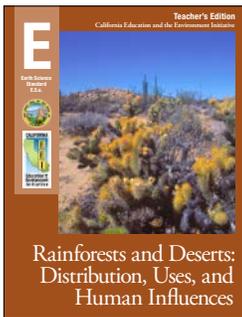




## TEACH COMMON CORE STANDARDS WITH THE EEI CURRICULUM

Created with your needs in mind, this document shows the correlation between the EEI Curriculum and the California Common Core State Standards. By teaching the EEI unit lessons in your classroom, you will be simultaneously addressing the Common Core standards depicted in this guide.

### E.5.e.—Rainforests and Deserts: Distribution, Uses, and Human Influences



Students examine global weather patterns and geologic features related to the location of rainforests and deserts. They identify latitudes associated with the geographic distribution of the world’s rainforests and deserts and discuss the ecosystem goods and ecosystem services provided by rainforests. Students investigate the effects of human activities on the functioning and local distribution of rainforests and deserts, and then look at the role of scientific knowledge in making policy decisions.

|                        |                        | RST.9–10.1 | RST.9–10.2 | RST.9–10.4 | RST.9–10.5 | RST.9–10.6 | RST.9–10.7 | RST.9–10.8 | RST.9–10.10 | RST.11–12.2 | RST.11–12.7 | RST.11–12.9 | WHST.9–10.2 | WHST.9–10.8 | SL.9–10.1 | SL.9–10.2 | SL.9–10.4 | SL.11–12.1 | SL.11–12.2 |
|------------------------|------------------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------|-----------|-----------|------------|------------|
| <b>LESSONS</b>         | California Connections |            | ✓          | ✓          | ✓          | ✓          | ✓          | ✓          | ✓           |             |             |             | ✓           |             |           |           |           |            |            |
|                        | 1                      |            |            | ✓          | ✓          | ✓          | ✓          |            | ✓           |             |             |             | ✓           |             | ✓         |           | ✓         |            | ✓          |
|                        | 2                      |            |            | ✓          |            |            | ✓          |            |             |             |             |             |             |             | ✓         |           |           |            | ✓          |
|                        | 3                      |            | ✓          | ✓          |            |            |            |            | ✓           |             |             |             | ✓           | ✓           | ✓         |           |           | ✓          |            |
|                        | 4                      | ✓          | ✓          | ✓          |            |            |            |            |             |             |             |             | ✓           | ✓           | ✓         |           |           | ✓          |            |
|                        | 5                      |            | ✓          | ✓          |            |            | ✓          |            | ✓           |             | ✓           | ✓           | ✓           |             | ✓         |           |           |            |            |
|                        | 6                      | ✓          |            | ✓          |            |            |            |            |             |             |             |             | ✓           | ✓           | ✓         |           | ✓         |            |            |
| Traditional Assessment |                        | ✓          |            |            |            |            |            |            |             | ✓           |             |             | ✓           |             |           |           |           |            |            |
| Alternative Assessment |                        |            |            | ✓          |            |            |            | ✓          |             |             |             |             | ✓           |             |           |           |           |            |            |

**Note:** For your reference, the list of California Common Core State Standards abbreviations is on the following page.

## Using the EEI-Common Core Correlation Matrix

The matrix on the front page identifies a number of Common Core standards that are supported by this EEI unit. However, the check marks in the matrix do not necessarily signify that the Common Core standards checked will be taught to mastery by using this EEI unit alone. Teachers are encouraged to select which Common Core standards they wish to emphasize, rather than teaching to every indicated standard. By spending more time on selected standards, students will move toward greater Common Core proficiency in comprehension, critical thinking and making reasoned arguments from evidence. Teaching this EEI unit will provide opportunities for teachers to implement the shift in instructional practice necessary for full Common Core implementation.

## California Common Core State Standards Abbreviations

- **CCSS:** California Common Core State Standards
- **RST:** Reading Standards for Literacy in Science and Technical Subjects
- **SL:** Speaking and Listening Standards
- **WHST:** Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects

**Note:** Since each Common Core standard includes a breadth of skills, in this correlation, the portion of the standard description that is featured in the Common Core Standards Applications is cited, using “...” to indicate omitted phrases. For a list of the complete standard descriptions, please see the Common Core Reference Pages located on pages 19–20 of this document.

