

About the Book

Text Type: Nonfiction/Informational Page Count: 16 Word Count: 264

Book Summary

People often ask, "How do we know dinosaurs lived on Earth?" This informational book answers that question. Students learn that scientists have found the fossilized remains of dinosaur bones, footprints, teeth, nests, and eggs. They also learn how scientists dig up, wrap, transport, and study dinosaur remains. Detailed photos and illustrations support the text.

About the Lesson

Targeted Reading Strategy

- Ask and answer questions

Objectives

- Ask and answer questions to understand text
- Identify the main idea and supporting details in informational text
- Segment phonemes and identify individual sounds
- Identify short vowel e
- Identify and read plural nouns
- Categorize content vocabulary

Materials

Green text indicates resources available on the website

- Book—*Discovering Dinosaurs* (copy for each student)
- Chalkboard or dry erase board
- Sticky notes
- **Main idea and details, plural nouns, categorize words worksheets**
- **Discussion cards**



Indicates an opportunity for students to mark in the book. (All activities may be demonstrated by projecting the book on interactive whiteboard or completed with paper and pencil if books are reused.)

Vocabulary

*Bold vocabulary words also appear in a pre-made lesson for this title on **VocabularyA-Z.com**.

- High-frequency words: *about, other, some*
- Content words:

Story critical: ***fossils (n.), museum (n.), scientists (n.), skeleton (n.)***

Enrichment: *bones (n.), dinosaurs (n.), Earth (n.), footprints (n.), nests (n.), world (n.)*

Before Reading

Build Background

- Write the word *dinosaurs* on the board. Ask students what they know about dinosaurs. Make a KWL chart on the board. Explain that the *K* stands for what students already know, the *W* stands for they want to know, and the *L* stands for what they've learned. Discuss as a class and then record what students already know about dinosaurs in the *K* column.

- Show students a fossil or a picture of a fossil with the imprint of a plant or animal embedded in the rock. Extend the discussion by asking students to share what they know about fossils. Add known information to the *K* column of the KWL chart on the board.

Book Walk

Introduce the Book

- Show students the front and back covers of the book and read the title with them. Ask what they think they might read about in a book called *Discovering Dinosaurs*. (Accept all answers that students can justify.)
- Show students the title page. Discuss the information on the page (title of book, author's name).

Introduce the Reading Strategy: **Ask and answer questions**

- Explain that many readers read the title and look at the pictures on the covers before they read a book. Then they ask themselves questions, based on what they see. When reading the book, they try to find the answers to the questions they asked.
- Model asking and answering questions.
Think-aloud: The title of this book is Discovering Dinosaurs. When I read the title and I look at the pictures, I have a lot of questions about the topic. I wonder what scientists do when they discover dinosaur bones. I wonder how they get the bones out of the ground without breaking them. I wonder what they do with the bones after they find them. I'm going to write these questions on the KWL chart in the W column.
- Invite students to share their questions about finding dinosaurs with a partner. Give students sticky notes to record their questions. Invite them to put their sticky notes on the KWL chart under the *W* column.
- As students read, encourage them to use other reading strategies in addition to the targeted strategy presented in this section.

Introduce the Vocabulary

- Use the table of contents, section headings, pictures, and captions to preview the book with students. Reinforce new vocabulary by incorporating it into the discussion. For example on page 6, you might say: *Look closely at the picture and read the caption. What do you think the scientists must do when they get the fossils out of the ground?*
- Draw students' attention to the bold words in the text. Explain that these words are in bold print to help the reader know that the words are important. Have students locate and read each bold-print word. Have them turn to the glossary on page 16 and read the definitions.
- Reinforce word-attack strategies by modeling how to read unfamiliar words. Read the sentence on page 5. Point out the word *Scientists*. Model how students can help themselves to read the word by masking from left to right using familiar word parts or syllables. Have them use a finger to mask the word so that only the first syllable *Sci* is showing; unmask the next syllable *en*; finally, unmask the final syllable *tists*. Have students blend the syllables together and say the word *scientists*. Reread the sentence and point out that good readers reread to make sure the new word makes sense.

