

# Grade 6 Reading

Student At-Home Activity Packet

This At–Home Activity packet includes two parts, Section 1 and Section 2, each with approximately 10 lessons in it. We recommend that your student complete one lesson each day.

Most lessons can be completed independently. However, there are some lessons that would benefit from the support of an adult. If there is not an adult available to help, don't worry! Just skip those lessons.

Encourage your student to just do the best they can with this content—the most important thing is that they continue to work on their reading!

Flip to see the Grade 6 Reading activities included in this packet!

## Grade 6 Reading Activities in Section 1

Lesson	Resource	Instructions	Answer Key	Page
1	<section-header></section-header>	<ul> <li>Read the Introduction.</li> <li>Complete the Guided Practice.</li> <li>Complete the Independent Practice.</li> </ul>	<ul> <li>Guided Practice: Answers will vary. Sample answers:</li> <li>1. Wouldn't it be fun to learn about insect colonies?</li> <li>2. When I looked at the museum map, I noticed a new insect exhibit.</li> <li>3. Near the entrance to the exhibit, the first thing I saw was a giant grasshopper.</li> <li>Independent Practice: 1. C, 2. C, 3. B, 4. C</li> </ul>	10–11
2	<section-header></section-header>	<ul> <li>Read the Introduction.</li> <li>Complete the Guided Practice.</li> <li>Complete the Independent Practice.</li> </ul>	Guided Practice: Answers will vary. Sample answers:Marsupials: mammals that carry their young in pouchesDefense mechanisms: keeps itself safe, hissesCollapses: pretends to be deadUnconscious: before thinkingIndependent Practice: 1. B, 2. C, 3. B, 4. C	12–13
3	<text></text>	<ul> <li>Read the Introduction.</li> <li>Complete the Guided Practice.</li> <li>Complete the Independent Practice.</li> </ul>	<ul> <li>Guided Practice: Answers will vary. Sample answers:</li> <li>1. audience: circle "aud" – audience has something to do with hearing</li> <li>2. motor: circle "mot" – motor has something to do with moving</li> <li>3. motion: circle "mot" – motion has something to do with moving</li> <li>4. thermometer: circle "therm" and "meter" – thermometer has something to do with measuring heat.</li> <li>5. vision: circle "vis". – vision has something to do with seeing</li> <li>Independent Practice: 1. A, 2. C, 3. D, 4. B</li> </ul>	14-15

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## Grade 6 Reading Activities in Section 1 (Cont.)

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4	<section-header><section-header><section-header></section-header></section-header></section-header>	<ul> <li>Read Part 1, including the passage about the giant squid.</li> <li>Underline evidence in the text about the giant squid.</li> <li>Read Part 2, including "A Scientist's Search for Bigfoot."</li> <li>Complete the inference chart.</li> <li>Complete the short written response.</li> <li>Read Part 3.</li> <li>Underline the evidence in the passage.</li> <li>Circle the correct answer in the question after the passage.</li> <li>Complete the short written</li> </ul>	<ul> <li>IntroductionUnderlining: Answers may vary, but any of the questions in paragraph 2 show that the writer wants more research to be done.</li> <li>Modeled Instruction - Inference Chart: The additional detail should relate to the "other samples." The finished inference should relate to the idea that Dr. Meldrum may think Bigfoot is real.</li> <li>Written Response: Answers will vary. Explanation should show how the inference students wrote and the detail are connected.</li> <li>Guided Instruction - Underlining: Best sentence is the second sentence that starts with "They feel"</li> <li>Guided Instruction: Correct answer is B</li> <li>Guided Instruction: Written Response - Answers will vary.</li> </ul>	16-18
5	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>	<ul> <li>Read Part 4, including "Tale of Chupacabras."</li> <li>Underline evidence in the passage.</li> <li>Answer questions 1 and 2.</li> <li>Complete the short written response in question 3.</li> </ul>	Guided Practice: Underlining – Answers will vary Guided Practice: Questions – 1. C, 2. D Guided Practice: Question 3 – Answers will vary.	19–20

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6	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>	<ul> <li>Read Part</li> <li>f, including</li> <li>"Looking for</li> <li>the Loch Ness</li> <li>Monster."</li> <li>Answer questions</li> <li>1–4.</li> <li>Complete the short written</li> </ul>	<b>Independent Practice</b> : Questions – 1. D, 2. A, 3. D, 4. C, 5. Answers will vary	21–23
	<ul> <li>Second Second Sec</li></ul>	response in question 5.		
7	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>	<ul> <li>Read "Worth More Than Gold."</li> <li>Answer Questions 1–4.</li> <li>Complete the written response in question 5.</li> </ul>	Answers: 1. C, 2A. A, 2B. D, 3. B, 4. C, 5. Answers will vary	24–27
8	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>	<ul> <li>Read "The Scent of Memory."</li> <li>Answer questions 6–10.</li> <li>Complete the written response in question 11.</li> </ul>	Answers: 6A. D, 6B, D. 7. B, E, F, 8. B, 9. C, 10. A, 11. Answers will vary	28-32
9	<section-header><section-header><section-header><section-header><text><text><text><text><text><list-item><list-item><list-item><list-item><list-item><list-item></list-item></list-item></list-item></list-item></list-item></list-item></text></text></text></text></text></section-header></section-header></section-header></section-header>	<ul> <li>Read "Luck Favors the Prepared."</li> <li>Answer questions 1–9.</li> </ul>	Answers: 1. D, 2A. B, 2B. 1 and 4, 3. B, 4. C, 5. A, 6. B, 7. Answers will vary 8. Answers will vary. 9. Answers will vary	33-40



## Grade 6 Reading Activities in Section 2

Lesson	Resource	Instructions	Answer Key	Page
1	<text></text>	<ul> <li>Read the Introduction.</li> <li>Complete the Guided Practice.</li> <li>Complete the Independent Practice.</li> </ul>	<ul> <li>Guided Practice: Answers will vary. Sample answers:</li> <li>1. The thunder was so loud, we thought maybe the Fourth of July had come early.</li> <li>2. It poured for an hour.</li> <li>When we finally got out of the car, each of our sleeping bags had soaked up a bathtub–full of water.</li> <li>Independent Practice: 1. A, 2. D, 3. B, 4. D</li> </ul>	41-42
2	<section-header><section-header></section-header></section-header>	<ul> <li>Read the Introduction.</li> <li>Complete the Guided Practice.</li> <li>Complete the Independent Practice.</li> </ul>	<b>Guided Practice</b> : extracts: 3, extract: 2, accounts: 1, account for: 2 <b>Independent Practice</b> : 1. B, 2. A, 3. B, 4. C	43-44
3	<section-header><section-header></section-header></section-header>	<ul> <li>Read the Introduction.</li> <li>Complete the Guided Practice.</li> <li>Complete the Independent Practice.</li> </ul>	Guided Practice: 1. state, declare, insist, 2. deny, 3. acrid, unpleasant, 4. sugary, sweet Independent Practice: 1. A, 2. C, 3. A, 4. D	45-46

## Grade 6 Reading Activities in Section 2 (Cont.)

Lesson	Resource	Instructions	Answer Key	Page
4		<ul> <li>Read Part <ol> <li>instructions</li> </ol> </li> <li>Read Part <ol> <li>including</li> <li>the passage</li> <li>Abraham</li> <li>Lincoln.</li> <li>Complete the</li> <li>inference chart.</li> <li>Read Part <ol> <li>including</li> <li>"Aretha,</li> <li>Arachne, and</li> <li>the Weaving</li> <li>Contest."</li> </ol> </li> <li>Complete the</li> <li>inference chart.</li> <li>Complete the</li> <li>inference chart.</li> <li>Complete the</li> <li>short written</li> <li>response.</li> <li>Read Part 3.</li> <li>Circle the</li> <li>evidence in the</li> <li>passage.</li> <li>Circle the</li> <li>correct answer</li> <li>in the question</li> <li>after the</li> <li>passage.</li> <li>Complete the</li> </ol></li></ul>	Introduction—Inference Chart: Answers will vary <b>Modeled Instruction</b> : Inference Chart: Answers will vary, but should include details about how Athena is upset. <b>Written Response</b> : Answers will vary. Explanation should show how the inference students wrote and the detail are connected. <b>Guided Instruction</b> : Circling: Answers will vary <b>Guided Instruction</b> : Correct answer is B <b>Guided Instruction</b> : Written Response – Answers will vary.	47-49