## A Note about Common Core Speaking and Listening Standards

Throughout this unit, students participate in various learning structures and groups to analyze, discuss, and synthesize data, which supports the skill in Speaking and Listening Standard 1 “Participate effectively in a range of collaborative discussions (one-on-one, groups...) with diverse partners.” With prior instruction on collaborative discussions, these various groupings and the materials students examine lend themselves to prime discussion material for collaborative discussions. Learning structures with tasks for pairs and groups are in the following lessons:

- **Lesson 1:** Whole class, small group
- **Lesson 2:** Whole class
- **Lesson 3:** Whole class, small groups
- **Lesson 4:** Whole class, small groups
- **Lesson 5:** Whole class
- **Lesson 6:** Whole class

## National Geographic Resources

- **Biological Diversity** wall map (Lessons 1 and 6)
- **Political** wall map (Lesson 1)

## Unit Assessment Options

| Assessments   | Common Core Standards Applications  |
|---|---|
| <b>Traditional Assessment</b>   |   |
| Students answer eleven multiple-choice questions, then answer six short-answer questions. | <p><b>RST.9–10.2:</b> Determine the central ideas or conclusions of a text; trace the text’s explanation or depiction of a complex process...or concept; provide an accurate summary of the text.</p> <p><b>RST.11–12.2:</b> Determine the central ideas...of a text; summarize...information presented in a text by paraphrasing them in simpler but still accurate terms.</p> <p><b>WHST.9–10.2:</b> Write informative/explanatory texts...</p>   |
| <b>Alternative Assessment</b>   |   |
| Students use their work from the unit to write a 400-word essay.                          | <p><b>RST.9–10.5:</b> Analyze the structure of the relationships among concepts in a text...</p> <p><b>RST.9–10.10:</b> ...read and comprehend science...texts... independently and proficiently.</p> <p><b>WHST.9–10.2:</b> Write informative/explanatory texts, including the narration of historical events, scientific...processes.</p> <ol style="list-style-type: none"> <li>a) Introduce a topic and organize ideas, concepts, and information...</li> <li>b) Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information...</li> <li>c) Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts.</li> <li>d) Use precise language and domain-specific vocabulary...</li> <li>f) Provide a concluding statement or section that follows from and supports the information or explanation...</li> </ol> |

## Lesson 1: California's Desert Blooms

Students read about natural factors that determine distribution of deserts and locate California deserts on a map. They discuss human practices that influence deserts and the battle to create the California Desert Protection Act. They identify different types of scientific knowledge necessary to manage desert ecosystems.



## National Geographic Resources

- **Biological Diversity** wall map
- **Political** wall map

Use this correlation in conjunction with the **Procedures** located on pages 38–39 of the Teacher’s Edition. Only procedure steps with a Common Core correlation are included in the table below.

| Student Tasks   | Common Core Standards Applications  |
|---|---|
| <p><b>Vocabulary Development:</b> For depth of understanding, vocabulary may be featured within the context of the unit instead of or in addition to the beginning of the lesson.</p>   | <p><b>RST.9–10.4:</b> Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context...</p>  |
| <p><b>Step 1:</b> Project <b>Joshua Tree National Park</b> (Visual Aid #1) and ask students to describe what they observe in the picture. Write their observations on the board and ask them to use the words to develop an initial definition of what comprises a desert.</p>  | <p><b>RST.9–10.7:</b> Translate...information expressed visually...into words.</p> <p><b>SL.9–10.1:</b> ...participate effectively in a range of collaborative discussions...</p> <p><b>SL.11–12.2:</b> Integrate multiple sources of information presented in diverse media or formats...</p>  |
| <p><b>Step 4:</b> Students take turns reading aloud <b>California Connections</b>’ <i>The California Desert Protection Act—A National Success</i> (Student Edition, pages 2–5). As a focus to the reading, students are asked to consider the question, “Why protect deserts?” When students read the “Preservation History” section, project and discuss <b>Barstow-Vegas Wagon Trail</b> (Visual Aid #2).</p> <p><b>Suggestion:</b> In addition to reading <b>California Connections</b> for content, students should look at several key elements on how the writing is structured. This can be done while they are reading or during a second reading of the material. Students who have been familiarized with this process can identify these structural elements as they read by themselves, and then they can be discussed as a class.</p> <p>Refer to the <b>Reading California Connections Using a Common Core Reading and Writing Focus</b> on pages 14–18 to view specific suggestions for integrating Common Core standards while reading this selection not only for content, but for text structure as well.</p> | <p><b>RST.9–10.4:</b> Determine the meaning of...key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context...</p> <p><b>RST.9–10.5:</b> Analyze the structure of the relationships among concepts in a text, including relationships among key terms...</p> <p><b>RST.9–10.6:</b> Analyze the author’s purpose in providing an explanation,... defining the question the author seeks to address.</p> <p><b>RST.9–10.10:</b> ...read and comprehend science...texts...independently and proficiently.</p> |

