

WEEKLY OVERVIEW

Build Knowledge

New Ideas



Teach and Model

Close Reading and Writing



Reading/Writing Workshop

Practice and Apply

Close Reading and Writing



Literature Anthology

Big Ideas from Nature, 258-267 Genre Folktale Lexile 570 ETS TextEvaluator 33



"Perdix Invents the Saw," 270–271 Genre Myth Lexile 580 ETS *TextEvaluator* 28

"Bats Did It First," 230–235 Genre Expository Text Lexile 700 ETS *TextEvaluator* 20

Differentiated Texts



APPROACHING Lexile 570 ETS TextEvaluator 24



ON LEVEL
Lexile 660
ETS TextEvaluator 31

Leveled Readers



Lexile 790 ETS *TextEvaluator* 38

Lexile 650 ETS *TextEvaluator* 27

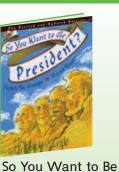
Extended Complex Texts



Martin Luther King, Jr. and the March on Washington Genre Biography Lexile 430 ETS *TextEvaluator* 29

President?
Genre Informational Text
Lexile 730
ETS TextEvaluator 41

Classroom Library



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T200 UNIT 3 WEEK 4

WEEK 4

Student Outcomes

Meaning Making

- Cite relevant evidence from text
- Determine main idea and key details
- Summarize text

RI.3.2, RI.3.5

Effective Expression

Write to Sources

- Draw evidence from informational texts
- Write informative texts
- Conduct extended research on overfishing

Writing Process

Prewrite a Book Review

Speaking and Listening

- Engage in collaborative discussions about new ideas
- Paraphrase portions of "Ideas From Nature"
- Present information on new ideas

SL.3.1a, SL.3.1d, SL.3.2, SL.3.3, W.3.2d, W.3.8, W.3.10, W.4.9b

Content Knowledge

Know that different solutions need to be tested to find which solves the problem.





Language Development

Conventions

Identify and use future-tense verbs

Vocabulary Acquisition

- Acquire and use academic vocabulary effective example identical imitate material model similar observed
- Use root words as clues to the meaning of a word

L.3.1e, L.3.2a, L.3.4a, L.3.4c, L.3.5b, RF.3.3b

Foundational Skills

Phonics/Word Study

- Prefixes pre-, dis-, mis-
- Syllables with final e

Spelling Words

misprint	misread	mistrust	misspell
mistreat	precut	preview	prepaid
preplan	preheat	distrust	discount
dishonest	discover	disable	

Fluency

Phrasing and rate

RF.3.3a, RF.3.4a, RF.3.4b, RF.3.4c, L.3.4.b



Professional Development

- See lessons in action in real classrooms.
- Get expert advice on instructional practices.
- Collaborate with other teachers.
- Access PLC Resources.



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INSTRUCTIONAL PATH



Talk About Ideas From Nature



Guide students in collaborative conversations.

Discuss the essential question: What ideas can we get from nature?

Develop academic language and domain specific vocabulary on ideas from nature.

Listen to "Ideas from Nature" to summarize ways nature inspires people to create new things.

2

Read "Bats Did It First"

Model close reading with a short complex text.

Read

"Bats Did It First" to learn about an idea that came from nature, citing text evidence to answer text-dependent questions.

Reread

"Bats Did It First" to analyze text, craft, and structure, citing text evidence.





3

Write About Ideas From Nature

Model writing to a source.

Analyze a short response student model.

Use text evidence from close reading to write to a source.

WEEK 4



Read and Write About **Ideas From Nature**

Practice and apply close reading of the anchor text.

Read

Big Ideas from Nature to learn how ideas from nature inspired new inventions.

Reread

Big Ideas from Nature and use text evidence to understand how the author presents examples of inventions that have been inspired by nature.

Write a short response about Big Ideas from Nature.

Integrate

Information about other inventions you have read about that were inspired by nature.

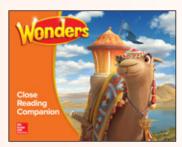
Write to Two Sources, citing text evidence from Big Ideas from Nature and "Perdix Invents the Saw."





Independent Partner Work

> Gradual release of support to independent work



- Text-Dependent Questions
- Scaffolded Partner Work Talk with a Partner Cite Text Evidence Complete a sentence frame.
- Guided Text Annotation



Integrate Knowledge and Ideas

Connect Texts

Text to Text Discuss how each of the texts answers the question: What ideas can we get from nature?

Text to Poetry Compare how organization of the texts read and of Christina Rosetti's poem, "What is Pink?," are similar.

Performance Task

Prewrite and draft.

DEVELOPING READERS AND WRITERS

Write to Sources



Day 1 and Day 2

Build Writing Fluency

• Quick write on "Bats Did it First," p. T228

Write to a Source

- Analyze a student model, p. T228
- Write about "Bats Did it First," p. T229
- Apply Writing Trait: Strong Conclusions, p. T228
- Apply Grammar Skill: Future-Tense Verbs, p. T229



Day 3

Write to a Source

- Write about Big Ideas from Nature, independent practice, p. T225L
- Provide scaffolded instruction to meet student needs, p. T230



Day 4 and Day 5

Write to Two Sources

- Analyze a student model, pp. T230-231
- Write to compare Big Ideas from Nature with "Perdix Invents the Saw," p. T231

WEEK 4: PREWRITE

WEEK 5: DRAFT AND REVISE WEEK 6: PROOFREAD/EDIT, PUBLISH, EVALUATE





Genre Writing: Opinion Writing

Book Review Expert Model

- Discuss features of opinion writing
- Discuss the expert model

Prewrite

- Discuss purpose and audience
- Plan the topic



Model Graphic Features of a Book Review Organizer



Expert Student Model



Graphic Organizer

Grammar and Spelling Resources



Reading/Writing Workshop **Grammar Handbook** p. 483



Online Spelling and Grammar Games



Grammar Practice, pp. 66-70

Online PDFs



Phonics/Spelling Practice, pp. 79-84

For additional support for Standard English Learners, see the online SEL Handbook.

SUGGESTED LESSON PLAN

	READING		DAY 1	DAY 2				
	Teach, Model and Apply		Introduce the Concept T208-T209 Vocabulary T212-T213 Close Reading "Bats Did It First," T214-T217	Close Reading "Bats Did It First," T214-T217 Strategy Summarize, T218-T219 Skill Main Idea and Key Details, T220-T221 Vocabulary Strategy Root Words, T224-T225				
	Reading/Writing Workshop in the control of the cont	Listening Comprehension T210-T211	Genre Expository Text, T222-T223					
	LANGUAGE ARTS							
Whole Group	Writing Grammar	Core	Grammar Future-Tense Verbs, T232 Spelling Prefixes <i>pre, dis-, mis-,</i> T234 Build Vocabulary T236	Write About the Text Model Note-Taking and Write to a Prompt, T228-T229 Grammar Future-Tense Verbs, T232 Build Vocabulary T236				
	Spelling Build Vocabulary	Options	Write About the Text Writing Fluency, T228 Genre Writing Book Review: Read Like a Writer, T358	Genre Writing Book Review: Discuss the Expert Model, T358 Spelling Prefixes <i>pre-, dis-, mis,</i> T234				
	Opinion Book Review, T358-T363 Use with Weeks 4-6							
	Differentiated Instruction Use your data dashboard to determine each student's needs. Then select instructional support options throughout the week.							

APPROACHING LEVEL

Leveled Reader Inspired by Nature, T240-T241

"Hermes and the Lyre,"

Literature Circles, T241

Phonics/Decoding

Decode Word with Prefix pre-, T242

Build Words with Prefixes pre-, dis-, mis-, T242

Practice Words with Prefixes pre-, dis-, mis-, T243 Final e Syllables (VCe), T243

Vocabulary

- · High-Frequency and Vocabulary Words, T244 (2)
- Identify Related Words, T245
- Root Words, T245

Comprehension

- Identify Key Details, T246
- · Review Main Idea and Key Details, T247

Self-Selected Reading, T247

Fluency

Phrasing and Rate, T246

ON LEVEL

Leveled Reader Inspired by Nature, T248-T249

"Hermes and the Lyre," T249

Literature Circles, T249

Vocabulary

Review Vocabulary, T250 Root Words, T250

Comprehension Review Main Idea and Key Details, T251

Self-Selected Reading, T251

DESIGNATED ELD See pages 354-379 of the ELD Teacher's Edition.

Emerging, Expanding, **Bridging**







Oral Language/Vocabulary

- Explore the Essential Question: What ideas can we get from nature?
- Develop Vocabulary and Academic Language

Small Group





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WEEK 4

DAY 3 DAY 4 DAY 5 Close Reading Big Ideas Fluency T227 Integrate Ideas T238-T239 From Nature, T225A-T225L Close Reading "Perdix Invents the Saw," Text Connections T225M-T225N Inquiry Space Integrate Ideas Inquiry Space, T238-T239 **Weekly Assessment** Phonics/Decoding T226-T227 Close Reading Big Ideas From Nature, T225A-T225L Prefixes • Syllables with Final e **Write About Two Texts** Grammar Future-Tense Verbs, T233 Write About Two Texts Model Note-Taking and Taking Notes, T230 Analyze Student Model and Write to the Prompt, T231 Spelling Prefixes pre-, dis-, mis-, T235 Write About the Text T230 Genre Writing Book Review: Teach the Genre Writing Book Review: Choose Your Prewrite Minilesson, T359 Topic, T359 Genre Writing Book Review: Prewrite T359 **Grammar** Future-Tense Verbs, T233 Grammar Future-Tense Verbs, T233 Spelling Prefixes pre-, dis-, mis-, T235 Spelling Prefixes pre-, dis-, mis, T235 **Build Vocabulary T237 Build Vocabulary T237 Build Vocabulary T237**



Opinion Book Review, T358-T363 Use with Weeks 4-6

BEYOND LEVEL

Leveled Reader

Inspired by Nature, T252-T253

"Hermes and the Lyre," T253

Literature Circles, T253

Vocabulary

Review Domain-Specific Words, T254

- · Root Words, T254
- · Analyze, T254



Comprehension

Review Main Idea and Key Details, T255

- · Self-Selected Reading, T255
- · Independent Study, T255

ENGLISH LEARNERS

Shared Read

"Bats Did It First," T256-T257

Leveled Reader

Inspired by Nature, T258-T259

"Hermes and the Lyre," T259 Literature Circles, T259

Phonics/Decoding

Decode Words with Prefix pre-, T242 Build Words With Prefixes pre- dis-, mis-, T242

Practice Words with Prefixes pre-, dis-, mis- T243

Final e Syllables (VCe), T243

Vocabulary

- Preteach Vocabulary, T260
- Review High-Frequency Words, T244 Review Vocabulary, T260 Root Words, T261 Additional Vocabulary, T261

Spelling

Spell Words With Prefixes pre-, dis-, mis-, T262

Writing Writing Trait: Organization, T262

Grammar

Future-Tense Verbs, T263

Close Reading

- Read Aloud: "Ideas from Nature"
- "Bats Did It First."
- · Differentiated Texts: Inspired by a Bird

Writing/Grammar

- · Write to One Source
- Write to Two Sources
- Grammar: Future-Tense Verbs

Progress Monitoring

- Written Production
- Oral Production
- · Diagnose and Prescribe

DIFFERENTIATE TO ACCELERATE



Scaffold to Access Complex Text



the text complexity of a particular selection is too difficult for students

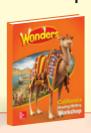


see the references noted in the chart below for scaffolded instruction to help students Access Complex Text.



TEXT COMPLEXITY

Reading/Writing Workshop



Literature Anthology



Leveled Readers



Classroom Library



"Bats Did It First"

Lexile 700 TextEvaluator_™ 20

Big Ideas from Nature

Lexile 670 TextEvaluator_™ 28

"Perdix Invents the Saw"

Lexile 580 TextEvaluator_™ 28

Approaching Level

Lexile 570 TextEvaluator_™ 24

Beyond Level

Lexile 790 TextEvaluator_™ 38

On Level

Lexile 660 TextEvaluator_™ 31

EL

Lexile 650 TextEvaluator_™ 27

Martin Luther King, Jr. and the March on Washington

Lexile 430

TextEvaluator_™ 29 So You Want to Be

Lexile 730

TextEvaluator_™ 41

What Makes the **Text Complex?**

- Genre Text Features T217
- Specific Vocabulary Root Words T225

ACT See Scaffolded Instruction in Teacher's Edition T217 and T225.

What Makes the Text Complex?

- Organization Cause and Effect T225C; Problem and Solution
- Specific Vocabulary Synonyms T225G; Root Words T225I
- Genre Text Features T225A, T225M
- Prior Knowledge Geckos T225G

ASSIN See Scaffolded Instruction in Teacher's Edition T225A-

What Makes the Text Complex?

- Specific Vocabulary
- Prior Knowledge
- Sentence Structure
- Connection of Ideas
- Genre

See Level Up lessons online for Leveled Readers.

What Makes the Text Complex?

Genre

President

- Specific Vocabulary
- Prior Knowledge
- Sentence Structure
- Organization
- Purpose
- Connection of Ideas

1001) See Scaffolded Instruction in Teacher's Edition T368-T369.

The Introduce the Concept lesson on pages T208-T209 will help determine the reader's knowledge and engagement in the weekly concept. See pages T215-T225 and T238-T239 for questions and tasks for this text.

The Introduce the Concept lesson on pages T208-T209 will help determine the reader's knowledge and engagement in the weekly concept. See pages T225A-T225N and T238-T239 for questions and tasks for this text.

The Introduce the Concept lesson on pages T208-T209 will help determine the reader's knowledge and engagement in the weekly concept. See pages T240-T241, T248-T249, T252-T253, T258-T259, and T238-T239 for questions and tasks for this text.

The Introduce the Concept lesson on pages T208-T209 will help determine the reader's knowledge and engagement in the weekly concept. See pages T368-T369 for questions and tasks for this text.

SO

Universal Access

Monitor and Differentiate



To differentiate instruction, use the Quick Checks to assess students' needs and select the appropriate small group instruction focus.

Comprehension Strategy Summarize T219 Comprehension Skill Main Idea and Details T221

Genre Expository Text T223

Vocabulary Strategy Root Words T225

Phonics/Fluency Prefixes pre-, dis-, mis-, Phrasing and Rate T227

If No \rightarrow

Approaching Level

Reteach T240-T247

EL

Develop T256-T263

If Yes \rightarrow

On Level

Review T248-T251

Beyond Level

Extend T252-T255

Using Weekly Data

Check your data Dashboard to verify assessment results and guide grouping decisions.



Leveled Readers



students can read their leveled text fluently and answer comprehension questions



work with the next level up to accelerate students' reading with more complex text.





ENGLISH LEARNERS

Integrated ELD

Language Development

Develop academic vocabulary related to new ideas and participate in collaborative conversations about new ideas.

Meaning Making

Read "Bats Did It First" and Big Ideas from Nature using scaffolded prompts to support accessing meaning of the complex texts.

Effective Expression

Write about "Bats Did It First" and Big Ideas from Nature to show understanding of new ideas.

Designated ELD

Extended Language Interactions

Participate in conversations about new ideas, using academic vocabulary, supported by sentence frames and sentence starters.

Focus on Meaning

Annotate "Bats Did It First" and Inspired by a Bird differentiated texts using differentiated scaffolded prompts.

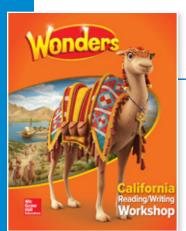
Focus on Forms

Write about the texts "Bats Did It First" and Inspired by a Bird, using scaffolded support to understand text structure and using text evidence.



Wonders for ELs **Teacher Edition** and Companion Worktexts

Introduce the Concept

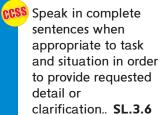


Reading/Writing Workshop

OBJECTIVES



Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. SL.3.1a



ACADEMIC LANGUAGE

- · imitate, observe
- · Cognates: imitar, observar



NGSS 3-5.ETS1.A



Build Background

ESSENTIAL QUESTION

What ideas can we get from nature?

Have students read the Essential Question on page 226 of the Reading/ Writing Workshop. Tell them that sometimes people *imitate*, or copy, what they see in nature.

Discuss the photograph of the boy and the spider with students. Focus on the new ideas scientists get when they *observe*, or look at, nature.

- Scientists observe nature and come up with new ideas. Sometimes scientists imitate what they see in nature.
- These ideas help people in many different ways.

Talk About It



Ask: How do scientists imitate nature's good ideas? What can they observe to find these ideas? How does nature inspire new ideas? Have students discuss in pairs or groups.

- Model using the graphic organizer by adding students' contributions to the discussion. Have students draw on what they know about nature to help explore the ideas under discussion.
- Have partners continue the discussion by sharing examples of good ideas from nature. They can complete the graphic organizer, generating additional related words and phrases.

Collaborative Conversations



Be Open to All Ideas As students engage in partner, smallgroup, and whole-class discussions, encourage them to share and listen openly in their conversations. Remind students to speak in complete sentences and also

- that all ideas, questions, or comments are important and should be heard.
- not to be afraid to ask a question if something is unclear.
- to respect the opinions of others.
- not to be afraid to offer opinions, even if they are different from others' viewpoints.







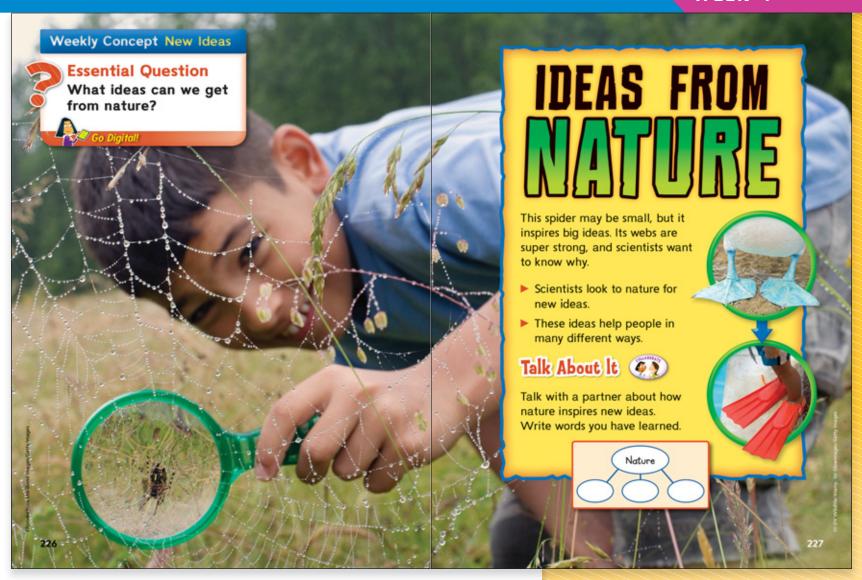
Watch Video



Use Graphic Organizer



Assign Blast



READING/WRITING WORKSHOP, pp. 226-227



Share the "Let's Live in a Cactus!" Blast assignment. Point out that you will discuss students' responses during the Integrate Ideas lesson at the end of the week.

ENGLISH LEARNERS SCAFFOLD

Emerging

Use Visuals Point to the picture of the boy with the spider. Say: This is a spider. The boy observes *the spider*. Point to the magnifying glass. Pantomime observing with a magnifying glass. Ask: What do you like to observe in nature? Guide students in using naturerelated words in their answers.