Set the Purpose

- Have students read the book to find answers to their questions about the collection and study of dinosaur bones and fossils.

During Reading


Student Reading

- **Guide the reading:** Give students their copy of the book. Ask them to place a finger on the page number in the bottom corner of page 3. Have them read to the end of page 7, using their finger to point to each word as they read. Encourage students who finish before others to reread the text.

- When they have finished, ask students if any of their questions on the KWL chart were answered.
- Model asking and answering questions.

Think-aloud: Before I read the book, I thought of questions I had about discovering dinosaurs. I wondered how scientists got the bones out of the rocks and what they did with the bones after that. I learned the answers to these questions by reading the first section. I learned that scientists dig up the individual bones, wrap them in plaster, and take them to the museum. At the museum, they put the bones back together. I am going to add this information to the L column of the KWL chart. I still have many questions about dinosaurs. For instance, I wonder how scientists know what dinosaurs did and ate. I am going to add this question to the W column of the chart.

- Have students read the remainder of the book. Remind them to look for answers to the questions they posed on the KWL chart.

 Have students make a question mark in their book beside any word they do not understand or cannot pronounce. These can be addressed in the discussion that follows.

After Reading

- Ask students what words, if any, they marked in their books. Use this opportunity to model how they can read these words using decoding strategies and context clues.

Reflect on the Reading Strategy

- *Think-aloud: After reading the book, it was easy to answer some of the questions I listed in the W section of the KWL chart. I learned that scientists study fossils of dinosaurs' teeth to see what type of foods they ate. Dinosaurs with sharp teeth ate meat, and dinosaurs with flat teeth ate mostly plants. The KWL chart kept me focused and helped me remember what I read.*
- Discuss how reading to answer questions about the book can help the reader get meaning from the book and promote a greater sense of curiosity and excitement.

Teach the Comprehension Skill: **Main idea and details**

- **Discussion:** Ask students to share what they learned by reading this book. Ask what information interested them or surprised them the most. Have them tell why.
- **Introduce and model:** Review or explain that many books are about one thing and that the topic is often the title of the book (*Discovering Dinosaurs*). Direct students to the table of contents. Explain that each section in this informational book contains a main idea and details about the main idea. Explain that in addition to reading the title, a reader can find out more about a main idea by reading the first two sentences of each section. As an example, have students turn to page 4. Read the name of the section titled "Finding Fossils." Reinforce that this is the main idea of the section by having students read the first two sentences. Review or explain how the information in the section provides details that tell more about the main idea.
- *Think-aloud: Before you read a book, you can look at the section titles in the table of contents to see what main ideas will be discussed. As you begin a section, the first two sentences will usually have the most general information. Then, more specific details follow, which support the main idea.*
- **Check for understanding:** Have students turn to the second section on page 8, read the title, and read the first two sentences. Have students tell the main idea of the section (learning from fossils). Have them skim the rest of the section to find interesting details that tell more about learning from fossils.
- **Independent practice:** Introduce, explain, and have students complete the [main-idea-and-details worksheet](#). If time allows, discuss their responses.
- **Enduring understanding:** If there were no fossils, humans would have little information about animals and plants that lived long ago. Scientists have learned how to find detailed information about ancient animals, plants, and civilizations by digging in the ground. Now that you know this information, what might scientists do if fossils did not exist? How else might they get information about the past?

Build Skills

Phonological Awareness: Segment phonemes

- Say the word *teeth*, stretching the sounds in the word. Explain to students that there are three sounds in the word *teeth*. Say the word again, emphasizing each sound in the word (/t/ /ee/ /th/).
- **Check for understanding:** Have students listen as you say the word *nest*, stretching the sounds in the word. Have them repeat the word and tell the number of sounds in the word (4).
- **Independent practice:** Write the following words on the board: *find, live, safe, fish, rock, egg, keep*. Have students work in pairs, taking turns segmenting phonemes and determining the number of sounds in each word. If time permits, have partners share their answers.