| Student Tasks  | Common Core Standards Applications  |
|--|---|
| <p><b>Step 5:</b> Students use focus questions to discuss <b>California Connections: The California Desert Protection Act—A National Success</b>.</p> <p><b>Suggestion:</b> <i>The discussion outlined in this step can be conducted as a collaborative discussion. Rather than the teacher presenting the questions, assign the nine questions to discussion leaders, who facilitate a discussion in which students are challenged to back up their ideas with evidence or clarifying thoughts, rather than simply a question/answer session. Students should also be encouraged to generate their own questions related to the story and explore possible explanations.</i></p>  | <p><b>SL.9–10.1:</b> Initiate and participate effectively in a range of collaborative discussions..., building on others’ ideas and expressing their own clearly...</p> <p>c) Propel conversations by posing and responding to questions..., or challenge...conclusions.</p> <p>d) Respond thoughtfully to diverse perspectives...</p> <p><b>SL.9–10.4:</b> Present information, findings, and supporting evidence...</p> |
| <p><b>Step 6:</b> Students work in small groups to answer the question, “What role does science play in desert management?” Students turn to <b>Managing Human Activity in the Desert</b> (Student Workbook, page 4) and answer the questions.</p> <p><b>Tip:</b> <i>If Student Workbooks need to be reused from year to year, students should not write in them. Some strategies teachers use to preserve the workbooks are:</i></p> <ul style="list-style-type: none"> <li>■ <i>Have students use binder paper or other lined or unlined paper.</i></li> <li>■ <i>Have students use a sheet protector over the page and write with a whiteboard marker.</i></li> <li>■ <i>Do together as a class on a projector or chart paper.</i></li> <li>■ <i>Project the digital fill-in version and do together as a class.</i></li> <li>■ <i>Students use digital devices to fill in the digital version found on the website.</i></li> <li>■ <i>Make student copies when necessary.</i></li> </ul> | <p><b>RST.9–10.10:</b> ...read and comprehend science...texts...independently and proficiently.</p> <p><b>SL.9–10.1:</b> ...participate effectively in a range of collaborative discussions...</p> <p><b>WHST.9–10.2d:</b> Use precise language and domain-specific vocabulary to... convey a style appropriate to the discipline and context...</p>  |

## Lesson 2: Global Distribution of Rainforests and Deserts

Students use maps to identify latitudes and outline the geographic distribution of the world's rainforests and deserts. They discuss global convection currents and their effect on global climatic patterns at specific latitudes and the location of Earth's major biomes.



Use this correlation in conjunction with the **Procedures** located on pages 52–54 of the Teacher’s Edition. Only procedure steps with a Common Core correlation are included in the table below.

| Student Tasks   | Common Core Standards Applications  |
|---|---|
| <p><b>Vocabulary Development:</b> For depth of understanding, vocabulary may be featured within the context of the unit instead of or in addition to the beginning of the lesson.</p>   | <p><b>RST.9–10.4:</b> Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context...</p>  |
| <p><b>Step 1:</b> Students view <b>Life in the Amazon Rainforest</b> (Visual Aid #3) and <b>Life in the Mojave Desert</b> (Visual Aid #4), and are asked to use the aids to list characteristics of both the rainforest and desert.</p>   | <p><b>RST.9–10.7:</b> Translate...information expressed visually...into words.</p> <p><b>SL.9–10.1:</b> ...participate effectively in a range of collaborative discussions...</p> <p><b>SL.11–12.2:</b> Integrate multiple sources of information presented in diverse media or format...</p> |
| <p><b>Step 2:</b> While viewing <b>Latitude</b> (Visual Aid #5), students locate and label latitudes on <b>World Rainforests and Deserts</b> (Student Workbook, pages 5–6).</p>   | <p><b>RST.9–10.7:</b> Translate...information expressed visually...into words.</p> <p><b>SL.11–12.2:</b> Integrate multiple sources of information presented in diverse media or formats...</p>   |
| <p><b>Step 3:</b> While viewing <b>Global Convection Currents</b> (Visual Aid #6), students review and learn about global circulation patterns. Students use the information to predict where tropical rainforests would be found on the <b>World</b> wall map.</p>                                 | <p><b>RST.9–10.7:</b> Translate...information expressed visually...into words.</p> <p><b>SL.11–12.2:</b> Integrate multiple sources of information presented in diverse media or formats...</p>   |
| <p><b>Steps 4–6:</b> Students view <b>Global Distribution of Rainforests</b> (Visual Aid #7), and <b>Global Distribution of Deserts</b> (Visual Aid #8). Students color corresponding areas on <b>World Rainforests and Deserts</b> (Student Workbook, pages 5–6) and answer summary questions.</p> | <p><b>RST.9–10.7:</b> Translate...information expressed visually...into words.</p> <p><b>SL.11–12.2:</b> Integrate multiple sources of information presented in diverse media or format...</p>  |

## Lesson 3: Rainforests' and Deserts' Influence on Humans

Students work in small groups to read about and discuss ecosystem services and ecosystem goods provided by rainforests and deserts. They summarize their findings on charts and discuss the importance of these biomes to human lives and communities.