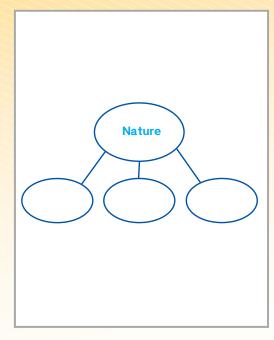
Expanding

Describe Have students describe the pictures on pages 226-227. Point to the webbed feet and the scuba flippers. Ask: How did the bird's feet inspire scientists? Encourage students to use a concept word in their responses.

Bridging

Discuss Ask students to describe ideas that people have gotten from nature. Ask questions to help them elaborate. Ask: What ideas are inspired by nature? What have you observed that may have inspired you?

GRAPHIC ORGANIZER 140





Listening Comprehension



Interactive Read Aloud

OBJECTIVES



CGSS Determine the main idea of a text; recount the key details and explain how they support the main idea. RI.3.2

- Listen for a purpose.
- Identify characteristics of expository text.

ACADEMIC LANGUAGE

expository, summarize



NGSS 3-5.ETS1.A

Connect to Concept: New Ideas

Tell students that good ideas can come from nature. Tell students that as they listen to you read the passage, they will learn about ways nature inspires people to create new things. As students listen, have them think about how the story answers the Essential Question.

Preview Genre: Expository Text

Explain that the story you will read aloud is expository text. Discuss features of expository text:

- explains by presenting carefully researched facts
- often begins with an introduction that gives some background about the subject
- organizes information in a way that is interesting and easy to follow

Preview Comprehension Strategy: Summarize

Point out that readers can summarize as they read by stopping to select and organize important ideas and key details. To determine how the details are related to the main idea, they may ask, "How do these details help me understand what this text is about?"

Use the Think Alouds on page T211 to model the strategy.

Respond to Reading

Think Aloud Clouds Display Think Aloud Master 5: *This was mostly* about... to reinforce how you used the summarize strategy to understand content.

Genre Features With students, discuss the elements of the Read Aloud that let them know it is expository text. Ask them to think about other expository texts they have heard or read independently.

Summarize Have students determine the main ideas from "Ideas from Nature." Have them discuss the key details and explain how they support the text's main ideas. Then, have them summarize the passage.









Ideas from Nature

Take a look at all the things around you. Some of the things that you see come from nature. Trees, grass, mountains, rocks, animals, oceans, and flowers are part of the natural world. Other things that you see are made by humans. Some things that have been built by humans are buildings, cars, chairs, airplanes, computers, pencils, and tools. 1

Parachutes Away!

Where do people get the ideas for what they build? Sometimes people look at the way nature works to give them ideas. Think about a fluffy dandelion. It is made up of hundreds of tiny seeds. Fluffy white threads hold each seed to the stem. If you blow on the dandelion, the seeds fly away like small parachutes.

The design of the dandelion is a great way for seeds to travel safely to a place where they can grow. It is also a great design for a parachute. A parachute opens up like a dandelion seed. Then it carries a person slowly and safely back to land! 2

Controlling Water

Beavers are animals known for building dams. They gather wood, stones, and mud to create a mound across a stream of water. A busy, rushing stream can be turned into a calm pool of water. This is the way they make a safe place to live and play.

Humans also make dams by building a structure across flowing water. The dam creates a pool or reservoir. During a very rainy period, beavers often open up an area of their dam to let some of the water flow through. People do the same thing!

Nature and Art

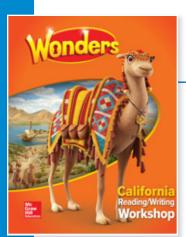
Artists also get ideas from nature. Painters may use the colors and patterns found on a butterfly's wing. They may use the texture and shape of leaves. Musicians may be inspired by the songs of birds or insects. Nature is filled with ideas for artists. 3 Take a walk and look around. What great ideas can you get from nature?

1 Think Aloud As I read the first paragraph I can stop to summarize to help me think about what I am reading. I can ask, "What did I learn from this paragraph that will help me understand what this article is about?"

2 Think Aloud As I continue to read, I can use the text's description of a fluffy dandelion to help me better understand what I read. I can use the key details to help me summarize the way a dandelion seed is like a parachute.

> **3** Think Aloud After reading this paragraph, I can ask myself, "How do artists get ideas from nature?" Restating the key ways artists use nature helps me summarize the text.

Vocabulary



Reading/Writing Workshop

OBJECTIVES

CSS Use sentence-level context as a clue to the meaning of a word or phrase. L.3.4a



ccss Identify real-life connections between words and their use (e.g., describe people who are friendly or helpful). L.3.5b

- Learn meanings of new vocabulary words.
- Write questions using new words.

ACADEMIC LANGUAGE

- · imitate, observed
- · Cognates: imitar, observar



Words in Context

Model the Routine

Introduce each vocabulary word using the Vocabulary Routine found on the Visual Vocabulary Cards.

Visual Vocabulary Cards



Vocabulary Routine

<u>Define:</u> If you **imitate** a person or animal, you try to be like that person or animal.

Example: This robot can **imitate** the way Cody moves.

Ask: What does it mean to *imitate* something?

Definitions

effective Something that is **effective** works well.

Cognate: efectivo

example An example is a thing that is used to show what other

> similar things are like. Cognate: ejemplo

identical Things that are **identical** are exactly the same.

Cognate: idéntico

material Material is the stuff used to make something.

model If something is a **model**, it is a small copy of something.

Cognate: modelo

observed When something is **observed**, it is looked at closely.

Cognate: observar

similar Similar things are alike but not exactly the same.

Talk About It



Have students work with a partner and look at each picture and discuss the definition of each word. Ask students to choose three words and write questions containing clues for their partner to answer. Have partners explain how the clues helped them answer the questions.



Go

Digital



Glossary

Words to Know

Vocabulary

Use the picture and the sentence to talk with a partner about each word.



The broom is an **effective** tool for sweeping up leaves and dirt.

What is an effective tool for cutting paper?



The apple is a good example of a healthy fruit.

Name an example of a healthy vegetable.



Mark and Matt are identical twins because they look alike.

What makes two things identical?



This robot can **imitate** the way Cody moves.

What does it mean to imitate something?

228



The baby's blanket is made of a soft, warm material.

Describe the material your shirt is made of.



Kevin and I play with my model airplane in the park.

Why does it help to have a model?



Meg and Joann observed the fish, and wrote down what they saw.

What is another word for observed?



My dad and I like to look alike, so we wear similar shirts.

What is a word that means the opposite of similar?

Your Turn



Pick three words. Then write three questions for your partner to answer.

Go Digital! Use the online visual glossary

APPROACHING

229

READING/WRITING WORKSHOP, pp. 228-229

ENGLISH LEARNERS SCAFFOLD

Emerging

Use Visuals Say: Look at the picture for imitate. Say: The robot imitates how Cody moves. Now watch me imitate how a bug moves. Another word for imitate is copy, and imitate in Spanish is imitar. Can you imitate how a bug moves? Have students repeat after you: I imitate how a bug moves.

Expanding

Describe Point to the picture for *imitate* and read the sentence. Ask: Why would someone want to imitate something? Have students complete the frame: People might imitate ________ Elicit details to develop students' responses. Remind students that *imitate* in Spanish is *imitat*.

Bridging

Discuss Ask students to talk about the picture with a partner and write a definition. Then have pairs use *imitate* in a sentence. Invite students to share their sentences and definitions with the class. Correct the meaning of students' responses as needed.

model effective example imitate Use a word from the box to answer each question. Then use the 1. If two things are impossible to tell apart, what might they be? identical: The book bag that I bought was identical to his. 2. When making a poster, what is paper considered? material: He went to the store to buy the material he needed to complete the project. 3. How would you describe a plan that went the way it was intended? effective; Our dog's banking is an effective warning signal. 4. What is another word for noticed something? Observed: We observed as our gymnastic coach showed us how to do a flip. 5. What might be used to show what something is like? example; Playing basketball is a good example of how to get exercise 6. If two things are alike, what can they be considered? similar; All six pupples looked very similar. 7. What is another word for copy? imitate; She had to imitate the sound of a lion in the school play. 8. What would a smaller version of a much larger building be called? _ model; The clay model looked like the real statue

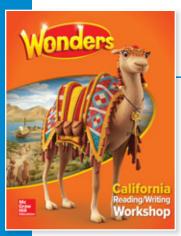
ON-LEVEL PRACTICE BOOK p. 131

ELD ELD.PI.3.1.Em ELD.PI.3.12.Em ELD ELD.PI.3.1.Ex ELD.PI.3.12.Ex ELD ELD.PI.3.1.Br ELD.PI.3.12.Br



Comprehension





Reading/Writing Workshop



Shared Read

Lexile 700

TextEvaluator_™ 20

Connect to Concept

New Ideas

Explain that "Bats Did It First" will give information about an idea that came from nature.



After reading each section, have partners discuss what they have learned about how nature can inspire new ideas and inventions.

Use Vocabulary Words in Context

The highlighted words in this text are the vocabulary words students have learned: *effective, example, identical, imitate, material, model, observed, similar.* As you read, have them discuss the words' meanings.

Close Reading Routine

Read

DOK 1-2

- Identify significance and key details of New Ideas.
- Take notes and summarize.
- Use (1971) prompts as needed.

Reread

DOK 2-3

- · Analyze the text, craft, and structure.
- · Use the Reread minilesson.

Integrate

DOK 4

- · Integrate knowledge and ideas.
- · Make text-to-text connections.
- · Use the Integrate lesson.

Read

Close Reading

Note Taking Read page 231 together. Model how to take notes. *I will think about the Essential Question as I read and note key ideas and details.* Encourage students to write down questions they have and words they don't understand.

OBJECTIVES

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.3.3

- Identify meanings of words used in context.
- Summarize and paraphrase expository text.

ACADEMIC LANGUAGE

context, summarize, paraphrase, expository

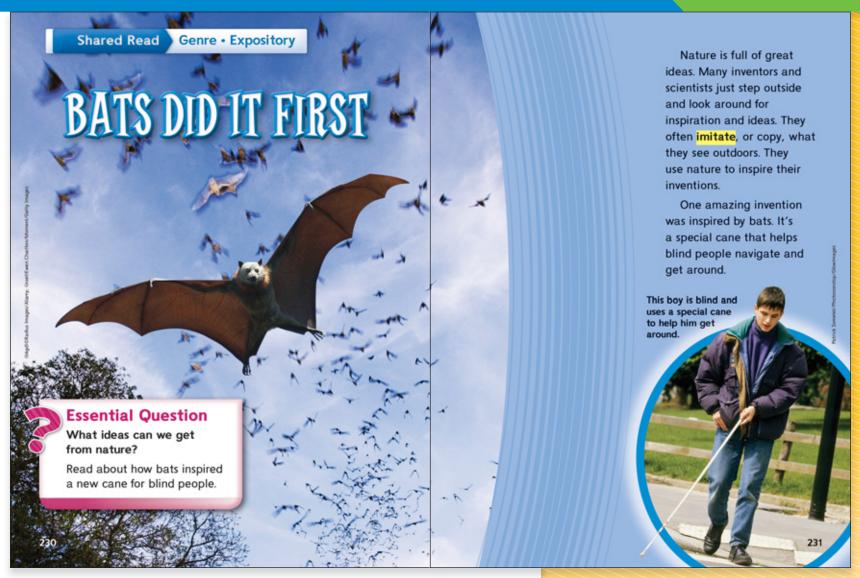


See pages T256-T257 for Interactive Question-Response routine for the Shared Read.





Discuss "Bat Did It First"



READING/WRITING WORKSHOP, pp. 230-231

Paragraph 1: Remind students that when they read parts of an informational text that they do not understand, one strategy is to summarize the information in the text. Model summarizing the first few sentences of paragraph 1 for students.

Inventors and scientists get their ideas from many places. Some look to nature for their inspiration. They imitate the things they see in nature.

Have students look at the pictures on pages 230 and 231. Then model how to paraphrase the rest of the copy on page 231. Remind students that paraphrasing or restating the text in their own words will help them summarize and understand the information in the text.

I see a boy using a cane. The paragraph says that scientists often get their inspiration from nature. The inventor of a special cane for the blind got his inspiration from bats.

ENGLISH LEARNERS

Explain Students might not understand what "get around" means, on page 231. Explain to them that this term is used when people talk about getting from place to place, either on foot or by car, bus, and so on.

You might also want to explain "bounce back" on page 233. Show students bouncing a ball, then having the ball bounce back to you.

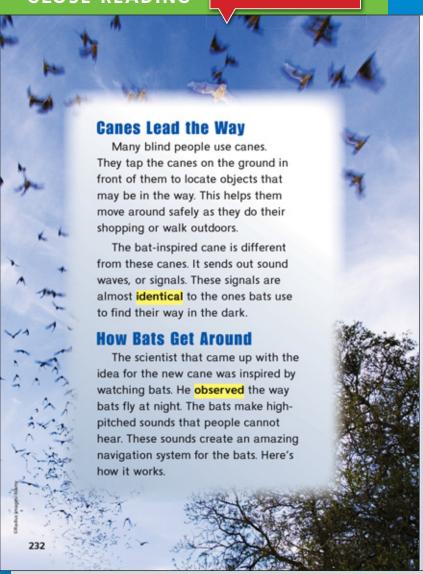
Finally, explain the head "A Batty Idea" on page 234. This is a play on words. It means that we are going to read about an invention inspired by bats, but *batty* means "crazy," so it also means that we are going to read about a crazy idea.

Discuss with students how well the author uses language to present the ideas in the story. Ask: Do you think "Bats Did It FIrst" is a good title for this story? Why or why not?

ELD_PI.3.6.Em • ELD.PI.3.6.Ex • ELD.PI.3.6.Br • ELD.PI.3.7.Em • ELD.PI.3.7.Ex • ELD.PI.3.7.Br

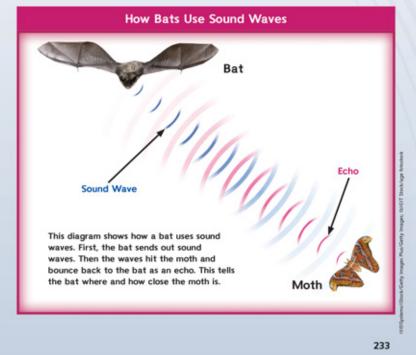






Read

Bats send sound waves out through their mouth or nose. These sound waves hit objects and then bounce back as an echo. The echo tells the bats how far away an object is and how big it is. This information helps bats find bugs to eat. It is also an effective way to keep bats from bumping into trees and other bats.



READING/WRITING WORKSHOP, pp. 232-233

Shared Read



Close Reading

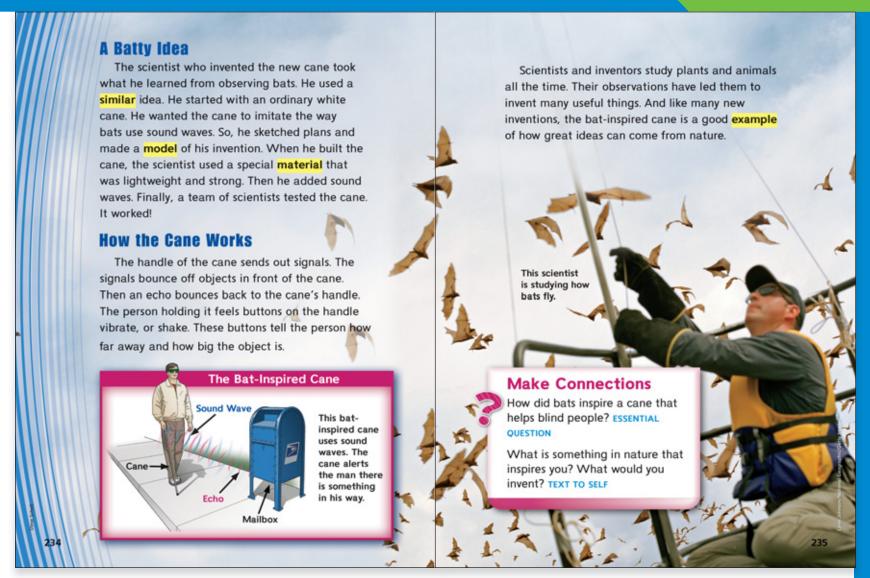
"Canes Lead the Way": After reading the section "Canes Lead the Way" on page 232, tell students that you are going to summarize the main ideas and key details in the text.

Many blind people use canes to get around every day. They tap their canes on the ground to detect objects. But the bat-inspired cane is much different. This cane sends out signals that are nearly identical to the ones bats send out. These signals help bats find their way around.

Paragraph 6: Tell students that scientific ideas or concepts can sometimes be described using cause and effect. After reading the paragraph on page 233, tell students that you are going to use cause and effect to better understand the text.

A cause is an action that makes something happen. The action in this paragraph is bats sending out sound waves. The effect is that the waves bounce off objects in the bats' paths. These sound waves come back as echoes that tell the distance and size of the object. This helps bats find food and avoid obstacles.

Tell students that readers often make inferences about cause and effect in scientific texts to better understand the processes being explained.



READING/WRITING WORKSHOP, pp. 234-235

Make Connections



Essential Question Encourage students to discuss with a partner how bats inspired the invention of a cane that helps blind people. Ask them to cite text evidence. Use these sentence frames to focus discussion:

I read that bats . . . The new cane helps blind people by . . .

A C T Access Complex Text

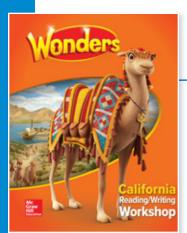
▶ Genre

Students may find sound waves and their use for navigation to be abstract concepts. Use the diagrams to help them.

- Look at the diagram on page 233. The sound wave is the sound that the bat makes. How does the sound wave help the bat tell if something is in front of it? (The sound wave bounces off whatever is in front of it. Then it comes back to the bat as an echo.)
- Have a similar discussion about the diagram on page 234.



Comprehension Strategy



Reading/Writing Workshop

OBJECTIVES



Determine the main idea of a text; recount the key details and explain how they support the main idea. RI.3.2

ACADEMIC LANGUAGE

summarize



Summarize

1 Explain

Explain to students that when they read, they may come across difficult facts and explanations. Tell students they can summarize the main ideas and key details in a section to increase their understanding and remember new information.

- Good readers ask themselves what the sentences in a paragraph or passage have in common. They can use these details to determine the main idea.
- Students can examine each detail. They should ask themselves, Would I understand the main idea without this detail? If the answer is no, then the detail is important.
- Students should write summaries in their own words. They should include events and details in order of importance and omit their own opinions.

Point out that summarizing will help students recognize and remember what they have learned.

Model Close Reading: Text Evidence

Model how summarizing can help students understand how one scientist came up with the idea for the new cane. Reread the section "How Bats Get Around" on pages 232-233 of "Bats Did It First."

3 Guided Practice of Close Reading



Have students work in pairs to summarize how the new bat-inspired cane works. Direct students to the section "How the Cane Works" on pages 234-235 of "Bats Did It First." Partners can reread the section together and identify the important ideas and key details within the paragraph. Have pairs write down their summaries and share them with the class.

Go Digital



Comprehension Strategy

Summarize

When you summarize, you tell the most important ideas and details in a text. Use important details to help you summarize "Bats Did It First."



