<p><b>New Imperialism: The Control of India's and South Africa's Resources</b></p>
<p><b>11th Grade- United States History and Geography: Continuity and Change in the Twentieth Century</b></p>			
<p><b>11.5 Students analyze the major political, social, economic, technological, and cultural developments of the 1920s.</b></p>			
<p>7. Discuss the rise of mass production techniques, the growth of cities, the impact of new technologies (e.g., the automobile, electricity), and the resulting prosperity and effect on the American landscape.</p>	<p>IV. The exchange of matter between natural systems and human societies affects the long-term functioning of both. CONCEPT A: Students need to know that the effects of human activities on natural systems are directly related to the quantities of resources consumed and to the quantity and characteristics of the resulting byproducts. CONCEPT B: Students need to know that the byproducts of human activity are not readily prevented from entering natural systems and may be beneficial, neutral, or detrimental in their effect.</p>	<p><b>The Waste Stream (MSW)</b></p>	<p><b>Mass Production, Marketing, and Consumption in the Roaring Twenties</b></p>
<p><b>11.8 Students analyze the economic boom and social transformation of post-World War II America.</b></p>			
<p>6. Discuss the diverse environmental regions of North America, their relationship to local economies, and the origins and prospects of environmental problems in those regions.</p>	<p>II. The long-term functioning and health of terrestrial, freshwater, coastal, and marine ecosystems are influenced by their relationships with human societies. CONCEPT B: Students need to know that methods used to extract, harvest, transport and consume natural resources influences the geographic extent, composition, biological diversity, and viability of natural systems. CONCEPT D: Students need to know that the legal, economic, and political systems that govern the use and management of natural systems directly influence the geographic extent, composition, biological diversity, and viability of natural systems.</p>	<p><b>Case Study: Old Growth Forests, Tough Choices, Who Owns America's Forests, Squirrels vs. Scopes (Focus on Forests); Decision Making: Ecological Risk, Wildfires, Natural Hazards, Special Topics: Electromagnetics Fields</b></p>	<p><b>Postwar Industries and the Emerging Environmental Movement</b></p>
<p><b>11.9 Students analyze U.S. foreign policy since World War II.</b></p>			

<p>7. Examine relations between the United States and Mexico in the twentieth century, including key economic, political, immigration, and environmental issues.</p>	<p>V. Decisions affecting resources and natural systems are based on a wide range of considerations and decision-making processes. As a basis for understanding this principle: Concept A: Students need to know the spectrum of what is considered in making decisions about resources and natural systems and how those factors influence decisions.</p>		<p><b>United States and Mexico-Working Together</b></p>
<p><b>11.11 Students analyze the major social problems and domestic policy issues in contemporary American society.</b></p>			
<p>5. Trace the impact of, need for, and controversies associated with environmental conservation, expansion of the national park system, and the development of environmental protection laws, with particular attention to the interaction between environmental</p>	<p>V. Decisions affecting resources and natural systems are based on a wide range of considerations and decision-making processes. As a basis for understanding this principle: Concept A: Students need to know the spectrum of what is considered in making decisions about resources and natural systems and how those factors influence decisions.</p>	<p><b>What's a Forest to You, Case Study: Old Growth Forests; Tough Choices, Who Owns America's Forests, Balancing America's Forests, Words to Live By, Take Action (Focus on Forests); Communicating Risk, Weights and Options: A Look at Tradeoffs, Decision Making</b></p>	<p><b>Many Voices, Many Visions: Analyzing Contemporary Environmental Issues</b></p>
<p style="text-align: center;"><b>12th Grade- Principles of American Democracy and Economics</b></p>			
<p><b>12.2 Students evaluate and take and defend positions on the scope and limits of rights and obligations as democratic citizens, the relationships among them, and how they are secured.</b></p>			
<p>2. Explain how economic rights are secured and their importance to the individual and to society (e.g., the right to acquire, use, transfer, and dispose of property; right to choose one's work; right to join or not join labor unions; copyright and patent)</p>	<p>V. Decisions affecting resources and natural systems are based on a wide range of considerations and decision-making processes. As a basis for understanding this principle: Concept A: Students need to know the spectrum of what is considered in making decisions about resources and natural systems and how those factors influence decisions. CONCEPT B: Students need to know the process of making decisions about natural resources and natural systems, and how the assessment of social, economic, political, and environmental factors has changed over time.</p>		<p><b>This Land is Our Land</b></p>
<p>5. Describe the reciprocity between rights and obligations; that is, why enjoyment of one's rights entails respect for the rights of others.</p>	<p>V. Decisions affecting resources and natural systems are based on a wide range of considerations and decision-making processes. As a basis for understanding this principle: Concept A: Students need to know the spectrum of what is considered in making decisions about resources and natural systems and how those factors influence decisions. CONCEPT B: Students need to know the process of making decisions about natural resources and natural systems, and how the assessment of social, economic, political, and environmental factors has changed over time</p>	<p><b>Tough Choices (Focus on Forests); Decision Making: Ecological Risks (Risk); Community Character, Neighborhood Design, Green Space, Vision for the Future, Far Reaching Decisions , Regional Community Issues (Places We Live)</b></p>	<p><b>This Land is Our Land</b></p>
<p><b>12.3 Students evaluate and take and defend positions on what the fundamental values and principles of civil society are (i.e., the autonomous sphere of voluntary personal, social, and economic relations that are not part of government), their interdependence, and the meaning and importance of those values and principles for a free society.</b></p>			