Use this correlation in conjunction with the **Procedures** located on pages 68–69 of the Teacher’s Edition. Only procedure steps with a Common Core correlation are included in the table below.

| Student Tasks  | Common Core Standards Applications   |
|--|--|
| <p><b>Vocabulary Development:</b> For depth of understanding, vocabulary may be featured within the context of the unit instead of or in addition to the beginning of the lesson.</p>  | <p><b>RST.9–10.4:</b> Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context...</p>   |
| <p><b>Step 2:</b> Students work in small groups to read <b>Importance of Rainforests to Human Lives</b> (Student Edition, pages 6–7), and students use the information to add to the chart on <b>Rainforest Uses</b> (Student Workbook, pages 7–8). A class list is generated and students identify and defend a position.</p> <p><b>Suggestion:</b> For Common Core connections, have students include textual evidence from the reading selections and visual aids. Create a rubric that includes the use of textual evidence as an assessment item.</p> | <p><b>RST.9–10.2:</b> Determine the central ideas...; trace the text’s explanation or depiction of a complex process, phenomenon, or concept...</p> <p><b>RST.9–10.10:</b> ...read and comprehend science...texts...independently and proficiently.</p> <p><b>SL.9–10.1:</b> ...participate...in a range of collaborative discussions...</p> <p><b>SL.11–12.1c:</b> ...probe reasoning and evidence...</p> <p><b>WHST.9–10.8:</b> Gather relevant information from multiple authoritative print and digital sources...</p> |
| <p><b>Step 3:</b> Students view <b>Solar and Wind Power from the Desert</b> (Visual Aid #10) and <b>Importance of Desert to Human Lives</b> (Student Edition, pages 8–9), and complete <b>Desert Uses</b> (Student Workbook, pages 9–10). A class list is generated and students identify and defend a position.</p>   | <p><b>RST.9–10.2:</b> Determine the central ideas...; trace the text’s explanation or depiction of a complex process, phenomenon, or concept...</p> <p><b>RST.9–10.10:</b> ...read and comprehend science...texts...independently and proficiently.</p> <p><b>SL.9–10.1:</b> ...participate...in a range of collaborative discussions...</p> <p><b>SL.11–12.1c:</b> ...probe reasoning and evidence...</p> <p><b>WHST.9–10.8:</b> Gather relevant information from multiple authoritative print and digital sources...</p> |

| Student Tasks  | Common Core Standards Applications  |
|--|---|
| <p><b>Step 4:</b> Individually, students complete summary questions for <b>Rainforest Uses</b> and <b>Desert Uses</b>.</p> | <p><b>WHST.9–10.2d:</b> Use precise language and domain-specific vocabulary to... convey a style appropriate to the discipline and context...</p> <p><b>WHST.9–10.8:</b> Gather relevant information from multiple authoritative print and digital sources...</p> |

# Lesson 4: Human Influences on the Distribution of Rainforests and Deserts

Students read about and discuss the effects of human activities on the functioning and local distribution (presence) of rainforests and deserts. Maps illustrate the location and distribution of deserts and rainforests, and students consider the ways in which humans can change the geographic profiles of these biomes.



Use this correlation in conjunction with the **Procedures** located on pages 86–88 of the Teacher’s Edition. Only procedure steps with a Common Core correlation are included in the table below.

| Student Tasks  | Common Core Standards Applications  |
|--|---|
| <p><b>Vocabulary Development:</b> For depth of understanding, vocabulary may be featured within the context of the unit instead of or in addition to the beginning of the lesson.</p>  | <p><b>RST.9–10.4:</b> Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context...</p>  |
| <p><b>Step 2:</b> Students work in small groups, with half reading <b>Importance of Rainforests to Human Lives</b> (Students Edition, pages 6–7) and the other half reading <b>Importance of Deserts to Human Lives</b> (Student Edition, pages 8–9). Students use the article to answer discussion questions.</p> <p><b>Suggestion:</b> Increase the Common Core connections in the discussion by encouraging students to build on each others’ ideas, cite evidence from the text, and pose questions that probe reasoning and evidence in the text and in each others’ comments. Prior to the discussion, review the criteria for collaborative discussions in standard <b>SL.9–10.1</b>.</p> | <p><b>RST.9–10.1:</b> Cite specific textual evidence to support analysis of...texts, attending to the precise details of explanations or descriptions.</p> <p><b>RST.9–10.2:</b> Determine the central ideas...; trace the text’s explanation or depiction of a complex process...or concept; provide an accurate summary of the text.</p> <p><b>SL.9–10.1:</b> ...participate...in a range of collaborative discussions (...in groups...)</p> <p>c) Propel conversations by posing and responding to questions...; actively incorporate others into the discussion; and clarify, verify and challenge ideas and conclusions.</p> |
| <p><b>Step 3:</b> Students regroup as a class and discuss what they have learned, and then use the information to record the answers in Part 1 of <b>Human Uses and Effects on Deserts and Rainforests</b> (Student Workbook, pages 11–13).</p>  | <p><b>RST.9–10.1:</b> Cite specific textual evidence to support analysis of...texts, attending to the precise details of explanations or descriptions.</p> <p><b>WHST.9–10.2d:</b> Use precise language and domain-specific vocabulary to... convey a style appropriate to the discipline and context...</p> <p><b>WHST.9–10.8:</b> Gather relevant information from multiple authoritative print and digital sources...</p>  |