Find Text Evidence

How did one scientist come up with the idea for the new cane? Identify important ideas and details, and summarize them in your own words.



I read that one scientist came up with an idea for a new cane. He watched bats use sound waves to navigate at night. Those details help me summarize. The way bats use sound waves led to the invention of a new cane

Your Turn



Reread "How The Cane Works" on page 234. Summarize the important ideas and details about how the new bat-inspired cane works.

236

READING/WRITING WORKSHOP, p. 236

ENGLISH LEARNERS SCAFFOLD

Emerging

Use Visuals Help students reread the section "How Bats Get Around" on pages 232-233. Point out difficult words or phrases such as came up with, highpitched, sound waves, and bumping. Define them for students. Help them replace the words with words they know.

Expanding

Respond Orally Reread the section "How Bats Get Around." Ask: How do bats navigate at night? (with sounds) How is this important? (This is what the scientist used to invent a special cane for blind people.) Explain that the sounds the bats make create waves that bounce against objects and come back to them. These waves let them know where the objects are.

Bridging

Write Have partners reread "How Bats Get Around." Elicit from students why this text is confusing. Ask: Why do you think it is important for us to know how bats navigate at night? Turn to a partner and explain.

Monitor and Differentiate



Do students summarize how the bat-inspired cane works?



Small Group Instruction

If No \rightarrow Approaching Level Reteach p. T240

Develop p. T256

On Level

Review p. T248

Beyond Level

Extend p. T252

ON-LEVEL PRACTICE BOOK pp. 133-134

Read the passage. Use the summarize strategy to find the most important ideas and details.

A Sticky Idea

Nature can inspire ideas. Take the tree frog for instance. Have ou ever tried to stick a piece of tape on something after it has gathered dirt or dust? Take tape off of a surface and try to use it again. It does not stick. The tree frog may hold the solution. A tree frog has sticky pads on its feet. The stickiness of the

pads helps the frog to hold onto trees or rocks. Yet the pads do not pick up dirt. They stay clean as the frog moves around.

The way this frog's foot works can be copied and used for many purposes. It can give us ideas for other invention For example, think about doctors and nurses at work. They

could reuse bandages used for patients if they staved clean and sticky. A smaller bandage used at home could also be taken off and used many times.

Tire and car makers also have a use for what a tree frog's foot can do. Material that can get a good grip and stay clean could improve tire performance. It could help cars stay on the road in bad weathe

A product like that could also make a good glue or tape. A clean adhesive that lasts long would be helpful at home a school.

APPROACHING pd. 133-134

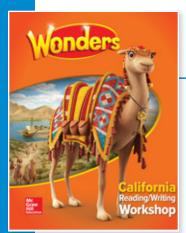
BEYOND

EL pp. 133-134

ELD ELD.PI.3.5.Em ELD.PI.3.6.Em ELD ELD.PI.3.5.Ex ELD.PI.3.6.Ex

ELD ELD.PI.3.5.Br ELD.PI.3.6.Br

Comprehension Skill



Reading/Writing Workshop

OBJECTIVES

Determine the main idea of a text; recount the key details and explain how they support the main idea. RI.3.2

ccs Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently. RI.3.5

ACADEMIC LANGUAGE

- · main idea, details
- · Cognate: detalles

SKILLS TRACE

MAIN IDEA AND DETAILS

Introduce Unit 1 Week 5

Review Unit 3 Weeks 3, 4; Unit 4 Week 6; Unit 5 Week 6; Unit 6 Week 6

Assess Units 1, 3



Main Idea and Key Details

1 Explain

Explain to students that the main idea is the most important point the author makes about a topic. Key details tell about the main idea.

- To find the main idea, students must first review the key details, or the information the author presents, and decide which details are the most important.
- Then they can decide what these details have in common, or how they are connected. This will help determine the main idea.

Model Close Reading: Text Evidence

Model identifying key details about how bats fly at night in "Bats Did It First." Reread page 233 with students and model figuring out key details in the passage. Then discuss with students what the details have in common. Add the details to the graphic organizer, and model using the details to tell the main idea.



Write About Reading: Summary Model for students how to use the notes in the graphic organizer to write a summary of what they learned about how bats fly at night.

Guided Practice of Close Reading



Have pairs of students reread and find more key details about how bats fly at night. Remind students that text features such as headings can be used to help them find information. Ask students to add each detail they find to their graphic organizers, and to use the details to figure out the main idea.



Write About Reading: Summary Ask pairs to work together to write a summary of how bats fly at night. Encourage them to use the details listed in the graphic organizer to support the main idea in their summary. Select pairs of students to share their summaries with the class.





Present the Lesson

Comprehension Skill

Main Idea and Key Details

The main idea is the most important point the author makes about a topic. Key details tell about the main idea. Put the details together to figure out the main idea.



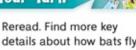
Find Text Evidence

What details tell about how bats fly at night? I can reread page 233 and find key details. Then I can figure out what they have in common to tell the main idea.

Bats make high-pitched sounds through their mouth and nose.

These sound waves hit objects and bounce back as an echo.

Your Turn



details about how bats fly at night. List them in your graphic organizer. Then use the details to figure out the main idea.

Go Digital!

237

READING/WRITING WORKSHOP, p. 237



ENGLISH LEARNERS

SCAFFOLD

Emerging

Comprehend Reread the section "How Bats Get Around" on pages 232-233. Ask after each sentence: What is this sentence about? Help students describe how bats fly at night. Students may respond nonverbally. Confirm their responses by restating them in complete sentences.

Expanding

Describe Reread the section "How Bats Get Around." Ask: What sounds do bats make? (high-pitched sounds) What do these sounds do? (help bats fly at night)

Encourage partners to describe more key details about how bats fly at night using the frame: One key detail is _____. Correct students' responses for meaning as needed.

Bridging

Discuss Have students describe a key detail about how bats fly at night in the section "How Bats Get Around" on pages 232-233. Ask: If bats cannot see well, what do they use to fly at night? Have students turn to a partner to discuss. Monitor their conversations and correct for meaning as needed.

Monitor and Differentiate



As students complete the graphic organizer, do they identify key details? Can they determine the main idea?



Small Group Instruction

If No \rightarrow Approaching Level Reteach p. T247

EL Develop p. T257

On Level Review p. T251 If Yes \rightarrow

Beyond Level Extend p. T255

ON-LEVEL PRACTICE BOOK pp. 133-135

- A. Reread the passage and answer the questions
- 1. What are three key details in paragraphs 4, 5, and 6?
- Doctors and nurses could reuse bandages that stayed clean and sticky.

Car tire makers could use a material that would help tire performance in

bad weather. An everyday glue or tape would be useful

2. How are these details connected?

They are all ideas for products that can be made using frogs' feet as

3. Using the details, what is the main idea of the whole passage?

The way a frog's foot works can be copied and used for many purposes. Its design can give us ideas for other inventions

B. Work with a partner. Read the passage aloud. Pay attention to phrasing and rate. Stop after one minute. Fill out the chart.

	Words Read	-	Errors	-	Score Score
First Read		-		-	
Second Read		-		-	

APPROACHING pd. 133-135

BEYOND

EL pp. 133-135

ELD ELD.PI.3.6.Em

ELD ELD.PI.3.6.Ex

ELD ELD.PI.3.6.Br



Genre: Informational Text



Reading/Writing Workshop

OBJECTIVES

Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently. RI.3.5

CGSS 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.3.7

> Recognize the features of expository text.

ACADEMIC LANGUAGE

- expository, informational, diagram, caption
- · Cognate: diagrama



Expository Text

Explain

Tell students the following key characteristics of expository text.

- An expository text gives facts and information about a topic.
- It may include text features such as photographs, captions, and diagrams that help readers better understand the text.

2 Model Close Reading: Text Evidence

Model identifying and using the text features on page 233 of "Bats Did It First."

Diagram Point out the diagram. Explain that diagrams are drawings that give information. Labels name the parts of the diagram. Ask: What does this diagram show?

Caption Point out the diagram's caption. Explain that captions help explain a photograph or diagram. Ask: What does this caption tell about the diagram?

Guided Practice of Close Reading

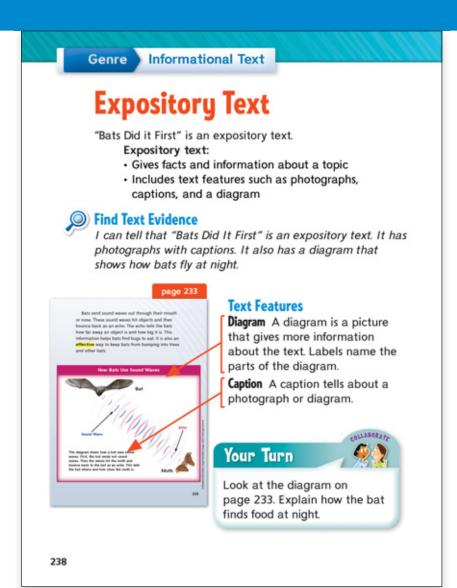


Have students look at the diagram on page 233 to locate information about how the bat finds food at night. Then, have them explain what they learned from the diagram.

Go Digital



Lesson



READING/WRITING WORKSHOP, p. 238

ENGLISH LEARNERS SCAFFOLD

Emerging

Use Visuals Point to the diagram on page 234. Say: The caption tells about the diagram. Have students chorally read it with you. Say: The cane is bat-inspired. It is inspired by bats. What is special about the cane? Have students use the sentence frame: The cane is ____ (inspired) by bats.

Expanding

Describe Point to the diagram on page 234. Say: This is a diagram. Point to the caption. Ask: What does the caption tell about the picture? Elicit details from students about the diagram to strengthen their responses.

Bridging

Discuss Point to the diagram on page 234. Ask: What does the diagram show? What does the caption tell us about the diagram? Have partners discuss the diagram and write a sentence describing the presented information.

Monitor and Differentiate



Are students able to read the diagram?
Are they able to explain what they
learned from the text features?



Small Group Instruction

If No → Approaching Level Reteach p.T240

EL Develop p. T256

If Yes → On Level Review p. T248

If Yes → On Level

Beyond Level

Extend p. T252

ON-LEVEL PRACTICE BOOK p. 136

Against the Flow

Fish can use little energy to move in the opposite direction of flowing water. They use whirlpools to help them. Whirlpools are spinning pools of water around rocks. They pull in things around them. Fish move their bodies back and forth so they are pulled from whirlpool to whirlpool. Scientists study fish to build boats that use less energy.



Answer the questions about the text.

How do you know this is expository text?
 It gives facts and information about a topic

2. What text features does the text include?

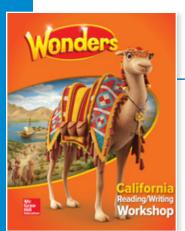
How does the diagram help you understand the text?
 It lets you see how fish move against the current.

What does the caption do?
 It explains what the diagram show

APPROACHING p. 136 BEYOND

EL p. 136

Vocabulary Strategy



Reading/Writing Workshop

OBJECTIVES

cess Decode words with common Latin suffixes. RF.3.3b

ccs Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., company, companion). L.3.4c

ACADEMIC LANGUAGE

- root words, prefixes, suffixes
- · Cognates: prefijos, sufijos

SKILLS TRACE

ROOT WORDS

Introduce Unit 3 Week 4

Review Unit 3 Week 5; Unit 4 Weeks 1, 2; Unit 5 Weeks 1, 2; Unit 6 Weeks

Assess Units 3, 4, 5, 6



Root Words

Explain

Remind students that they can often figure out the meaning of an unknown word by looking for root words.

- A root word is the simplest form of a word.
- No prefixes or suffixes have been added to it.

2 Model Close Reading: Text Evidence

Model using the root word *invent* to figure out the meaning of the word invention.

Guided Practice of Close Reading

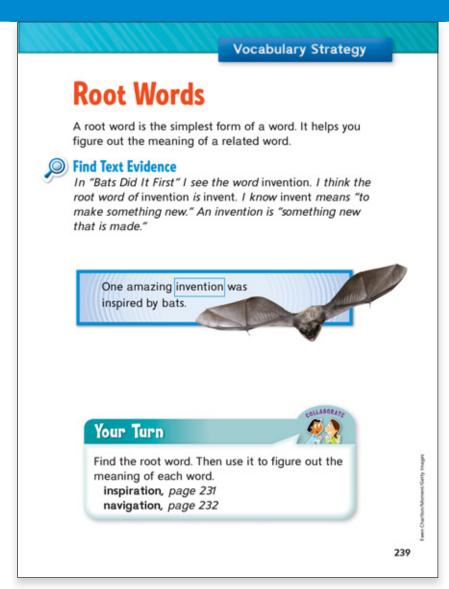


Have students work in pairs to figure out the meanings of inspiration and navigation in "Bats Did It First." Have partners identify the root words and use them to figure out the meanings of the words.

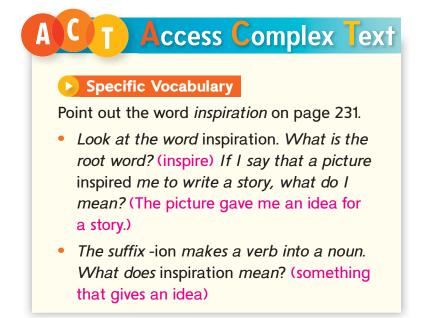




Lesson



READING/WRITING WORKSHOP, p. 239



Monitor and Differentiate



Can students identify and use root words to determine the meanings of inspiration and navigation?

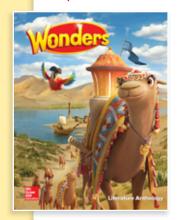


Small Group Instruction

If No → Approaching Level Reteach p. T245 EL Develop p. T261 On Level Review p. T250 If Yes \rightarrow Beyond Level Extend p. T254

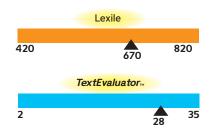
ON-LEVEL PRACTICE BOOK p. 137 Read each sentence below. Write the root word of the word in bold on the line. Then write the definition of the word in bold. Possible responses provided. 1. Its design can give us ideas for other inventions. invent; something new that is made 2. A product that can get a good grip and stay clean could improve tire perform; the way in which something works 3. Researchers tested a group of tree frogs. research; people who study things. 4. Studying frogs' feet is just one way that people can find inspiration inspire; something that brings about an idea. 5. What is your prediction? predict; the act of predicting something APPROACHING

Read



Big Ideas from Nature

Text Complexity Range



Literature Anthology

What makes this text complex?

- Genre
- **Organization**
- **Specific Vocabulary**
- **Prior Knowledge**

Close Reading Routine

Read

DOK 1-2

- Identify key ideas and details about New Ideas.
- Take notes and summarize.
- Use AGT prompts as needed.

Reread

DOK 2-3

- · Analyze the text, craft, and structure.
- Use Close Reading Companion, pp. 88-90.

Integrate

DOK 4

- · Integrate knowledge and ideas.
- · Make text-to-text connections.
- Use the Integrate lesson.

Curriculum Connection



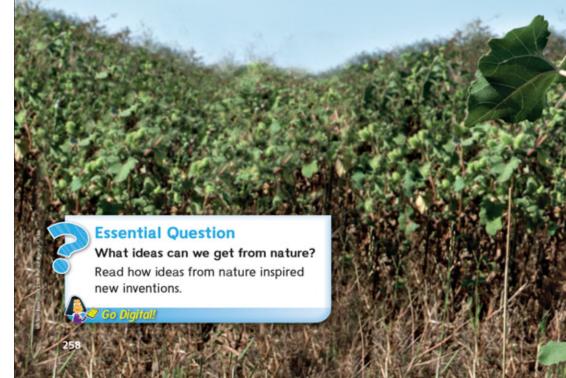
NGSS 3-5.ETS1.A

Genre • Expository Text

Big Ideas from



by Adrienne Mason



ACCESS Complex Text

▶ Genre

Point out that the photographs in an expository text can also give information. To understand this selection, students need to connect the photograph of the inspiration with the photograph of the idea.

 What does the photograph of the inspiration show? (The plant from nature that gave George de Mestral his idea.)



Sometimes a sticky situation can lead to a great invention. In the 1940s, George de Mestral went for a walk with his dog. Along the way, George's pants and his dog's fur caught tiny seeds called burrs. George was curious. Why did the burrs stick so well? He looked closer. The burrs were covered in tiny hooks. George used this idea to invent a two-sided fastener. It had hooks on one side and loops on the other. Today these hook and loop fasteners are used on everything from shoes to spacesuits!



Observing how burrs stick to cloth and fur inspired one inventor to create a new fastener.

Those sticky burrs gave de Mestral a great idea. Nature provided a model that George could imitate. Copying, or imitating, designs from nature is called biomimicry [bigh-o-MIM-i-kree]. (Bio means life and mimicry means to copy.) From owls' sharp claws to elephants' bendy noses, nature is full of models. We can learn from each one.

259

Read

Tell students they will be reading about how nature has inspired new inventions. Ask students to predict how the selection will help them answer the Essential Question.

Note Taking: Use the Graphic Organizer



Remind students to take notes as they read. Have them fill in the graphic organizer on Your Turn Practice Book page 132. Ask them to record the main idea and key details of each section. They can also note words they don't understand and questions they have.

1 Vocabulary: Root Words

Find the word *invention* in the first sentence on page 259. What is the root word of invention? (invent) What do you think an invention is? (something that is created or invented)

Build Vocabulary page 259

curious: eager to learn more

fastener: something that holds two parts

together

LITERATURE ANTHOLOGY, pp. 258-259

 How does the photograph of the plant help you better understand de Mestral's invention? (It shows how de Mestral's invention is similar to the plant. It helps readers understand how de Mestral used features of the plant in his design.)

CLOSE READING

Read

2 Skill: Main Idea and Key Details

On page 260, what do all the details have in common? (They are about how nature gives us ideas.) What is the main idea? (Nature helps us create new things.) Add the main idea and key details to your graphic organizer.

Main Idea

Nature helps us create new things.

Detail

Nature often has the answers to the questions people ask.

Detail

Watching bird wings gave the Wright brothers ideas on how to design airplane wings.

Detail

George de Mestral set out on a walk and ended up creating a new fastener.

Observing nature gives us ideas for new things.

George de Mestral didn't set out on his walk thinking he would create a new fastener. But by being curious and observant, he did just that.

Nature Did It First

Designers often start with a problem. They may look for solutions in the natural world. Nature has been making and testing designs for a long time! Nature often has the answers to questions people ask.

More than a hundred years ago, the Wright brothers, Orville and Wilbur, wondered how to fly. For an answer, they watched birds, the flying experts. Watching bird wings gave them ideas on how to design airplane wings. While bird wings are not identical to plane wings, they both can

Leonardo da Vinci was an artist and inventor. He lived more than 400 years ago. He looked at birds' wings and then drew plans for many flying machines.



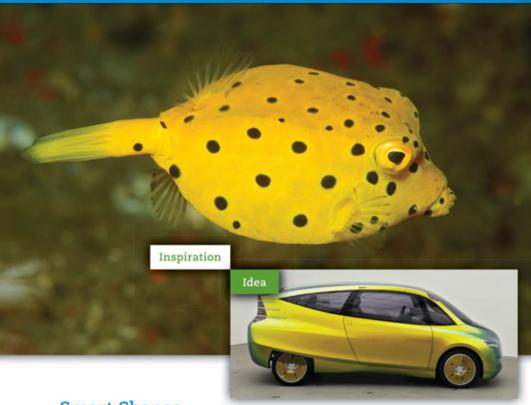
A C T Access Complex Text

▶ Organization

Remind students that to understand how nature helps inventors, they need to identify causes and effects. Help students focus on the effect that studying birds and fish had on two kinds of modern transportation.