Phonics: Short vowel e

- Write the word *eggs* on the board and say it aloud with students.
- Have students say the short /e/ sound aloud. Then run your finger under the letters in the word as students say the whole word aloud. Ask students to identify which letter represents the short /e/ sound in the word *eggs*.
- Ask student to turn to page 5 and locate two words with the short /e/ sound (*eggs* and *nest*). Have students say the short /e/ sound aloud. Then ask students to run their fingers under the letters in each word as students say the whole word aloud.
- **Check for understanding:** Write the following words that have the short /e/ sound on the board, leaving out the vowel: *met, spent, end, when, send*. Say each word, one at a time, and have volunteers come to the board and add the vowel e to each word.

Grammar and Mechanics: Plural nouns

- Review with students that a *noun* is a word that names a *person, place, or thing*. Write the word *dinosaur* on the board and tell students that *dinosaur* is a noun because it names a thing. Add the letter *s* to the end of *dinosaur*. Explain to students that adding an *s* to the end of the word means that there is more than one dinosaur. Tell students that words that name *more than one person, place, or thing* are called *plural nouns*.
- ✎ **Check for understanding:** Have students look through the book to locate other plural nouns (*rocks, skeletons, humans, birds, years, insects, fossils, eggs, animals, footprints, nests, plants, scientists, and bones*). Have students use a crayon to highlight these words.
- **Independent practice:** Introduce, explain, and have students complete the [plural nouns worksheet](#). If time allows, discuss their answers.

Word Work: Categorize words

- Write the following words on the board: *rock, skeleton, plants, fossils, scientists, teeth, museum, bones, dinosaurs, nest*. Read each word aloud with the students. Explain that these words can be categorized or placed into groups, *Living Things* and *Non-Living Things*. Write these headings on the board and model sorting the words into the appropriate category. For example, say: *The first word I read is rock. A rock is not a living creature so I will place it under the heading Non-Living Things*. Ask students to determine where to place the word *plants*.
- **Check for understanding:** Have students work with a partner to place the remaining words in the correct category. Ask students if they can think of other ways to sort the words into different categories.
- **Independent practice:** Introduce, explain, and have students complete the [categorize words worksheet](#).

Build Fluency

Independent Reading

- Allow students to read their book independently. Additionally, allow partners to take turns reading parts of the book to each other.

Home Connection

- Give students their book to take home to read with parents, caregivers, siblings, or friends. Have them identify the main idea and details of the book to someone at home.

Extend the Reading

Informational Writing Connection

Ask students what they know about what scientists do. Ask them if they think being a scientist would be an interesting profession. Have students write about what they would research and study if they were a scientist.

Visit [Writing A–Z](#) for a lesson and leveled materials on informational writing.

Science Connection

Have students use the KWL chart on the board to create a list of questions they still have about fossils and dinosaurs. Provide resources for students to research their questions. Add what they learn to the *L* column of the KWL chart on the board.

Skill Review

[Discussion cards](#) covering comprehension skills and strategies not explicitly taught with the book are provided as an extension activity. The following is a list of some ways these cards can be used with students:

- Use as discussion starters for literature circles.
- Have students choose one or more cards and write a response, either as an essay or as a journal entry.
- Distribute before reading the book and have students use one of the questions as a purpose for reading.
- Conduct a class discussion as a review before the book quiz.

Assessment

Monitor students to determine if they can:

- consistently ask and answer questions using a KWL chart
- identify the main idea and details in text in discussion and on a worksheet
- correctly segment phonemes and identify the number of individual sounds in words
- identify and read words with short vowel *e*
- identify and read plural nouns in discussion and on a worksheet
- sort content vocabulary into categories and explain the way they categorized them, using a worksheet

Comprehension Checks

- [Book Quiz](#)
- [Retelling Rubric](#)