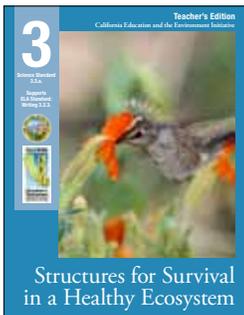




TEACH COMMON CORE STANDARDS WITH THE EEI CURRICULUM

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.

3.3.a.—Structures for Survival in a Healthy Ecosystem



In this unit, students learn ways in which species use their physical structures to support the processes of their life cycle, including growth, reproduction, and survival. They locate California habitats and identify physical structures that help organisms survive in those habitats. They compare plant life in two different habitats to determine if a plant’s physical structure will ensure its survival. Later, they investigate the role of a healthy ecosystem in an animal’s survival, examine how the growth and reproduction of flowering plants affect the survival of plants and animals, and plan a hummingbird habitat, using the knowledge they’ve gained from the unit and specific information about hummingbird needs and potential items to include in their gardens.

LESSONS

	RI.3.1	RI.3.2	RI.3.3	RI.3.4	RI.3.5	RI.3.7	RI.3.8	RI.3.9	RI.3.10	W.3.1	W.3.2	W.3.4	W.3.8	W.3.10	SL.3.1	SL.3.2	SL.3.3	SL.3.6	L.3.4	L.3.6
California Connections		✓	✓			✓			✓				✓		✓					
California's Natural Regions Reader	✓	✓		✓	✓	✓	✓		✓										✓	
1		✓	✓	✓		✓			✓				✓		✓				✓	
2	✓			✓	✓	✓	✓		✓	✓	✓					✓			✓	
3	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		✓		✓			✓	
4				✓							✓		✓			✓	✓	✓	✓	✓
5	✓			✓					✓		✓					✓		✓	✓	
Traditional Assessment	✓		✓								✓									
Alternative Assessment	✓		✓								✓									

COMMON CORE STANDARDS

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
- **L:** Language Standards
- **RI:** Reading Standards for Informational Text
- **SL:** Speaking and Listening Standards
- **W:** Writing Standards

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 and 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 20–21 of this document.

A Note about Common Core Speaking and Listening Standards

Many of the EEI units provide various learning structures, materials, and groupings that lead toward students working in pairs or small groups to discuss concepts and ideas. This 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 in collaborative discussion techniques, students can be placed in pairs or small groups to discuss the lesson topics. To aid in teacher planning, the lessons are listed below along with their learning structures for whole class, pairs/partners, and/or small groups.

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

National Geographic Resources

- **Habitats** wall map (Lessons 1, 2, and 3)

Unit Assessment Options

Assessments	Common Core Standards and Applications
Traditional Assessment	
<p>Students use words from a word bank to fill in blanks in sentences. Then they answer multiple choice questions, write sentence answers to questions, and write two paragraphs which give explanations or descriptions.</p>	<p>RI.3.1 Ask and answer questions to demonstrate understanding...</p> <p>RI.3.3: Describe the relationship between a series of... scientific ideas...</p> <p>W.3.2: Write informative/explanatory texts...</p> <p>b) Develop the topic with facts...and details.</p> <p>c) Use linking words and phrases...</p>
Alternative Assessment	
<p>Students complete a chart about animals' body parts and survival. Then they look at pictures to complete sentences about plant structures and their purposes. They also respond to short answer questions about the interaction of animals, plants and humans for survival.</p>	<p>RI.3.1 Ask and answer questions to demonstrate understanding...</p> <p>RI.3.3: Describe the relationship between a series of... scientific ideas...</p> <p>W.3.2: Write informative/explanatory texts...</p> <p>b) Develop the topic with facts...and details.</p> <p>c) Use linking words and phrases...</p>

Lesson 1: Structures That Help

Students use a map to locate California habitats. They read about physical structures that help plants and animals survive in their habitats. As a class, and in small groups, students chart how structures are used to survive and what may happen if there are changes to the environment.



National Geographic Resources

- **Habitats** wall map

Use this correlation in place of the **Procedures** on page 42 of the Teacher’s Edition.

Procedures	Common Core Standards and Applications
Vocabulary Development	
<p>Use the Dictionary Workbook and the vocabulary Word Wall Cards to introduce new words to students as appropriate. Ask students to write their name in the space provided in the Dictionary. These documents are provided separately.</p> <p>Tip: <i>If you are going to reuse the Dictionary Workbooks from year to year, do not have students write in them.</i></p>	<p>L.3.4d: Use glossaries or beginning dictionaries...to determine or clarify the precise meaning of key words and phrases in all content areas. CA</p> <p>RI.3.4: Determine the meaning of general academic and domain-specific words and phrases in a text...</p>
Step 1	
<p>Direct students’ attention to the Habitats wall map. Tell students this wall map shows 10 different habitats in California, as well as some of the animals and plants that live there.</p> <p>Point out the inset “Mixed Evergreen and Conifer Forest.” Point to and name the lodgepole pine, the pileated woodpecker, and the fisher. Tell students that these are some of the forest plants and animals they will learn about in this unit.</p> <p>Point to the map key and identify the symbol for mixed evergreen and conifer forests. Point out and mark the approximate location of your community on the wall map. Ask for a student volunteer to find the nearest mixed evergreen forest.</p>	<p>RI.3.7: Use information gained from...(e.g., maps)...to demonstrate understanding...</p> <p>Suggestion: <i>As they read the text in the following steps, have students refer back to what they know from the map to increase understanding of the text.</i></p>
Step 2	
<p>Refer to the Word Wall Cards for the word “structure,” and review the definition. Ask students to imagine that they are looking at their reflection in a mirror and examining their teeth. Tell them that teeth are a structure. Ask students, “What is the purpose of teeth? What do you use them for?” (<i>Chewing food</i>) “How do your teeth help you live and grow?” (<i>They help us eat so we can live and grow.</i>)</p> <p>Tell students that as they read about some forest plants and animals, they should think about the organisms’ physical structures and how those structures are used.</p>	<p>L.3.4d: Use glossaries or beginning dictionaries...to determine or clarify the precise meaning of key words and phrases in all content areas. CA</p> <p>RI.3.4: Determine the meaning of general academic and domain-specific words...</p>