 What happened because Orville and Wilbur Wright studied birds? (They got ideas on how to create airplane wings, and they were able to create the first plane that flew.)

 What effect did making the car the same shape as the boxfish have? (It led to a car that saves gas.)



Smart Shapes

Fish and cars share a problem. It takes energy to move a fish through water and a car through air. Fish get energy from food. Cars get it from fuel.

To create a new fuel-saving car, designers studied the shape of fish. They found that the boxfish's square shape was streamlined. This means that the fish slips through the water without wasting energy. By making the new car's shape similar to that of the boxfish, they created a car that saves gas.

The car's frame is also similar to the fish's skeleton. The metal frame is thick in some places and thinner in others, just like the fish's bones. This saves on materials and puts strength where it is needed most.

Watching fish gave car designers a new idea for a car's shape.

261

LITERATURE ANTHOLOGY, pp. 260-261



Point to the photograph of the boxfish. Say boxfish and have students repeat. Then have students point to the car and say car. You may want to have students finger-trace a square around the boxfish to help them see the fish's square-like shape.

• How is the car like the boxfish? Guide students to point out similarities such as the color and shape.

Strategy: Summarize

Teacher Think Aloud When I read, I pause after each section of text to summarize the most important ideas. This helps me check my understanding and remember information. I might summarize "Smart Shapes" like this: To create a fuel-saving car, scientists studied the boxfish's streamlined shape. They mimicked the shape and frame of the boxfish to create a car that saves gas.

Reread

Close Reading Companion, 88

Author's Craft: Comparison

How does the way the author compares fish and cars help you to understand how designers solve problems? (The author compares the shape and skeleton of the boxfish to the shape and frame of the new fuel-saving car. This comparison helps you to visualize how fish slip through water without wasting energy. The car's design is meant to solve the problem of energy use. The shape of the car is similar to a fish, so it can slip through air without wasting energy.)

NGSS 3-5.ETS1.C



CONNECT TO CONTENT

SCIENCE FROM NATURE

Scientists use models to understand and explain how things work. Models from nature can help them create new things. On page 260, students read about how the Wright brothers studied birds and their wings and used them as a model to design airplane wings. On page 261, students read that scientists studied the boxfish and its streamlined shape to help them design a fuel-efficient car.



Read

4 Ask and Answer Questions



Generate a question of your own about the text and share it with a partner. To find the answer, try rereading and paraphrasing the text. For example, you might ask, "What are two ways buildings can stay cool?" To find the answer, you can reread and paraphrase the first two sentences on page 262. (They can stay cool with air conditioning and the kind of shape they have.)

STOP AND CHECK

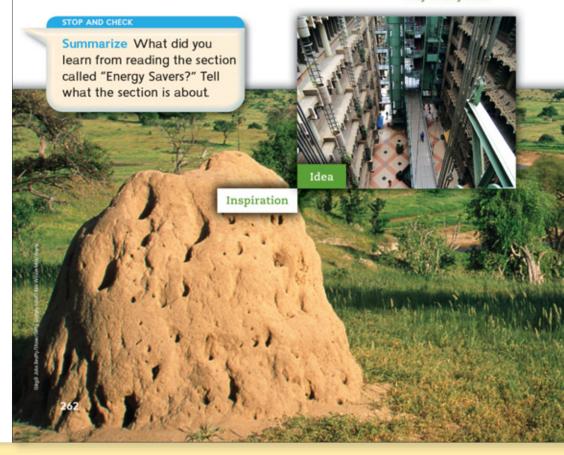
Summarize What did you learn from reading the section called "Energy Savers"? (Designers made a big building that stays a good temperature without using much energy. They used termite mounds as a model.)

Energy Savers

Air conditioners keep buildings cool. The shape of a building can also help. In Africa, termites gave builders an **example** of a self-cooling structure. Holes at the bottom of termite mounds catch the wind. The air rises through tunnels and flows out the top. The termites designed an **effective** way to cool a structure. The builders borrowed their ideas. During the day, fans on the first floor blow cool air into the building. The air rises and flows through chimneys on the roof. This design saves money and energy.



How is a termite mound like this building in Africa? They both need a way to stay cool.

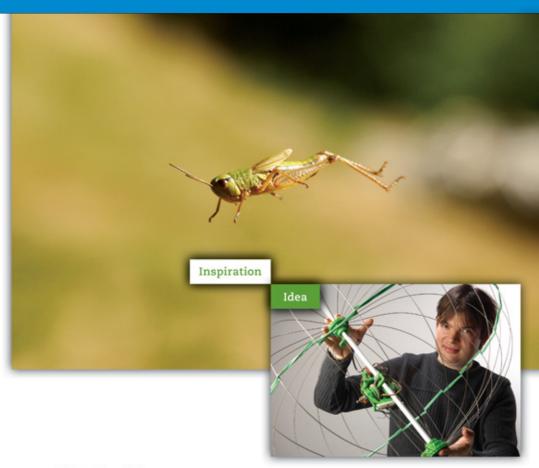


A C T Access Complex Text

Organization

Explain that when authors use the problem-andsolution text structure, they may present more than one problem and solution in a paragraph. Help students recognize the problems and solutions in "Master Movers" on page 263.

- What problem do people have? (There are places that are not safe for them to explore.)
- How did they solve it? (They invented robots.)
- What problem do robots have? (They sometimes get stuck traveling over dips and bumps.)
- How did designers solve it? (They invented a robot that can jump.)



Master Movers

You can't travel to Mars, but a robot can. Robots can explore places that are not safe for people. Robots can't walk, but they still have to travel over dips and bumps. Sometimes they get stuck. Designers are working on a robot called Jollbot to fix the problem. The name Jollbot comes from the words jump and roll. The Jollbot can do both. The super spring of grasshopper legs gave designers their idea.

Grasshoppers and the robot, Jollbot, can both jump.

263

5 Genre: Expository Text



Turn to a partner and talk about the features of expository text you notice on pages 262-263. How do they help you understand the text? (The heading tells you what the section is about. The photographs and captions help readers picture the similarities between the ideas and the inspirations.)

Reread

Author's Craft: Contrast

The word *but* is a signal word used to show a contrast, or difference, between two or more things. What contrast is the author showing in the first sentence on page 263? (The author is showing a contrast between people and robots.) What is one way people and robots are different? (Robots can explore places that are too dangerous for people.) What change in the information is signaled by the word but in the third sentence? (Robots have to travel.) How do you know? (That information appears after the word but.)

LITERATURE ANTHOLOGY, pp. 262-263



Students may need help with the multiple-meaning word spring. Say: Spring means "to jump." Have students demonstrate and say spring. Ask:

- What problem do robots have? Do they get stuck? (yes)
- What can Jollbot do? Show me or tell me. (Jollbot can jump.)
- Point to the animal that Jollbot is like. What is that animal called? (grasshopper)

CLOSE READING

Read

6 Skill: Main Idea and Key Details

What do all the details in "Tunnel Makers" have in common? (They all describe how an engineer used the shipworm's technique to build a tunnel.) Determine the main idea of this paragraph. (An engineer copied the shipworm to build the Thames Tunnel.) Add the main idea and details to your organizer.

Main Idea

An engineer copied the shipworm to build the Thames Tunnel.

Detail

An engineer kept failing when he attempted to drill a tunnel under a river.

Detail

He saw how shipworms bored through wood.

Detail

The animal uses a tough shield to drill and then builds a hard tube along the tunnel walls.

7 Make Inferences



Based on "Mixing New Materials," turn to a partner and discuss when people might use a bandage with bumps. (during operations)

Tunnel Makers

More than 200 years ago, an engineer was trying to drill a tunnel under a river. But each attempt failed. The walls kept falling in. Then he saw how shipworms bored through wood. The animal uses a tough shield to drill. Then it builds a hard tube along the tunnel walls. What a great idea! The engineer copied the shipworm to build the Thames Tunnel. As he drilled, workers lined the tunnel walls with bricks.

Shipworms and tunnelbuilders need a way to drill through wood or rock safely.



A C T Access Complex Text

Specific Vocabulary

Review strategies for finding the meanings of unfamiliar words, such as using synonyms.

- Reread the sentence: Then he saw how shipworms bored through wood. Help students identify a synonym for bored. (drilled)
- What does bored mean? (drilled)

▶ Prior Knowledge

Students may be unfamiliar with geckos.

 Explain that geckos are lizards. (These lizards live on all continents except for Antarctica. Geckos are especially known for their climbing abilities. They can climb smooth, vertical surfaces and can even scurry along smooth ceilings.)



walls. It can cling to ceilings, too. Scientists studied gecko feet to create a bandage with bumps. The bandage is so sticky it can even attach wet surfaces (like a human heart!).

Summarize What did you learn from reading the section called "Mixing New Materials?" Tell what the section is about.

idea for a super sticky bandage.

265

STOP AND CHECK

Summarize What did you learn from reading "Mixing New Materials"?

Teacher Think Aloud How can we remember the most important ideas?

Prompt students to apply the strategy in a Think Aloud by first paraphrasing the text and then summarizing just the most important ideas. Have them turn to a partner to summarize what they read.

Student Think Aloud I can summarize what I read in "Mixing New Materials." Inventors made a new, super-sticky bandage. They got the idea from looking at gecko feet.

Reread

Close Reading Companion, 89

Author's Purpose

How does the author use photographs and captions to help you understand why shipworms and geckos are important to inventors? (The shipworm photo helps me understand what the creature looks like and what its tunnel looks like, and how it looks like a tunnel made by people. In the same way seeing the gecko foot and the bandage helps me understand the text better.)

LITERATURE ANTHOLOGY, pp. 264-265



Clarify the meaning of the multiple-meaning word bored by demonstrating or restating to explain its use in this selection.

- Point to the shipworm and the hole in the photograph and say: The shipworm bored a hole. Have students repeat.
- If students are unfamiliar with geckos, show them a photograph. Say: A gecko is a lizard. Have students repeat.

Read

8 Strategy: Summarize



First, paraphrase "Working Together" to check your understanding. Then turn to a partner and summarize the most important ideas.

Student Think Aloud When I summarize, I retell just the most important information. Cars move in large groups, but they often crash. Scientist are studying locusts to learn how they safely travel in large groups. One day cars may "see" the cars around them.

Skill: Main Idea and Key Details

What is the main idea of the second paragraph on page 267? What details support this main idea? Add the main idea and details to your organizer.

Main Idea

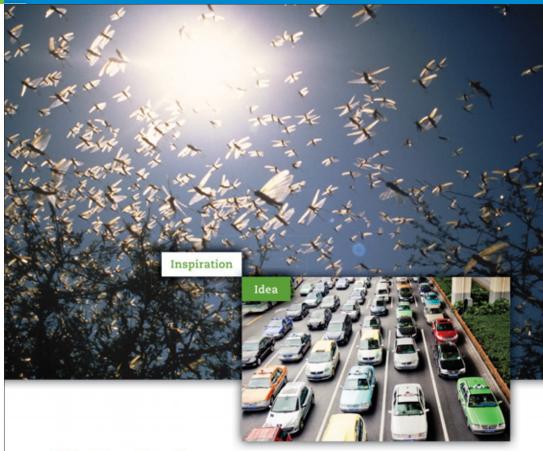
Observing how nature works shows us ways to help the planet.

Detail

Nature does not waste materials or energy.

Detail

Nature does not pollute air or water.



Working Together

Birds fly in flocks. Fish swim in schools. They do this without hitting one another. Cars move in large groups, too. But they often crash. Today, car designers are learning from locusts. They study how the insects travel together safely. One day you might drive a car that "sees" the cars around it.

Ideas from locusts are helping to design safer cars.

STOP AND CHECK

Ask and Answer Questions Why are car designers studying locusts? Reread page 266 to find the answer.

266

ACC T Access Complex Text

Specific Vocabulary

Review the meaning of *biomimicry* by pointing out the Greek root *bio* and the word *mimicry* and discussing the meaning of each.

- What does bio mean? (life)
- What does mimicry mean? (copying)
- So what is biomimicry? (copying designs from nature)

Confirm students' understanding of the term by having them give examples of biomimicry from the selection. (the airplane, fuel-saving car, African building, Jollbot, Thames tunnel, and bumpy bandage.)

T225I UNIT 3 WEEK 4

Learning from the Experts

Biomimicry shows that ideas that work for nature can work for people, too. It makes sense. Need a material that is strong and stretchy? Learning about spider silk would be a good place to begin. Spider silk is one of the strongest fibers in nature. It is as flexible as an elastic band and strong like steel. Need a type of glue that will harden in salt water? What do the sea creatures barnacles and mussels use to stick to rocks? Maybe nature already has a plan or a recipe people can use!

Observing how nature works also shows us ways to help the planet. Nature does not waste materials or energy. And natural designs do not pollute the

This cloth was woven from the silk that spiders use to spin webs.



STOP AND CHECK

Ask and Answer Questions Why are car designers studying locusts? (Scientists are studying locusts to learn how they travel safely together so that they can apply that knowledge to cars.)

Return to Purposes Review students' predictions and purposes for reading. Ask them to use text evidence to answer the **Essential Question. (Inventors and scientists** observe how things work in nature and apply nature's innovations to solve problems.)

Build Vocabulary page 267

fibers: strong, thin threads

flexible: able to bend easily

pollute: to make impure or dirty with

harmful substances

Reread

Close Reading Companion, 90

Author's Purpose

What is the author's purpose for comparing birds, fish, locusts, and cars on page 266? (These details help the reader understand why designers might study animals to learn how to create safer cars.)

LITERATURE ANTHOLOGY, pp. 266-267



Pronounce the word biomimicry with students. Restate it as "copying from nature." Have them point to or name examples of biomimicry from the selection.

You may also want to review collective nouns, such as *flocks* and *schools* on page 266, and explain that these words are used to describe groups of

certain kinds of animals. Say: A flock of birds flew by. A school of fish swam by. Have students repeat, and invite groups to demonstrate each statement.

Read

About the Author

Adrienne Mason

Have students read the biography of the author. Ask:

- How did studying to be a scientist help Adrienne Mason as an author?
- How do photographs help you visualize what Adrienne Mason is describing?

Author's Purpose

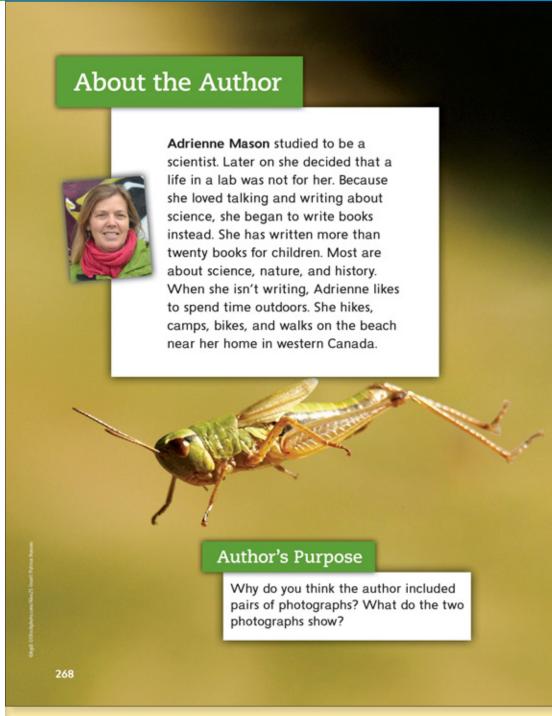
To Inform

Review with students that when authors write to inform, they may include photographs to illustrate their ideas. The author used pairs of photographs to show the object in nature that inspired someone to invent a product.

Reread

Author's Craft

Explain that authors of expository texts often use headings to organize and divide their text. They also often choose headings that reflect the main idea. How does the heading "Energy Savers" on page 262 signal the main idea of the paragraph? (Termites provided inspiration for a better way to cool a building.) What does the heading refer to? (efficient use of energy) What other examples of headings that describe the main idea can you find in the selection? (On page 264, "Tunnel Makers" explains that an engineer got the idea of how to build a tunnel from the way shipworms build tunnels.)



LITERATURE ANTHOLOGY, pp. 268-269

Respond to the Text

Summarize

What ideas from nature led inventors to create new products? Information from your Main Idea and Details chart may help you summarize.



Write

How does the author organize the text to help you understand that each new idea starts with a problem? Use these sentence frames to cite your text evidence.

The author describes problems to . . . Then she compares to help me . . . This helps me understand how . . .

Make Connections



Describe how something in nature led someone to a new idea. ESSENTIAL QUESTION

Think about one of the inventions in this article. How has it made our world better? TEXT TO WORLD

Integrate

Make Connections



Essential Question Answer: I learned that shipworms gave an engineer an idea about how to build better tunnels. Evidence: On page 264, I read that the engineer's attempts to drill a tunnel under a river kept failing. Then the engineer watched how shipworms make tunnels. Using what he learned, the engineer successfully created the tunnel.

Text to World Answers will vary, but encourage students to do research online and cite text evidence from their sources.

Respond to the Text

Read

Summarize

Tell students they will use the information from their Main Idea and Key Details Chart to summarize. As I read Big Ideas from Nature, I collected key details and figured out the main idea of each section. To summarize, I will use the main ideas and paraphrase, or reword, them in a logical way.

Reread



Analyze the Text

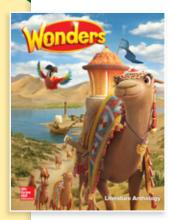
After students summarize the selection, have them reread to develop a

deeper understanding of the text and answer the questions on Close Reading Companion pages 88-90. For students who need support in citing text evidence, use the Reread prompts on pages T225D-T225M.

Write About the Text

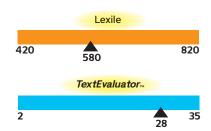
Review the writing prompt and sentence frames. Remind students to use their responses from the Close Reading Companion to support their answers. For a full lesson on writing a response using text evidence, see page T230.

Answer: The author describes some features found in nature, and how these features inspired scientists to solve problems. Evidence: On page 261, the author says that "Fish and cars share a problem." The problem is how to move efficiently through water or air. The solution is to make a car with a fish shape.



"Perdix Invents the Saw"

Text Complexity Range



Literature Anthology

What makes this text complex? Genre

Compare Texts

As students read and reread Perdix Invents the Saw, encourage them to take notes and think about the Essential Question: What ideas can we get from nature? Tell students to think about how this text compares with Big Ideas from Nature.



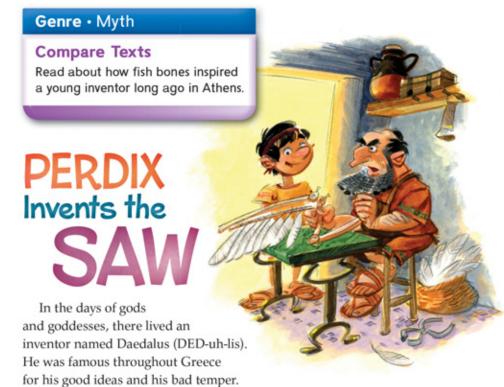
What happens to Perdix that sparks his imagination? Paraphrase the event with a partner. (He cuts his finger on the backbone of a fish while washing dishes.)