| Student Tasks  | Common Core Standards Applications  |
|--|---|
| <p><b>Step 5:</b> Students choose two human practices from Step 2 and discuss how and why these activities might affect the local distribution of desert ecosystems.</p>   | <p><b>SL.9–10.1:</b> ...participate...in a range of collaborative discussions...</p> <p><b>SL.11–12.1c:</b> ...probe reasoning and evidence...</p>  |
| <p><b>Step 6:</b> Working with a partner, students discuss and answer the Summary Questions on <b>Human Uses and Effects on Deserts and Rainforests</b>. Students then regroup and discuss answers as a class.</p> | <p><b>SL.9–10.1:</b> ...participate...in a range of collaborative discussions...</p> <p><b>SL.11–12.1c:</b> ...probe reasoning and evidence...</p> <p><b>WHST.9–10.2:</b> Write informative/explanatory texts...</p> <p>d) Use precise language and domain-specific vocabulary to...convey a style appropriate to the discipline and context...</p> <p><b>WHST.9–10.8:</b> Gather relevant information from multiple authoritative print and digital sources...</p> |

## Lesson 5: The Effects of Biome Distribution on Human Cultures

Students learn how global temperature causes changes in distribution of biomes and how two separate cultures once thrived in the Green Sahara Desert.



Use this correlation in conjunction with the **Procedures** located on pages 104–105 of the Teacher’s Edition. Only procedure steps with a Common Core correlation are included in the table below.

| Student Tasks   | Common Core Standards Applications   |
|---|--|
| <p><b>Vocabulary Development:</b> For depth of understanding, vocabulary may be featured within the context of the unit instead of or in addition to the beginning of the lesson.</p>   | <p><b>RST.9–10.4:</b> Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context...</p>   |
| <p><b>Steps 2–5:</b> Students take turns reading aloud <b>Global Climate Change—The Green Sahara</b> (Student Edition, pages 10–122), and view <b>Artifacts of the Kiffian Culture</b>, <b>Global Temperature Change</b>, and <b>Artifacts of the Tenerian Culture</b> (Visual Aids #19–21). Students answer discussion questions regarding the information presented.</p> <p><b>Suggestion:</b> Increase the Common Core connections in the discussion by encouraging students to build on each others’ ideas, cite evidence from the text, and pose questions that probe reasoning and evidence in the text and in each others’ comments.</p> | <p><b>RST.9–10.2:</b> Determine the central ideas or conclusions of a text; trace the text’s explanation or depiction of a complex process...or concept; provide an accurate summary of the text.</p> <p><b>RST.9–10.7:</b> Translate...information expressed visually...into words.</p> <p><b>RST.9–10.10:</b> ...read and comprehend science...texts...independently and proficiently.</p> <p><b>RST.11–12.7:</b> Integrate and evaluate multiple sources of information...</p> <p><b>RST.11–12.9:</b> Synthesize information from a range of sources...into a coherent understanding of a...concept...</p> <p><b>SL.9–10.1:</b> ...participate...in a range of collaborative discussions...</p> |
| <p><b>Step 6:</b> Students use what they have learned to complete <b>Climate Change and People of the Sahara Desert</b> (Student Workbook, pages 14–15).</p>  | <p><b>RST.11–12.9:</b> Synthesize information from a range of sources...into a coherent understanding of a...concept...</p> <p><b>WHST.9–10.2d:</b> Use precise language and domain-specific vocabulary to... convey a style appropriate to the discipline and context...</p>  |

## Lesson 6: Science and Decision Making for California's Deserts

Students read about a government study to gather and use scientific data to conserve and restore the threatened Mojave Desert ecosystem. As a class, students discuss the role of scientific knowledge in making policy and management decisions about human activity related to ecosystems.



## National Geographic Resources

- **Biological Diversity** wall map

Use this correlation in conjunction with the **Procedures** located on pages 120–121 of the Teacher’s Edition. Only procedure steps with a Common Core correlation are included in the table below.

| Student Tasks  | Common Core Standards Applications  |
|--|---|
| <p><b>Vocabulary Development:</b> For depth of understanding, vocabulary may be featured within the context of the unit instead of or in addition to the beginning of the lesson.</p>  | <p><b>RST.9–10.4:</b> Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context...</p>  |
| <p><b>Step 4:</b> Students read aloud from <b>Recoverability and Vulnerability of Desert Ecosystems</b> (Student Edition, pages 12–15) and work as a class to answer Questions 1 through 8 on <b>Vulnerability of Desert Ecosystems Guiding Questions</b> (Student Workbook, pages 16–18).</p> <p><b>Suggestion:</b> <i>The discussion outlined in this step can be conducted as a collaborative discussion. Assign the eight questions to discussion leaders, who facilitate a discussion where students are challenged to back up their ideas with evidence or clarifying thoughts, rather than simply a question/answer session. Students should also be encouraged to generate their own questions related to the story and explore possible explanations.</i></p> | <p><b>RST.9–10.1:</b> Cite specific textual evidence to support analysis of...texts, attending to the precise details of explanations or descriptions.</p> <p><b>SL.9–10.1:</b> Initiate and participate effectively in a range of collaborative discussions..., building on others’ ideas and expressing their own clearly...</p> <p>c) Propel conversations by posing and responding to questions...or challenge...conclusions.</p> <p>d) Respond thoughtfully to diverse perspectives...</p> <p><b>SL.9–10.4:</b> Present information, findings, and supporting evidence...</p> <p><b>WHST.9–10.2:</b> Write informative/explanatory texts...</p> <p>d) Use precise language and domain-specific vocabulary to...convey a style appropriate to the discipline and context...</p> |

