Uncovering the World of Dinosaurs

Written by Robert E. Slavin and Richard Gifford

This project was developed at the Success for All Foundation under the direction of Robert E. Slavin and Nancy A. Madden to utilize the power of cooperative learning, frequent assessment and feedback, and schoolwide collaboration proven in decades of research to increase student learning.
Targeted Treasure Hunt:
Uncovering the World of Dinosaurs

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INFORMATIONAL (9 DAY)

Uncovering the World of Dinosaurs

Written by Robert E. Slavin and Richard Gifford

Summary

Early dinosaurs first appear in the fossil record 230 million years ago. Over the course of millennia, species died out; others diversified, adapting to changing environmental conditions, and survived until about 65 million years ago. Paleontologists are scientists who study the fossil remains of plants and animals to learn more about what life was like in the distant past. Paleontologists who study dinosaurs look for fossilized evidence, such as bones, teeth, footprints, and eggs, to learn what these creatures were like, how they behaved, and how they changed over time. Uncovering the World of Dinosaurs looks at the work of paleontologists and presents some theories about the causes of the dinosaurs’ extinction and about the relationship between dinosaurs and birds of today.

Instructional Objectives

<table>
<thead>
<tr>
<th>Reading</th>
<th>Word Power</th>
<th>Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text features (TF)</td>
<td>Antonyms</td>
<td>Write an answer to a research question.</td>
</tr>
<tr>
<td>Students will use text features to gather information from the text.</td>
<td>Students will identify words that have opposite meanings (antonyms).</td>
<td>Students will write at least one paragraph with the answers to a research question about dinosaur life.</td>
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</table>

Teacher’s Note: This book contains a glossary and an index. Point out to students that the bold words in the text can be found in the glossary.
DAY 1 / Uncovering the World of Dinosaurs

ACTIVE INSTRUCTION
Timing Goal: 40 minutes

Rate New Vocabulary Words

- Display the vocabulary words.
- Have students copy the words into their journals and rate their knowledge of each as they arrive for class.

Success Review and Keeping Score

- Hand out team score sheets and team certificates to each team.
- Point to the Team Celebration Points poster, and celebrate super teams from the previous lesson.
- Remind students how to earn team celebration points. Remind them that team celebration points help them to become super teams.
- Guide teams to set new goals for the cycle.
- Have one student from each team write the team improvement goal on the team score sheet. Note each team’s improvement goal on the teacher cycle record form.
- Explain the challenge scores using the rubrics on the team folders.
- Explain the student assessments: fluency, the Student Test, and Adventures in Writing. Tell students there will be questions on the Student Test that are related to the reading skill, vocabulary, and the Word Power skill.

Team Cooperation Goal

- Point out that this lesson’s team cooperation goal is complete tasks, or choose one based on your class’s needs. Point out the related behavior on the team score sheet. Explain, or model, as necessary.
- Tell students that you will award team celebration points to teams whose members practice the team cooperation goal and related behavior.

Set the Stage

- Introduce the text, author, and reading objective.

This cycle we will read Uncovering the World of Dinosaurs by Robert E. Slavin and Richard Gifford. As we read, we’ll use text features, such as headings, illustrations, diagrams, a glossary, and fact boxes, to gather information. Good readers use text features to learn more information about the ideas in the text.
- Point out the strategy target on the team score sheet.
Point out that the text is informational, or have students explore the text to figure out that it is informational. Review how informational texts differ from literature.

Tell students that they will use the TIGRRS process as they read, or ask them what process they use when they read informational text. Review the steps of the TIGRRS process: topic, intent of author, graphic organizer, read, reread, summarize.

Prompt students to identify the topic for the first step of TIGRRS by paging through the text. Use Think-Pair-Share to have them point to various text features and identify the topic. Randomly select a few students to share.

As we read this text, we will use TIGRRS. The first step of TIGRRS is to identify the topic of the text. Take a few moments to page through the text and look at the pictures, headings, and other text features. What is the topic of the text? Give students time to discuss. Yes, I agree. The topic of the text is dinosaurs. The title is a big clue, and the many illustrations of dinosaurs throughout the book are also clues that the topic is dinosaurs.