Procedures	Common Core Standards and Applications
Step 3	
<p>Distribute a California Connections: Roots and Trunks, Beaks and Claws reader to each student. Have students take turns reading pages 2–21. Talk about the photographs on each page, focusing on the plant or animal structures.</p>	<p>RI.3.2: Determine the main idea of a text; recount the key details and explain how they support the main idea. Suggestion: <i>Reread the text, this time having students identify the physical structures of the plants and animals that are described and how they are used.</i></p> <p>RI.3.3: Describe the relationship between a series of...scientific ideas...in a text... Suggestion: <i>During or after reading the text, have students compare the functions of the structures for the different animals and plants.</i></p> <p>RI.3.7: Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur). Suggestion: <i>Have students identify the illustrations and text that work together to explain where, when, why and how key events occur.</i></p> <p>RI.3.10: ...read and comprehend informational texts, including...science...texts...independently and proficiently.</p>
Step 4	
<p>Tell students that plants and animals need these structures to survive. Explain that even with these structures, plants and animals need to be healthy and live in a healthy environment if they are to grow, live, and reproduce.</p> <p>Distribute a Student Workbook to each student. Tell them to turn to What Are Structures For? (Student Workbook, pages 2–5). Project What Are Structures For? (Visual Aid #1). Use the lodgepole pine to model one set of responses for students. (<i>Note: Remind students that needles are this plant’s leaves. Tell them that like leaves, needles use sunlight to make food.</i>) Write students’ responses in the appropriate columns on What Are Structures For? Tell students to do the same thing on their copy of What Are Structures For? Organize students into small groups to complete What Are Structures For? Tell students to record their answers on their own copy of What Are Structures For? Allow students to refer to the California Connections: Roots and Trunks, Beaks and Claws reader as they complete the activity.</p>	<p>RI.3.2: Determine the main idea...key details... Suggestion: <i>Model how to locate the key details in the text to write the information on the workbook page.</i></p> <p>SL.3.1: Engage effectively in a range of collaborative discussions...(in groups)...building on others’ ideas and expressing their own clearly. Suggestion: <i>Prior training in collaborative conversation protocols will increase the collaborative nature of this small group task.</i></p> <p>W.3.8: Recall information from experiences or gather information from print...sources; take brief notes on sources and sort evidence into provided categories. Suggestion: <i>Assist students in understanding which item of information to place in each category.</i></p>
Optional	<p>Complete What Are Structures For? as a class. Have students volunteer answers. Instruct students to record the answers on their copies of What Are Structures For?</p> <p>RI.3.2: Determine the main idea...key details... Suggestion: <i>Model how to locate the key details in the text to write in the information.</i></p>
Step 5	
<p>Gather the California Connections: Roots and Trunks, Beaks and Claws readers.</p> <p>Collect Student Workbooks and use What Are Structures For? for assessment.</p>	n/a

Lesson 2: When Structures Are Not Enough!

Students locate low desert habitats and discuss characteristics of desert environments. They identify a plant in the desert and one in a habitat near their community, discuss the plants' structures, and answer the following question: "Are structures enough to help a plant survive in its habitat?"



National Geographic Resources

- **Habitats** wall map

Use this correlation in place of the **Procedures** on pages 54–55 of the Teacher’s Edition.

Procedures	Common Core Standards and Applications
Vocabulary Development	
<p>Use the Dictionary Workbook and the vocabulary Word Wall Cards to introduce new words to students as appropriate.</p>	<p>L.3.4d: Use glossaries or beginning dictionaries...to determine or clarify the precise meaning of key words and phrases in all content areas. CA</p> <p>RI.3.4: Determine the meaning of general academic and domain-specific words and phrases in a text...</p>
Step 1	
<p>Locate your community (or the closest town or city) on the Habitats wall map. Point to the map scale and explain that the scale line represents 50 miles. Show students the cutout of the Local Region Ring (Teacher’s Masters, page 2). Point out the map scale and explain that, according to the map scale, this circle shows an area that is 100 miles across. Mention that 100 miles is about the distance that a car travels in light traffic on a highway in two hours. Center the circle on your community and trace the Local Region Ring on the wall map. Tell students that this area is their local region of California and that they will study plants and animals of this region closely during this unit. (<i>Note: Keep the Local Region Ring for use in subsequent lessons.</i>)</p> <p>Tip: Ask students to consider how knowing the location of the region they are about to read about might help them understand the information.</p>	n/a
Step 2	
<p>Tell students they will be looking at plants of the low desert as examples of plant and animal structures. Then, they will be looking at structures of a plant of their own local region. Invite a student to use the map key to locate and point out low desert habitats. Ask students, "How would you describe a desert environment?" (<i>Hot, sandy, and dry; gets little rain; has a lot of cacti; animals hide during the day to stay cool, come out at night.</i>)</p>	<p>RI.3.7: Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).</p> <p>Suggestion: While continuing with the lesson in the following steps, refer back to the map and have students explain how the information on the map helps with understanding the information they read, and vice versa.</p>