Reread

Close Reading Companion, 93

Author's Craft: Clues

How do the author's clues at the beginning of the myth help you predict what might happen to Perdix at the end? (Perdix says that he wants to be a great inventor, too. Daedalus only allows Perdix to watch. But the author says that Perdix "had some clever ideas.")



One day Daedalus heard a knock on his workshop door. "Who's interrupting my work?" he growled.

"It's me, Uncle," said his twelve-year-old nephew Perdix (PER-dix). "I want to be a great inventor, too. Will you teach me?"

Daedalus's back hurt from chopping firewood. His shoulder ached from sweeping. He didn't really want to teach Perdix. Then he got an idea. "If you do all the chores, I'll let you watch me invent things," he said.

Perdix did the chores, cooked meals, and observed how Daedalus worked. The boy had some clever ideas. He wanted to make a smaller ax for cutting branches for firewood. Daedalus disagreed. "Just leave the inventing to me," he always hissed.

270

A C T Access Complex Text

▶ Genre

Reread these sentences: The boy had some clever ideas. He wanted to make a smaller ax for cutting branches for firewood.

 What does the illustration on page 271 show? (a fish backbone) How does it look like it could be used for cutting branches? (It has jagged edges that could be used to cut things.)

One afternoon Perdix roasted a large fish for lunch. After eating, Daedalus licked his fingers and smacked his lips. "That was pretty good, Perdix, but I've eaten better," he said.

Perdix sighed and started washing the dishes. In the process he cut his finger on the jagged backbone of the fish. He held the backbone up and studied its

sharp edges. "I can imitate this design and make a fine tool for cutting wood," he thought.

The next day, Perdix sawed all the firewood before Daedalus awoke. "How did you finish your work so early?" Daedalus snarled.

"It was easy with my new invention," said Perdix. He showed his uncle the saw.

Daedalus was reluctant to praise his clever nephew.

"It should be my invention because you cooked that fish for me," he sniffed.

Perdix just smiled. He now realized that he was a great inventor, too.



Make Connections

How did nature inspire Perdix? ESSENTIAL QUESTION

What other inventions have you read about that were inspired by nature? TEXT TO TEXT

271

LITERATURE ANTHOLOGY, pp. 270-271



Show students a picture of a saw and demonstrate its use. Have students demonstrate a sawing motion and say saw. Point to the illustration on page 271 and guide students to point out the similarities between the saw and the backbone.

What does Perdix do with the saw? Does he cut branches? (yes)

Read

Summarize

Guide students to summarize the selection.

Reread



Analyze the

After students read and summarize, have them reread to develop a deeper

understanding of the text by annotating and answering questions on pages 91-93 of the Close Reading Companion.

Integrate

Make Connections

Essential Question Answer: A fish gave Perdix the idea for a new tool. Evidence: In paragraph 5 on page 270, I read that Perdix had some clever ideas, such as the idea to make a smaller ax for cutting branches for firewood. In paragraph 1 on page 271, I learned that one day Perdix roasted a fish for lunch. In paragraph 2 on page 271, I read how he cut his finger on the sharp edges of the fish's jagged backbone, and that he then realized that by imitating the design he could make a good tool for cutting wood.

Text to Text Answers may vary, but encourage students to cite evidence from Big Ideas from Nature and other texts they have read.



Phonics/Fluency



Prefixes pre-, dis-, mis-

OBJECTIVES

derivational suffixes. RF.3.3a

Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings. RF.3.4b

Determine the meaning of the new word formed when a known affix is added to a known word (e.g., agreeable/disagreeable, comfortable/uncomfortable, care/careless, heat/preheat). L.3.4b

Rate: 82-102 WCPM

ACADEMIC LANGUAGE

- phrasing, rate
- Cognates: fraseo, ritmo



Refer to the sound transfers chart in the Language Transfers Handbook to identify sounds that do not transfer in Spanish, Cantonese, Vietnamese, Hmong, and Korean.

ELD ELD.PIII.3

1 Explain

A prefix is a word part added to the beginning of a word to make a new word. The prefix *dis*- changes a word's meaning to its opposite or means "not". The prefix *mis*- means "bad or wrong". The prefix *pre*- means "before". Identifying prefixes can help readers decode and understand an unfamiliar word.

2 Model

Write and say the words *distrust, misspell,* and *preheat*. Draw a line between each prefix and base word. Use the prefixes and base words to discuss the meanings of the words.

3 Guided Practice

Write the following words on the board. Help students pronounce each prefix and base word Guide students as they use the prefixes and base words to determine the meanings of the words.

disagreemisleadprecutdislikemistreatprepaydishonestmistrustpreplan

Read Multisyllabic Words

Transition to Longer Words Give students additional practice with reading words with prefixes, first in isolation, then in text. Draw a T-chart. Write *appear*, *spell*, *school* in column one. In column two, write *disappear*, *misspell*, *preschool*. Point to the first column and model how to read each word. Have students repeat. Explain that each word in the second column contains a base word from the first column and a prefix. Have students draw a line between the prefix and base word. Then have them use the prefixes and base words to determine the meanings of the words. Point to each word and have students read chorally. Write simple sentences using words from the guided practice, such as, *I dislike bugs*. Guide students to read the sentences.



Prefixes

Present the Lesson



View "Bats Di It First"

Final e Syllables

1 Explain

Review CVC words, such as can and hop, pointing out the short vowel sounds. Tell students that when a word is spelled with a vowel, consonant, and a final e, the vowel sound is usually long. Point out the VCe pattern in cane and hope.

To decode multisyllabic words with final e, divide the word into syllables and read the word one syllable at a time. The final e usually means the vowel sound will be long.

2 Model

Write and say the words escape, reptile, alone, and complete. Have students repeat. Model drawing a line between the syllables. Draw a line under the VCe pattern in each of the final syllables and point out the long vowel sound.

3 Guided Practice

Write the words sunshine, costume, awake, and define. Have students draw a line between the syllables and a line under the VCe pattern in each of the final syllables. Then have students say each word.



Phrasing and Rate

Explain/Model Remind students that phrasing refers to grouping words and phrases when reading. Explain that rate refers to their reading speed. Point out that readers may slow down their rate to add emphasis or make sure the details are clear. Readers may speed up to add drama or excitement.

Model reading the page 231 of "Bats Did It First." Emphasize using commas in the paragraph to group phrases. Model changing your rate as you read.

Practice/Apply Have students echo-read as a group and then one at a time. Remind students to pay attention to phrasing and rate as they read. Offer feedback as needed.

Daily Fluency Practice

Students can practice fluency using Your Turn Practice Book.

Monitor and Differentiate



Can students decode words with prefixes and use the prefixes to determine the meanings? Can students read multisyllabic words with final e? Can students read fluently?

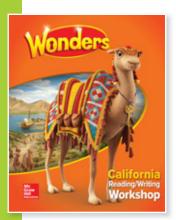


Small Group Instruction

If No → Approaching Level Reteach pp. T240, T242 EL Develop p. T258 On Level Review p. T248 Beyond Level Extend p. T252

ON-LEVEL PRACTICE BOOK p. 138 A. The prefix pre-means "before." The prefix dis-means "not." The prefix mis-means "bad" or "wrong." Read each set of words and circle the word that has a prefix. Write its meaning on the line. preheat to heat before paper to not trust messy preview 4. parting to treat badly misty mindful B. Read each sentence and underline the word that has a VCe pattern in the final syllable. Write the word on the line and circle the letters that make the pattern. I think we will retake the photos. 2. I had to fly in an airplane last year. airplane 4. They will plan a surprise party for Mom. surprise 5. The sunshine is pouring through the window. ____sunshine APPROACHING

Write to Sources



Reading/Writing Workshop

OBJECTIVES

GGSS Write informative/ explanatory texts to examine a topic and convey ideas and information clearly. Provide a concluding statement or section. W.3.2d

CGSS 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. W.3.10

ACADEMIC LANGUAGE

conclusion, closure, restate





U3W4 Organization: **Strong Conclusions**



Writing Fluency

Write to a Prompt Provide students with the prompt: Write about what the scientist learned from bats. Have students share their ideas. How do bats fly in the dark without bumping into things? How do they find bugs to eat? When students finish sharing ideas, have them write continuously for nine minutes in their Writer's Notebook. If students stop writing, encourage them to keep going.

When students finish writing, have them work with a partner to compare ideas and make sure that they both have a clear understanding of the topic.

Genre Writing

Book Review pp. T358-T363

Fourth Week Focus: Over the course of the week, focus on the following stages of the writing process:

Expert Model Discuss the Expert Model found online at Writer's Workspace. Work with students to identify the features of a book review.

Prewrite Teach the minilesson on supporting an opinion. Analyze the Model Three Column Chart found online at Writer's Workspace. Provide blank Three Column Charts found online at Writer's Workspace, and have students use the chart to plan their own book reviews.



Write to the Reading/Writing **Workshop Text**

Analyze the Prompt Read aloud the first paragraph on page 240 of the Reading/ Writing Workshop. Ask: What is the prompt asking? (to compare and contrast) Say: Let's reread to find clues about why the new cane is better. We can note text evidence.

Analyze Text Evidence Display Graphic Organizer 27 in Writer's Workspace. Say: Let's see how one student, Aisha, took notes to answer the prompt. She notes that the new cane was inspired by bats, which can fly in the dark without bumping into things. Guide the class through the rest of Aisha's notes.

Analyze the Student Model Explain how Aisha used text evidence from her notes to write a response to the prompt.

- **Topic Sentence** Aisha used her notes and the text evidence she wanted to include in her writing to write a strong topic sentence. **Trait: Organization**
- Supporting Details Aisha's details about the new cane support the topic sentence. Aisha used evidence about bats and the cane for her supporting details. Ask students to compare the evidence in Aisha's notes with the details in her writing. Trait: Ideas
- **Strong Conclusion** A good conclusion often restates the most important idea. Aisha's conclusion clearly restates why the new cane is better than earlier models. **Trait: Organization**

For additional practice with organization and strong conclusions, assign Your Turn Practice Book page 139.



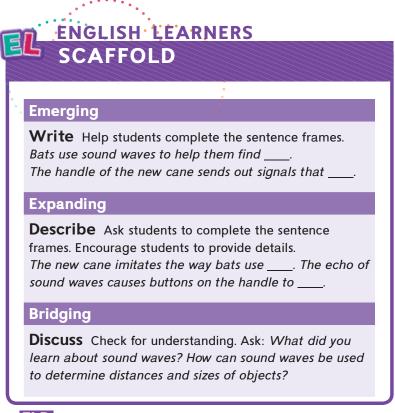
READING/WRITING WORKSHOP, pp. 240-241

Your Turn Writing Read the Your Turn prompt on page 241 of the Reading/Writing Workshop aloud. Discuss the prompt with students. If necessary, review with students that authors write strong conclusions to provide a sense of closure for their readers.

Have students take notes as they look for text evidence to answer the prompt. Remind them to include the following elements as they craft their response from their notes:

- Topic Sentence
- **Supporting Details**
- Strong Conclusion

Have students use Grammar Handbook page 483 in the Reading/Writing Workshop to edit for errors in future-tense verbs.



ELD.PI.3.10a.Em • ELD.PI.3.10a.Ex • ELD.PI.3.10a.Br



Write to Sources



For students who need support to complete the writing assignment for the Literature Anthology, provide the following instruction.

DAY 4

Write to the Literature Anthology Text

Analyze the Prompt Explain that students will write about Big Ideas from Nature on Literature Anthology pages 258-267. Provide the following prompt: How does the author help you understand that each new idea starts with a problem? Ask: What is the prompt asking you to do? (to analyze the author's explanation of problems and solutions)

Analyze Text Evidence Help students note evidence.

Page 259 Read this page. Ask: What does the first paragraph discuss? (how burrs inspired the invention of a two-sided fastener) What problem did this solve?

Page 267 Read this page. Ask: What examples does the author give of ideas in nature that can work for people? (spider silk and the "glue" that barnacles and mussels use to stick to rocks) How can observing how nature works help us protect the plan?

Encourage students to look for more text evidence of how problems and solutions are interconnected. Then have them craft a short response. Use the Teacher Conference routine below.

Write to Two Sources

Analyze the Prompt Explain that students will compare Big Ideas from Nature and "Perdix Invents the Saw." Provide students with the following prompt: How can nature inspire inventions? Use evidence from two sources to support your answer. Ask: What is the prompt asking you to do? (to identify inventions and tell how they are inspired by nature) Say: On page 262, I read that studying termite mounds helped builders figure out a new building design that saves money and energy. So in my notes, I will write: Engineers base the design of energy-efficient buildings on termite mounds. I will also note the page number and the title of the source. On page 271, the text says Perdix got the idea for a design of a tool to cut wood from the skeleton of a fish. I will add this to my notes.

Analyze Text Evidence Display online Graphic Organizer 28 in Writer's Workspace. Say: Let's see how one student took notes to answer the prompt. Here are Aisha's notes. Read through the text evidence for each selection and have students explain how the inventions in each selection were inspired by nature.

Teacher Conferences

STEP 1

Talk about the strengths of the writing.

The topic sounds very interesting and makes me want to read more. The topic sentence is written clearly and it grabs my attention.

STEP 2

Focus on how the writer uses text evidence.

Your writing is well organized. You support your ideas with specific evidence from the text. Try to add more details to your second paragraph.

STEP 3

Make concrete suggestions.

Rewrite the conclusion to make it stronger and to restate your main idea.



Share the Prompt Provide the following prompt to students: How can a new invention make life easier for people? Use text evidence from Big Ideas from Nature and "Perdix Invents the Saw" to support your answer.

Find Text Evidence Have students take notes. Find text evidence and give guidance where needed. If necessary, review with students how to paraphrase. Remind them to write the page number and source of the information.

Analyze the Student Model Review the prompt and Aisha's notes from Day 4. Display the student model on page 140 of the Your Turn Practice Book. Explain to students that Aisha synthesized her notes to write a response to the prompt. Discuss the page together with students or have them do it independently.

Write the Response Review the prompt from Day 4 with students. Have students use their notes to craft a short response. Tell students to include the title of both sources and the following elements:

- Topic Sentence
- Supporting Details
- Strong Conclusion



Share and Reflect Have students share their responses with a partner. Use the Peer Conference routine below.

Suggested Revisions

Provide specific direction to help focus young writers.

Focus on a Sentence

Read the draft and target one sentence for revision. Rewrite this sentence by adding details that explain _____.

Focus on a Section

Underline a section that needs to be revised. Provide specific suggestions. This section is interesting. I want to know more about ____. Provide more details that help me understand better.

Focus on a Revision Strategy

Underline a section. Have students use a specific revision strategy, such as deleting. You've included a lot of good details. Try taking out the details that do not support your main idea.

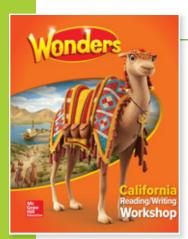
Peer Conferences

Focus peer responses on adding supporting details to explain the main idea. Provide these questions:

- Does the topic sentence state the purpose of the writing?
- Are all of the supporting details related to the topic sentence?
- Did your partner write a strong conclusion?



Grammar: Future-Tense Verbs



Reading/Writing Workshop

OBJECTIVES

CCSS Form and use the simple (e.g., I walked; I walk; I will walk) verb tenses. L.3.1e



CGSS Capitalize appropriate words in titles. L.3.2a

- · Identify and use future-tense verbs
- Capitalize and punctuate book titles correctly
- Proofread sentences for mechanics and usage errors



DAILY LANGUAGE ACTIVITY

captain knowles sailed to japan. When he arrivved, the emperor was there to greet him. (1: Capt. Knowles;

2: Japan; 3: arrived)

Introduce Future-Tense Verbs

Present the following:

 Verbs can show actions that happen in the present or in the past. They can also show action in the future:

> They see the shore. They saw the shore. They will see the shore.

- A future-tense verb describes an action that is going to happen: Hank will speak to her.
- Use the special verb will to write about the future.

Have partners discuss futuretense verbs using page 483 of the Grammar Handbook in Reading/ Writing Workshop.



DAILY LANGUAGE ACTIVITY

"The ball will bounced down the street if no one gets it," cried Candice. "Dan will gets it," said lucy. (1: will bounce; 2: will get; 3: Lucy)

Review Future-Tense Verbs

Review future-tense verbs. Tell students to discuss the difference between verbs that show action in the past, present, or future.

Introduce Subject-Verb Agreement with Future Tense

Present the following:

- A verb in the future tense tells about an action that will happen.
- Use will with a verb to form the future tense.
- A future-tense verb must agree with its subject:

I will meet you there. They will meet you there.

 Remind students that the same future-tense verb is used for both singular and plural nouns.



Pair students of different proficiency levels. Provide three sentences missing future-tense verbs. Have partners help each other practice using future-tense verbs correctly to complete the sentences.

ELD.PII.3.3.Em, ELD.PII.3.3.Ex, ELD.PII.3.3.Br



TALK ABOUT IT

USE THE FUTURE TENSE

Have students in small groups each write down five present-tense verbs on a piece of paper. Students will take turns selecting a paper and saying aloud a sentence using the future tense of the verb.

TALK ABOUT THE THEME

Ask partners to use future-tense verbs to talk about new ideas and learning from nature. Students might discuss different ideas people get from nature. As they talk, students should listen to be sure they use future-tense verbs.



DAILY LANGUAGE ACTIVITY

when spring arrives, flowers will bursts from the buds. They will grows until autumn (1: When; 2: will burst; 3: grow; 4: autumn.)

Mechanics and Usage: Book Titles

- The important words in a book or magazine title are always capitalized.
- The words the, and, in, of, and a are not capitalized in a title unless they are the first word.
- Underline all of the words in a book or magazine title if you are handwriting it. If you are using a computer, put the title in italic type.

As students write, refer them to Grammar Handbook pages 483, 500, and 504.



DAILY LANGUAGE ACTIVITY

mister evans read The story of King Arthur to us. We wills write a report about it. (1: Mr. Evans; 2: <u>The Story</u> of King Arthur; 3: will write)

Proofread

Have students correct errors in these sentences

- have you read Forest friends?
 Have; 2: Forest Friends?)
- 2. "My favorite book is the Indian in the cupboard," said April
 - (1: The Indian in the Cupboard;
 - 2: April.)
- **3.** The <u>little book of riddles</u> is so funny that I reads it four times.
 - (1: Little Book of Riddles;
 - 2: read)
- 4. I read my book tomorrow (1: will read; 2: tomorrow.)

Have students check their work using Grammar Handbook pages 483, 500, and 504.

DAY 5

DAILY LANGUAGE ACTIVITY

I told beth to read the book <u>all the</u> <u>zoo's animals</u>. She will reads it during the winter break.(1: Beth; 2: <u>All the</u> <u>Zoo's Animals</u>; 3: will read)

Assess

Use the Daily Language Activity and Grammar Practice Reproducibles page 70 for assessment.

Reteach

Use Grammar Practice
Reproducibles pages 66-69 and
selected pages from the Grammar
Handbook for reteaching. Remind
students it is important to use
future-tense verbs correctly as they
read, write, and speak.

Check students' writing for use of the skill and listen for it in their speaking. Assign Grammar Revision Assignments in their Writer's Notebooks as needed.

See Grammar Practice Reproducibles pages 66–70.