Use the items below to build or activate background knowledge about the topic.

- Use Team Huddle to have students discuss what they know about dinosaurs. Use Random Reporter to select students to share, and record student responses on the board.
- Use Think-Pair-Share to have students explain what kind of evidence scientists study to learn about dinosaurs, and randomly select a few students to share. Dinosaur bones, fossils.
- Point out that scientists study the fossilized remains of dinosaurs, including bones, teeth, footprints, imprints of skin, eggs, and even fossilized feces.

Prompt students to identify the next step of TIGRRS. Use Think-Pair-Share to have them identify the author’s intent. Randomly select a few students to share.

We already completed the first step of TIGRRS, which was identifying the topic. What is the next step of TIGRRS? Give students time to discuss. Yes, the next step of TIGRRS is to predict the authors’ intent. Look at the text with your partner. What do you predict the authors’ intent is? Give students time to discuss. The authors’ intent might be to tell readers about dinosaurs and how scientists study them.

Refer to the next step in TIGRRS. Use Think-Pair-Share to have students identify the graphic organizer they will use to record information from the text. Randomly select a few students to share. Display an idea tree. Use Think-Pair-Share to have students tell what will be written in each part, and randomly select a few students to share.
The next step in TIGRRS is to identify the graphic organizer we will use to record important ideas. We know that the topic of the text is dinosaurs. The table of contents tells us the section headings and how the authors are going to present information. Let’s take a look at the text and find clues that might tell us how the text is organized so we can choose a graphic organizer to make notes. Allow students a few minutes to look through the text and identify a graphic organizer. What graphic organizer should we use? Wait for students’ responses. Looking at the heading for each section of text, it looks like the authors will answer questions about dinosaurs, paleontologists, and fossils. The information will probably be organized as main ideas and details. Yes, an idea tree will work well. Display an idea tree. Where will we write the main ideas for each section of text? Main ideas go in the circles. Where will we write the supporting details? Supporting details go next to the lines coming out of each circle. As we add to the idea tree, we will make notes on the important information we read about dinosaurs and paleontologists (the scientists who study them).

- Establish the purpose for reading by telling students that they will learn more about the topic as they read.

**Vocabulary**

- Ask teams to have teammates make a tent with their hands when they are ready to tell a word the entire team rated with a “+” and a word the entire team rated with a “?”.
- Use Random Reporter to have teams share one word they know and one word they need to study further. Award team celebration points.
- Introduce the vocabulary words.
- Review the routine for partner study of the vocabulary words, reminding students to review all the vocabulary words. Assign partners for this activity.
- Use Random Reporter to follow up the team review. Model the use of strategies, and correct pronunciations when necessary.
- Award team celebration points.
- Review the procedures for students finding words in their daily reading and for adding words to the Vocabulary Vault.

<table>
<thead>
<tr>
<th>Word and Page Number</th>
<th>Identification Strategy</th>
<th>Definition</th>
<th>Sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>massive page 6</td>
<td>chunk: mas-sive</td>
<td>very big and heavy</td>
<td>The road crew needed special equipment to move the <em>massive</em> rock.</td>
</tr>
<tr>
<td>roamed page 6</td>
<td>base word + ending: roam + ed</td>
<td>wandered</td>
<td>We wanted to see what was for sale at the fish market, so we just <em>roamed</em> up and down the aisles.</td>
</tr>
</tbody>
</table>
**Using the Targeted Skill (Prompt and Reinforce)**

- Introduce the skill and its importance in informational text.
- Remind students that this cycle they will use text features to learn more information about the topic. Use **Think-Pair-Share** to have students preview the text, *Uncovering the World of Dinosaurs*, and identify different ways that information is presented. Randomly select a few students to share.