Procedures	Common Core Standards and Applications
Step 3	
<p>Distribute a California Connections: California's Natural Regions reader to each student. Explain that this book includes information about each of the habitats presented on the wall map. Tell students that they will use this book in the next two lessons as they learn about the survival of plants and animals in California habitats. Have students turn to the "Low Desert" chapter, pages 34–37.</p> <p>Tip: <i>It may be valuable to have students briefly explore the rest of the sections of the book to realize the number of other habitats. These readers could be used for enrichment reading throughout the year. They are also used in other grade 3 EEI Units.</i></p>	n/a
Step 4	
<p>Project Low Desert (Visual Aid #2), and point out the different plants and animals of the habitat. Tell students that they will study the structures of the ocotillo to learn how those structures help the plant grow, reproduce, and survive in the desert environment. Have students read along silently as you read aloud about the plants in the "Low Desert" chapter, pages 34–37.</p>	<p>L.3.4a: Use sentence-level context as a clue to the meaning of a word or phrase.</p> <p>RI.3.4: Determine the meaning of general academic and domain-specific words...</p> <p>Suggestion: <i>While reading pages 34–37, have students point out the surrounding context that helps define terms such as "flash flood," and "succulents."</i></p> <p>RI.3.7: Use information gained from illustrations...</p> <p>Suggestion: <i>Use this visual aid as an overview of some of the animal and plant life that will be explained in the text.</i></p> <p>RI.3.8: Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison...)...</p> <p>Suggestion: <i>While reading, note with students words that show logical structure, such as comparison words on page 34 to compare the low desert with the high desert.</i></p> <p><i>After reading the text, review each page, this time focusing on the logical connections between sentences and paragraphs. Have students locate transition/connecting words and sentences, and trace how the selection moves from one topic to another. Students may even critique one of the subheadings "Desert Wildlife" by noting that only one paragraph following the subheading discusses wildlife, while the rest continue to describe plants.</i></p> <p>RI.3.10: ...read and comprehend informational texts, including...science...texts...independently and proficiently.</p>
Step 5	
<p>Project Ocotillo Plant Structures (Visual Aids #3–4). Redistribute a Student Workbook to each student. Tell students to turn to Ocotillo Structures for Survival (Student Workbook, pages 6–7). As you introduce the ocotillo plant, have students complete Part 1, labeling the plant structures and writing a sentence to explain how each structure helps the ocotillo survive, grow, or reproduce.</p>	<p>RI.3.1: Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.</p> <p>Suggestion: <i>Ensure that students identify the text that supports the answers they write.</i></p>

Procedures	Common Core Standards and Applications
Step 6	
<p>Ask the following questions to help students summarize the ways in which various structures of the ocotillo help the plant survive, grow, or reproduce:</p> <ul style="list-style-type: none"> ■ Which parts help the plant grow? (<i>Leaves, roots, stems</i>) ■ Which parts help it reproduce? (<i>Flowers, seeds</i>) ■ Which parts help it survive? (<i>Thorns protect the ocotillo from being eaten by animals, but all of the structures help the plant to survive.</i>) 	<p>RI.3.1: Ask and answer questions...of a text...</p>
Step 7	
<p>In the California Connections: California's Natural Regions reader, have students turn to the chapter most appropriate to your region. Identify a plant in the illustration at the beginning of the chapter. Tell students which plant they will study, based on your region:</p> <ul style="list-style-type: none"> ■ Alpine Meadow, page 2: alpine gold (Visual Aids #5–6) ■ Grasslands, page 26: purple needlegrass (Visual Aids #17–18) ■ High Desert, page 30: Joshua tree (Visual Aids #13–14) ■ Mixed Evergreen and Conifer Forest, page 6: lodgepole pine (Visual Aids #15–16) ■ North Coastal Forest (Redwood), page 10: coast redwood (Visual Aids #11–12) ■ Oak Woodland, page 14: Chinese houses (Visual Aids #9–10) ■ Sagebrush Scrub and Pinyon-Juniper Woodland, page 22: single-leaf pinyon (Visual Aids #19–20) ■ Scrubland and Chaparral, page 18: chamise (Visual Aids #7–8) 	<p>RI.3.5: Use text features...to locate information...</p>
Step 8	
<p>Project the Plant Structure visual aids appropriate to your region (Visual Aids #3–20). Read the text on the pair of visual aids to introduce the plant. Review the sample plant structure for your local region and discuss how each structure helps the plant grow, survive, and reproduce in your local habitat.</p>	<p>RI.3.7: Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text...</p> <p>Suggestion: <i>Have students explain how the labeled illustration, the text beneath it, and the text describing each plant structure work together to create understanding of the text.</i></p>