<p>2. Explain how civil society makes it possible for people, individually or in association with others, to bring their influence to bear on government in ways other than voting and elections.</p>	<p>V. Decisions affecting resources and natural systems are based on a wide range of considerations and decision-making processes. As a basis for understanding this principle:          Concept A: Students need to know the spectrum of what is considered in making decisions about resources and natural systems and how those factors influence decisions. CONCEPT B: Students need to know the process of making decisions about natural resources and natural systems, and how the assessment of social, economic, political, and environmental factors has changed over time</p>	<p>Case Study: Old Growth Forests, Tough Choices, Squirrels vs. Scopes (Focus on Forests); Personal Places, Community Character, Mapping Your Community Through Time, Neighborhood Design, Green Space, A Vision for the Future, Far Reaching Decisions (Places We Live)</p>	<p>Active Voices: Civil Society and the Environment</p>
<p><b>12.7 Students analyze and compare the powers and procedures of the national, state, tribal, and local governments.</b></p>			
<p>6. Compare the processes of lawmaking at each of the three levels of government, including the role of lobbying and the media.</p>	<p>V. Decisions affecting resources and natural systems are based on a wide range of considerations and decision-making processes. As a basis for understanding this principle:          Concept A: Students need to know the spectrum of what is considered in making decisions about resources and natural systems and how those factors influence decisions. CONCEPT B: Students need to know the process of making decisions about natural resources and natural systems, and how the assessment of social, economic, political, and environmental factors has changed over time.</p>	<p>Community Character, Mapping Your Community Through Time, Neighborhood Design , A Vision For the Future, Far Reaching Decisions, Regional Community Issues (Places We Live)</p>	<p>Making and Implementing Environmental Laws</p>



**12th Grade- Principles of Economics**

**12.1 Students understand common economic terms and concepts and economic reasoning.**

<p>4. Evaluate the role of private property as an incentive in conserving and improving scarce resources, including renewable and nonrenewable natural resources.</p>	<p>V. Decisions affecting resources and natural systems are based on a wide range of considerations and decision-making processes. As a basis for understanding this principle:                  Concept A: Students need to know the spectrum of what is considered in making decisions about resources and natural systems and how those factors influence decisions. CONCEPT B: Students need to know the process of making decisions about natural resources and natural systems, and how the assessment of social, economic, political, and environmental factors has changed over time.</p>	<p>Decisionmaking: Ecological Risk (Risk); Personal Places, Community Chara+A103cter, Mapping Your Community Through Time, Neighborhood Design, Green Space, A Vision for the Future, Far Reaching Decisions, Regional Community Issues (Places We Live)</p>	<p>Private Property and Resource Conservation</p>
---	---	--	---

**12.2 Students analyze the elements of America's market economy in a global setting.**

<p>2. Discuss the effects of changes in supply and/or demand on the relative scarcity, price, and quantity of particular products.</p>	<p>IV. The exchange of matter between natural systems and human societies affects the long-term functioning of both. CONCEPT A: Students need to know that the effects of human activities on natural systems are directly related to the quantities of resources consumed and to the quantity and characteristics of the resulting byproducts. CONCEPT B: Students need to know that the byproducts of human activity are not readily prevented from entering natural systems and may be beneficial, neutral, or detrimental in their effect. CONCEPT C: Students need to know that the capacity of natural systems to adjust to human alterations depends on the nature of the system as well as the scope, scale, and duration of the activity and nature of the byproducts.</p>	<p>Weighing the Options: A Look at Tradeoffs (Risk); Source Reduction (MSW); Exploring the World Marketplace (Global Connections)</p>	<p>Sustaining Economics and the Earth's Resources</p>
--	---	---	---