| Student Tasks   | Common Core Standards Applications   |
|---|--|
| <p><b>Step 6:</b> Students use their work on <b>Vulnerability of Desert Ecosystems Guiding Questions</b> and their knowledge of desert ecosystems to write a two-paragraph essay in response to question 9.</p> <p><b>Suggestion:</b> For Common Core connections, have students include textual evidence from the reading selections. Create a rubric that includes the use of textual evidence as an assessment item.</p> | <p><b>WHST.9–10.2:</b> Write informative/explanatory texts...</p> <ul style="list-style-type: none"> <li>a) Introduce a topic and organize ideas, concepts, and information...</li> <li>b) Develop the topic with well-chosen, relevant, and sufficient facts...</li> <li>c) Use varied transitions and sentence structures to link the major sections of the text...</li> <li>d) Use precise language and domain-specific vocabulary...</li> <li>f) Provide a concluding statement or section...</li> </ul> <p><b>WHST.9–10.8:</b> Gather relevant information from multiple authoritative print and digital sources...</p> |

## Unit Assessment

Refer to the introduction pages at the front of this document for information regarding the Traditional and Alternative Assessments for this unit and their Common Core correlations.

### Reading *California Connections* using a Common Core Reading and Writing Focus

#### Reading

Science teachers can further enhance the teaching of Common Core Reading Literacy Standards by noting the suggestions below and in the following pages while reading the *California Connections* selection for content. Explicitly teach students to pay attention to the structure of the text by noting the following:

- Note how the author cites evidence to support main points; note any gaps or inconsistencies. **(RST.9–10.1 and RST.11–12.1)**
- Note how the author sets up the central ideas or conclusions; trace the text’s explanation or depiction of a process or concept; summarize concepts, processes, and information by paraphrasing the text. **(RST.9–10.2 and RST.11–12.2)**
- Note how the author explains multi-step procedures. **(RST.9–10.3 and RST.11–12.3)**
- Note how the author explains the meaning of key terms, symbols, domain specific words, and phrases. **(RST.9–10.4 and RST.11–12.4)**
- Analyze the structure of the relationships among concepts in a text, and the relationships among key terms, including categories or hierarchies. **(RST.9–10.5 and RST.11–12.5)**
- Analyze the author’s purpose in providing an explanation or describing a procedure, and how this defines the question the author seeks to address; identify important unresolved issues. **(RST.9–10.6 and RST.11–12.6)**
- Note how the information in the *California Connections* text integrates with information provided throughout the unit in diverse formats, including tables, charts, maps, and quantitative data. **(RST.9–10.7 and RST.11–12.7)**
- Assess the extent to which the reasoning and evidence in a text support the author’s claim; evaluate the analysis and conclusions in the text. **(RST.9–10.8 and RST.11–12.8)**
- When other documents are included, compare and contrast findings presented in this text to those in other sources, noting when the findings support or contradict previous explanations. **(RST.9–10.9 and RST.11–12.9)**
- Note comprehension strategies for understanding science texts. **(RST.9–10.10 and RST.11–12.10)**

**Note:** Standard descriptions are paraphrased, using terminology that applies to reading a *California Connections* selection.

#### Writing

Many *California Connections* selections can be used as a model for future student writing tasks applying the Writing Literacy Standards by noting how the author structures the text, organizes the ideas, and provides well-chosen relevant and sufficient facts, extended definitions, concrete details, quotations, or other information and examples.

#### Using the California Connections Selection

The following pages note specific places where the *California Connections* selection provides examples for specific Writing Literacy Standards for Science and Technical Subjects, using this selection as a writing model. They also provide suggestions for teaching students to analyze text structure using the Reading Literacy Standards for Science and Technical Subjects. Teachers can incorporate more suggestions from the list above.

**RST.9–10.10:** ...read and comprehend science... texts...independently and proficiently.

**Suggestion:** Throughout the reading, note comprehension strategies for understanding the text.

**RST.9–10.8:** Assess the extent to which the reasoning and evidence in a text support the author’s claim...

**Suggestion:** Ask, “Are these claims supported in the text?” Have students identify the places where the text supports the claim(s).