Procedures	Common Core Standards and Applications
Step 9	
<p>Tell students they will revisit the ocotillo to discuss how the health of its habitat affects its survival. Begin a discussion by asking students the following questions:</p> <ul style="list-style-type: none"> ■ What things might make a desert habitat unhealthy? (<i>Too much rain, not enough rain</i>) ■ What would happen to an ocotillo if something made the desert habitat unhealthy for the plant? (<i>It may be unable to grow and reproduce.</i>) ■ If there is less than the normal amount of rain, will the plant's structures still help the ocotillo survive? (<i>No</i>) Why? (<i>If there is not enough rain, the roots underground will not get water to pass on to the plant. Without water, the plant cannot grow and will not live to reproduce. It will die.</i>) ■ Is the healthy functioning of all of a plant's structures enough to enable the plant to survive? (<i>No. A plant also needs a healthy environment that provides the resources the plant requires for its survival.</i>) 	<p>SL.3.2: Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.</p> <p>Suggestion: <i>After the questions have been answered and explained, have students summarize the main idea and supporting details with partners. Use sentence frames if needed:</i></p> <ul style="list-style-type: none"> ■ One way a desert habitat could be unhealthy is _____. ■ An unhealthy habitat can affect a plant by _____. ■ If there is not enough rain, the plant's structures _____. ■ In addition to healthy structures, a plant needs _____ to survive.
Step 10	
<p>Have students complete Part 2 of Ocotillo Structures for Survival.</p>	<p>W.3.1: Write opinion pieces...supporting a point of view with reasons.</p> <p>a) ...state an opinion...</p> <p>b) Provide reasons that support the opinion.</p> <p>c) Use linking words and phrases (e.g., <i>because, therefore, since, for example</i>) to connect opinion and reasons.</p> <p>W.3.2: Write informative/explanatory texts to...convey... information clearly.</p> <p>b) Develop the topic with facts, definitions, and details.</p> <p>Suggestion: <i>Before students write, review appropriate linking words and sentence structures for answering the questions.</i></p>
Step 11	
<p>Gather the California Connections: California's Natural Regions readers.</p> <p>Collect Student Workbooks and use Ocotillo Structures for Survival for assessment.</p>	<p>RI.3.7: Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text...</p> <p>Suggestion: <i>Before gathering the student readers, refer back to the map and have students explain how the information from the map, the diagrams in the visual aids, and the text from the reader work together to help readers understand the main ideas and details.</i></p>

Lesson 3: Do Animal Structures Guarantee Survival?

Students observe photographs and read about structures of a desert animal and an animal from a local ecosystem. They discuss how each animal's survival depends on a healthy ecosystem. On postcards, students describe one structure that helps the Merriam's kangaroo rat survive in a healthy ecosystem.



National Geographic Resources

- **Habitats** wall map

Use this correlation in place of the **Procedures** on pages 84–85 of the Teacher's Edition.

Procedures	Common Core Standards and Applications
Vocabulary Development	
Use the Dictionary Workbook and the vocabulary Word Wall Cards to introduce new words to students as appropriate.	<p>L.3.4d: Use glossaries or beginning dictionaries...to determine or clarify the precise meaning of key words and phrases <i>in all content areas</i>. CA</p> <p>RI.3.4: Determine the meaning of general academic and domain-specific words and phrases in a text...</p>
Step 1	
Direct students' attention to the Habitats wall map and point to the low desert region. Project Low Desert (Visual Aid #2), and point out the different animals.	n/a
Step 2	
Redistribute a California Connections: California's Natural Regions reader to each student. Tell students to turn to the "Low Desert" chapter, pages 34–37, and look at the animals as you identify each one. Tell students to follow along as you read aloud about the animals in this habitat.	<p>RI.3.3: Describe the relationship between a series of...scientific ideas...using language that pertains to...cause/effect.</p> <p>Suggestion: <i>While reading aloud, have students listen for any relationships between the scientific ideas or concepts that are presented, especially the reasons certain animals live in this habitat and what makes it possible for them to survive.</i></p> <p>RI.3.10: ...read and comprehend informational texts, including...science...texts...independently and proficiently.</p> <p>Suggestion: <i>After reading a portion of the text aloud, have students reread it to a partner to practice reading independently.</i></p> <p>SL.3.2: Determine the main ideas and supporting details of a text read aloud...</p> <p>Suggestion: <i>Ask students to pay attention to the main ideas and how they are supported by details in the text. Pause at times to have students turn to partners and share what they just read.</i></p>

Procedures	Common Core Standards and Applications
Step 3	
<p>Project Merriam’s Kangaroo Rat Animal Structures (Visual Aids #21–22). Tell students they will study the structures of the Merriam’s kangaroo rat to understand how its structures help it survive in the low desert environment. Have students read along silently as you read aloud the paragraph at the bottom of the visual aid.</p>	<p>RI.3.7: Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text...</p> <p>Suggestion: <i>Have students explain how the labeled illustration, the text beneath it, and the text describing each animal structure work together to create understanding of the text.</i></p>
Step 4	
<p>Redistribute a Student Workbook to each student. Tell them to turn to Merriam’s Kangaroo Rat Structures for Survival (Student Workbook, pages 8–9). As you introduce Merriam’s kangaroo rat, have students complete Questions 1 and 2, labeling the animal structures and writing a sentence to explain how each structure helps the kangaroo rat survive, grow, or reproduce in the low desert habitat. Review students’ responses as you fill in the answers on the visual aid, and allow them to correct any misconceptions.</p>	<p>RI.3.1: Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.</p>
Step 5	
<p>Ask the following questions to help students summarize the ways in which the kangaroo rat’s various structures help the animal to survive, grow, or reproduce:</p> <ul style="list-style-type: none"> ■ Which parts help the animal grow? (<i>Cheek pouches for collecting seeds for food to support growth</i>) ■ Which parts help it reproduce? (<i>Cheek pouches for collecting seeds for food and water to give the animal strength for reproduction</i>) ■ Which parts help the kangaroo rat survive? (<i>Cheek pouches for collecting seeds for food; eyes, ears, and feet that help kangaroo rat avoid predators</i>) 	<p>RI.3.1: Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.</p> <p>Suggestion: <i>Before asking the questions in the procedures, have students suggest questions that could be asked and answered from the text. Encourage them to refer to the specific part of the text that answers their questions.</i></p>
Step 6	
<p>Refer to the Habitats wall map. Invite a student to point out the location of your community and identify nearby habitats. (<i>Note: A dot was placed on the correct location during Lesson 1.</i>) Tell students they will study an animal from one of those habitats.</p>	<p>n/a</p>