FUTURE TITLES

Have partners each write five book titles that contain present- and past-tense verbs. Remind them to capitalize the appropriate words in the titles. Students will take turns reading aloud a title using only future-tense verbs.

FUTURE-TENSE QUESTIONS

Partners should create five sentences with future-tense verbs and trade sentences with another partner. One partner should read a sentence; the other should identify the verb using a question form (for example, "What is will walk?").

SWITCH THE VERB TENSE

Have students in small groups each write down five sentences using past-tense verbs. Students will take turns selecting a sentence, saying it aloud, and repeating the verb. The others will raise their hands for a chance at saying the sentence aloud using a future-tense verb.



Spelling: Prefixes pre-, dis-, mis-



OBJECTIVES

GGSS Use spelling patterns and generalizations (e.g., word families, position-based spellings, syllable patterns, ending rules, meaningful word parts) in writing words. L.3.2f

ccs Determine the meaning of the new word formed when a known affix is added to a known word (e.g., agreeable/ disagreeable, comfortable/ uncomfortable, care/careless, heat/ preheat). L.3.4b

Spelling Words

misprint precut distrust misread preview discount mistrust prepaid dishonest preplan discover misspell mistreat preheat disable

Review stairs, rear, where Challenge prejudge, disconnect

Differentiated Spelling

Approaching Level

misread mistake discount misuse precut discover preplan distrust mistrust mistreat prepay disagree dismount mislead preheat

Beyond Level

misprint dishonest precut dismounted misread preheat mistreat preplan discover miscount preview disconnect distrust misspell presale

Assess Prior Knowledge

Display the spelling words. Model for students how to spell the word preview. Divide the word into its word parts. Point out that the prefix pre- means "before." Segment the prefix sound by sound, then attach a spelling to each sound.

Demonstrate sorting the spelling words by pattern under key words misprint, preview, and disable. (Write the words on index cards or the IWB.) Sort a few words. Point out the spellings for the prefixes disand mis-. Explain that dis- means not and that mis- means wrong, like a mistake.

Then use the Dictation Sentences from Day 5. Say the underlined word, read the sentence, and repeat the word. Have students write the words.

Spiral Review

DAY

Review the /âr/, /îr/ sound from *r*-controlled vowels in the words stairs, rear, and where. Have students find words in this week's readings with the same sounds.

Use the Dictation Sentences below for the review words. Read the sentence, say the word, and have students write the words.

- 1. The old stairs were creaky.
- 2. The extra tire was in the rear.
- 3. I knew where you were.

Challenge Words Review the spelling words, point out the prefixes, and discuss their meanings. Use the Dictation Sentences for challenge words. Read the sentence, say the word, have students write the word.

- 1. Don't prejudge the food until you taste it!
- 2. I had to disconnect the TV.

Have students check and correct their spellings.



WORD SORTS

OPEN SORT

Have students cut apart the Spelling Word Cards BLM in the Online Resource Book and initial the backs of each card. Have them read the words aloud with a partner. Then have partners do an open sort. Have them record the sort in their word study notebook.

PATTERN SORT

Complete the pattern sort using the key words, pointing out the prefixes and discussing their meanings. Have students use Spelling Word Cards to do their own pattern sort. A partner can compare and check their sorts.



Word Meanings

Display distrust, discover, mistrust, and precut. Model how to alphabetize to the third or fourth letter. Say: Look at the first two letters. Decide which one comes first in the alphabet. If the first and second letters are the same, go to the third letter, and so on.

Put these words in ABC order: precut, preheat, dishonest, discover. Explain that it is necessary to go to the fourth letter to alphabetize precut and preheat: since the letters pre are the same, and c comes before h.

Have students alphabetize the first five words in the spelling list to the fourth letter or beyond. DAY 4

Proofread and Write

Write these sentences on the board. Have students circle and correct each misspelled word. Remind students they can use print or electronic resources to check and correct spelling.

- The book's writer discovered a missprint. (discovered, misprint)
- Her prepade phone plan had a discaughnt price. (prepaid, discount)
- The mispelling made Sascha diztrust the author.
 (misspelling, distrust)
- **4.** All of the sandwiches were preecut. (precut)

Error Correction Remind students that a prefix is often its own syllable. If they say the word syllable by syllable as they spell it, this will help.

See Phonics/Spelling Reproducibles pp. 79-84.

SPEED SORT

Have partners do a **speed sort** to see who is faster. Then have them do a word hunt in their books for words with the prefixes *pre-, dis-* and *mis-*. Have them record the words in their Day 2 pattern sort in the word study notebook.

BLIND SORT

Have partners do a blind sort: one reads a spelling word card; the other tells under which key word it belongs. Have them take turns until both have sorted all their words. Then have students explain how they sorted the words.



Assess

Use the Dictation Sentences for the Posttest. Have students list misspelled words in their word study notebooks. Look for students' use of these words in their writings.

Dictation Sentences

- 1. The newspaper corrected the misprint.
- 2. He <u>misread</u> the instructions.
- 3. I <u>mistrust</u> a map that gets us lost.
- Ali never <u>misspells</u> a single word.
- 5. If you don't feed your cat, you mistreat it.
- 6. The teacher <u>precut</u> the paper.
- 7. The movie <u>preview</u> was very exciting.
- 8. Mom and Dad said the hotel was prepaid.
- 9. Dad will <u>preplan</u> our vacation.
- 10. The cookbook said <u>preheat</u> the stove.
- 11. Lacey would <u>distrust</u> your report.
- 12. The shop was offering a discount.
- 13. He was dishonest, but not a liar.
- 14. That man <u>discovered</u> ice on Pluto!
- 15. Claire <u>disabled</u> the phone's ringer.

Have students self-correct the tests.



Build Vocabulary



OBJECTIVES

GGSS Determine the meaning of the new word formed when a known affix is added to a known word (e.g., agreeable/ disagreeable, comfortable/ uncomfortable, care/careless, heat/ preheat). L.3.4b

ccs Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., company, companion). L.3.4c

> Expand vocabulary by adding inflectional endings and suffixes.

Vocabulary Words effective material example model identical observe similar imitate



Have partners practice using this week's words in an oral presentation, such as a brief retelling of a selection or a description of a character, event, or scientific process. Help them plan their presentations.

ELD.PI.3.9.Em, ELD.PI.3.9.Ex, ELD.PI.3.9.Br

Connect to Words

Practice this week's vocabulary.

- 1. What is an effective way to study for a test?
- 2. Give an example of a machine.
- 3. Describe identical twins.
- 4. Can you imitate an animal?
- 5. Name a material that was used to make your home.
- 6. What types of things can you make a **model** of?
- 7. How can you observe the stars in the night sky?
- 8. Describe two similar animals.

DAY

Expand Vocabulary

Help students generate different forms of this week's words by adding, changing, or removing inflectional endings.

- Draw a four-column chart on the board. Write observe in the left column. Then write observed, observing, and observation in the other columns. Read aloud the words, discuss the meanings, and have students share sentences.
- Repeat with other vocabulary words, such as imitate.
- Have students copy the chart in their word study notebook.

BUILD MORE UOCABULARY

ACADEMIC VOCABULARY

Discuss important academic words.

- Display the terms inventor and observation.
- Define each word and discuss the meanings with students.
- Display invent and inventor. Have partners look up and define related words.
- Write the related words on the board. Have partners ask and answer questions using the words. Repeat with observation. Elicit examples from students.

SUFFIXES



- Remind students that adding a suffix, such as -y and -ly, to a base word changes the meaning of the word. Give examples, such as effective and effectively. Have students copy the words and discuss the meaning of each word.
- Have partners generate examples of other words with the suffixes -y and -ly. After they have completed their list, ask them to write a sentence with one of the words.
- Invite students to share their words and discuss the meanings of the words.

DAY 3

Reinforce the Words

Review this week's vocabulary words. Have students orally complete each sentence stem.

- 1. Our teacher wants to find an effective way to _____.
- **2.** My mom gave me an <u>example</u> of a ____ math problem.
- **3.** ____ is a <u>material</u> you can find in most houses.
- **4.** Those two ____ are very similar.
- **5.** Some <u>identical</u> ____ actually have different personalities from one another.
- **6.** My brother likes to build model _____.



Connect to Writing

- Have students write sentences in their word study notebooks using this week's vocabulary.
- Tell them to write sentences that provide information about the words and their meanings.
- Provide the Day 3 sentence stems for students needing extra support.

Write About Vocabulary Have students write something they learned from this week's words in their word study notebook. For example, they might compare and contrast two *similar* animals.



Word Squares

Ask students to create Word Squares for each vocabulary word.

- In the first square, students write the word. (example: model)
- In the second square, students write their own definition of the word and any related words.
 (examples: design, mock-up)
- In the third square, students draw a simple illustration. (example: a model airplane)
- In the fourth square, students write non-examples. (example: actual)
- Have students share their Word Squares with a partner.

ROOT WORDS

Remind students that identifying root words can help them figure out the meanings of unfamiliar words.

- Display Your Turn Practice Book pages 133-134. Read the first paragraph under the New Ideas heading. Model figuring out the meaning of the word inventions.
- For additional practice with root words, have students complete page 137.
- Students can confirm meanings in a print or online dictionary.

SHADES OF MEANING

Help students generate words related to *similar*. Draw a synonym/ antonym scale on the board.

- Begin a discussion about the word similar. Elicit synonyms and write them on the scale. Ask follow-up questions, such as: Does similar have the same meaning as identical?
- Have partners work together to add other words to the scale.
 They may confirm meanings in a print or online dictionary.
- Ask students to copy the words in their word study notebook.

MORPHOLOGY

Use the word *effective* as a springboard for students to learn more words. Draw a T-chart.

- Write the word effect in the first column. Discuss the meaning.
- In the second column, write the suffix -ive. Discuss the meaning of the suffix and model how to use the suffix and the base word to determine the meaning.
- Have partners generate other words with the suffix -ive, such as product/productive.
- Tell students to use the suffixes and base words to determine the meanings of the words.

→ Integrate Ideas

Close Reading Routine



DOK 1-2

- Identify key ideas and details about New Ideas.
- Take notes and summarize.
- Use (AGT) prompts as needed.

Reread

DOK 2-3

- · Analyze the text, craft, and structure.
- Use Close Reading Companion.

Integrate

DOK 4

- · Integrate knowledge and ideas.
- · Make text-to-text connections.
- Use the Integrate lesson.
- Use Close Reading Companion, p. 94.

COSE READING

TEXT CONNECTIONS



Connect to the Essential Question

Write the essential question on the board: What ideas can we get from nature? Divide the class into small groups. Tell students that each group will compare the information that they have learned about what ideas we can get from nature. Model how to compare this information by using examples from this week's **Leveled Readers** and "Bats Did It First," **Reading/Writing Workshop** pages 230–235.

Evaluate Text Evidence Have students review their class notes and completed graphic organizers before they begin their discussions. Encourage students to compare information from all the week's reads. Have each group pick one student to take notes. Explain that each group will use a Two-Tab Foldable® to record their ideas. You may wish to model how to use a Two-Tab Foldable® to record comparisons.





OPINION PERFORMANCE TASK

Take a Stand: Overfishing



INQUIRY SPACE

LEVEL

2

3

4

5

6

Write an Outline

PREVIEW LEVEL 4 Display Level 4 of the Opinion Performance Task. Explain that in this level they will use their notes to write an outline for their opinion essay on how to protect the oceans from overfishing.

1 Organize Your Notes Model how to organize notes for an opinion essay for students. Say: I am writing an essay that states an opinion on whether cats or dogs make better pets. When I look through my notes, I find facts about cats and facts about dogs. I will put all of my notes about cats together, and then do the same for my notes about dogs. I will also divide my notes on each animal into positive and negative facts about that animal as a pet. You may wish to show students the Organize Notes animation from the Toolkit.

Text to Media

Post Online Remind students to discuss their responses to the "Let's Live in a Cactus!" Blast along with information from all the week's reads. Tell students to include Christina Rossetti's poem "What Is Pink?" on page 94 of the

Close Reading Companion as a part of their discussion. Guide students to see the connections among media, the poem, and text. Ask: How does the Blast connect to what you read this week? To Rossetti's poem?

Present Ideas and Synthesize Information

When students finish their discussions, ask for a volunteer from each group to read his or her notes aloud.

OBJECTIVE

SS Compare and contrast the most important points and key details presented in two texts on the same topic. RI.3.9





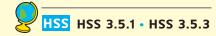


- Write an Outline Tell students that outlines start with a topic sentence. A topic sentence in an opinion essay might be one that asks a question, or it might state an opinion. The essay could even start with an interesting fact that grabs the reader's attention. Tell students that an outline is divided into sections. Each main idea is its own section. Explain that there should be at least two supporting details listed under each main idea. Display and discuss with the class the Student Model: Outline.
- 3 Draft Display the Student Model: Draft from the Toolkit. Discuss how the writer introduced the essay's topic. Then ask: Do you think this is a strong beginning for the essay? Did it get your attention or make you think about your own opinion on the topic? Does the writer list reasons for having their opinion? Does the writer have a strong concluding statement? Discuss with students how they might improve the draft. Then have students skim the draft for examples of facts used to support his opinion.

ASSIGN LEVEL 4 Have students begin Level 4 by reviewing their notes. You may wish to have students watch the **Outline to Draft** animation before they start writing.

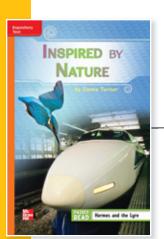
OBJECTIVES

- Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons. W.3.1a
- Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories. W.3.8





Approaching Level



Lexile 570
TextEvaluator_™ 24

OBJECTIVES

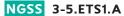
Determine the main idea of a text; recount the key details and explain how they support the main idea. R1.3.2

- Summarize the key points and facts of a text.
- Use root words to determine the meanings of words.

ACADEMIC LANGUAGE

summarize, main idea, details, expository, root word, myth





Leveled Reader: Inspired by Nature

Before Reading

Preview and Predict

Have students read the Essential Question. Have them read the title and table of contents of *Inspired by Nature* and predict what they will learn from reading it. Have them share their predictions with a partner.

Review Genre: Expository

Review with students that expository text explains about a topic. Expository text also includes text features like photographs and captions, and charts. As they preview *Inspired by Nature*, have students identify features of expository text.

During Reading

Close Reading

Note Taking Have students use their graphic organizer as they read.

Pages 2–3 Reread page 2, and look at the photo and caption on page 3. Explain to a partner the purpose of grooves on lotus leaves. (The grooves trap air bubbles and prevent dirt and water from settling on a leaf.) How has this inspired scientists? (They have made self-cleaning paints.)

Pages 4–6 Based on the title and the first sentence of paragraph 1, what is the main idea of Chapter 1? (Copying what we see in nature can improve how we travel.) Turn to a partner and find two key details that support this idea.

Look at the photos on page 5. How does the smaller photo help you better understand how a shark's skin looks? (Possible Response: It shows the skin up close so that you can see the scales.)

Pages 7–9 What is the main idea of Chapter 2? Think about how you figured out the main idea of Chapter 1. (Things in nature have helped us improve how we communicate.) What animal has helped scientists create better devices to warn people of a coming tsunami? (dolphins) What is the root of the word studied on page 7? (study) What does study mean? ("to work hard at learning something") What does studied mean? ("worked hard at learning something")







Fill in the Graphic Organizer

Pages 10–13 What have scientists done based on sandcastle worms? Help students summarize the key facts on page 10 to answer the question. What part of the gecko's feet inspired scientists? (the thousands of tiny hairs) How are a gecko's feet and Stickybot the same? Look at the photographs on pages 11 and 12 to help you answer the question. (They can both climb walls.)

Page 14 How are designs based on nature better? (They are built to last.) Talk to a partner about which design you liked best and explain why.

After Reading

Respond to Reading Revisit the Essential Question, and ask students to complete the Text Evidence Questions on page 15.

Analytical Write About Reading Have students work with a partner to write a short paragraph about a product from the book they find most interesting. Have them include two or more facts about the product.

Fluency: Phrasing and Rate

Model Model reading page 2 with proper phrasing and rate. Next, reread the page aloud, and have students read along with you.

> PIRED BY ATURE

Apply Have students practice reading with a partner.

PAIRED READ

"Hermes and the Lyre"

Make Connections: Write About It Analytical Write Wildelin

Leveled Reader Before reading, have students note that the genre of this text is a myth, which is a story that explains something in nature. Then discuss the Essential Question.

After reading, have students make connections between the information learned in *Inspired by Nature* and "Hermes and the Lyre."

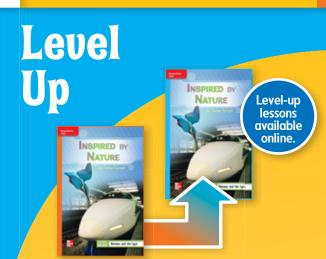


FOCUS ON SCIENCE

Students can extend their knowledge of how to create new products by completing the science investigation on page 20. STEM



Ask students to conduct a literature circle using the Thinkmark questions to guide the discussion. You may wish to have a whole-class discussion on ways they could borrow designs from nature, drawing from both selections from the leveled reader.



IF students read the Approaching Level fluently and answered the questions

THEN pair them with students who have proficiently read On Level and have approaching-level students

- echo-read the On Level main selection with their partner.
- use self-stick notes to mark a detail to discuss in each section.

ACCESS Complex Text

The On Level challenges students by including more domain-specific words and complex sentence structures.

Approaching Level

Phonics/Decoding

ELD ELD.PIII.3

DECODE WORDS WITH PREFIX pre-



OBJECTIVES

(ccss) Identify and know the meaning of the most common prefixes and derivational suffixes. RF.3.3a

> Decode words with prefix *pre*-.



Explain that a prefix is a word part added to the beginning of a word that changes the word's meaning. Identifying prefixes can help readers decode and understand an unfamiliar word. Tell students that the prefix pre- means "before." Write preheat on the board, underlining pre. Point out that if the prefix pre- means "before," then preheat means "to heat before." Repeat with precut and prepay.



Write preplan and preview on the board. Model how to decode each word. Underline each pre, and model decoding. Explain the meaning of each word. Have students read the words with you.



Add these words to the board: preschool, preset, and premix. Have students read each word aloud and give a short definition for each. Then point to the words in random order for students to read chorally. Repeat several times.

ELD ELD.PIII.3

BUILD WORDS WITH PREFIXES pre-, dis-, mis-



OBJECTIVES

(ccss) Identify and know the meaning of the most common prefixes and derivational suffixes. RF.3.3a

GCSS) Decode multisyllable words. RF.3.3c

> Build words with prefixes pre-, dis-, and mis-.



Tell students that they will be building multisyllable words with prefixes pre-, mis-, and dis-. Remind students that pre- means "before," dis- means "not," and mis- means "bad" or "wrong." Display these Word-Building Cards one at a time: pre, dis, mis, read, lead. Then write these syllables on the board: wash, teen, like, prove. Model sounding out each syllable.



Have students chorally read each syllable. Repeat at varying speeds and in random order. Next, display all the cards and syllables. Work with students to combine the Word-Building Cards and the syllables to form two-syllable words with prefixes pre-, dis-, and mis-. Have students chorally read the words: prewash, preteen, dislike, disprove, misread, mislead.



On the board, write: pre, dis, mis, paid, date, trust, mount, use, and take. Have students work with partners to build words using these syllables. Then have partners share the words they built and make a class list.