<p>7. Analyze how domestic and international competition in a market economy affects goods and services produced and the quality, quantity, and price of those products.</p>	<p>IV. The exchange of matter between natural systems and human societies affects the long-term functioning of both. CONCEPT A: Students need to know that the effects of human activities on natural systems are directly related to the quantities of resources consumed and to the quantity and characteristics of the resulting byproducts. CONCEPT B: Students need to know that the byproducts of human activity are not readily prevented from entering natural systems and may be beneficial, neutral, or detrimental in their effect. CONCEPT C: Students need to know that the capacity of natural systems to adjust to human alterations depends on the nature of the system as well as the scope, scale, and duration of the activity and nature of the byproducts.</p>	<p>Exploring the World Marketplace (Global Connections)</p>	<p>Sustaining Economics and the Earth's Resources</p>
--	---	---	---

**12.3 Students analyze the influence of the federal government on the American economy.**

<p>1. Understand how the role of government in a market economy often includes providing for national defense, addressing environmental concerns, defining and enforcing property rights, attempting to make markets more competitive, and protecting consumers' r</p>	<p>V. Decisions affecting resources and natural systems are based on a wide range of considerations and decision-making processes. As a basis for understanding this principle:          Concept A: Students need to know the spectrum of what is considered in making decisions about resources and natural systems and how those factors influence decisions. CONCEPT B: Students need to know the process of making decisions about natural resources and natural systems, and how the assessment of social, economic, political, and environmental factors has changed over time.</p>	<p>Old Growth Forests (Focus on Forests); Weighing the Options: A Look at Tradeoffs, Decision Making: Ecological Risk-Plastics (Exploring Environmental Issues -Focus on Risk)</p>	<p>Government and the Economy: An Environmental Perspective.</p>
--	---	--	--

Participants in the review of the "Project Learning Tree materials and the development of an alignment to the California Environmental Education Initiative's Environmental Principles and Concepts (EP&C) and Standards-based learning objectives -2006.

**Kay Antunez de Mayolo**

M.S., B.S., Biological Sciences  
 California Teaching Credential (Life Credential) – Secondary Science  
 Classroom science teacher - (grades 3-8, high school, community college, outdoor school educator) - 12 years  
 Education Director – Sacramento Tree Foundation

**Marianne Chang**

B.A. International Relations  
 California Teaching Credential - multiple subjects (K-8)  
 Reading Certificate, CLAD  
 Classroom teacher (grades 1, 2, 5) -10 years  
 Reading Specialist, Reading Recovery teacher, Literacy Coach  
 Scorer – CA Subjects CSET, multiple subjects exam-RISE

**Linda Desai**

BS, Conservation Education, M.S. Conservation Education  
 Community College credential-Biological Sciences, Natural Resources, Forestry and related technologies  
 Education Director, Placer Nature Center - 15 years  
 PLT "Educator of the Year" award (2005) Facilitator - Project Learning Tree, Project WILD, Project WET

**Dennis Mitchell**

BA, Liberal Studies  
 California Teaching Credential (Life) Multiple Subjects  
 Science and Math teacher (grades 3, 8) - 28 years  
 Staff development and education consultant , California Science Project, Science in Rural California, Project ARISE  
 PLT "Educator of the Year" (2000)

**Reviewers for the updated alignment of Project Learning Tree curriculum materials and the Education and the Environment Initiative's 45 curriculum units. June 2010.**

**Helen de la Maza**

BA, Comparative Literature & Biological Sciences

MS, Wildlife Science

MA, Curriculum & Instruction

California Teaching Credentials: Biological Sciences, Language Arts, Spanish, Multiple Subjects

Environmental Educator - 15 years

Science Teacher - 2 years

Curriculum Writer- Education and the Environment Initiative

Facilitator - Project Learning Tree, Project WILD, Project WET, Population Connection

**Michael Roa**

MA, Secondary Education

Secondary (life), Multiple Subject, Administrative Services

Staff Developer- North Coast Professional Development Consortium; Lead Teacher - Redwood Area Science Project

*Science Activities Kit, A Guide to the Side of the Sea, Redwood Ed*

Initiative

BA, Life BA -Sciences (minor-Physical Sciences)

California Teaching Credentials: Standard

Classroom teacher and Administrator (grades 4-12) - 38 years

Author - *Environmental*

Curriculum Writer - Education and the Environment

Facilitator - Project Learning Tree, Project WILD, Project WET