Procedures	Common Core Standards and Applications
Step 7	
<p>In the California Connections: California's Natural Regions reader, have students turn to the chapter related to the selected "local" habitat studied in Lesson 2. Identify an animal in the illustration at the beginning of the chapter. Tell students which animal they will study, based on your region:</p> <ul style="list-style-type: none"> ■ Alpine Meadow, page 2: pika (Visual Aids #31–32) ■ Grasslands, page 26: tule elk (Visual Aids #35–36) ■ High Desert, page 30: desert tortoise (Visual Aids #25–26) ■ Mixed Evergreen and Conifer Forest, page 6: mountain bluebird (Visual Aids #27–28) ■ North Coastal Forest (Redwood), page 10: banana slug (Visual Aids #23–24) ■ Oak Woodland, page 14: western bluebird (Visual Aids #37–38) ■ Sagebrush Scrub and Pinyon-Juniper Woodland, page 22: pronghorn antelope (Visual Aids #33–34) ■ Scrubland and Chaparral, page 18: Pacific rattlesnake (Visual Aids #29–30) 	<p>RI.3.5: Use text features...to locate information...</p> <p>Suggestion: <i>Instead of telling students exactly which page to turn to, let them know the habitat they will be studying and have them use the features in the book to locate the specific pages.</i></p>
Step 8	
<p>Project the Animal Structures visual aids appropriate to your region. Read the text on the visual aids to introduce the animal. Review the sample animal structure for your local region and discuss how each structure helps the animal grow, survive, and reproduce in the local habitat.</p>	<p>RI.3.7: Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text...</p> <p>Suggestion: <i>Have students explain how the labeled illustration, the text beneath it, and the text describing each animal structure work together to create understanding of the text.</i></p> <p>RI.3.9: Compare and contrast the...key details presented in two texts on the same topic.</p> <p>Suggestion: <i>Students can compare the information obtained from the reader with the information obtained from this visual aid.</i></p>
Step 9	
<p>Tell students they will revisit the Merriam's kangaroo rat to discuss how the health of its habitat affects its survival. Begin a discussion by asking students the following questions:</p> <ul style="list-style-type: none"> ■ What things might make a desert habitat unhealthy? (<i>Too much rain or not enough rain for plants that produce seeds, such as ocotillo and creosote, that the Merriam's kangaroo rat depends on.</i>) ■ If there is less than the normal amount of rain, will the Merriam's kangaroo rats' structures still help it survive? (<i>No</i>) Why? (<i>Without enough rain, there will be fewer desert plants and fewer seeds for the kangaroo rat to eat and get water from. Without seeds, the kangaroo rat will have trouble growing, reproducing, and surviving. Some kangaroo rats will die.</i>) ■ Is the healthy functioning of all of an animal's structures enough to enable the animal to survive? (<i>No. An animal also needs a healthy environment that provides the things the animal requires for its survival.</i>) 	<p>SL.3.2: Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.</p> <p>Suggestion: <i>Encourage students to generate their own questions related to the Merriam's kangaroo rat and how its habitat can affect its survival.</i></p>

Procedures	Common Core Standards and Applications
Step 10	
<p>Have students complete Question 3 of Merriam’s Kangaroo Rat Structures for Survival.</p>	<p>W.3.1: Write opinion pieces...supporting a point of view with reasons.</p> <ul style="list-style-type: none"> a) ...state an opinion... b) Provide reasons that support the opinion. c) Use linking words and phrases (e.g., <i>because, therefore, since, for example</i>) to connect opinion and reasons. <p>W.3.2: Write informative/explanatory texts to...convey... information clearly.</p> <ul style="list-style-type: none"> b) Develop the topic with facts, definitions, and details. <p>Suggestion: Before students write, review appropriate linking words and sentence structures for answering the questions.</p>
Step 11	
<p>Tell students to turn to Greetings from the Low Desert (Student Workbook, pages 11–12). Project Greetings from the Low Desert (Visual Aid #39) as you tell students about the assignment. They are to imagine that they have just seen a kangaroo rat in the low desert habitat. They want to tell a friend about the animal. On the front of the postcard, have students label the structures of the Merriam’s kangaroo rat. Students should refer to Merriam’s Kangaroo Rat Structures for Survival for information. On the back of the postcard, have students write a personal letter telling how one of the kangaroo rat’s structures helps the animal survive, grow, or reproduce in a healthy low desert ecosystem. (Note: Have students refer to the board for letter content and format.) (Note: An Answer Key and Sample Answers for Greetings from the Low Desert are provided on pages 107–108.)</p>	<p>W.3.2: Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p> <p>W.3.4: With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose...</p> <p>W.3.10: Write routinely over...shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.</p> <p>Suggestion: Before students write, review the purpose of a postcard (friendly letter) and the tone and type of writing that should be used to convey the factual information on the postcard. Remind them to include specific details.</p>
Step 12	
<p>Gather the California Connections: California’s Natural Regions readers.</p> <p>Collect Student Workbooks and use Merriam’s Kangaroo Rat Structures for Survival for assessment.</p>	n/a

Lesson 4: Plants, Animals, and People

Students learn that the fruits and vegetables they eat require an animal to ensure the plants' growth and survival. They sequence the events in an apple tree's life cycle and then discuss the implications of disruptions to this cycle for the plant, animals, and humans.