ELD ELD.PIII.3

PRACTICE WORDS WITH PREFIXES pre-, dis-, mis-

OBJECTIVES

(ccss) Identify and know the meaning of the most common prefixes and derivational suffixes. RF.3.3a

> Decode words with prefixes pre-, dis-, and mis-.



Remind students that a prefix can be added to a word to change its meaning. Write disagree on the board. Then read the word aloud. Point out that the new word is made of the prefix dis-, which means "not," and the root word agree. To disagree, then, means "to not agree."



On the board, write: presale, prejudge, disable, dishonest, misguide, and misspell. Model how to decode the first word, then help students read the remaining words. Underline the prefix in each word. Explain that the meaning of each word relates to the meaning of its root word and prefix.



Randomly point to the words for students to chorally read and define.

ELD ELD.PIII.3

OBJECTIVES

FINAL e SYLLABLES (VCe)

(ccss) Distinguish long and short vowels when reading regularly spelled one-syllable words. RF.2.3a

> Decode words with final e.



Review CVC words with students, such as cap and not, pointing out that CVC words usually have a short vowel sound. Tell students that when a word is spelled with a vowel, a consonant, and a final e, however, the vowel is usually long and the final e is silent. Point out the VCe pattern in cape and note. Tell students that when a word has a VCe spelling, the vowel and the silent e must stay in the same syllable.



Write sample words pan, them, rid, con, and hug on the board. Say each word and have students repeat. Model adding a final e to pan to make pane. Then model adding a final e to the rest of the words to make theme, ride, cone, and huge. Read the list out loud again while students read each word with you.



Write the words mad, pet, shin, glob, and cut on the board. Have students read the words, then add a final e to each word. Then point to the words in random order for students to chorally read.

ENGLISH LEARNERS

For the students who need phonics, decoding, and fluency practice, use scaffolding methods as necessary to ensure students understand the meaning of the words. Refer to the Language Transfers Handbook for phonics elements that may not transfer in students' native languages.

Approaching Level

Vocabulary

REVIEW HIGH-FREQUENCY WORDS



OBJECTIVES

(ccss) Acquire and use accurately gradeappropriate 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). L.3.6

> Review highfrequency words.



Use Word Cards 111-120. Display one word at a time, following the routine:

Display the word. Read the word. Then spell the word.



Ask students to state the word and spell the word with you. Model using the word in a sentence, and have students repeat after you.



Display the word. Ask students to say the word then spell it. When completed, quickly flip through the word card set as students chorally read the words. Provide opportunities for students to use the words in speaking and writing. For example, provide sentence starters such as For my sister's birthday, I ____ her a card. Ask students to write each word in their Writer's Notebook.

REVIEW VOCABULARY WORDS





OBJECTIVES

(ccss) Acquire and use accurately gradeappropriate conversational, general academic, and domain-specific words and phrases, including those that signal spatial and temporal relationships. L.3.6

> Review vocabulary words



Display each Visual Vocabulary Card and state the word. Explain how the photograph illustrates the word. State the example sentence and repeat the word.



Point to the word on the card and read the word with students. Ask them to repeat the word. Engage students in structured partner talk about the image as prompted on the back of the vocabulary card.



Display each visual in random order, hiding the word. Have students match the definitions and context sentences of the words to the visuals displayed. Then ask students to complete Approaching Reproducibles page 131.

IDENTIFY RELATED WORDS

OBJECTIVES

CESS Demonstrate understanding of word relationships and nuances in word meanings. Identify real-life connections between words and their use (e.g., describe people who are *friendly* or helpful). L.3.5b

> Identify words that are related in meaning.



Display the *imitate* Visual Vocabulary Card, and say aloud the word set imitate, copy, create. Point out that the word create does not belong and explain why.



Display the vocabulary card for the word *material*. Say aloud the word set material, drawing, substance. With students, identify the word that does not belong, and discuss why.



Using the word sets below, display the remaining cards one at a time, saying aloud the word set. Ask students to identify the word that does not belong.

identical, same, different effective, useless, capable

model, original, replica example, opposite, sample

observed, watched, ignored similar, alike, diverse

ROOT WORDS



OBJECTIVES

GGSS) Use a known root word as a clue to the meaning of an unknown word with the same root. L.3.4c

> Decode words by identifying root words.



Display the Comprehension and Fluency passage on Approaching Reproducibles pages 133-134. Read aloud paragraph 2. Point to the word sticky. Explain that students can figure out the meaning of a unknown word by determining the meanings of the root word and suffix.

Think Aloud I see that *sticky* contains the root word *stick* and the suffix -y. I know that the suffix -y means "having" or "are made of." I think that sticky must mean "having the ability to stick."

Write the definition of the word using the root word and suffix.



Ask students to point to the word *inventions* in the next paragraph. With students, discuss how to break the word down into its root, suffix, and inflectional ending to figure out the meaning. Write the definition of the word.



Have students find the meaning of *performance* and *reseachers* from the passage using their knowledge of root words and suffixes.

Approaching Level

Comprehension

FLUENCY

OBJECTIVES

CESS) Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings. RF.3.4b

> Read fluently with appropriate phrasing and rate.



Remind students that phrasing refers to grouping words and phrases when reading, usually by pausing at commas and stopping at periods. Tell students that rate refers to reading speed. Read the first paragraph of the Comprehension and Fluency passage on Approaching Reproducibles pages 133-134. Emphasize reading at a rate appropriate to the content, and model proper grouping of words and phrases.



Read the rest of the page aloud and have students repeat each sentence after you using the same phrasing and rate. Explain that you grouped certain words and phrases together to show meaning.



Have partners take turns reading sentences from the passage. Remind them to focus on their rate and phrasing. Listen in and provide corrective feedback as needed by modeling proper fluency.

IDENTIFY KEY DETAILS

OBJECTIVES

ccss Determine the main idea of a text; recount the key details and explain how they support the main idea. RI.3.2

Identify key details.



Write the topic *Tree Frogs*. Then write: sticky pads on feet; pads do not pick up dirt; pads secrete mucus. Explain that these three details are all about how tree frogs' feet stay clean and sticky. Help students understand that the details are connected to each other.



Read the first page of the Comprehension and Fluency passage in the Approaching Reproducibles. Ask: So far, what is this selection about? Point out that this is the topic of the selection. Then ask, What facts did the selection tell you about the topic? Explain that these facts are the details. Help students identify what point most of these details relate to. Discuss why these details are key, or most important.



Have students read the rest of the passage. After each paragraph, they should write down the details that seem key. Review their lists with them, and help them explain why the details they chose are key. Then have them use these details to determine the main idea.

REVIEW MAIN IDEA AND KEY DETAILS

OBJECTIVES

GCSS) Determine the main idea of a text; recount the key details and explain how they support the main idea. RI.3.2

> Identify the main idea and key details.



Remind students that the main idea is the most important point that an author makes about a topic. A paragraph has a main idea that the whole paragraph is about, and a whole selection has a main idea too. The details are all the smaller facts that tell about the main idea. Point out that one sentence can include more than one detail.



Read the first two paragraphs of the Comprehension and Fluency passage in Approaching Reproducibles together. Pause to point out key details in each sentence. Model how to decide what all the key details have in common, or how they are connected, and how to state the main idea using these details. Then, work with students to identify the main idea in each paragraph in the passage.



Have students use the main ideas of each paragraph to come up with the main idea of the whole passage.

SELF-SELECTED READING



OBJECTIVES

CCSS Determine the main idea of a text; recount the key details and explain how they support the main idea. **RI.3.2**

> Summarize key points and facts of a text.

Read Independently

Have students choose an expository text for sustained silent reading. Remind students that:

- the main idea is the most important point that the author makes about the topic. Details provide information about the main idea.
- they should summarize key points and facts of a paragraph or section to check their understanding.

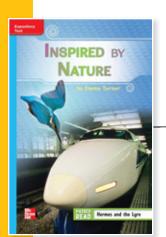
Read Purposefully

Have students record the main idea and key details on Graphic Organizer 141 as they read independently. After they finish, they can conduct a Book Talk, each summarizing the book they read.

- Students should share their organizers and answer this question: What was the most interesting fact you learned from this book?
- They should also tell the group if there were any photographs, captions, or diagrams that helped to increase their understanding.



On Level



Lexile 660

TextEvaluator_™ 31

OBJECTIVES

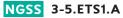
Determine the main idea of a text; recount the key details and explain how they support the main idea. R1.3.2

- Summarize the key points and facts of a text.
- Use root words to determine the meanings of words.

ACADEMIC LANGUAGE

summarize, main idea, details, expository, root words, myth





Leveled Reader: Inspired by Nature

Before Reading

Preview and Predict

Have students read the Essential Question. Have them read the title and table of contents of *Inspired by Nature*, predict what they will learn from reading it, and then share their predictions with a partner.

Review Genre: Expository

Review with students that expository text explains about a topic. Expository text also includes text features like photographs and captions, and charts. As they preview *Inspired by Nature*, have students identify features of expository text.

During Reading

Close Reading

Note Taking Have students use their graphic organizer as they read.

Pages 2–3 What does the introduction tell us about the main idea of this text? (Scientists are using nature's good ideas to make new things.)

What is clever about the lotus's design feature? (The plant has grooves on its leaves to trap air bubbles and act as a barrier for dirt.) What did the lotus grooves inspire? (the creation of self-cleaning paints)

Pages 4-6 What is the main idea of Chapter 1? Use the chapter title and first paragraph to answer the question. (We can use ideas from nature to improve how we travel.) Turn to a partner and tell two key details that support this idea. (Japan's first super-fast trains adapted the wedge shape of the kingfisher bird. Swimwear-makers have copied the texture of sharks' scales when making Olympic swimsuits.)

Pages 7–9 Use the root word to determine the meaning of studied. (Studied means "worked hard at learning something;" I know that the root word of studied is study, which means "to work hard at learning something.") How do Morpho butterfly wings appear blue? (The special patterns reflect light in a certain way.) How have the wings inspired scientists? (to make cell phones and e-readers with those same patterns so the screens look brighter in the sun)







Fill in the Graphic Organizer

Pages 10-13 Turn to a partner and summarize how scientists developed the Stickybot. (Scientists found that geckos' toes are covered in many tiny hairs. These allow geckos to climb on any surface. Scientists developed the Stickybot with feet designed to mimic geckos' feet. The Stickybot can stick to any surface.)

Page 14 What is the main idea of the conclusion? (Nature's designs are built to last.) What does the author think of designs based on nature? (They are wonderful and can help us improve our lives.)

After Reading

Respond to Reading Revisit the Essential Question, and ask students to complete the Text Evidence Questions on page 15.

Mrite About Reading Have students work with a partner to write a short paragraph about the product they find most interesting. Have them include two or more facts about the product.

Fluency: Phrasing and Rate

Model Model reading page 2 with proper phrasing and rate. Next, reread the page aloud, and have students read along with you.

Apply Have students practice reading with a partner.

PAIRED READ

"Hermes and the Lyre"

Make Connections: Write About It Analytical Writing

Before reading, have students note that the genre of this text is a myth, which is a story that may explain

something in nature. Then discuss the Essential Question. After reading, have students make connections between the information learned in *Inspired by Nature* and "Hermes and the Lyre."



Leveled Reader

FOCUS ON SCIENCE

Students can extend their knowledge of how to create new products by completing the science investigation on page 20. STEM

Literature Circles

Ask students to conduct a literature circle using the Thinkmark questions to guide the discussion. You may wish to have a whole-class discussion on ways they could borrow designs from nature, drawing from both selections from the leveled reader.

Level

NATURE



IF students read the On Level fluently and answered the questions

THEN pair them with students who have proficiently read Beyond Level and have on-level students

- partner-read the Beyond Level main selection.
- list and look up difficult words.
- name two details to learn more about.

A C T Access Complex Text

The Beyond Level challenges students by including more domain-specific words and complex sentence structures.

On Level

Vocabulary

REVIEW VOCABULARY WORDS

GGSS) Acquire and use accurately gradeappropriate 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). L.3.6

OBJECTIVES



Use the Visual Vocabulary Cards to review key vocabulary words material, model, effective, example, identical, and similar. Point to each word, read it aloud, and have students chorally repeat it.



Help students choose a vocabulary word for the sentence frames.

- Susan did not have enough _____ to finish the dress.
- Michael created a ____ of the rocket for his science project.
- The scientists used the most ____ way to compare results.



Have students work in pairs to complete to the following frames.

- My teacher wrote an ____ of the math problem on the board.
- The dancers wore ____ costumes for the performance.
- Axel and Vivian grew up together, but they are not ____ at all.

ROOT WORDS



OBJECTIVES

GGSS) Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., company, companion). L.3.4c



Tell students they can often figure out the meaning of an unknown word by identifying its root word. Use the passage on Your Turn Practice Book pages 133-134 to model figuring out the meaning of the word stickiness.

Think Aloud I want to know what stickiness means. I think the root word of stickiness is stick. I know that stick means "to remain attached to something." Stickiness means something that is characterized by the quality of remaining attached to something else.



Have students continue reading the selection. Have students figure out the definition of *inventions* by looking at the root word *invent*. Ask students to think of another word with the root word invent.



Have students work in pairs to determine the meanings of the words secretion and prediction as they read the rest of the passage.

Comprehension

REVIEW MAIN IDEA AND KEY DETAILS



OBJECTIVES

Determine the main idea of a text: recount the key details and explain how they support the main idea. **RI.3.2**



Remind students that the main idea is the most important point an author makes about a topic. Key details tell about the main idea of the text. Tell students to put the details together to figure out the main idea.



Have a volunteer read the Comprehension and Fluency passage on Your Turn Practice Book pages 133-134. Have students orally list details about the text. Help them explain why the details are important. Ask students: What do the details have in common with each other? Then, model how to identify the main idea using the key details students have provided.



Have partners describe the main idea of the text in their own words to each other. Ask students to list at least three key details that support the main idea.

SELF-SELECTED READING



OBJECTIVES

ccss Determine the main idea of a text; recount the key details and explain how they support the main idea. RI.3.2

> Summarize key points and facts of a text.

Read Independently

Have students choose an expository text for sustained silent reading.

- Before they read, have students preview the book, reading the title and viewing the front and back cover as well as any photographs, captions, and diagrams.
- As students read, remind them to summarize what they read to check their comprehension.

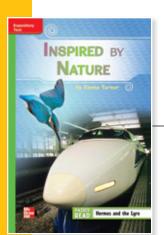
Read Purposefully

Encourage students to read different expository texts in order to learn about a variety of subjects.

- As students read, have them fill in the key details and main idea on Graphic Organizer 141.
- They can use this organizer to help them write a summary of the book.
- Ask students to share their reactions to the book with classmates.



Beyond Level



Lexile 790 TextEvaluator_™ 38

OBJECTIVES

Determine the main idea of a text; recount the key details and explain how they support the main idea. RI.3.2

- · Summarize the key points and facts of a text.
- Use root words to determine the meanings of words.

ACADEMIC LANGUAGE

summarize, main idea, details, expository, root word, myth



Leveled Reader:

Inspired by Nature

Before Reading

Preview and Predict

Have students read the Essential Question. Have them read the title and table of contents of *Inspired by Nature* and predict what they will learn from reading it. Have students share their predictions with a partner.

Review Genre: Expository

Review with students that expository text explains about a topic. Expository text also includes text features like photographs and captions, and charts. As they preview Inspired by Nature, have students identify features of expository text.

During Reading

Close Reading

Note Taking Have students use their graphic organizer as they read.

Pages 2–3 What does the author mention the lotus's grooves as an example of? (It shows how nature can give us ideas for design.) What does the introduction tell us about the main idea of this text? (People can look to nature to find good ideas for design.) Find the word in the text that explains this type of science. (biomimicry) What did the lotus grooves inspire? (the creation of self-cleaning paints)

Pages 4-6 Turn to a partner and summarize how scientists fixed the problem with ultra-fast trains. (Japan's trains made a very loud noise, so scientists changed the design. They designed the front of the train to be like the kingfisher's wedge-shaped beak, because the kingfisher makes no sound as it dives into water.)

Pages 7-9 What is Chapter 2's main idea? (mimicking animal communication systems) How does the diagram on page 8 help you better understand the text? (The picture and captions help me visualize how the warning system works and how information is sent to and from the devices and finally to the warning center.) How have other animals been mimicked to improve communication? (butterfly and bird wings to make colors on cell-phone screens brighter)





Leveled Readers



Fill in the Graphic Organizer

Pages 10–13 What is the meaning of dangerous on page 11? Find the root word and explain how you came to your answer. (Dangerous means "full of danger." The root word is danger, the suffix is -ous: "full of.")

Page 14 What does the author think about the future of biomimicry? (The exclamation point shows the author is excited about the endless possibilities for borrowing ideas from nature.) Turn to a partner and discuss what you think of biomimicry and explain why.

After Reading

Respond to Reading Revisit the Essential Question, and ask students to complete the Text Evidence Questions on page 15.

Write About Reading Have students work with a partner to write a short paragraph about the product they find most interesting. They should write a main idea and as many details as possible.

Fluency: Phrasing and Rate

Model Model reading page 2 with proper phrasing and rate. Next, reread the page aloud, and have students read along with you.

Apply Have students practice reading with a partner.

PAIRED READ

"Hermes and the Lyre"

Make Connections: Write About It Analytical William

Before reading, have students note

that the genre of this text is a myth, which is a story that may explain something in nature. Then discuss the Essential Question.

After reading, have students make connections between the information learned in *Inspired by Nature* and "Hermes and the Lyre."



Leveled Reader



Ask students to conduct a literature circle using the Thinkmark questions to guide the discussion. You may wish to have a whole-class discussion on ways they could borrow designs from nature, drawing from both selections from the leveled reader.



Gifted and Talented

Synthesize Challenge students to do research on other inventions that have been inspired by nature. Students can create a chart with the various inventions, including those mentioned in the main selection, and what in nature inspired each invention.



FOCUS ON SCIENCE

Students can extend their knowledge of how to create new products by completing the science investigation on page 20.



Vocabulary

REVIEW DOMAIN-SPECIFIC WORDS



OBJECTIVES

(ccss) Acquire and use accurately gradeappropriate conversational, general academic, and domain-specific words and phrases, including those that signal spatial and temporal relationships. L.3.6



Use the Visual Vocabulary Cards to review the meaning of the words model and material. Write science-related sentences on the board using the words.

Write the words microscope, obstacles, and scatter on the board, and discuss the meanings with students. Then help students write sentences using these words.



Have students work in pairs to review the meanings of the words system, frequencies, and limitation. Then have partners write sentences using the words.

ROOT WORDS



OBJECTIVES

(ccss) Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., company, companion). L.3.4c



Read aloud the first two paragraphs of the Comprehension and Fluency passage on Beyond Reproducibles pages 133-134.

Think Aloud I want to understand the word stickiness. I know that the root word of stickiness is stick. I know that stick means "to remain attached" to something. From what I know of suffixes, I can tell that stickiness means "something that is characterized by the quality of remaining attached to something else."

With students, read the rest of the first page. Help them figure out the meaning of inventions.



Have pairs of students read the next page. Ask them to identify root words and determine the meanings of any unfamiliar words.



Analyze Ask students to imagine that an inventor has created sticky pads for people to use on their feet. The pads will also secrete mucus when people go from place to place. Have students write several sentences in which they predict the success or failure of this new product. Encourage students to use artwork to show how the invention will work.