California Connections: The California Desert Protection Act—A National Success  
Lesson 1 | page 1 of 4

---

## The California Desert Protection Act— A National Success



The passage of the California Desert Protection Act in 1994 was the culmination of a nine-year legal battle by conservationists seeking legislation to protect desert habitat in California and other parts of the American Southwest. The act survived four filibusters in the U.S. Senate, finally passing a day after the regularly scheduled adjournment date of the 103<sup>rd</sup> Congress, without a vote to spare.

Many people who drive through this area wonder what prompted conservationists to protect California’s deserts. Those who know the region can tell you; it is an area rich with unique plants and animals, geological resources, and a place of great scenic beauty.



**California’s Deserts**  
Deserts across Earth share some similarities but also exhibit individual characteristics that make them unique. Convective air patterns around Earth create geographic areas with similar climatic conditions at similar latitudes. Air masses rise at the Equator where the most light energy from the Sun is received

Joshua Tree National Park

2 CALIFORNIA EDUCATION AND THE ENVIRONMENT INITIATIVE | Unit E.5.e | Rainforests and Deserts: Distribution, Uses, and Human Influences | Student Edition

**RST.9–10.6:** Analyze the author’s purpose in providing an explanation...

**Suggestion:** Ask what the author’s purpose is for including this explanation...

**RST.9–10.4:** Determine the meaning of symbols, key terms, and other domain-specific words...

- Density
- Latitude
- Ecosystem
- Air mass

**WHST.9–10.2c:** Use varied transitions to... clarify the relationships among...concepts.

per unit area of Earth's surface. That light energy is converted to heat, warming the air. As the air is warmed, its density decreases and it rises. As this rising air expands and cools, moisture within it is released, causing heavy rainfall and depleting the air of moisture. The cooled, moisture-depleted air finally sinks again near latitudes 30° north and south. Deserts are found beneath these bands of sinking, moisture-depleted air. Deserts comprise about one-third of Earth's land surface.

The latitude of California's southern border is 32° north, exposing the region to the dry and warm air masses that produce desert conditions. Desert ecosystems cover one-quarter of the state, primarily in the southeastern region. Twenty-five thousand square miles of California are occupied by the Great Basin, Mojave, and Sonoran Deserts. California's portion of the Sonoran Desert is called the Colorado Desert.

The California Desert Protection Act affected California's desert areas primarily in the Mojave Desert. The act created Death Valley National Park, expanding the protected area around the former Death Valley Monument.

In addition, it created Joshua Tree National Park and Mojave National Preserve, which encompasses not only the California portion of the desert but also 1,420,000 acres across the rest of the Southwest United States. The designation of national park status also protects and preserves the unrivaled scenic, geologic, and wildlife values of these lands, perpetuates their significant and diverse ecosystems, and protects and preserves their historical and cultural values.

**Preservation History**

The story behind the unexpected success of the California Desert Protection Act

began in the late 1960s with controversy over recreational land use. Photographs of the Barstow-Vegas motorcycle race astonished the state director of the Bureau of Land Management. Director Russ Penny saw that the damage caused by these off-road vehicles to desert vegetation and soils could lead to serious erosion. His concerns resulted in some of the earliest studies of deserts as unique and fragile ecosystems. Conservationists then began a public education program that included desert study trips to educate Californians about the value of these lands.

A law passed in 1976 required the Bureau of Land



Barstow-Vegas motorcycle race

**WHST.9–10.2b:** Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details...or other information and examples...

**RST.9–10.5:** Analyze the structure of the relationships among concepts in a text...

- Cause and effect

**RST.9–10.7:** ...translate information expressed visually...into words.

**Suggestion:** Have students provide textual evidence to support the use of this picture.

**WHST.9–10.2b:** Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details...or other information and examples...

Management to determine if any of its public lands should be set aside as wilderness. (Wilderness is defined as "an area where Earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain.") The legislation also mandated preparation of a California Desert Plan. Over the next four years, there were open public debates on resource uses in California deserts. A compromise plan that considered mining, cattle grazing, and recreation, as well as wilderness interests, emerged at the end of the Carter administration in 1981.

But during the following Reagan years, the desert plan was gutted by amendments. No lands were set aside as wilderness despite the efforts of wilderness advocates. In 1986, California Senator Alan Cranston introduced the California Desert Protection Act. Senator Cranston continued to champion the act throughout its passage. From 1987 to 1993, California Senator Diane Feinstein introduced new versions of the act with each new Congress. Each version resolved new site-



Petroglyph

specific concerns of resource users, such as ranchers and small mining operations. Other interests included agriculture, urban development, and military installations. These varied interests led to much dialogue and compromise as the act was developed.

The strongest opposition to the act came from off-road vehicle groups whose activities inadvertently inspired the early desert conservation efforts. Despite delaying tactics by opponents, in 1994 the Senate stayed in session an extra day and the act received the votes required to pass. Millions of acres of desert wilderness areas and national parks were newly designated.