## Grade 6 Reading Activities in Section 2 (Cont.)

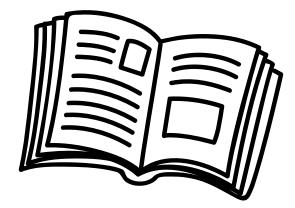
Lesson	Resource	Instructions	Answer Key	Page
5	<section-header><section-header></section-header></section-header>	<ul> <li>Read Part 4, including "The Wisdom of the Willow Tree."</li> <li>Underline sentences that show what Young Man learns on his journey.</li> <li>Answer questions 1 and 2.</li> <li>Complete the short written response in question 3.</li> </ul>	Guided Practice: Underlining – Answers will vary Guided Practice: Questions – 1. B, 2. D Guided Practice: Question 3 – Answers will vary.	50–51
6	<section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header>	<ul> <li>Read Part</li> <li>5, including</li> <li>"A Sewing</li> <li>Sensation."</li> <li>Answer</li> <li>questions 1–4.</li> <li>Complete the</li> <li>short written</li> <li>response in</li> <li>question 5.</li> </ul>	<b>Independent Practice</b> : Questions – 1. B, 2. C, 3. B, 4. D, 5. Answers will vary	52–54
7	<section-header><section-header><section-header><text><section-header><section-header><text><list-item><list-item><list-item><list-item><list-item><list-item><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></list-item></list-item></list-item></list-item></list-item></list-item></text></section-header></section-header></text></section-header></section-header></section-header>	<ul> <li>Read "Work Smarter, Not Harder."</li> <li>Answer questions 6–10.</li> <li>Complete the written response in question 11.</li> </ul>	Answers: 6. D, 7. C, 8A. B, 8B. D, 9. C, 10. C, 11, Answers will vary	55-59

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## Grade 6 Reading Activities in Section 2 (Cont.)

Lesson	Resource	Instructions	Answer Key	Page
8	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>	<ul> <li>Read "His Wings and Tail."</li> <li>Answer questions 12–16.</li> </ul>	Answers: 12. B, 13. A, F, 14A. C, 14B, Answers will vary, 15. B, 16A. A, 16B. D	60-63
9	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>	•Read "Dust." •Answer questions 1–9.	Answers: 1. D, 2. A, 3. C, 4. C, 5A. B, 5B. D, 6–9: Answers will vary	64-71

# Independent Reading!



See pages 72 and 73 of this packet.



Use the questions/ prompts on the Discourse Card resource to start a conversation about something the student has read. You may talk about a text the student read in one of the lessons above, or anything else the student is reading.

**Encourage daily reading**. And remember, reading isn't just about the books on the shelves—it's about anything around you with letters! Turn on the closed captioning feature on your TV or read catalogs that come in the mail. The backs of cereal boxes work, too, as do directions to board games!

Running out of stuff to read? **Grab some sticky notes, and label household objects, or make up new, silly names for things!** Communicating with sticky notes, instead of talking, is fun, too—start with a half hour and see if you can go all afternoon. Reading is everywhere!

**Don't worry about right/wrong answers** when you talk about text—the important thing is that you and your student share a reading experience and have fun!

#### Here are some websites that offer fun, free, high-quality material for kids:

- www.starfall.com www.storyplace.org www.uniteforliteracy.com www.storynory.com
- www.freekidsbooks.org
- en.childrenslibrary.org



### **Section 1 Activities**

## Lesson 9 Varying Sentence Patterns

Good writers use a variety of sentence types. They mix short and long sentences, and they find different ways to start sentences. Here are ways to improve your writing:

- Use different sentence types: statements, questions, imperatives, and exclamations.
- Use different sentence structures: simple, compound, complex, and compound-complex.
- Sometimes begin a sentence with a prepositional phrase or a dependent clause.

#### Draft

We went on an impressive field trip. We went to the science museum. The building was huge. It had many exhibits. I especially liked the laser exhibit. You should make sure to visit the museum.

#### Revision

Our field trip to the science museum really impressed me. The building itself was huge, and it was filled with exhibits. Do you dream of seeing actual lasers? At some point, then, be sure to visit the museum. You won't be sorry!

😵 🛛 Guided Practice

#### Follow the directions to rewrite each sentence or pair of sentences.

#### Hint

When a sentence begins with a dependent clause, use a comma to separate it from the main clause. When a sentence begins with a prepositional phrase, usually use a comma after the phrase.

- 1 Change this sentence to a question: It is fun to learn about insect colonies.
- 2 Use the word *when* to combine these sentences: I looked at the museum map. I noticed a new insect exhibit.
- 3 Combine these sentences so that the new sentence begins with a prepositional phrase: It was near the entrance to the exhibit. The first thing I saw was a giant grasshopper.

#### Independent Practice

## Read the paragraphs for numbers 1–4. Then answer the questions that follow in each column.

(1) Many of the insects were robots.(2) I almost thought they were real.(3) They moved like real insects. (4) They were much larger than real insects.

- 1 Which is the best way to revise sentence 1?
  - **A** For me, the insects were robots.
  - **B** When looking, many of the insects were robots.
  - **C** To my surprise, many of the insects were robots.
  - **D** Surprised, many of the insects were robots.
- 2 Which best combines sentences 3 and 4?
  - A They moved like real insects, or they were much larger.
  - **B** They moved like real insects, so they were much larger.
  - **C** They moved like real insects, but they were much larger.
  - **D** They moved like real insects, because they were much larger.

#### **Answer Form**

1	A	₿	$^{\odot}$	D		
2	A	₿	$^{\odot}$			
3	A	₿			Number	/
4	A	₿	$^{\odot}$		Correct	⁄4

(5) The tour guide told us that the robots show insect behavior. (6) A wolf spider seemed to rush toward me.(7) I was scared. (8) I remembered it was a robot spider.

- **3** Which is the best way to revise sentence 6?
  - A After a long time, a wolf spider seemed to rush toward me.
  - **B** At that moment, a wolf spider seemed to rush toward me.
  - **C** After the trip, a wolf spider seemed to rush toward me.
  - **D** Along with others, a wolf spider seemed to rush toward me.
- 4 Which is the best way to combine sentences 7 and 8?
  - A Remembering it was a robot spider, I was scared.
  - **B** I looked scared, but the robot looked like a spider.
  - **C** I was scared until I remembered it was a robot spider.
  - **D** I was scared when I remembered it was a robot spider.

## Lesson 11 Using Context Clues

When you come across a word you do not know in your reading, look for clues. **Context clues** are words and phrases in the text that give hints to a word's meaning.

Context Clue	Signal Words	Example
Definition	are, is, means, or	Larger animals often treat smaller animals as prey, or something to be killed and eaten.
Example	like, such as, for example	Predators, such as hawks, wolves, and coyotes, hunt rabbits.
Cause and Effect	as a result of, because, and thanks to	<b>Because</b> many animals eat rabbits, the number of wild rabbits has <u>decreased</u> .
Comparison and Contrast	like, too, similarly, but, unlike, although	Although wolves eat both plants and animals, hawks are completely carnivorous.

A word's position and function in the sentence can also be a clue to its meaning. For example, read the sentence below:

Brown bears are solitary animals and are often found alone.

You can tell that *solitary* is an adjective in this sentence. The adjective describes the bears. Then the word *solitary* is defined in the sentence. Since the bears *are often found alone,* this gives a good clue to what the word *solitary* means.

## Guided Practice Read the paragraph below. Circle context clues to help you figure out the meaning of the underlined words. Then tell a partner the meaning of the underlined words.