Comprehension

REVIEW MAIN IDEA AND KEY DETAILS



OBJECTIVES

CESS Determine the main idea of a text; recount the key details and explain how they support the main idea. RI.3.2



Remind students that the most important point the author makes about a topic is the main idea. The key details in a text tell about the main idea. Tell students that in order to find the main idea, they must review the details and decide which ones are key.

Have students read the Comprehension and Fluency passage on **Beyond** Reproducibles pages 133-134. Ask open-ended questions to facilitate discussion about the main idea and key details in the text, such as What does the diagram of the tree frog tell you about its foot? and What are two ways the design and function of a frog's foot could help people? Students should support their responses with details from the text.



Have students list the main idea and key details as they independently fill in Graphic Organizer 141. Then have partners use the completed organizers to provide a summary of "A Sticky Idea."

SELF-SELECTED READING



OBJECTIVES

GGSS Determine the main idea of a text; recount the key details and explain how they support the main idea. **RI.3.2**

> Summarize key points and facts of a text.

Read Independently

Have students choose an expository text for sustained silent reading.

- As students read, have them fill in Graphic Organizer 141.
- Remind them to summarize the key points and facts of the text to check their comprehension.

Read Purposefully

Encourage students to keep a reading journal. Ask them to read different expository texts in order to learn about a variety of subjects.

- Students can write summaries of the texts in their journals.
- Ask students to share their reactions to the texts with classmates.



Independent Study Challenge students to discuss how the text relates to the weekly theme of ideas we can get from nature. Ask students to think about and discuss an ability that an animal has that they would like to have.



English Learners



Reading/Writing Workshop

OBJECTIVES

Determine the main idea of a text; recount the key details and explain how they support the main idea. R1.3.2

- Summarize the key points and facts of a text.
- Use root words to determine the meanings of words.

LANGUAGE OBJECTIVE

Determine the main idea and key details of a text.

ACADEMIC LANGUAGE

- summarize, main idea, key details, root word, expository
- Cognate: detalles

Shared Read Bats Did It First

Before Reading

Build Background

Read the Essential Question: What ideas can we get from nature?

- Explain the meaning of the Essential Question. Demonstrate how we can observe nature to get ideas.
- Model an answer: We observe by looking at the world around us. Nature can give us ideas. Birds can teach us about flying. Fish can teach us about swimming. Let's make a list of what else we can observe.
- Ask students a question that ties the Essential Question to their own background knowledge: Work with a partner to make a list or draw pictures of something in nature that you want to learn about.

During Reading

Interactive-Question Response

- Ask questions that help students understand the meaning of the text after each paragraph.
- Reinforce the meanings of key vocabulary.
- Ask students questions that require them to use key vocabulary.
- Reinforce strategies and skills of the week by modeling.





View "Bats Did It First"

Page 231

Paragraphs 1-2

Explain and Model Summarizing Summarizing is giving the key points and facts of a text. Let's summarize what we have read in the first paragraph. The most important point is that nature can give us ideas. Who is inspired by nature? (inventors) How do inventors use nature? (They use nature as an inspiration for inventions.) This is also a key point. We can summarize paragraph 1 by saying: Nature can give us ___ (ideas). ____ (Inventors) use nature as inspiration to invent things.

Pages 232-233

Canes Lead the Way

Paragraph 1

Demonstrate how the cane is used. Who uses these canes? Have one student answer and another verify the answer. (blind people) The canes let them know when objects are in their way.

Paragraph 2

Reread the paragraph. Bats inspired the inventor to make a new kind of cane. What does the cane send out, just like bats? (sound waves)

How Bats Get Around

Paragraphs 1-2

Model Main Idea and Key Details The main idea of this section is that how bats get around, or travel, inspired the scientist who invented the new cane. Have one student give a key detail supporting the main idea and another student verify the answer and then come up with a new key detail. Continue until all key details have been discussed. Point to the picture on page 233. Bats use their mouths and noses to make sound waves.

What happens when the sound waves hit objects? (They bounce back as an echo.)

Explain and Model Root Words Have students echo read the sentence: These sounds create an amazing navigation system for bats. Have students identify the suffix -ion. Explain that navigate is the root word and means "to find your way." Have students complete the sentence frame: Navigation is the act of ____ (finding your way).

Page 234

A Batty Idea

Have students point to key facts in the section "A Batty Idea." Then have partners work together to summarize the facts in their own words. What animal did the scientist who invented the new cane imitate? (bats)

Pages 234-235

How the Cane Works

Paragraph 1

Have students choral read the labels in the illustration on page 234. Have students point to or read the correct label to answer the following questions. What sends out sound waves? (cane) What do the sound waves hit? (mailbox) What bounces back to the handle? (echo) Draw arrows on the board to demonstrate the sound waves hitting an object and the echo bouncing back. Buttons on the cane vibrate, or shake. Have students mimic you shaking your hand. The person feels the buttons and knows where the object is.

After Reading

Make Connections

- Review the Essential Question: What ideas can we get from nature?
- Make text connections.
- Have students complete the EL Reproducibles pages 133-135.



English Learners



Lexile 650 TextEvaluator_™ 27

OBJECTIVES

Determine the main idea of a text; recount the key details and explain how they support the main idea. RI.3.2

- Summarize the key points and facts of a text.
- · Use root words to determine the meanings of words.

LANGUAGE OBJECTIVE

Determine the main idea and key details.

ACADEMIC LANGUAGE

summarize, main idea, details, root words



Leveled Reader:

Inspired by Nature

Before Reading

Preview

- Read the Essential Question: What ideas can we get from nature?
- Refer to Ideas from Nature: What special things can an insect do?
- Preview Inspired by Nature and "Hermes and the Lyre": Let's read about people who have made things work better by finding ideas in nature.

Vocabulary

Use the Visual Vocabulary Cards to preteach the ELL vocabulary: pollute, reliable. Use the routine found on the cards.

During Reading

Interactive Question-Response

Note Taking Have students use the graphic organizer on ELL Reproducibles page 132. Use the following questions after reading each section. As you read, use visuals to define key vocabulary.

Pages 2–3 Look at the lotus leaf on page 3. What helps the leaf stay clean? (the bumps and grooves) What product have scientists created using this idea? (paints that clean themselves) Have students fill in the sentence frame to tell the main idea of the introduction. Nature is full of ____ (good ideas).

Pages 4-6 The title of Chapter 1, Getting Around, means "travelling." Use the title and the first sentence to figure out the main idea of this chapter. (It is about making travelling better.) Look at the pictures on page 4. How do the train and the bird look similar? Have one student answer and another elaborate on the answer. (The bird's beak and the front of the train match.)

Pages 7–9 Have students find the word *bright* on page 9. Bright *means* "giving out light." Now have students point to brighter in the last sentence and name the suffix. (-er) The suffix means "more." What does brighter mean? (Brighter means "giving out more light.")









Graphic Organizer **Pages 10–13** Have students pick one of the animals you just read about. What is an important fact about this animal? Write a summary of the facts on the board, and then have students choral read it.

Page 14 What are the benefits of using nature's designs? (built to last; do not pollute the planet; problems figured out; do not waste energy)

After Reading

Respond to Reading Help students complete the graphic organizer. Revisit the Essential Question. Have student pairs summarize and answer the Text Evidence Questions. Support students as necessary, and review all responses as a group.

Write About Reading Have students work with a partner to write a short paragraph about the product they find most interesting. Have them include three details about the product.

Fluency: Phrasing and Rate

Model Model reading page 2 with proper phrasing and rate. Next, reread the page aloud, and have students read along with you.

Apply Have students practice reading with a partner.

PAIRED READ

"Hermes and the Lyre"

Make Connections: Write About It Analytical Writing

Before reading, have students note that

the genre of this text is a myth, which is a story that may explain something in nature. Then discuss the Essential Question.

After reading, have students make connections between the information learned in *Inspired by Nature* and "Hermes and the Lyre."



Leveled Reader



FOCUS ON SCIENCE

Students can extend their knowledge of how to create new products by completing the science investigation on page 20.

Literature Circles

Ask students to conduct a literature circle using the Thinkmark questions to guide the discussion. You may wish to have a whole-class discussion on ways they could borrow designs from nature, drawing from both selections from the leveled reader.

Level Up



IF students read the **EL Level** fluently and answered the questions

THEN pair them with students who have proficiently read On Level and have EL students

- echo-read the On Level main selection with their partner.
- list difficult words and discuss them with their partner.

A C T Access Complex Text

The On Level challenges students by including more domain-specific words and complex sentence structures.



English Learners

Vocabulary

ELD ELD.PI.3.10a.Em • ELD.PI.3.10a.Ex • ELD.PI.3.10a.Br

PRETEACH VOCABULARY



OBJECTIVES

(ccss) Acquire and use accurately gradeappropriate conversational, general academic, and domain-specific words and phrases, including those that signal spatial and temporal relationships. L.3.6



Preteach vocabulary from "Bats Did It First" following the Vocabulary Routine found on the Visual Vocabulary Cards for effective, example, identical, imitate, material, model, observed, and similar.



Complete the Vocabulary Routine for each word, and point to the word on the Visual Vocabulary Card. Next, read the word with students. Ask students to repeat the word. Act out the word using gestures and actions.



Have students work with a partner to use two or more words in sentence frames. Then have each pair read the sentence frames aloud.

LANGUAGE OBJECTIVE

Use vocabulary words

Emerging

Help students write the completed sentences and read them aloud.

Expanding

Have students write two sentence frames and two clues.

Bridging

Challenge students to write about how identical differs from similar.

ELD ELD.PI.3.10a.Em • ELD.PI.3.10a.Ex • ELD.PI.3.10a.Br

REVIEW VOCABULARY



OBJECTIVES

CCSS Acquire and use accurately gradeappropriate conversational, general academic, and domain-specific words and phrases, including those that signal spatial and temporal relationships. L.3.6



Review the previous week's vocabulary words over a few days. Read each word aloud and point to the word on the Visual Vocabulary Card. Ask students to repeat after you. Then follow the Vocabulary Routine on the back of each card.



Act out the vocabulary words for students. Ask students to guess each word you act out. Give clues by describing your actions (e.g., for surface, say: The top of this desk is very smooth).



Have students choose two words and write clues about the words without showing their partners. Students should ask their partners additional questions about the words until they guess them correctly.

LANGUAGE OBJECTIVE

Use vocabulary words.

Emerging

Help students write clue words and read them aloud.

Expanding

Have students write clues using complete sentences.

Bridging

Challenge students to use synonyms or antonyms in their clues.

ELD ELD.PIII.3 • ELD.PIII.3 • ELD.PIII.3

ROOT WORDS



OBJECTIVES

GGSS) Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., company, companion). L.3.4c

LANGUAGE OBJECTIVE

Determine the meanings of unknown words using root words.



Read aloud the second paragraph of "Bats Did It First" on page 231 while students follow along. After summarizing the paragraph, point to the word invention. Remind students that a root word is the simplest form of a word. Point out that students can often use a root word to figure out the meaning of a related word.

Think Aloud I want to know the meaning of invention. I think the root word of *invention* is *invent*. I know that *invent* means "to make something new." So, I think that an invention is "something new that is made."



Have students read page 231 carefully. Using the root word, ask them to find the meaning of the word *inspiration*. Write the meaning on the board.



In pairs, have students reread page 232. Have them find the word navigation. Have them figure out the meaning of navigation by determining the root word.

Emerging

Help students determine its meaning by acting out the root word navigate.

Expanding

Ask students to locate the word and determine the meaning of its root word.

Bridging

Have students explain how they determined the meaning of the word.

ELD ELD.Pl.3.1.Em • ELD.Pl.3.1.Ex • ELD.Pl.3.1.Br

ADDITIONAL VOCABULARY



OBJECTIVES

RESS Produce simple, compound, and complex sentences. L.3.1i

> Discuss concept and high-frequency words.

LANGUAGE OBJECTIVE

Use concept and high-frequency words.



List concept and high-frequency words from "Bats Did It First": sound wave, echo, high-pitched; and Inspired by Nature: features, like, look, make. Define each word for students: A sound wave is a signal that humans cannot hear.



Model using the word like for students in a sentence: Elana sounds just like her mother. Then provide sentence frames and complete them with students: The ____ looks like ____.



Have pairs make up their own questions using the words look and make and share them with the class. Have students answer the questions.

Emerging

Help students copy and answer the questions correctly.

Expanding

Provide question starters for students, as necessary.

Bridging

Have students ask and answer questions.

English Learners

Writing/Spelling

ELD ELD.PI.3.10a.Em • ELD.PI.3.10b.Em • ELD.PI.3.10a.Ex • ELD.PI.3.10b.Ex • ELD.PI.3.10a.Br • ELD.PI.3.10b.Br

WRITING TRAIT: ORGANIZATION

OBJECTIVES

explanatory texts to examine a topic and convey ideas and information clearly. Provide a concluding statement or section.

Identify details for a strong conclusion.

LANGUAGE OBJECTIVE

Write a strong conclusion.



Explain that good writers add a strong conclusion to the end of informative or explanatory writing. Point out that a strong conclusion retells the main idea of the text in different words. Read the Student Model passage aloud as students follow along, and identify linking words.



Read aloud page 235 from "Bats Did It First" as students follow along. With students, model how to identify key details using a word web. Model how to draw a conclusion from these details to add to the center of the web.



Have pairs write a short paragraph using the word web. They should include a few sentences with details and end with a strong conclusion. Edit each pair's writing. Then, ask students to revise.

Emerging

Help students copy the edited sentences.

Expanding

Have students revise, adding details for a strong conclusion.

Bridging

Have students revise to strengthen the conclusion and edit for errors.

ELD ELD.PIII.3 • ELD.PIII.3 • ELD.PIII.3

SPELL WORDS WITH PREFIXES pre-, dis-, mis-

OBJECTIVES

derivational suffixes.

RF.3.3a

Identify and know the meaning of the most common prefixes and derivational suffixes.

Spell words with prefixes *pre-*, *dis-*, *mis-*.

LANGUAGE OBJECTIVE

Spell words with prefixes *pre-*, *dis-*, *mis-*.



Read the Spelling Words on page T236 aloud, modeling how to pronounce the prefixes and root words. Point out that the prefix *pre*-means "before," the prefix *dis*-means "not," and the prefix *mis*-means "bad" or "wrong."



Read the Dictation Sentences on page T237 aloud. Model how to segment the prefix and root word. Have students repeat and then write the word.



Display the words. Have students exchange their lists with a partner to check the spelling and write the words correctly.

Emerging

Help students copy the corrected words and say the words aloud.

Expanding

Have students circle the prefix and underline the root word in each word.

Bridging

After students correct their words, have pairs write sentences.

WEEK 4 Grammar

ELD ELD.PII.3.3.Em • ELD.PII.3.3.Ex • ELD.PII.3.3.Br

FUTURE-TENSE VERBS

OBJECTIVES

GGSS) Form and use the simple (e.g., I walked; I walk: I will walk) verb tenses. L.3.1e

> Use future-tense verbs.

LANGUAGE OBJECTIVE

Write sentences.



Language Transfers Handbook

There is no verb agreement in Khmer and Hmong. This may make it more difficult for Khmerand Hmong-speaking students to remember to use will when talking or writing about future action. Model correct usage of future-tense verbs, and have students repeat.



Remind students that a future-tense verb describes an action that is going to happen. Write the following sentences on the board: Mario will play soccer tomorrow. The girls will play basketball Sunday. Underline the verbs will play in both sentences. Read the sentences aloud, and have students repeat. Explain that the special verb will is added to speak and write about the future. Point out that the same future-tense verb is used for both singular and plural subjects.



Write the sentences below on the board, and underline the verb in each. Review how to form the future tense. For each sentence, ask a volunteer to change the underlined verb form to the future tense using will and tell if the subject is singular or plural. Have the volunteer read the sentence aloud, and have the other students repeat.

We walked to the park. He bakes a cake for the party.

Tara rides her bike. They buy fruit at the market.

The parents go to a meeting. Diego and Jane enjoyed the movie.



Have student pairs write two sentences each using present- or past-tense verbs. Then have them switch sentences with each other and rewrite their partners' sentences in the future tense using the verb will. Have students read their sentences aloud and, if possible, act out their sentences.

Emerging

Help students write sentences with presenttense verbs. Then help them rewrite their sentences using the verb will and read them aloud.

Expanding

Ask students to write their present- or past-tense sentences on the board. Have them underline the verb, tell if the subject is singular or plural, and rewrite the sentences in the future tense.

Bridging

At the board, challenge students to write sentences with irregular past-tense verbs such as was, were, bought, and broke. Have them rewrite their sentences in the future tense using will.

For extra support, have students complete the activities in the Grammar **Practice Reproducibles** during the week, using the routine below:

- Explain the grammar skill.
- Model the first activity in the Grammar Practice Reproducibles.
- Have the whole group complete the next couple of activities, then the rest with a partner.
- Review the activities with correct answers.

PROGRESS MONITORING



Unit 3 Week 4 Formal Assessment	Standards Covered	Component for Assessment	Alignment with California Smarter Balanced Assessment
Text Evidence	RI.3.1	 Selection Tests Weekly Assessments Approaching-Level Weekly Assessments 	Claim ①, Target 8
Main Idea and Key Details	RI.3.2	Weekly AssessmentsApproaching-LevelWeekly Assessments	Claim ①, Target 9
Root Words	L.3.4c	Selection TestsWeekly AssessmentsApproaching-Level Weekly Assessments	Claim ①, Target 🛈
Writing About Text	W.3.8	Weekly Assessments	Claim ②, Target 3 a
Unit 3 Week 4 Informal Assessment	Standards Covered	Component for Assessment	Alignment with California Smarter Balanced Assessment
Research/Listening/ Collaborating	SL.3.1d, SL.3.2, SL.3.3	RWWTeacher's Edition	For targets associated w/ Claims ③ and ④
Oral Reading Fluency (ORF) Fluency Goal: 82-102 words correct per minute (WCPM) Accuracy Rate Goal: 95% or higher	RF.3.4a, RF.3.4b, RF.3.4c	Fluency Assessment	(not component of End-of-Year test)

Using Assessment Results

Weekly Assessments Skills and Fluency	If	Then	
COMPREHENSION	Students score below 70%	assign Lessons 55–57 on Main Idea and Key Details from the <i>Tier 2 Comprehension Intervention online PDFs</i> .	
VOCABULARY	Students score below 70%	assign Lesson 155 on Word Parts from the <i>Tier 2 Vocabulary Intervention online PDFs.</i>	
WRITING	Students score below "3" on constructed response	assign Lessons 55–57 and/or Write About Reading Lesson 200 from the <i>Tier 2</i> Comprehension Intervention online PDFs.	
FLUENCY	Students have a WCPM score of 75-81	assign a lesson from Section 1,7,8,9 or 10 of the <i>Tier 2 Fluency Intervention online PDFs</i> .	
	Students have a WCPM score of 0-74	assign a lesson from Sections 2-6 of the <i>Tier 2 Fluency Intervention online PDFs</i> .	

Using Weekly Data

Check your data Dashboard to verify assessment results and guide grouping decisions.



Data-Driven Recommendations

Response to Intervention

Use the appropriate sections of the *Placement and Diagnostic Assessment* as well as students' assessment results to designate students requiring:



Intervention Online PDFs



WonderWorks Intervention Program