**Why Fight for the Desert?**

The lands protected by the act are located in an area rich in human and natural heritage. The lands include archaeological sites, homesteads, rock-walled military outposts, towering sand dunes, volcanic cinder cones, and stands of Joshua trees. The Environmental Impact Report (EIR) produced to evaluate the consequences of implementing or failing to implement the act also documented fossilized dinosaur tracks, American Indian petroglyphs, abundant wildflowers, and several threatened and endangered species, including the desert bighorn sheep and the desert tortoise.

**RST.9–10.7:** Translate... information expressed visually...into words.

**Suggestion:** Have students provide textual evidence to support the use of this picture.

**RST.9–10.6:** Analyze the author's purpose in providing an explanation...

**Suggestion:** Ask what the author's purpose is for including this explanation.

**WHST.9–10.2.c:** Use varied transitions to... clarify the relationships among...concepts.

**RST.9–10.2:** Determine the central ideas...; trace the text’s explanation or depiction of a complex process, phenomenon, or concept...

Just as the Mojave Desert Preserve is abundant and beautiful, each park created within it by the act boasts unique splendor. Joshua Tree National Park encompasses parts of both the Mojave and Colorado deserts. It contains magnificent rock formations and spectacular plant life, from wildflowers on the desert floor to pine forests in the high country. The landscape of Death Valley National Park includes a diverse range of pine forests, salt playas, and jagged rocks. It is a land of extremes—one of the hottest, driest, and lowest places on Earth. Mojave National Preserve has an equally remarkable geologic diversity—from limestone and granite to countless types of metamorphic rocks.

These wilderness areas offer an unequalled opportunity to experience vast areas of landscape and history that have been preserved and protected from human activity since the establishment of the act. The effects of land use and development can still threaten wilderness areas. Preservation of desert wilderness requires the highest levels of protection and management, as provided through the act.

**Provisions of the Act**

The purpose of the act was fivefold, to: (1) preserve natural values, (2) perpetuate ecosystems, (3) protect historical and cultural values, (4) provide opportunities for scientific research and recreation, and (5) promote public understanding. It transferred over 3 million acres of California desert from the Bureau of Land Management to the National Park Service. It designated nearly 8 million acres of wilderness areas. Nearly 10,000 acres of U.S. Forest Service lands and 9,000 acres of U.S. Fish and Wildlife Service lands were also set aside as wilderness.

President Clinton said, in signing the act in 1994, "This is the first time since 1980

that the United States has set aside so rich and vast an area... treasures that merit protection on behalf of the American people." Not everyone shared the enthusiasm or opinion of President Clinton about the act. Many business owners and residents remained defiant about the new restrictions. They considered it an unfair expansion of public lands at the expense of the rights and interests of private property owners. Yet there are those who deeply care for the desert's rich natural heritage and appreciate this wilderness as a place of solitude and a source of inspiration. They support the government's continued role in protecting these public lands, California's part of the global desert band.



Clouds over desert

## California Common Core State Standards Descriptions for Grades 9–10

### Reading Standards for Literacy in Science and Technical Subjects

- **RST.9–10.1:** Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.
- **RST.9–10.2:** Determine the central ideas or conclusions of a text; trace the text’s explanation or depiction of a complex process, phenomenon, or concept; provide an accurate summary of the text.
- **RST.9–10.4:** Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to *grades 9–10 texts and topics*.
- **RST.9–10.5:** Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., *force, friction, reaction force, energy*).
- **RST.9–10.6:** Analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, defining the question the author seeks to address.
- **RST.9–10.7:** Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.
- **RST.9–10.8:** Assess the extent to which the reasoning and evidence in a text support the author’s claim or a recommendation for solving a scientific or technical problem.
- **RST.9–10.10:** By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.

### Speaking and Listening Standards

- **SL.9–10.1:** Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grades 9–10 topics, texts, and issues*, building on others’ ideas and expressing their own clearly and persuasively.
  - c) Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions.
  - d) Respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement, and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented.
- **SL.9–10.2:** Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.
- **SL.9–10.4:** Present information, findings, and supporting evidence clearly, concisely, and logically (**using appropriate eye contact, adequate volume, and clear pronunciation**) such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose (**e.g., argument, narrative, informative, response to literature presentations**), audience, and task. **CA**

### Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects

- **WHST.9–10.2:** Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.
  - a) Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.
  - b) Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience’s knowledge of the topic.
  - c) Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts.
  - d) Use precise language and domain-specific vocabulary to manage the complexity of the topic and convey a style appropriate to the discipline and context as well as to the expertise of likely readers.

- f) Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).
- **WHST.9–10.8:** Gather relevant information from multiple authoritative print and digital sources (**primary and secondary**), using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation. **CA**

### California Common Core State Standards Descriptions for Grades 11–12

#### Reading Standards for Literacy in Science and Technical Subjects

- **RST.11–12.2:** Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
- **RST.11–12.7:** Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.
- **RST.11–12.9:** Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.

#### Speaking and Listening Standards

- **SL.11–12.1:** Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grades 11–12 topics, texts, and issues*, building on others' ideas and expressing their own clearly and persuasively.
  - c) Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives.
- **SL.11–12.2:** Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.