#### Hint

Think about the different types of context clues. Look for words that signal examples, cause and effect, and contrasts. Then use the clues to help you figure out the meanings of the underlined words. Marsupials are mammals that carry their young in pouches.

The American opossum is a marsupial. Thanks to its <u>defense</u> <u>mechanisms</u>, the opossum keeps itself safe from predators. When threatened, it hisses, growls, and bites. If this doesn't work, the opossum reacts in an unusual way. Although many animals move quickly to escape danger, the opossum <u>collapses</u> and pretends to be dead. This is an <u>unconscious</u> response to stress that is similar to jerking your hand away from a hot object before thinking. Read the paragraph. Then answer the questions that follow for numbers 1–4.

#### **Answer Form**

1 (A) (B) (C) (D) 2 (A) (B) (C) (D) 3 (A) (B) (C) (D) 4 (A) (B) (C) (D) Correct 4

Pangolins have a physical <u>resemblance</u>, or likeness, to an armadillo, with claws and armored bodies. When attacked, pangolins <u>thwart combat</u> by rolling into a hard ball and hiding. Like bats and other animals that sleep all day, pangolins are <u>nocturnal</u>. Because they lack teeth, eating tiny stones with their food is <u>critical</u> for digestion.

3 1 Which phrase from the paragraph What does the word nocturnal best helps you understand the suggest about the pangolins? meaning of the word resemblance? **A** They roll into hard balls. have a physical Α В They are awake at night. R or likeness **C** They are like all other animals. С with claws D They lack teeth. **D** armored bodies 4 What does the word critical mean 2 What does the phrase thwart combat in the paragraph? mean in the paragraph? Α safe Α get attacked В possible В attack others С necessary **C** avoid a fight D imaginable **D** start a fight

## Lesson 12 Greek and Latin Word Parts

Many English words have Greek and Latin roots and affixes. By becoming familiar with them, you will be able to unlock the meaning of many words.

• **Roots** are word parts that have meanings but usually cannot stand alone. Sometimes roots combine with other roots to form words, such as *audiovisual*.

Root Meaning		Root	Meaning
aud	"hear"	mot, mov	"move"
cycle	"circle, wheel"	vis, vid	"see"
therm	"heat"	meter	"measure"

• Affixes, such as prefixes and suffixes, can also be added to roots to form words, such as *interject*.

Prefix	Meaning	Suffix	Meaning
uni-	"one"	-ance, -ence	"state of"
bi-	"two"	-ion, -al	"action, process"
tri-	"three"	-or	"state" or "quality of"

## Guided Practice Circle the roots in the underlined words. Write the meaning of each root. Then tell a partner the meaning of the underlined words.

#### Hint

A suffix adds meaning to a root or word. Suffixes often give clues that indicate part of speech (noun, adjective, etc.). The suffix *-ence* usually signals a noun; the suffix *-al* usually signals an adjective.

- 1 Inez sat in the audience at a cooking show.
- <sup>2</sup> The motor of the cake mixer broke. The chef needed help.
- B He made a hand motion for lnez to come up on stage.
- 4 As he worked, she kept an eye on the oven thermometer.

5 Because she had great vision, this was an easy task.

lndependent Practice	
For items 1–4, read each sentence. Then answer the	1 (A) (B) (C) (D) 2 (A) (B) (C) (D) 3 (A) (B) (C) (D) Number
<ul> <li>Watch now rextend the dough with my hands," said the chef.</li> <li>The prefix ex- means "out," and the root tend means "stretch." What does the word extend mean in the sentence?</li> <li>A pull it in different directions</li> <li>B form it into small balls</li> <li>C loosen it with water</li> <li>D cut it into small pieces</li> <li>2 "Next, I add the equivalent of a teaspoon of spice," explained the chef.</li> <li>The prefix equi- means "equal," and the root vale means "worth." What does the word equivalent mean in the sentence?</li> <li>A half portion</li> <li>B cost</li> <li>C same measure</li> <li>D double the amount</li> </ul>	<ul> <li>4 (A) (B) (C) Correct / 4</li> <li>3 "Are my directions audible?" asked the chef. The root <i>aud</i> means "hear," and the suffix <i>-ible</i> means "able." What does the word <u>audible</u> mean in the sentence?</li> <li>A necessary</li> <li>B too complicated</li> <li>C realistic</li> <li>D loud enough</li> <li>4 Inez told the chef she was grateful for the cooking lesson. The root <i>grat</i> means "pleasing," and the suffix <i>-ful</i> means "having or giving." What does the word grateful mean in the sentence?</li> <li>A eager</li> </ul>
	<ul><li>B thankful</li><li>C greatly impatient</li><li>D responsible</li></ul>

Lesson 3 Part 1: Introduction 🍪 Citing Evidence to Make Inferences

Theme: Mysterious Creatures

Writers don't always tell you exactly what's on their minds. Sometimes you need to make a reasonable guess about what the writer thinks. A reasonable guess, which is based on both evidence and your prior knowledge of a topic, is called an **inference**.

#### The passage below is about a creature known as the giant squid. You will read it twice.

For many years, both sailors and scientists suspected that a creature they called the giant squid lived in the ocean depths. Over the years, the evidence mounted, and in 2012 came solid proof: They filmed giant squids swimming in the ocean.

Before the 2012 video, nobody had answers to several significant questions about giant squids. How did they act in the wild? Were they hunters? Or did they just float in the water, eating what came their way? What purpose did their huge eyes serve? Thanks to the video, we have some answers. We know that the squid is a hunter that uses its large eyes to spot prey and avoid being eaten. But many fascinating mysteries about the creature still need solving. Will this important research continue?

## Read the passage again. This time, underline any evidence suggesting whether the writer feels scientists should keep researching the giant squid.

So, does the writer think that scientists should keep researching the giant squid? You can use evidence from the text to make and support an inference about what she thinks.

What You Know -	What the Text Says	=	Inference
A person with positive feelings about a type of work usually wants that work to continue.	<ul> <li>"Before the 2012 video, nobody had answers to several significant questions about giant squids."</li> <li>"But many fascinating mysteries about the creature still need solving."</li> <li>"Will this important research continue?"</li> </ul>		The author thinks that scientists should keep researching the giant squid.

#### Study the chart. It shows how you can support an inference using textual evidence.

By using text evidence and what you already know, you can make and support inferences. In a way, you make the same kinds of educated guesses that scientists do when they study mysterious creatures of the deep!



### Read the first part of a scientific account about Bigfoot.

Genre: Scientific Account

## A Scientist's Search for Bigfoot by Tetsuo Fujii

Dr. Jeffrey Meldrum is an Associate Professor of Anatomy and Anthropology at Idaho State University. He specializes in primate foot structure—a category that includes apes, monkeys, and humans. His interests also include evaluating footprints that some claim are left by a mythical North American ape known as Bigfoot.

Meldrum's laboratory houses more than 200 casts and artifacts relating to Bigfoot. Although he believes that some samples are hoaxes, others interest him, such as unidentified hair and unique casts of muscle and foot-bone anatomy.

(continued)

**Explore how to answer this question:** *"Dr. Meldrum thinks that some samples are hoaxes, but others interest him. Why is he most likely interested in those other samples?"* 

Reread the second paragraph. It suggests what Dr. Meldrum thinks, but does not state it directly.

Look for details suggesting why Meldrum is interested in the other samples. One detail is listed in the second column; write another detail there. Then complete the inference statement.

What You Know	What the Text Says	Inference
<ul> <li>If a scientist is interested in something, he or she might think it has scientific value.</li> <li>A scientist might keep samples that could lead to a discovery.</li> </ul>	<ul> <li>"Meldrum's laboratory houses more than 200 casts and artifacts relating to Bigfoot."</li> </ul>	Dr. Meldrum is most likely interested in those other samples because

On the lines below, explain how the details you presented in the chart support your inference.

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## **Close Reading**

What do most other scientists think about Meldrum's work? **Underline** the sentence that tells how they feel about it.