This cycle we will examine text features to gather extra information about the topic. When we read informational text, sometimes the author gives us more information than just sentences and paragraphs. Text features are things that teach us more about the topic such as photographs, captions, headings, a glossary, and fact boxes. Let’s preview *Uncovering the World of Dinosaurs* to see what text features the authors use to give us extra information. Allow students 1 or 2 minutes to preview the text. What are some of the different text features in this book? *Illustrations, headings, sidebars, diagrams, maps, and a glossary.*
As students share, use the book to show examples of each type of text feature.

Explain to students that they can gather information from text features by reading what the text feature states directly or by drawing conclusions from the information in the text feature.

Read page 2 aloud. Use a **Think Aloud** to model using the text features to gather more information.

The authors had me imagine finding a huge dinosaur bone. They also talk about two different dinosaurs with very long names. What additional information can I learn from the text features on this page?

The text feature on the right side of the page is called a sidebar. The title of the sidebar is Dino Lingo. I see that it provides help in pronouncing those long dinosaur names. Let me see...the first dinosaur name is pronounced ty-ran-uh-SOAR-us rex. I’ve heard of that dinosaur. That is the one described as giant in the text. The second dinosaur name is pronounced ah-pat-uh-SOAR-us. That is the one described as gentle in the text. The picture and caption give me more information. It says *Apatosaurus* was a plant eater and was seventy-five feet long. Wow! From the picture, I can see that this dinosaur had a very long neck and tail. By using the text features, I learned how to pronounce dinosaur names and what an *Apatosaurus* looked like.

Have partners use the text feature to help them pronounce the name of the third dinosaur: veh-laws-er-AP-tor.

Tell students that they will use text features to gather additional information as they read and reread the text.

**Listening Comprehension**

Introduce the text, and remind students that it is informational. Remind them that you will use the TIGRRS process as you read.

Remind students of the topic, intent of the author, and the graphic organizer.

Tell students that you will start reading the text and applying the skill. Tell them that you will also record the important ideas on the graphic organizer.

Display a blank idea tree. Remind students that you will only read for main ideas as you read the text the first time.

Read page 3 aloud. Use a **Think Aloud** to model using the text features to gather more information.

The text says that dinosaurs walked the earth millions of years ago when there were no people. It mentions two types of dinosaurs: *T-rex* and *Velociraptor*. I think these must have been meat-eating dinosaurs because it says they were ferocious. Now that I’ve read the text, I will view the text features to see if I can gather more information. The fact box tells me that the word *dinosaur* means terrible lizard. From the pictures, I can see how they got that name! Look at the huge mouths and sharp teeth on the *T-rexes* in the picture! Another piece of information I get from the pictures is that the *T-rex* could stand upright and had very short front
legs. The caption identifies the skeleton as T-rex and tells me when and where T-rex dinosaurs lived: in North America 68 to 66 million years ago.

- Read pages 4 and 5 aloud, and point out the text features on each page. For example, model using the glossary to find the meanings of the words extinct and paleontologists in bold on page 4. Model using the illustration on page 5 to draw the conclusion that dinosaurs had a wide range of body shapes.
- Summarize the main ideas from your reading, and write them on the idea tree.
- Tell students that as they read, they should look at the text features to learn more information about the topic.

**Preview Team Talk**

- Preview the Team Talk questions with the class. Point out that the answer to the Write-On question, #1, must be written individually, after students discuss it in their teams.
- Ask students to underline key words or phrases in the Write-On question, or model this if necessary. Ask questions to guide students’ reflection as they determine the meaning of the question.
- Ask students to tell what key words or phrases they underlined and to state the question in their own words.

**Team Talk**

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<table>
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<tbody>
<tr>
<td>1.</td>
<td>Give an example of additional information that you learned from the sidebar on page 6. (Write-On) [TF]</td>
</tr>
<tr>
<td>2.</td>
<td>The comparison chart on pages 8 and 9 shows the height of a human and of some dinosaurs. Use the information from the chart to answer the following questions: How long was <em>Argentinosaurus</em> from head to tail? How did you use the chart to figure out that information? [TF • DC]</td>
</tr>
<tr>
<td>3.</td>
<td>What characteristics do dinosaurs and birds have in common? [CC]</td>
</tr>
<tr>
<td>4.</td>
<td>Use the text feature on page 11 to explain the asteroid theory. What do scientists think may have happened? [TF • DC]</td>
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- Randomly assign team leaders.
TEAMWORK
Timing Goal: 45 minutes

Partner Reading  **TP**
- Explain, or review if necessary, the Partner Reading routines for strategy use with sticky notes and TIGRRS before having students read and restate: **SR** pages 6–15 aloud with partners.
- If some partners finish reading and filling out their graphic organizers ahead of their teammates, have them begin looking over the Team Talk questions.

Team Discussion  **TP**
- Ensure that students discuss the Team Talk questions thoroughly before having students individually write answers to the Write-On question. Have students revise their answers after discussion if necessary.
- Explain, or have team leaders review if necessary, how to use role cards during Team Discussion. **SR**
- Remind students that they will need to prepare each team member to discuss the team’s strategy use, Write-On discussion, and Think-and-Connect discussion to earn team celebration points during Class Discussion.

<table>
<thead>
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<th>Team Talk</th>
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<tr>
<td><strong>1.</strong> Give an example of additional information that you learned from the sidebar on page 6. (Write-On)</td>
</tr>
</tbody>
</table>

*(Answers will vary.)* **100 points** = From the sidebar on page 6, I learned that Argentinosaurus may have been the largest dinosaur and was as big as an eighteen-wheeler. It was an herbivore, or plant eater, and may have eaten evergreen tree branches. The sidebar also says that the eggs of this dinosaur were the size of footballs. **90 points** = From the sidebar on page 6, I learned that Argentinosaurus may have been the largest dinosaur. It was a plant eater and may have eaten evergreen tree branches. **80 points** = I learned that Argentinosaurus may have been the largest dinosaur.*
### Team Talk continued

2. The comparison chart on pages 8 and 9 shows the height of a human and of some dinosaurs. Use the information from the chart to answer the following questions: How long was *Argentinosaurus* from head to tail? How did you use the chart to figure out that information? ![TF • DC]

   **100 points** = *Argentinosaurus* was about 120 feet long from head to tail. To figure it out, I measured the scale on the side of the chart that is marked thirty feet. Then I used that length and measured *Argentinosaurus* as four thirty-foot lengths. $30 + 30 + 30 + 30 = 120$ feet.

   **90 points** = *Argentinosaurus* was about 120 feet long. I measured the scale on the side of the chart and used it to measure the dinosaur. **80 points** = It was about 120 feet long. I measured the scale on the chart.

3. What characteristics do dinosaurs and birds have in common? ![CC]

   **100 points** = Characteristics that dinosaurs and birds have in common are similar bones. There are twenty bones that only birds and dinosaurs have. Also, dinosaurs laid eggs like birds. Some dinosaurs had feathers, and others had beaks like birds. Scientists think birds and dinosaurs are related. **90 points** = Characteristics that dinosaurs and birds have in common are similar bones. Dinosaurs laid eggs, and some dinosaurs had feathers and beaks. **80 points** = Some dinosaurs had feathers and beaks.

4. Use the text feature on page 11 to explain the asteroid theory. What do scientists think may have happened? ![TF • DC]

   **100 points** = Scientists think a big asteroid hit the earth and kicked up so much dust that it blocked the heat from the sun. As a result, it got cold, and plants died. Without any food, plant-eating animals died. Then meat-eating animals died, and the dinosaurs became extinct. **90 points** = Scientists think a big asteroid hit the earth. It kicked up so much dust that it blocked the heat from the sun and caused the death of the dinosaurs. **80 points** = A big asteroid hit the earth. It kicked up so much dust that it blocked the sun, and the dinosaurs died.

- If some teams finish ahead of others, have them work on their graphic organizers.
- Award team celebration points for good discussions that demonstrate effective teamwork and that use this lesson's team cooperation goal.
Class Discussion

- Ensure participation by calling on teams to share responses to all discussions.
- Remember to add individual scores to the teacher cycle record form.

Strategy-Use Discussion

- Use Random Reporter to select two or three students to describe their team’s strategy use with the class.
- Award team celebration points.

Think-and-Connect Discussion

- Use the Team Talk questions, the Team Talk Extenders, and other appropriate questions (examples below) to ask students if they understood and enjoyed the reading and to reinforce understanding of the skill.
- Allow students time to discuss your questions.
- Use Random Reporter to select students to respond to your questions.

Team Talk Extenders

Look at the size-comparison chart on pages 8 and 9. Are there any animals in today’s world as large as Therizinosaurus? Why do you think no gigantic creatures exist today?

How would being cold or warm blooded affect the behavior of a dinosaur?

- Award team celebration points.

Write-On Discussion

- Use Random Reporter to ask one or two students to read their written answers to the skill question to the class. If desired, display student answers on the board.
- Award team celebration points.
- Construct a class answer, and display it on the board. Refer to the sample answers given in the Team Talk box. Discuss with students what makes the class answer a good, complete answer or how to improve it.
FLUENCY IN FIVE

Timing Goal: 5 minutes

- Explain to students that when they read correctly, smoothly, and with expression, it shows that they understand what they are reading.
- Tell students to look at the Fluency rubric as you model fluent reading.
- Explain and model reading fluently. Read a passage from the student text. Then reread it, first incorrectly, then choppy, and finally without expression to show a lack of fluency skills.

Pages 12 and 13

- Ask students to use the Fluency rubric as they practice giving you feedback.
- Explain that students will practice reading fluently with partners on days 2 through 4.
- Tell students that they will receive an informal fluency score. Tell them they may read aloud to you for their score when they feel ready on days 2 through 4.

Team Celebration Points

| Total any tallies on the team score sheets, and add points to the Team Celebration Points poster. Guide team reflection about the points they earned. |
| - How many points did you earn today? |
| - How well did you use the team cooperation goal and behavior? |
| - How can you earn more points? |
DAY 2

ACTIVE INSTRUCTION
Timing Goal: 30 minutes

Team Cooperation Goal
- Remind students of this lesson’s team cooperation goal. Point out the related behavior on the team score sheet.
- Tell students that you will award team celebration points to teams whose members practice the team cooperation goal and related behavior.

Set the Stage
- Display and have students complete the Two-Minute Edit to start the class. TP
- Use Random Reporter to check corrections.
- Remind students of the text, author, and reading objective.
- Point out the strategy target printed on the team score sheet.

Vocabulary TP
- Ask teams to have teammates make a tent with their hands when they are ready to tell a word the entire team rated with a “+” and a word the entire team rated with a “?”.
- Use Random Reporter to have teams share one word they know and one word they need to study further. Award team celebration points.
- Have the teams review the vocabulary words. Ask them to use the vocabulary words in new meaningful sentences, if possible, rather than reading the sentences provided. SR
- Use Random Reporter to check the review.
- Open the Vocabulary Vault, and celebrate students’ words. Have each team record their Vocabulary Vault words on the team score sheet.
- Award team celebration points.

Strategic Review
- Ask teammates to summarize the ideas recorded on their graphic organizers from the passage they read/reread the previous day. Use Random Reporter to have students share these items with the class.
- If appropriate, have students survey the section of text that they will read today and predict the topic of this section. Model this if necessary. Use Random Reporter to share the predictions with the class.
Ask students if they can think of a good question to ask about the text at this point in their reading. Allow volunteers to pose their questions to the class. Model these questions if necessary; an example follows.

What is the biggest dinosaur that paleontologists have found so far? How long was it?

Listening Comprehension

- Review the topic and the author’s intent with students.
- Remind them of the graphic organizer you are using to help you remember the text.
- Review the important ideas from yesterday’s reading.

Yesterday when we read Uncovering the World of Dinosaurs, we learned that dinosaurs lived 145 to 65 million years ago and that some were herbivores and others were carnivores. We also read descriptions of several types of dinosaurs. The book also had information about the dinosaur-bird connection and about the asteroid theory that could explain why the dinosaurs became extinct. The text features gave us additional information.

- Tell students that you will continue to record important ideas on the graphic organizer.
- Read pages 16 and 17 aloud. Use Think-Pair-Share to have students identify information that they learned from the text features.

What text features are included on these pages? Give students time to discuss. That’s right. There is a heading and photograph on page 16 and a series of labeled maps on page 17. What information do the text features on these two pages add to the information in the text? What do you learn from them? Give students time to discuss. Yes, something we learn from the heading is the main idea of the page: how paleontologists figure out where to look for dinosaur fossils.

What do we learn from the photograph? Give students time to discuss. I agree; from the photograph, we learn what the land looks like at Cedar Mountain where many dinosaur fossils have been found. There are some trees, but there are also a lot of open areas where dirt could be worn away to reveal fossil bones.

What do we learn from the series of maps? Give students time to discuss. Yes, we learn what the continents looked like when they were all together in one land mass 250 million years ago. The other maps show how the continents moved apart gradually over millions of years, until they are in their present positions.

- Read pages 18–20 aloud, and add main ideas to your idea tree as you read.
- Tell students that as they read, they should pay attention to text features to gather more information about the main ideas.
Preview Team Talk

- Preview the Team Talk questions with the class. Point out that the answer to the Write-On question, #1, must be written individually, after students discuss it in their teams.
- Ask students to underline key words or phrases in the Write-On question, or model this if necessary. Ask questions to guide students’ reflection as they determine the meaning of the question.
- Ask students to tell what key words or phrases they underlined and to state the question in their own words.

Team Talk

1. Give an example of additional information that you learned from the sidebar on page 21. (Write-On) [TF]

2. Which sentence below states the main idea of page 22? [MI]
   - a. There are many dinosaur skeletons in museums.
   - b. Dinosaur robots are featured in movies.
   - c. Scientists use 3D printing to make dinosaur robots.
   - d. Scientists can make artificial muscles.

3. What can scientists learn by studying dinosaur feathers preserved in amber? [CE]

4. What evidence is there that paleontologists share information about their discoveries? [DC]

TEAMWORK

Timing Goal: 45 minutes

Partner Reading [TP]

- Explain, or review if necessary, the Partner Reading routines for strategy use with sticky notes and TIGRRS before having students read and restate: [SR] pages 21–27 aloud with partners.
- If some partners finish reading and filling out their graphic organizers ahead of their teammates, have them take turns rereading the pages designated for Fluency in Five.
Team Discussion

- Ensure that students discuss the Team Talk questions thoroughly before having students individually write answers to the Write-On question. Have students revise their answers after discussion if necessary.
- Explain, or have team leaders review if necessary, how to use role cards during Team Discussion.
- Remind students that they will need to prepare each team member to discuss the team’s strategy use, Write-On discussion, and Think-and-Connect discussion to earn team celebration points during Class Discussion.

### Team Talk

1. Give an example of additional information that you learned from the sidebar on page 21. (Write-On) [TF]

   **100 points** = I learned from the sidebar that the oldest dinosaur discovered so far is 245 million years old. It is from *Nyasasaurus*, a dinosaur that was seven feet tall and walked on two legs. **90 points** = I learned from the sidebar that the oldest dinosaur discovered so far is 245 million years old. It is from *Nyasasaurus*. **80 points** = The oldest dinosaur discovered so far is 245 million years old.

2. Which sentence below states the main idea of page 22? [MI]
   a. There are many dinosaur skeletons in museums.
   b. Dinosaur robots are featured in movies.
   c. Scientists use 3D printing to make dinosaur robots.
   d. Scientists can make artificial muscles.

3. What can scientists learn by studying dinosaur feathers preserved in amber? [CE]

   **100 points** = By studying the dinosaur feathers in amber, scientists can learn what dinosaur feathers looked like and what colors they were. This is important because scientists cannot learn this information by studying bones or fossils. **90 points** = By studying the dinosaur feathers in amber, scientists can learn what dinosaur feathers looked like. Scientists cannot learn this information by studying bones. **80 points** = They can learn what dinosaur feathers look like.

4. What evidence is there that paleontologists share information about their discoveries? [DC]

   **100 points** = The evidence that paleontologists share their discoveries is that they compare the bones they find. They use computers to compare what they find with the other bones found by paleontologists around the world. Scientists hope that the bones they find have never been found before. **90 points** = The evidence that paleontologists share their discoveries is that they compare the bones they find to others. They use computers to compare what they find with the other bones found around the world. **80 points** = They compare the bones they find to others.
If some teams finish ahead of others, have them work on their graphic organizers.

Award team celebration points for good discussions that demonstrate effective teamwork and that use this lesson’s team cooperation goal.

**Class Discussion**

| Strategy-Use Discussion | – Use **Random Reporter** to select two or three students to describe their team’s strategy use with the class.
| – Award team celebration points. |

| Think-and-Connect Discussion | – Use the Team Talk questions, the Team Talk Extenders, and other appropriate questions (examples below) to ask students if they understood and enjoyed the reading and to reinforce understanding of the skill.
| – Allow students time to discuss your questions.
| – Use **Random Reporter** to select students to respond to your questions. |

| Team Talk Extenders |
| In your reading so far, what evidence do paleontologists use to draw conclusions about dinosaur behavior? |
| If you found a fossil bone, what is the first thing you would do? What is the first thing a paleontologist does? |
| – Award team celebration points. |

| Write-On Discussion | – Use **Random Reporter** to ask one or two students to read their written answers to the class. If desired, display student answers on the board.
| – Award team celebration points.
| – Construct a class answer, and display it on the board. Refer to the sample answers given in the Team Talk box. Discuss with students what makes the class answer a good, complete answer or how to improve it. |
FLUENCY IN FIVE TP
Timing Goal: 5 minutes

- Explain, or have team leaders review if necessary, the routine and rubric for fluency.
- Tell students the page numbers and the paragraphs of the fluency passage. Write or display these on the board.

FLUENCY SECTION

Pages 21 and 22 (not including sidebar)

- Remind students that partners should use the rubric to provide feedback during fluency practice. Model this with a student if necessary.
- Tell the reading students when they should begin reading, and then time them for one minute. Have the listening students identify where the readers stopped, how many words they missed, and if they met their reading goal. Also have partners share their feedback using the Fluency rubric. Have partners switch roles, and repeat the process.
- Assign individual fluency goals as needed, monitor practice, and assign scores.
- Select two or three students to read the fluency section that they practiced for a score.
- Award team celebration points. Remember to add individual scores to the teacher cycle record form.

WORD POWER TP
Timing Goal: 10 minutes

- Introduce the Word Power skill. Link the skill to Captain Read More’s Word Treasure clue for antonyms.
- Display the words forget and remember. Use Think-Pair-Share to have students discuss the meanings of these words. How are these two words related? Randomly select a few students to share. They have opposite meanings.
Remind students that words with opposite meanings are called antonyms. Display the Word Treasure clue for antonyms (a compass rose). Point to the directions north and south on the compass rose. Explain that north and south are opposite directions. Point to east and west, and explain that these are also opposite directions.

Tell students that Captain Read More thinks it is important to know antonyms because they help us define words and make connections between words.

Display the compass rose, and write the word “ancient” at the top.

ancient

Use **Think-Pair-Share** to have students identify an antonym for the word *ancient*. Randomly select a few students to share. *Possible antonyms are new, modern, and young.*

Point out that looking at the antonyms helps us better understand the meaning of *ancient*.

Reveal the Word Treasure (skill).

**Word Treasure**

Some words have opposites.

If you come across a word with an opposite, think about what each word means. This will help you better understand each word’s meaning.

Tell students that they will practice knowing the meanings of the vocabulary words and the Word Power skill in preparation for the test.

Explain, or have the team leaders review as necessary, the Word Power activity before having students begin. **SR**

**Teacher’s Note:** Accept reasonable responses for skill-practice and test answers; many words have more than one antonym.

**Skill Practice**

Write an antonym for each of the following words.

1. speedy  *slow*
2. found  *lost*
3. carnivore  *herbivore*
4. heavy  *light*
5. Choose a word from the vocabulary list, and write a meaningful sentence for that word.

100 points = The sentence uses the word correctly and includes details to create a mind movie. 90 points = The sentence uses the word correctly and includes one detail. 80 points = The sentence uses the word correctly.

6. Choose the word that best fits in the blank.

To win the game, a player has to reveal the clues and solve the mystery.

- Use Random Reporter to check responses on the skill-practice items.
- Award team celebration points.
- Use Random Reporter to share meaningful sentences. Discuss how students can improve sentences to make them more meaningful. Demonstrate with an example if necessary.
- Award team celebration points.
- Remember to add individual scores to the teacher cycle record form.
- Use Random Reporter to check responses on the remaining item for building meaning.
- Award team celebration points.
- Remind students to look for their vocabulary words outside of reading class so they can add them to the Vocabulary Vault tomorrow.

Team Celebration Points

| Total any tallies on the team score sheets, and add points to the Team Celebration Points poster. Guide team reflection about the points they earned. |
|---|---|---|---|
| How many points did you earn today? |
| How well did you use the team cooperation goal and behavior? |
| How can you earn more points? |
ACTIVE INSTRUCTION
Timing Goal: 30 minutes

Team Cooperation Goal
- Remind students of this lesson’s team cooperation goal. Point out the related behavior on the team score sheet.
- Tell students that you will award team celebration points to teams whose members practice the team cooperation goal and related behavior.

Set the Stage
- Display and have students complete the Two-Minute Edit to start the class. TP
- Use Random Reporter to check corrections.
- Award team celebration points.
- Remind students of the text, author, and reading objective.
- Point out the strategy target printed on the team score sheet.

Vocabulary TP
- Ask teams to have teammates make a tent with their hands when they are ready to tell a word the entire team rated with a “+” and a word the entire team rated with a “?.”
- Use Random Reporter to have teams share one word they know and one word they need to study further. Award team celebration points.
- Have the teams review the vocabulary words. Ask them to use the vocabulary words in new meaningful sentences, if possible, rather than reading the sentences provided. SR
- Use Random Reporter to check the review.
- Open the Vocabulary Vault, and celebrate students’ words. Have each team record their Vocabulary Vault words on the team score sheet.
- Award team celebration points.

Strategic Review
- Ask teammates to summarize the ideas recorded on their graphic organizers from the passage they read/reread the previous day. Use Random Reporter to have students share these items with the class.
- If appropriate, have students survey the section of text that they will reread today and predict that ideas will become more clear. Model this if necessary. Use Random Reporter to share the predictions with the class.
Day 3 / Uncovering the World of Dinosaurs

- Ask students if they can think of a good question to ask about the text at this point in their reading. Allow volunteers to pose their questions to the class. Model these questions if necessary; an example follows.

What important discovery did scientists find preserved in amber?

Listening Comprehension

- Review the topic and the author’s intent with students.
- Remind them of the graphic organizer you are using to help you remember the text.
- Review the important ideas from yesterday’s reading.

Yesterday we read about how paleontologists figure out where to look for fossils. We also learned how they use technology to find out more about dinosaurs.

- Tell students that as you reread you will look for details about the important ideas and add them to the graphic organizer. Tell students that you will also add any important information you missed the first time you read.
- Reread pages 2 and 3 aloud, pointing out the text features such as captions, illustrations, sidebars, and fact boxes. Use Think-Pair-Share to have students identify supporting details from the text features to add to their idea trees, and randomly select a few students to share. Add the supporting details to the idea tree accordingly.

The first time we read pages 2 and 3, we found the main idea that dinosaurs lived millions of years ago when there were no people. Using the text features, what are some supporting details we can add to our idea trees? Allow students time to discuss. Some details are that Apatosaurus was a seventy-five-foot plant-eating dinosaur; dinosaur means terrible lizard; and T-rex was a meat-eating dinosaur in North America 68 to 66 million years ago.

- