

Uncovering the Past

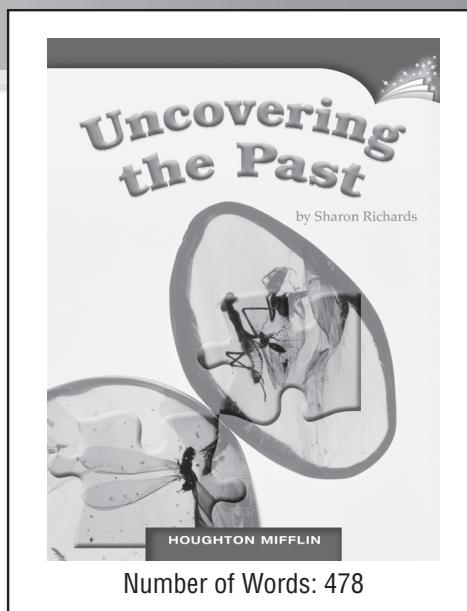
by Sharon Richards

Fountas-Pinnell Level M

Informational Text

Selection Summary

Scientists find clues about the past by studying fossils buried in the ground and in tar pits, ice, and amber. They use these clues to learn about animals and people that lived long ago.



Characteristics of the Text

Genre	<ul style="list-style-type: none"> • Informational Text
Text Structure	<ul style="list-style-type: none"> • Five sections with headings, each 2-3 pages • Four sections each describe a different type of fossil; final section explains how scientists use fossils to learn about animals that lived in the past.
Content	<ul style="list-style-type: none"> • Examples of fossils (<i>turtle, fish, dinosaur, mastodon, saber-toothed tiger, woolly mammoth, Ice Man, insects</i>) • Information that scientists can gather by studying fossil clues: what animals looked like, what kind of food they ate, how they moved
Themes and Ideas	<ul style="list-style-type: none"> • Fossil clues help solve questions that scientists have about the past. • Bodies of animals that died long ago have been discovered many thousands of years later.
Language and Literary Features	<ul style="list-style-type: none"> • Terms defined within the text • Literary language describing how scientists use fossils (“like pieces of a puzzle”; “unlock the secrets of life long ago”; “clues to the past”)
Sentence Complexity	<ul style="list-style-type: none"> • Some sentences with introductory clauses
Vocabulary	<ul style="list-style-type: none"> • Content vocabulary: <i>mastodons, saber-toothed tigers, woolly mammoth, fossils, tar pits, rotting, glacier, amber, sap</i> • Words dealing with the scientific process: <i>evidence, prove, discovered</i>
Words	<ul style="list-style-type: none"> • Mostly one- and two-syllable words with a few longer words on each page • Some challenging multi-syllable words: <i>glacier, Europe, Los Angeles, Italy</i>
Illustrations	<ul style="list-style-type: none"> • Photographs of preserved fossilized remains, some of which may be disturbing • Inset maps of California and Western Europe, showing where fossils were found
Book and Print Features	<ul style="list-style-type: none"> • Thirteen pages of text with captioned photographs on every page
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Uncovering the Past *by Sharon Richards*

Build Background

Help students think about what life on Earth was like thousands and thousands of years ago. Build interest by asking questions such as the following: *If you could go back in time thousands of years ago, what kinds of things do you think you would see?* Read the title and the author and talk about the cover photograph. Tell students that this book is informational text, so the words and photos will give factual information about the topic.

Introduce the Text

Guide students through the text, noting important ideas and helping with unfamiliar language and vocabulary. Here are some suggestions:

Page 2: Explain that this is a book about how scientists uncover clues to learn about things that lived on Earth long ago.

Suggested language: *Turn to page 2. The book begins with a question: Have you ever wondered what life on Earth was like long ago? In this book, we will read about how scientists try to find **clues**, or information, to help them answer that question.*

Page 3: Call attention to the details in the photograph. *Scientists look very carefully at the clues they find. Sometimes they use a magnifying glass, like detectives do. What kind of things can you see in this picture? Does it look like any animal that is alive today?*

Page 6: Tell students that this group of scientists digging for clues in a very sticky place. *Animal bones were found in this famous tar pit in Los Angeles, California. Tar is so sticky that if you step in it, your foot gets stuck and you can't get back out. What do you think happened to the animals that walked into this tar pit?*

Page 13: Explain that scientists look for **evidence** just like a detective. *Look at the picture. The scientist is putting together the bones of an animal skeleton. What evidence has she found about the dinosaur's tail?*

Let's read from the beginning of the book to find out how scientists discover clues to learn about life from long ago.

Target Vocabulary

buried – something covered or hidden, often underground

clues – facts that help solve a problem or mystery, p. 2

evidence – facts or signs that show something is true, p. 13

fierce – wild, strong, or dangerous

fossils – parts or traces of things that lived long ago, such as bones, footprints, or the imprint of a leaf, p. 3

locations – the places where something is found

prove – show that something is true, p. 4

remains – n. things that are left over

skeletons – what humans and many animals rely on to support their bodies and protect their organs

uncovering – taking the cover off, digging up something, or revealing something, p. 10

Read

Have students read *Uncovering the Past* silently while you listen to individual students read. Support their problem solving and fluency as needed.

Remind students to use the Visualize Strategy  **TARGET STRATEGY** and use selection details to picture what is happening as they read.

Discuss and Revisit the Text

Personal Response

Invite students to share their personal responses to the text.

Suggested language: *What did you learn about how fossils are formed? If you were a scientist, how might you use these fossils to learn about things that lived in the past?*

Ways of Thinking

As you discuss the text, help students understand these points:

Thinking Within the Text	Thinking Beyond the Text	Thinking About the Text
<ul style="list-style-type: none">• A fossil is what is left of an animal or plant long after it dies.• Fossils can be found in the ground, in tar pits, in ice, and in amber.• Fossils can give scientists important clues about how people and animals lived long ago.	<ul style="list-style-type: none">• Each fossil discovered by scientists is like a piece of a giant puzzle that tells us how plants and animals lived long ago.• Scientists study clues to solve questions about the natural world, like a detective studies clues to solve a mystery.	<ul style="list-style-type: none">• The photographs show examples of fossils that were found in different places.• The maps show where certain fossils were found.• The section headings give a good idea of what information will be covered.

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- **Fluency** Invite students to choose a passage from the text to read aloud. Remind them to pay attention to the punctuation and to divide sentences with commas into separate phrases that are read as chunks.
- **Comprehension** Based on your observations of the students' reading and discussion, revisit parts of the text to clarify or extend comprehension. Remind students to go back to the text to support their ideas.
- **Phonics/Word Work** Provide practice as needed with words and word parts, using examples from the text. Remind students to look for base words to help them take apart and make new words by adding prefixes and suffixes. For example, *cover/discover/uncovering*.

Writing about Reading

Critical Thinking

Have students complete the Critical Thinking questions on BLM 17.7.

Responding

Have students complete the activities at the back of the book. Use the instruction below as needed to reinforce or extend understanding of the comprehension skill.

Target Comprehension Skill

Conclusions ✓ **TARGET SKILL** Remind students that they can use details to figure out ideas that the author doesn't state. Model the skill, using a "Think Aloud" like the one below:

Think Aloud

Conclusions are smart guesses about a topic. On page 14, the author writes that fossil clues can tell how an animal lived. The text clues the author gives are about animals' feet and teeth. Feet show how an animal moved. Teeth show what an animal ate. I think fossils of teeth and feet would be two things a scientist would look for to learn about an animal from long ago.

Practice the Skill

Ask students to think of another science book they have read. Have them tell a conclusion they made about the topic.

Writing Prompt: Thinking Beyond the Text

Have students write a response to the prompt on page 6. Remind them that when they think beyond the text, they use what they know and their own experience to think about what happens in the story.

Assessment Prompts

- Which words from page 11 help the reader know the meaning of *amber*?
- Complete this sentence in your own words: This book was most likely written to

-
- How can the reader tell that fossil bones are like pieces of a puzzle?

English Language Development

Reading Support Pair advanced and intermediate readers to select and re-read a section about one type of fossil (in the ground, in tar pits, in ice, or in amber).

Vocabulary This book includes the following expressions in which *to get* means *to become* or *to be* and is followed by an adjective: *gets covered* (p. 4); *got stuck* (p. 6); and *gets hard* (p. 11) In English *get* can be used to mean different things. For example, in the phrase “get out”, *get* means *go*; in the phrase “get a good grade”, *get* means *receive*.

Oral Language Development

Check student comprehension, using a dialogue that best matches your students’ English proficiency level. **Speaker 1** is the teacher, **Speaker 2** is the student.

Beginning/Early Intermediate	Intermediate	Early Advanced/ Advanced
<p>Speaker 1: Show me the fossil of the fish</p> <p>Speaker 2: [Points to page 4]</p> <p>Speaker 1: Do fossils take a long time or a short time to form?</p> <p>Speaker 2: a long time</p>	<p>Speaker 1: Where can scientists find fossils of animals that lived long ago?</p> <p>Speaker 2: Scientists can find clues in the ground, in tar pits, in ice, and in amber.</p> <p>Speaker 1: Who was the Ice Man?</p> <p>Speaker 2: The Ice Man was a man who died 5000 years ago. His body was found in the snow.</p>	<p>Speaker 1: What is a fossil?</p> <p>Speaker 2: A fossil is what happens when an animal (or plant) dies, and parts of its body turns to rock.</p> <p>Speaker 1: What can fossils teach us?</p> <p>Speaker 2: Fossils can teach us about animals that died long ago, how they moved, and what they ate.</p>

Responding

TARGET SKILL **Conclusions** Conclusions are smart guesses about a topic. Clues in the text help you make conclusions. Copy the chart below. Write two more text clues to complete the chart.

Text Clue Fossils are found in the ground.	Text Clue ?	Text Clue ?
Conclusion Clues to the past can be found in many places.		

Write About It

Text to Self Do you think it is interesting to learn about animals from long ago? Write a paragraph that gives your opinion. Tell why you think this.

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Name _____ Date _____

Lesson 17
BLACELINE MASTER 17.7

Critical Thinking

Uncovering the Past
Critical Thinking

Read and answer the questions.

- Think within the text** How much time does it take for fossils to form?
_____ thousands and thousands of years _____
- Think within the text** How does ice help preserve animals?
_____ It keeps bodies from rotting. _____
- Think beyond the text** Why do you think scientists are interested in animals that no longer live on Earth?
Possible response: They are curious about how life has changed over many years.

- Think about the text** The book shows photographs that look like puzzle pieces. Do you think showing the pictures this way is a good choice? Explain your answer.
Possible response: Yes, because the parts of an animal found in the ground, ice, tar, and amber offer clues that are like pieces of a puzzle.

Making Connections Describe a time when learning about your own past gave you a new understanding of your life.

Write your answer in your Reader's Notebook.

Read directions to students.
Critical Thinking
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Grade 3, Unit 4: Extreme Nature

Name _____ Date _____

Critical Thinking

Uncovering the Past
Critical Thinking

Read and answer the questions.

1. Think within the text How much time does it take for fossils to form?

2. Think within the text How does ice help preserve animals?

3. Think beyond the text Why do you think scientists are interested in animals that no longer live on Earth?

4. Think about the text The book shows photographs that look like puzzle pieces. Do you think showing the pictures this way is a good choice? Explain your answer.

Making Connections Describe a time when learning about your own past gave you a new understanding of your life.

Write your answer in your Reader's Notebook.

Uncovering the Past • LEVEL M

Uncovering the Past
Running Record Form

page	Selection Text	Errors	Self-Corrections
8	Scientists also find clues to the past in ice. There are places on Earth where the ice hardly ever melts. The ice acts like a freezer. It keeps dead animals' bodies from rotting.		
9	Scientists have found whole woolly mammoths frozen in the ice. A woolly mammoth was a kind of elephant that lived many thousands of years ago.		
10	Scientists have been uncovering the bodies of people in ice, too. In 1991, hikers in Europe discovered the body of a frozen man on a snow-covered mountain. The Ice Man had lived 5,000 years ago. He was still in some of his clothes and shoes!		
	Comments:	Accuracy Rate (# words read correctly/104 × 100) _____ %	Total Self-Corrections _____

Behavior	Code	Error
Read word correctly	✓ cat	0
Repeated word, sentence, or phrase	Ⓜ cat	0
Omission	⊖ cāt	1

Behavior	Code	Error
Substitution	cut cat	1
Self-corrects	cut ^{sc} cat	0
Insertion	the ^cat	1
Word told	Ⓢ cat	1