### Hint

Which choice gives evidence of what most scientists think of Bigfoot research?

## Continue reading the account about Meldrum's research. Use the Close Reading and the Hint to help you answer the question.

#### (continued from page 20)

Many anthropologists criticize Meldrum's work. They feel he is trying to find an imaginary creature that exists only in folklore. Meldrum tells critics he is not saying that Bigfoot exists. He just believes there is enough evidence to justify scientific investigation.

Unsurprisingly, most anthropologists reject Meldrum's evidence. Dr. David J. Daegling, a University of Florida anthropologist who thinks Meldrum's methods of analyzing data are unscientific, sums up this feeling: "Meldrum's evidence doesn't look better on deeper analysis; it looks worse."

#### Circle the correct answer.

Which sentence from the account best supports the idea that most scientists do not find value in investigating Bigfoot artifacts?

- A "Many anthropologists criticize Meldrum's work."
- **B** "They feel he is trying to find an imaginary creature that exists only in folklore."
- **C** "Meldrum tells critics he is not saying that Bigfoot exists."
- **D** "He just believes there is enough evidence to justify scientific investigation."

### 🔪 Show Your Thinking

Look at the answer you chose above. Explain how the evidence in your answer helped show that most scientists do not find value in investigating Bigfoot artifacts.

Genre: Scientific Account

### Read the scientific account. Use the Study Buddy and Close Reading to guide your reading.

1

2



As I read, I'm going to underline clues that help me infer the author's viewpoint about chupacabras.

## **Close Reading**

According to the author, why do people hope that chupacabras are real? **Underline** a sentence that shows the author's explanation.

What examples of new discoveries does the author give? **Underline** the evidence that new creatures have been discovered.

## Tales of Chupacabras by Cynthia Burnham

- Legend tells of the chupacabra, a monster that sucks the
  blood of livestock. *Chupacabra* means "goat sucker" in
  Spanish. For many in the southwestern United States and
  Mexico, these tales are more than just stories; they have been
  accepted as fact. In Puerto Rico in 1995, hundreds of livestock
  fatalities were blamed on the chupacabra.
- Some describe chupacabras as two-legged, lizard-like creatures with claws, spikes, and piercing red eyes. Others insist they are hairless, four-legged creatures that are part kangaroo, part dog, and part rat. Many similar beasts have been brought to labs for DNA testing, but most have been coyotes with mange, a disease that strips animals of fur.
- 3 <u>Why do we want these mythical beasts to be real?</u> Surely not because we want livestock to fall prey to vampires! Perhaps it is because of our natural desire to shed light on the unknown. Scientists constantly identify new life-forms. According to the World Wildlife Federation, more than 1,200 species of plants and vertebrates were discovered in the Amazon rain forest between 1999 and 2009. Given this fact, the idea that undiscovered species could exist empowers our imaginations and gives us hope.
- 4 Although we have explored much of this planet, there are still creatures that lurk in the underbrush, evading recognition. That is a thrilling concept. So even as evidence mounts against the existence of chupacabras, a part of us hopes that one will creep from the shadows and boggle our minds.

## Hints

Think about the word choice in each sentence. Which choice helps you infer what the author actually thinks about chupacabras?

Which sentence offers support for why people hope chupacabras are real?

What kinds of life-forms were discovered between 1999 and 2009? What is the author's purpose for including this evidence?

#### Use the Hints on this page to help you answer the questions.

A student makes the following claim about the author of "Tales of Chupacabras."

The author believes that chupacabras are imaginary even though she would like to think they exist.

Which sentence from the text best supports this claim?

- A "Chupacabra means 'goat sucker' in Spanish."
- **B** "Some describe chupacabras as two-legged, lizard-like creatures with claws, spikes, and piercing red eyes."
- C "Why do we want these mythical beasts to be real?"
- D "Scientists constantly identify new life-forms."
- 2 Which sentence from the text explains why the author thinks people want to believe in chupacabras?
  - A "For many in the southwestern United States and Mexico, these tales are more than just stories: they have been accepted as fact."
  - **B** "Legend tells of the chupacabra, a monster that sucks the blood of livestock."
  - **C** "Others insist they are hairless four-legged creatures that are part kangaroo, part dog, and part rat."
  - **D** "Perhaps it is because of our natural desire to shed light on the unknown."

3 Explain how the examples of recent scientific discoveries support the idea that chupacabras may one day be found. Use details from the text in your explanation.

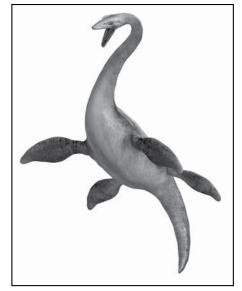
## Looking for the Loch Ness Monster

by Stuart Clyburn

1 The word *loch* is a Scottish Gaelic word for *lake*. And there are a whole lot of lochs in Scotland—more than 500 of them! But one loch, Loch Ness in the Scottish Highlands, is known around the world. The reason for its fame is not its great size or beauty. People know the name *Loch Ness* because it is said to be the home of a mysterious, giant creature known as "the Loch Ness monster." Whether the creature really exists or not has been a matter of great debate for decades.

2 What does "Nessie," the popular nickname for the monster, supposedly look like? By most accounts, she has a small head on a very long neck. Her body is broad and rounded, with four flippers and a long tail. If you know your prehistoric creatures, you might be thinking: Nessie sounds like a *plesiosaur*, a giant sea reptile that lived hundreds of millions of years ago. One common theory about Nessie is that she actually *is* a plesiosaur. Other explanations for Nessie are far less dramatic. Some people think that the "mysterious" creature people have mistaken for a monster may have been nothing more than a walrus, seal, or eel.

3 How could a creature as big as a plesiosaur hide in a lake? Well, Loch Ness is a huge body of water. It's the second largest loch in Scotland, based on the surface area of its water. Loch Ness covers more than 21 square miles, and only Loch Lomond is bigger. But if you look at the volume of water, Loch Ness is the biggest. And that's because it's deep—about 755 feet at its deepest point. This single loch contains



an artist's depiction of a plesiosaur

more water than all the freshwater lakes in England. In other words, it's one big place to hide.

4 Some people who believe in Nessie say that she's made her home in the region for more than a thousand years. A book written in the seventh century tells about an Irish monk who saw a giant "water beast" in the River Ness in 565 c.e. No one thought much about that story until 1933. A couple was driving home along the loch late one night. They said they were forced to stop when a giant, dragon-like creature crossed the road and slid into the water. Their story appeared in newspapers. Soon, many more people claimed to have seen the monster. The following year, in 1934, a doctor from England took a photo that became famous worldwide. The poorly lit, grainy photo shows what looks like the head and long neck of a plesiosaur-like creature rising from the water. The photo served as "proof" of the monster until 60 years later—when it was revealed to be a fake.

5 Since the 1930s, dozens of serious, scientific searches have been undertaken to find the Loch Ness monster. One early effort involved placing scouts with cameras and binoculars around the loch for five weeks. Later searches relied on the use of sonar. This method involves bouncing sound waves through the deep waters of the loch to detect moving objects. In 2003, the famous British Broadcasting Corporation (BBC) sponsored one of the most thorough searches ever. Scientists used 600 sonar beams and satellite tracking. What did they find? Nothing of note, really. They concluded that Nessie was a myth.

6 After so many attempts, you have to wonder why people keep looking for the Loch Ness monster. It may just be that there's something exciting about the idea of mysterious creatures living so close to us, always just out of view. There's a word for such creatures: *cryptids*. It comes from a Greek word meaning "to hide." The Loch Ness monster is one of many cryptids that have captured the public imagination. Others include Bigfoot in North America, the Yeti in the Himalaya Mountains, and the chupacabra in the southwestern United States and Mexico.

7 Many animals whose existence we take for granted today might once have been considered cryptids. Komodo dragons and giant squids were once thought to be tall tales. Until 1902, people regarded stories of "giant ape-men" living in Africa as just a myth. Today, we know them as mountain gorillas. The odds of "Nessie" turning out to be real may not be quite as good. But if it were true, we'd all love it, wouldn't we? It's exciting to think that a real live monster lives deep in a loch in Scotland.