Use this correlation in place of the **Procedures** on pages 114–115 of the Teacher's Edition.

Procedures	Common Core Standards and Applications
Vocabulary Development	
<p>Use the Dictionary Workbook and the vocabulary Word Wall Cards to introduce new words to students as appropriate.</p>	<p>L.3.4d: Use glossaries or beginning dictionaries...to determine or clarify the precise meaning of key words and phrases in all content areas. CA</p> <p>RI.3.4: Determine the meaning of general academic and domain-specific words and phrases in a text...</p>
Step 1	
<p>Project What Do These Have in Common? (Visual Aid #40). Ask students to look at the photographs and think about what all of the items have in common. Have volunteers share their ideas. <i>(All of the items are types of food; all grow on farms; all come from plants.)</i></p> <p>Tell students that all of these food items come from plants with flowers and that all reproduce with the help of animals. Inform students that reproduction is the process a living thing goes through to create a baby plant or animal. Explain that today they will learn about how an apple trees grows and reproduces and how this affects other plants, animals, and people.</p>	n/a
Step 2	
<p>Explain to students that plants with flowers have special structures that help them reproduce. Project Pollen (Visual Aid #41). Explain that plants make a substance called pollen. Ask students to describe pollen. <i>(It looks like fine yellow dust; if you brush against it, it falls off.)</i></p>	<p>L.3.6: Acquire and use accurately grade-appropriate... domain-specific words and phrases...</p> <p>Suggestion: Ask students to turn to a partner and summarize the main points, being sure to use the words "structures" and "reproduce."</p> <p>SL.3.2: Determine the main ideas and supporting details of... information presented...orally.</p>

Procedures	Common Core Standards and Applications
Step 3	
<p>Tell students that for a plant to grow a new seed, the pollen needs to move from one part of the plant to another part or to another plant. Ask students if they have any ideas about how pollination can happen. (<i>The wind may blow the pollen. An animal, such as a bee, a butterfly, or a hummingbird may carry the pollen.</i>) Tell students that when animals carry pollen from one plant to another, they do so accidentally. Project Bees (Visual Aid #43). Tell students that when bees go to a flower to get some pollen or nectar to eat, they brush against the pollen. The pollen sticks to their bodies. When they visit another flower, they leave the pollen behind. Remind students of the foods they looked at in Step 1, and inform them that insects carry pollen for all of these foods. They deliver the pollen from one flower to another. Ask students what might happen if there were no insects. (<i>None of the plants on the list could reproduce, and people would not be able to eat the fruit they produce.</i>)</p> <p>Tip: <i>Much of this lesson requires students to listen to information as it is presented. Review listening skills as well as how students should paraphrase and summarize the information presented. To increase comprehension, use structures such as think/pair/share, partner share, and whiteboard responses throughout each step.</i></p>	<p>SL.3.2: Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.</p> <p>SL.3.6: Speak in complete sentences...</p> <p>Suggestion: <i>When presenting the information, have students summarize the main points with partners. Use sentence frames as needed:</i></p> <ul style="list-style-type: none"> ■ For a plant to grow a new seed, the pollen _____. ■ Animals carry pollen _____. ■ The pollen sticks _____. ■ When a bee visits a new flower, it _____. ■ If there were no insects to carry pollen, _____. <p>Suggestion: <i>The last bullet lends itself to collaborative discussion. Encourage students to think about the many connections between plants, animals, and humans that could be affected if there were no insects to carry pollen.</i></p>
Step 4	
<p>Tell students they will think about all the steps that must happen for them to be able to eat apples, which grow on trees that are pollinated by bees. Redistribute a Student Workbook to each student. Tell students to turn to How I Get an Apple (Student Workbook, pages 13–14). Give each student a set of Apple Cards (Teacher’s Masters, page 3) and a pair of scissors and glue. Have students cut apart the Apple Cards and then sequence the cards to show how an apple tree grows. (<i>Note: Students should not glue the Apple Cards to the How I Get an Apple until they have been checked.</i>) When all students have finished sequencing the cards, have them compare their answers with those of the person sitting next to them.</p>	<p>SL.3.2: Determine the main ideas and supporting details of... information presented...orally.</p> <p>Suggestion: <i>This activity helps students visually summarize what they listened to and verbalized in the previous steps.</i></p> <p><i>When students finish their diagrams, they can orally explain the sequence of the events represented by the cards, using transition words to show sequence.</i></p>

Procedures	Common Core Standards and Applications
Step 5	
<p>Ask students the following questions to explore how reproduction and growth are necessary for the survival of the apple tree population, the bee population, and humans:</p> <ul style="list-style-type: none"> ■ What kinds of things do you think an apple tree needs to survive? (<i>Sunlight, water, nutrients from the soil</i>) ■ What is one animal that an apple tree needs to reproduce? (<i>Bees move pollen from one flower to another.</i>) ■ If an apple tree does not have bees, can it survive? (<i>Yes, the tree can survive, but it will not be able to make seeds and reproduce. It will not be able to make new apple trees.</i>) ■ What do bees need to survive? (<i>Nectar and pollen from the apple blossoms</i>) ■ If apple trees were cut down, what would happen to the bees? (<i>They would not survive unless there were other flowers to provide nectar and pollen.</i>) ■ Many bees in the United States have died over the past decade, possibly from disease. What would happen to people if there were no bees? (<i>Many crops could not make fruit or reproduce. People would not have as many kinds of food plants.</i>) 	<p>SL.3.2: Determine the main ideas and supporting details of... information presented...orally.</p> <p>SL.3.3: Ask and answer questions about information from a speaker...</p> <p>SL.3.6: Speak in complete sentences...</p> <p>Suggestion: <i>Have students summarize the information with the class or with partners, using sentence frames as needed:</i></p> <ul style="list-style-type: none"> ■ Apple trees need _____, _____, and _____ to survive. ■ An apple tree needs _____ to reproduce. ■ Without bees, apple trees _____. ■ Bees need _____ to survive. ■ Without apple trees, bees would _____. ■ People would be affected if too many bees die from disease because _____. <p><i>After the discussion, have students complete How to Get an Apple (Student Workbook, page 14).</i></p> <p><i>Before completing the page, review linking words that show cause and effect relationships in sentences. Example:</i> <i>"If _____, then _____."</i></p> <p>W.3.2: Write informative/explanatory texts to...convey... information clearly.</p> <p>b) Develop the topic with facts, definitions, and details.</p> <p>c) Use linking words and phrases...to connect ideas...</p> <p>W.3.8: Recall information from experiences or gather information from print...sources; take brief notes on sources and sort evidence into provided categories.</p>
Step 6	
<p>Have students glue their sequenced cards onto How I Get an Apple and answer the questions.</p> <p>Collect Student Workbooks and use How I Get an Apple for assessment.</p>	n/a

Lesson 5: Building a Hummingbird Habitat

Students look at photos of two animals that help plants survive. They examine the needs of hummingbirds for reproduction, growth, and survival; use a mock garden catalog to plan a habitat for hummingbirds; and describe how humans can help hummingbirds meet their survival needs.



Use this correlation in place of the **Procedures** on pages 128–129 of the Teacher’s Edition.

Procedures	Common Core Standards and Applications
Vocabulary Development	
<p>Use the Dictionary Workbook and the vocabulary Word Wall Cards to introduce new words to students as appropriate.</p>	<p>L.3.4d: Use glossaries or beginning dictionaries...to determine or clarify the precise meaning of key words and phrases <i>in all content areas</i>. CA</p> <p>RI.3.4: Determine the meaning of general academic and domain-specific words and phrases in a text...</p>
Step 1	
<p>Project Animals Helping Plants (Visual Aid #43). Ask students the following questions to prompt discussion:</p> <ul style="list-style-type: none"> ■ What do you observe in these two photos? (<i>One is a bee; one is a hummingbird.</i>) ■ What are these animals doing, and why? (<i>They are getting nectar and pollen to eat. This food helps them survive.</i>) ■ How are these animals helping the plants? (<i>They are pollinating the plants by taking pollen from one flower to another; this allows the plants to make new seeds and reproduce.</i>) ■ Bees and hummingbirds have different structures on their bodies that help them eat. This makes them choose different kinds of flowers. What is different about the flowers from which the two animals get their food? (<i>Hummingbirds have long beaks and tongues that can reach inside a flower that is long and shaped like a tube; bees cannot fit in flowers with long tubes, so the flowers they eat from are more open.</i>) 	<p>SL.3.2: Determine the main ideas and supporting details of... information presented...orally.</p> <p>SL.3.6: Speak in complete sentences...</p> <p>Suggestion: Have students summarize the information with the class or with partners, using sentence frames as needed.</p> <ul style="list-style-type: none"> ■ Hummingbirds and bees help plants by _____. ■ Hummingbirds have _____ so they seek flowers that _____. ■ Bees have _____, so they seek flowers that _____.
Step 2	
<p>Remind students that in Lesson 4, they learned that bees help plants grow and reproduce, benefiting humans. Explain that in this lesson, they will learn about ways in which humans can help animals survive. Students will consider how humans can create a habitat that can support hummingbirds.</p>	<p>n/a</p>

Procedures	Common Core Standards and Applications
Step 3	
<p>Distribute a set of What Anna’s Hummingbirds Need (Information Card #1) to each pair of students. Project What Anna’s Hummingbirds Need (Visual Aids #44–45). Explain to students that they will create a habitat for hummingbirds. To do so, they will need to understand what hummingbirds need to grow, reproduce, and survive. Read the information with students, pointing to the relevant photos to indicate the kinds of flowers the hummingbirds eat from. Ask the following questions to check for understanding:</p> <ul style="list-style-type: none"> ■ Can the hummingbird survive in a garden without water? (<i>No. The hummingbird needs water to drink and to wash off its wings.</i>) ■ Can the hummingbird grow in a garden with flowers that bloom only in spring? (<i>No. The bird eats lots of nectar year-round.</i>) ■ What do long, tube-like flowers need to reproduce? (<i>They need hummingbirds to pollinate them so that they can produce seeds.</i>) ■ Do tube-like flowers need insects to reproduce? Why? (<i>Yes. These flowers are pollinated by hummingbirds, which eat insects to survive. Without insects, the hummingbirds cannot pollinate the plants.</i>) 	<p>RI.3.1: Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.</p> <p>Suggestion: <i>Have students identify the text that supports their reasoning for selecting the items for their garden.</i></p> <ul style="list-style-type: none"> ■ Hummingbirds need water to _____. ■ Hummingbirds need flowers that bloom _____ because _____. ■ Tube-like flowers need _____ to reproduce. ■ Tube-like flowers need insects to survive because _____. <p>RI.3.10: ...read and comprehend informational texts, including...science...texts...independently and proficiently.</p> <p>Suggestion: <i>Have students read the Information Card again with a partner, pausing to identify reasons why the hummingbird needs each item.</i></p> <p>SL.3.2: Determine the main ideas and supporting details of... information presented...orally.</p> <p>SL.3.6: Speak in complete sentences...</p>
Step 4	
<p>Redistribute a Student Workbook to each student. Tell students to turn to Our Hummingbird Habitat (Student Workbook, pages 15–17).</p> <p>Distribute a copy of Garden Catalog (Information Cards #2–4) to each pair of students. Explain that each pair is to plan a garden that will provide all the things necessary for a population of Anna’s hummingbirds to grow, reproduce, and survive. Tell students that they will need to use the clues on What Anna’s Hummingbirds Need to figure out what kinds of plants and other items should be included in their garden.</p> <p>Ask students, “Have you seen any hummingbirds near school or in your neighborhood?” Have them think about the types of plants the hummingbirds were visiting. Explain that they may add this information to their hummingbird habitat plan.</p>	<p>RI.3.1: Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.</p> <p>Suggestion: <i>Tell students that as they make their decisions about which plants and other items they will use, they should support their choices with explicit information from the text in What Anna’s Hummingbirds Need.</i></p>

Procedures	Common Core Standards and Applications
Step 5	
<p>Have student pairs identify items from the Garden Catalog that they would like to use. Tell students that not all items in the catalog are important for hummingbirds. They must be careful to provide things that will help meet all the hummingbirds' survival needs.</p> <p>Review the instructions for Our Hummingbird Habitat. Ask for a student volunteer to select one item and explain its importance. (For example, a student may pick gooseberries because they provide "nectar for birds to eat in winter and early spring.") Write the student response on the board. When students understand the instructions, allow them to work in pairs to create a map of their proposed garden habitat. (Note: <i>An Answer Key and Sample Answers for Our Hummingbird Habitat are provided on pages 140–142.</i>)</p>	<p>RI.3.1: ...demonstrate understanding of a text, referring explicitly to the text...</p> <p>Suggestion: Remind students that they should support each choice they make with specific information they learned from the text in What Anna's Hummingbirds Need. While students are working, walk around and ask groups to point to and explain the textual information that supports their choices.</p> <p>In addition, have students identify items from the Garden Catalog that shouldn't be placed in the garden, explaining why. (examples: pond, poppy, eucalyptus tree; see Teacher's Edition, page 141 for reasons)</p> <p>W.3.2: Write informative/explanatory texts to...convey... information clearly.</p> <p>c) Use linking words and phrases...to connect ideas...</p> <p>Suggestion: Have students complete Our Hummingbird Habitat, (Student Workbook, page 16, #4). To ensure use of complete sentences, fill in one row together. Discuss linking words to use in their sentences (because, since, etc.).</p>
Step 6	
<p>Tell students to turn to How I Built a Garden (Student Workbook, page 18). Have them complete the questions independently in class or as homework. When the work is completed, review and discuss the answers as a class.</p> <p>Gather information cards.</p> <p>Collect Student Workbooks and use How I Built a Garden for assessment.</p>	<p>W.3.2: Write informative/explanatory texts to...convey... information clearly.</p> <p>c) Use linking words and phrases...to connect ideas...</p> <p>Suggestion: Before writing, discuss linking words that will lead toward answering "why" (because, since, due to, etc.).</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.

California Common Core State Standards Descriptions

Language Standards

- **L.3.4:** Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on *grade 3 reading and content*, choosing flexibly from a range of strategies.
 - a) Use sentence-level context as a clue to the meaning of a word or phrase.
 - d) Use glossaries or beginning dictionaries, both print and digital, to determine or clarify the precise meaning of key words and phrases **in all content areas. CA**
- **L.3.6:** Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases, including those that signal spatial and temporal relationships (e.g., *After dinner that night we went looking for them*).

Reading Standards for Informational Text

- **RI.3.1:** Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
- **RI.3.2:** Determine the main idea of a text; recount the key details and explain how they support the main idea.
- **RI.3.3:** Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.
- **RI.3.4:** Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a *grade 3 topic or subject area*. (**See grade 3 Language standards 4–6 for additional expectations.**) **CA**
- **RI.3.5:** Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.
- **RI.3.7:** Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).
- **RI.3.8:** Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).
- **RI.3.9:** Compare and contrast the most important points and key details presented in two texts on the same topic.
- **RI.3.10:** By the end of the year, read and comprehend informational texts, including history-social studies, science, and technical texts, at the high end of the grades 2–3 text complexity band independently and proficiently.

Speaking and Listening Standards

- **SL.3.1:** Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 3 topics and texts*, building on others' ideas and expressing their own clearly.
- **SL.3.2:** Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
- **SL.3.3:** Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.
- **SL.3.6:** Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification. (See grade 3 Language standards 1 and 3 for specific expectations.)

Writing Standards

- **W.3.1:** Write opinion pieces on topics or texts, supporting a point of view with reasons.
 - a) Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons.
 - b) Provide reasons that support the opinion.
 - c) Use linking words and phrases (e.g., *because, therefore, since, for example*) to connect opinion and reasons.
- **W.3.2:** Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
 - b) Develop the topic with facts, definitions, and details.
 - c) Use linking words and phrases (e.g., *also, another, and, more, but*) to connect ideas within categories of information.
- **W.3.4:** With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
- **W.3.8:** Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.
- **W.3.10:** Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.