		Answer Form
		1 (A) (B) (C) (D)
	cording to the account, what is one reason many	2 A B C D
pe	eople believe the Loch Ness monster does not exist?	3 A B C D Number
Α	The earliest sighting of the Loch Ness monster occurred in 565 c.E.	4 A B C D Correct 7 4
В	The photo taken in 1934 has been proven to be a fake.	
C	<b>C</b> Plesiosaurs, like the dinosaurs, lived hundreds of millions of years ago.	
D	<b>D</b> Sonar beams and satellite tracking found no evidence in the loch.	
	Which detail provides evidence that a creature as huge as a plesiosaur could really hide in Loch Ness?	
Α	Loch Ness has a surface area of 21 square miles and is 7	'55 feet deep.
В	<b>B</b> The Loch Ness monster might actually be an ordinary walrus, seal, or eel.	

- **C** Dozens of scientific searches of Loch Ness have been conducted.
- **D** The Loch Ness monster is known as a cryptid, a word whose root word means "to hide."

## Part 5: Independent Practice

Α	It is illogical to think that a plesiosaur could still be living in Loch Ness today.
В	Someday, scientists will prove that no giant creatures live in Loch Ness.
C	Some people want to believe in the Loch Ness monster and ignore scientific evidenc showing it does not exist.
D	People have always been fascinated by the idea of strange creatures such as Bigfoot the Loch Ness monster.
	spite the great interest in the Loch Ness monster, it is highly unlikely that such an anim ually exists. Which sentence from the passage <b>best</b> supports this conclusion?
A	"Whether the creature really exists or not has been a matter of great debate for dec
B	"Some people who believe in Nessie say that she's made her home in the region for than a thousand years."
С	"Since the 1930s, dozens of serious, scientific searches have been undertaken to finc Loch Ness monster."
D	"Many animals whose existence we take for granted today might once have been considered cryptids."
	ne people firmly believe that the Loch Ness monster is actually a plesiosaur. Use at lea <b>ee</b> details from the account to explain why some people believe this.

## Reading

Read the passage. Then answer the questions that follow.

## Worth More Than Gold

by Amy Charles

1 Every summer, millions of acres of America are green with growing crops. American farmers grow wheat, soybeans, corn, and other foodstuffs, and it's an impressive sight. There's also something eerie about it, though. Each field grows an army of identical plants. Every cornstalk in the cornfield is exactly like its neighbors, with the same DNA. That means it has the same instructions for building itself. This kind of field is called a monoculture, *mono* meaning "one."

2 This is of some benefit to the farmer because each plant grows about as well as the next. The farmer is in trouble, however, if a pest or disease strikes. If one cornstalk in the field can be killed easily by an attacker, so can all the rest. This was a serious problem in Ireland long ago. The Irish potato famine in 1845 was caused by a fungus that is extremely harmful to potatoes. Because all the potatoes in Ireland at the time were so similar, most of the potato crop died. And because potatoes were the main food in Ireland at the time, people began to starve. The situation became even worse because the fungus stayed in the ground. When new potatoes were planted, the fungus killed them, too. Within 25 years, nearly half of Ireland's people had starved or moved away.

3 Why was the famine so destructive in Ireland? One problem was that we didn't have the science to know what had gone wrong; people didn't know about DNA. DNA tells the cell how to take atoms, the smallest pieces of matter, and make from them the smallest pieces of the body. These pieces, called molecules, are too small for us to see, but once they're made, the molecules work together to grow the body and keep it alive.

4 Some molecules are great at fighting disease. Unfortunately for those desperate farmers in Ireland, none of the potatoes they planted, year after year, could make the right molecules. Because of this, the potatoes weren't protected from the fungus.

5 Scientists now know how to solve that problem, and the answer lies in how DNA works. DNA is a molecule, too—a long molecule at the center of the cell. The cell can read DNA like a cookbook, finding recipes that tell how to make other molecules that it needs. We call the recipe for each molecule a gene. If you want molecules that will fight potato fungus, you need the genes for making those molecules. If a potato doesn't have those genes, that potato can't fight the fungus. One way to solve the problem is to give the potato the right genes. To find those genes, we look in other strains, or kinds, of potatoes. We look for a potato that can fight off the fungus. That potato has the genes for making the right molecules. Then all we have to do is put that plant's genes into the unprotected potato plants. And, roughly speaking, we know how to do that.

6 Here's the big question, though: Where do you find that super-strong potato when a fungus is attacking? The answer comes from scientists and farmers around the world who have built gene banks to keep our food supply safe. All over the world, scientists and farmers collect seeds from different crop plants—corn, potatoes, alfalfa, wheat, oats, rice, and every other grain, fruit, and vegetable; they collect them all. They record what diseases and pests each plant can fight off, and they record which plants can live well in certain conditions, such as limited water, high heat, floods, or poor soil. Then they store seeds from each plant in a safe place, a gene bank.

7 Now, when a pest attacks a wheat crop in Oklahoma, scientists don't wait. They look in gene banks for a strain of wheat that fights that pest well. They can use that wheat's genes to create a new wheat plant that will grow well in Oklahoma and will also fight off the pest.

8 There are more than 1,600 plant gene banks around the world, and one of the most famous gene banks is in Norway. It's an abandoned coal mine north of the Arctic Circle, in a group of islands called Svalbard. This bank stores backup copies of seeds that are in other banks around the world. The Svalbard bank now has copies of over half a million seeds. If crops are in trouble, what's in those vaults is worth more than gold.

9 That's the extent to which scientists and farmers around the world go to protect those crops growing all across the Midwest—and Brazil, and Russia, and China. Thanks to their work, the food supply for seven billion people is safer than it ever was before.

- Which sentence from the passage **best** supports the idea that growing monocultures can be risky?
  - A "American farmers grow wheat, soybeans, corn, and other foodstuffs, and it's an impressive sight."
  - **B** "Every cornstalk in the cornfield is exactly like its neighbors, with the same DNA."
  - C "If one cornstalk in the field can be killed easily by an attacker, so can all the rest."
  - **D** "One problem was that we didn't have the science to know what had gone wrong; people didn't know about DNA."
  - **E** "The cell can read DNA like a cookbook, finding recipes that tell how to make other molecules that it needs."
  - **F** "They look in gene banks for a strain of wheat that fights that pest well."

1

2 The following question has two parts. First, answer part A. Then, answer part B.

#### Part A

What is one main idea of "Worth More Than Gold"?

- **A** Gene banks protect the world's food supply.
- **B** People have studied DNA for hundreds of years.
- **C** Monocultures are often destroyed by pests.
- **D** The Irish potato famine began in 1845.

#### Part B

Which sentence from the article **best** supports the answer to part A?

- A "That means it has the same instructions for building itself."
- **B** "Because all the potatoes in Ireland at the time were so similar, most of the potato crop died."
- **C** "If you want molecules that will fight potato fungus, you need the genes for making those molecules."
- **D** "If crops are in trouble, what's in those vaults is worth more than gold."
- **3** Which of the following would **not** belong in a summary of the passage?
  - A The Irish potato famine in the 1800s was made worse because people at the time did not know about DNA.
  - **B** To get molecules that will fight a potato fungus, you need to have the right materials.
  - **C** One solution to possible problems caused by monocultures lies in the field of genetics, in plant DNA.
  - **D** To protect the world's crops, a gene bank in Svalbard, Norway, has backup copies of more than half a million seeds.

Go On

- **4** What is the **main** purpose of paragraph 5?
  - **A** It introduces the topic of worldwide famine.
  - **B** It provides a definition of the key term "fungus."
  - **C** It shows how genes can solve the problem of crop disease.
  - **D** It poses and answers logical questions about DNA and genes.

Read the statement below.

5

The author of this passage has great respect for the scientists and farmers who have made gene banks possible.

How can you tell this statement is true? Use two details from the text to support your answer.

## The Scent of Memory

by Christopher Ford

1 Scientists say that, more than sight, sound, touch, or taste, the sense of smell can trigger memory. For me, the smell of wood smoke always makes me think of autumn. One whiff, and I am twelve, at home on my family's farm, snuggled in bed as the smell of wood smoke snakes through my slightly-open bedroom window.

2 It is early autumn, and all around us, our neighbors are harvesting apples. We have been eating apple pie, applesauce, apple cakes, even apple stew. My family does not own an orchard, but we rejoice in the benefits of the harvest and our special neighbors.

3 It's Saturday morning. My father wakes me gently, saying, "Let's go, Chris, it's time." I stand up stiffly, shivering, the chill draft hurrying me over to pull on jeans and a shirt, my favorite old sweatshirt, and my warmest socks.

4 My mom is already up and at the stove, coffee cup in one hand, stirring a huge pot of oatmeal with the other. It's not my favorite breakfast in the world, but on a morning like this, with hard work ahead of me, I know I'll appreciate it later.

5 "Good stuff, Lynn," my dad says as he gives my mom a kiss on one cheek. He spoons out a huge bowl for himself and then one for me. Even with raisins and brown sugar, it's hard to swallow.

6 "Eat up, Chris," my dad teases. "It'll stick to your ribs!"

7 He and my mom talk as they drink their coffee and eat their breakfast. It's all bills and money talk, so I tune out, watching the leaves swirl outside. My little sister pads in after a while, all pink fluff and fuzzy curls. Even I have to admit she's kind of adorable. She crawls silently into my dad's lap and he nestles her right into the crook of his arm, as if the shape of his arm was made to fit the curve of her back. He manages this maneuver while continuing to sip his coffee and talk to my mom. After we finish breakfast, we say goodbye to the two of them and head out.

8 It is just past dawn, and in the east, a smattering of lacy clouds drifts slowly across the streaks of pink, orange, and red that forecast a cold day. The air smells lightly of wood smoke from the farmers who are burning brush in the nearby orchards. Crunch, crunch, crunch, my feet push easily through the carpet of fallen leaves on the way to the barn. The colors are outrageous: orange, red, yellow, and even greens that are bright and playful. I can't resist kicking a few piles into the air to watch them swirl.

9 In the barn, it's warmer, with animal breath and body heat creating a hazy fog. I scratch our old goat, Ginger, behind her ears, pat the orange tabby, Huck, and say good morning to Jessie and her three pups. They are still squirmy and warm, snuggling in for breakfast.

10 We feed the animals and then load up the truck with everything we need: axes, clippers, small saw, twine, gloves. Our neighbor has trees down and has offered the wood to anyone who wants to come and chop it up. With the winter weather we're expecting, we can use all the firewood he can spare. The more we can get by on fireplace heat this winter, the better.

<sup>11</sup> "Woo-hoo, you feel that, Chris? Fall is here for sure!" my dad rubs his hands together and starts the truck.

12 I nod in agreement and reach up to tuck my nose into my sweatshirt collar, then my hands go into my sweatshirt pocket.

13 Dad laughs. "Don't worry. In no time at all, you'll be sweating."

14 At Mr. Arnold's place, there are three trees down: two apple trees and one huge old oak that got dragged down when the apples blew down in our first storm of the season. The holes their roots left behind are enormous, and I want to crawl into them and explore, but Dad has other plans for me.

<sup>15</sup> "Okay, Chris, we're going to start with the lower branches, here. We'll strip the branches and work our way up the tree, then we can chop up the trunk." We dig in, Dad correcting my axe strokes from time to time, interrupting my swing to show me where to hit the branch just right so that I'll get a cleaner cut. He was right: in no time I'm sweating enough to take my sweatshirt off, but my breath comes out of my mouth steaming in the frosty air.

By noon we've stripped off the lower branches and have the truck full of wood, about a cord's worth. We'll need about four more to get through the winter, but we thank Mr. Arnold and promise to be back tomorrow.

17 On the ride home, I nearly fall asleep, so my dad reaches over and gives me a playful punch in the arm. "That went twice as fast today with your help, son. You're getting pretty strong," he says and I feel positively mighty.

18 I watch the orchards as we pass. There are so many shades of orange and red that I can't possibly record them all, so I breathe deep and flood my nose to best recall the memories of this day.

**6** The following question has two parts. First, answer part A. Then, answer part B.

#### Part A

What is one theme of "The Scent of Memory"?

- A Scientists have proven that smell is an important scent.
- **B** The harvest is an unpleasant time with big rewards.
- **C** Life on a farm is better than life elsewhere.
- **D** Thinking about the past is a powerful source of emotion.

#### Part B

7

Which sentence from the "The Scent of Memory" best supports the answer to part A?

- A "Scientists say that, more than sight, sound, touch, or taste, the sense of smell can trigger memory."
- **B** "For me, the smell of wood smoke always makes me think of autumn."
- **C** "On the ride home, I nearly fall asleep, so my dad reaches over and gives me a playful punch in the arm."
- D "There are so many shades of orange and red that I can't possibly record them all, so I breathe deep and flood my nose to best recall the memories of this day."
- Select three sentences that should be included in a summary of "The Scent of Memory."
  - **A** A boy describes the many pleasures in his life on a farm.
  - **B** Thinking about the smell of wood smoke, a man recalls an autumn day in his youth.
  - **C** His best memories are of the barn, the goat, the cat, the dog, and chopping wood.
  - **D** His mother and sister stay at home, while he and his father share a harvest with neighbors.
  - **E** He wakes up early and has breakfast with his family before heading out with his father.
  - **F** He and his father feed the animals in the barn and then chop wood on a neighbor's farm.
  - **G** He sweats from working so hard, but his breath still looks like steam in the cold air.

Go On

8 Read this sentence from paragraph 5 of "The Scent of Memory."

Even with raisins and brown sugar, it's hard to swallow.

What does the phrase "hard to swallow" suggest about the narrator?

- **A** He has a sore throat.
- **B** He does not like oatmeal.
- **C** He prefers plain oatmeal.
- **D** He is not hungry.

9

- In paragraph 17 of "The Scent of Memory," why does the narrator **most likely** say that he feels "positively mighty"?
  - A He recognizes that he has grown taller in the past year.
  - **B** He believes that his father would not have been able to do the work himself.
  - **C** He is pleased that his father recognizes his helpfulness and ability.
  - **D** He has accomplished something he thought was impossible.
- **10** How does the author develop the narrator's point of view in "The Scent of Memory"?
  - A by having the narrator recall a specific day from his childhood
  - **B** by having the narrator use only the sense of smell to describe a memory
  - **C** by having the narrator alternate between past and present to show the past's influence
  - **D** by having the narrator reflect on how his life has changed a great deal since his youth

11	Read the	following	poem	about	October:
----	----------	-----------	------	-------	----------

October is the lovely girl who draws her sisters' envy: Mild in temper, fair of heart, and much admired by many. Her sisters dress more modestly, but she is always bold, clothed in red and violet, crowned with green and gold.

One theme of "The Scent of Memory" is that autumn is a special time of year with plentiful harvests and beautiful colors. The poem also shares this theme. Compare and contrast how "The Scent of Memory" and the poem present the theme stated above. Use details from the texts to support your answer.

Read this account of important moments in the history of science. Then answer the questions that follow.

## Luck Favors the Prepared

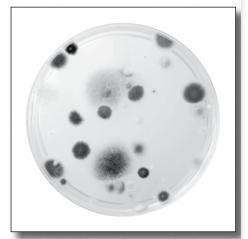
by Maria Malzone

1 Making a great discovery generally requires hard work, years of study, and experiment after experiment. However, people sometimes accidentally stumble upon amazing discoveries. Some of the things we use in everyday life—such as sticky notes, microwaves, and artificial sweeteners—were all chance discoveries that changed the way we live. The inventor of the sticky note just happened to stumble on a type of glue that could be reused. The scientist who discovered microwaves wasn't looking for them. He was doing experiments with a new type of vacuum tube. Then one day the chocolate bar in his pocket began to melt, and he realized the machine in front of him could change the way people cooked. A scientist who was trying to find new uses for coal tar happened by chance to notice that it tasted sweet, thus discovering the first artificial sweetener.

2 It is exciting to think that anyone could discover something important, such as sticky notes or microwave ovens. However, most of the accidental discoveries you hear about required more than just luck. While the discoverers may have been lucky, they were also prepared. Some of the most famous "accidental" discoveries were made by scientists who had been working to solve problems for a long time.

3 The discovery of penicillin, which is a medicine used to kill bacteria, is one of the most famous stories of accidental discovery. In the early 1900s, a scientist named Alexander Fleming was trying to find ways to cure diseases and infections. While doing his research, Fleming grew bacteria on special plates called petri dishes.

4 One day he noticed a type of mold, called penicillin, growing on the plate. To Fleming's amazement, the mold killed the bacteria. He discovered that the mold could be used as an antibiotic, which is a medicine that fights bacterial infections. The penicillin antibiotic was used to treat cuts, infections, and diseases that made many people seriously ill. Because of this, it was called a "miracle drug." It is still used today to help save lives.



Mold growing in a petri dish. Alexander Fleming's chance observation of how a type of mold killed bacteria led to the development of modern antibiotics.

5 X-rays were another accidental discovery. A scientist named Wilhelm Röntgen, who had studied physics and engineering, was working as a professor in the late 1800s. At that time, Röntgen was performing experiments by passing an electric current through gas. His experiments sometimes produced sparks in the gas. Röntgen noticed that every time the gas sparked, a plate treated with a special chemical lit up. Röntgen thought that perhaps the sparks were producing some sort of rays. These rays were not like anything known at the time, however. For this reason, Röntgen called them X-rays.

6 After making this discovery, Röntgen decided to investigate the rays further. For example, he placed different objects in front of the rays. He tested whether the X-rays would pass through the objects or be blocked by them. Röntgen's most famous image is the X-ray shadow of his wife Bertha's hand. This image shows that the rays do not pass through bone. Doctors quickly realized that they could use X-ray images to look at broken bones.

7 Another scientist who made an accidental discovery was Charles Goodyear. Goodyear was experimenting with natural rubber because he hoped to find a way to make it more useful. Natural rubber, which comes from the sap of rubber trees, is too soft and sticky to be used in many products. Goodyear was determined to find a way to change the rubber so that it would be more durable but also remain elastic, or stretchy. He tried to change the rubber in countless ways, but each attempt disappointed him. Goodyear even patented one method of changing the rubber, but he was still unhappy with the results.



the first X-ray photograph, showing Bertha Röntgen's hand

8 One day, Goodyear spilled a mixture containing natural rubber onto a hot stove. The result was the hard, strong rubber he had been seeking. The process resulted in what we now call vulcanized rubber. Goodyear patented a process for making vulcanized rubber in 1844 and then sold his product to manufacturers. Today vulcanized rubber is used in everything from bowling balls to car tires to shoe soles.

9 These scientists and inventors are all known for their accidental discoveries. Could these discoveries have been made by anyone else? Perhaps. But Fleming, Röntgen, and Goodyear all studied and worked hard for many years. When their lucky accidents happened, they had learned enough to understand what they saw. They then worked hard to make their observations useful. Lucky accidents can happen to anybody, but great discoveries are almost always the result of hard work.

	terim Assessment	Unit 1
		Answer Form
th	hich sentence from the article <b>best</b> supports e idea that the discovery of X-rays helped to prove people's health?	1 (A) (B) (C) (D) 2A (A) (B) (C) (D) 3 (A) (B) (C) (D)
Α	"After making this discovery, Röntgen decided to investigate the rays further."	4 & 8 © 0 5 & 8 © 0 Number 6 & 8 © 0 Correct /6
В	"He tested whether the X-rays would pass through the objects or would be blocked by them."	
C	"Röntgen's most famous image is the X-ray shadov	w of his wife Bertha's hand."
D	"Doctors quickly realized that they could use X-ray bones."	images to look at broken
Part A		
	hich statement is true about Alexander Fleming's ini	tial understanding of penicillin
Α	He hoped that penicillin would cure certain diseas	es.
В	He was unaware that penicillin would have any ef	fect.
C	C He was sure penicillin would be a helpful medicine.	
D	He knew penicillin was deadly to some bacteria.	
Part B		
	lect <b>two</b> pieces of evidence from "Luck Favors the Pr sswer to Part A.	epared" that support the
Г	<sup>1</sup> "one of the most famous stories of accidental disc	overv"

- "one of the most famous stories of accidental discovery"
  - ] "a medicine used to kill bacteria"
- "trying to find ways to cure diseases and infections"
  - "To Fleming's amazement"
  - "the mold could be used as an antibiotic"
  - ] "it was called a 'miracle drug'"

### Interim Assessment

- **3** The author believes that Charles Goodyear was a dedicated scientist who kept improving on his work. Which sentence from the article **best** supports this statement?
  - A "Another scientist who made an accidental discovery was Charles Goodyear."
  - **B** "He tried to change the rubber in countless ways, but each attempt disappointed him."
  - **C** "One day, Goodyear spilled a mixture containing natural rubber onto a hot stove."
  - **D** "Goodyear patented a process for making vulcanized rubber in 1844 and then sold his product to manufacturers."
  - Which of the following **best** matches a central idea from the text with a detail that supports it?
    - A Central idea: Many important discoveries are made during experiments. Supporting detail: Doctors began using X-rays to examine injured patients.
    - **B** Central idea: Some important discoveries are not well understood at first. Supporting detail: Artificial sweetener was based on a kind of coal tar.
    - **C** Central idea: Some scientists make accidental discoveries that help people. Supporting detail: Penicillin is still used in modern times to save lives.
    - **D** Central idea: Dedicated scientists may accidentally become great inventors. Supporting detail: Fleming used plates called petri dishes to grow bacteria.
- **5** Vulcanized rubber continues to be an important part of modern products. How does the author illustrate this idea in the passage?
  - **A** She lists examples of different uses for vulcanized rubber.
  - **B** She tells the story of the invention of vulcanized rubber.
  - **C** She compares vulcanized rubber with natural rubber.
  - **D** She notes the year in which vulcanized rubber was patented.

4

### Interim Assessment

#### 6 Which of the following **best** summarizes the article?

- A Sticky notes, microwaves, and artificial sweeteners all have something in common. Each of these useful things was discovered by accident. The same is true of a number of other discoveries, including penicillin, X-rays, and vulcanized rubber.
- **B** Many important scientific discoveries have been made by accident. These include the discoveries of penicillin, X-rays, and vulcanized rubber. In each case, the scientist making the discovery had the experience to see the usefulness in what others might have considered a mere "accident."
- **C** Alexander Fleming may be the person who made the most important accidental discovery of all time. He was working in his lab when he noticed a type of bread mold that killed bacteria. This led to the invention of penicillin, an antibiotic that has saved countless lives.
- **D** When a good scientist discovers something by accident, the discovery involves more than just luck. Microwaves, penicillin, and X-rays are all examples of useful things discovered by scientists who knew how to turn a mistake into something good. Their "lucky accidents" had more to do with hard work than good luck.
- Explain how the author uses anecdotes, or stories, to illustrate key ideas of the passage. Use details from the passage to support your answer.

7

## Interim Assessment

8 Below is information from paragraphs 5 and 6 of the passage "Luck Favors the Prepared." Organize the information by writing each phrase from the passage into the proper section of the table: <u>central idea</u>, <u>supporting detail</u>, and <u>example used to make a point</u>.

Röntgen was performing experiments by passing an electric current through gas.

Röngten's image of his wife's hand showed that X-rays do not pass through bone.

X-rays were another accidental discovery.

Every time the gas sparked, a plate treated with a special chemical lit up.

Central idea	
Supporting detail	
Supporting detail	
Example used to make a point	

## Performance Task—Extended Response

### 9

How does the author introduce and illustrate the differences between truly "accidental" discoveries and those made by hard-working scientists? How does the author feel about the two kinds of discoveries? Write an essay of two to three paragraphs explaining your answer. Be sure to include examples from the passage in your answer.

In your answer, be sure to

- explain how the author presents the differences between these discoveries
- explain how the author feels about these types of discoveries
- use examples from the passage in your answer

Check your writing for correct spelling, grammar, capitalization, and punctuation.

Interim Assessment	Unit 1

## Lesson 10 Consistency in Style and Tone

Introduction When you write, choose a style and tone that suit your purpose and audience. You might choose a formal style and serious tone for a report. For a personal e-mail, you might choose an informal style and humorous tone. Once you've decided on a style and tone, you need to be consistent.

• The words you choose and your sentence patterns form your **style**.

Formal	During meteorological events, animals tend to scatter	
Informal	It's raining. Look at that mouse run for cover. It's fast!	

• Your tone shows your attitude toward your subject and/or readers. For example, a tone may be serious, playful, humorous, angry, calm, joyful, or sad.

Serious Some animals seek shelter in and under trees or bus	
Playful	Can a lizard use a tree as an umbrella? It sure can!

## Guided Practice Read the passage. Then rewrite the underlined sentences to match the style and tone of the rest of the passage.

#### Hint

The style and tone of the story are informal and casual. The underlined sentences contain language that is either too poetic or too technical. Replace them with language that matches the story's style and tone. "Our camping trip is off to a great start," said Dad. We had just

begun to unpack. Then crack, sizzle! Lightning flashed through

the sky. Thunder made the mountains tremble in fear.

"Run to the car!" yelled Dad. "We'll wait it out there." After an

hour, the rain stopped. When we exited the vehicle, we found that

our belongings had absorbed a vast amount of moisture!

2

	Independent Practice				
Read the paragraph below. Then answer the questions that follow for numbers 1–4.Answer Form1ABCD2ABCD3ABCD4ABCD					
the hou	outsio thril uses r	Saving our local campground is of gre de stuff to do, like running around by l of snoozing under the stars, outside natters, but keeping a space for peop you imagine if this option were taken	the river of the ci ble to enj	r. (3) ity. ( oy n	There is also nothing quite like 4) I know that building new ature is necessary, too.
1	ma	hat revision of sentence 2 best tches the style and tone of ntence 1? First, it offers children outdoor exercise, such as hiking. First, it allows kids to finally get a chance to run around. First, it lets children do stuff, like run around outside. First, kids get to run around the river and do other outside stuff.	3	<u>snc</u> for	aich best replaces the word bozing in sentence 3 to add a mal style and serious tone to the ragraph? catching some z's falling asleep nodding off getting some shut-eye
2	beo is i	hich sentence should be deleted cause it introduces a tone that nconsistent with most of the ragraph? sentence 1 sentence 4 sentence 5 sentence 6	4	the	ich sentence could be added to paragraph without changing its e or tone? Nobody gets it! We need to stop those pesky builders from taking over! They've really got to leave our campground alone. We must preserve our local campground!

## i-Ready

## Lesson 13 Using a Dictionary or Glossary

Many words have more than one definition and can serve as more than one part of speech. When you are reading or writing, use a dictionary to check the precise meaning of a word or phrase.

• Words in a **dictionary** appear in alphabetical order. Each entry provides the pronunciation, the part of speech, and the meanings of the word. Sample sentences are often included to clarify meaning.

account (ə kount') <u>n</u> . 1. a record of ever period 2. money in a bank 3. worth, impo- account for v. 1. to be the main reason for rain accounted for the flooding. 2. to expla- account for the dog's barking.	or: Heavy
<b>extract</b> (ĭk străkt') v. 1. to pull out 2. to get meaning, pleasure, or information fro something <b>extract</b> (ĕk' străkt) n. 3. an part of a text 4. a flavoring	m is in parentheses. For some

• A **glossary** is similar to a dictionary. It is an alphabetical list of special words that are used in a book. Each entry defines the word as it is used in that book.

## Guided Practice Read the paragraph. Use the entries above to find the meanings of the underlined words and phrases. Write the number of the correct meaning above each word or phrase.

#### Hint

Identify how a word is used in a sentence before you use the dictionary. If the word is used as a noun, then you should read the definitions given for a noun. includes <u>extracts</u> from books about the landscape paintings. Many people <u>extract</u> pleasure from viewing these paintings. However, various <u>accounts</u> suggest that these paintings were also used to teach life lessons. If the paintings were used to teach morals, then scholars could <u>account for</u> the wide use of symbols that stand for character traits.

Our museum has an exhibit on Chinese art. The catalog

### Independent Practice

## For numbers 1–4, use the dictionary entries to answer the questions.

**express** (ik spress') v. 1. to say or state 2. to communicate ideas or feelings 3. to squeeze or press something out n. 4. type of transportation that moves with few or no stops adj. 5. specific: I bought these apples for the express purpose of baking a pie. 6. stated 7. moving with few or no stops

What part of speech is <u>express</u> as used in this sentence?

My mother and I took the express train to the museum.

- A noun
- **B** adjective
- C verb
- **D** adverb
- 2 Which definition of <u>express</u> best fits this sentence?

One artist painted a gloomy landscape to express the theme of grief and loss.

- A Definition 2
- **B** Definition 3
- C Definition 5
- **D** Definition 6

#### **Answer Form**

1	A	₿	$^{\odot}$		
2	A	₿	0		
3	$(\mathbb{A})$	₿		 Number	/
4	A	₿		 Correct	/ 4

**reflect** (ri flěkt') v. **1.** to bend back light **2.** to show an image, to mirror **3.** to show clearly or reveal: The novel reflects the writer's unhappiness. **4.** to consider seriously: You need to reflect on your actions. **5.** to bring negative attention to: The team's rowdiness reflected on the school.

**3** Which definition best fits <u>reflect</u> as used in this sentence?

Many landscape paintings reflected the artist's mood.

- A Definition 1
- **B** Definition 3
- C Definition 4
- **D** Definition 5
- **4** Which definition best fits the way reflect is used in this sentence?

When you view a Chinese landscape painting, reflect on the artist's message.

- A Definition 2
- **B** Definition 3
- **C** Definition 4
- **D** Definition 5

## Lesson 14 Using a Thesaurus

Introduction You can use a thesaurus to make your writing more precise or interesting. A **thesaurus** provides synonyms and antonyms for particular words.

• A thesaurus lists words in alphabetical order. Each entry gives the part of speech, the definition, and a list of synonyms. Antonyms, if any, are also included.

bitter adj. 1. a strong, unpleasant taste: The white part of a lemon rind is bitter. acrid, unpleasant Antonyms: sugary, sweet 2. harsh and cold: Winter has been bitter this year. rough, severe Antonyms: mild, pleasant 3. having or showing resentment: Al felt bitter when he lost his job. angry, resentful, sullen Antonym: friendly

claim v. 1. to need: This issue claims our attention. deserve, demand, require 2. to say that something is true: Nola claims that bees sleep at night. state, declare, insist Antonym: deny n. 3. a statement that something is true: The ad makes the claim that Brand X is the best flour. assertion, allegation, declaration Antonym: denial

When there is more than one meaning, each definition is numbered.

Sometimes there is a sample sentence.

Some words can serve as more than one part of speech.

## Guided Practice Read the paragraph. Use the thesaurus entries above to answer the questions about the underlined words.

#### Hint

Remember: A synonym is similar in meaning to another word. An antonym has the opposite meaning of the word. Nearly 2,600 years ago, people in Mexico and Central America

drank a bitter chocolate drink, which they made from cocoa beans.

Some scholars claim that people drank chocolate even longer ago.

- Which words are synonyms of *claim* as used in the paragraph?
- 2 Which word is an antonym of *claim*?
- 3 Which words are synonyms of *bitter* as used in the paragraph?

4 Which words are antonyms of *bitter*?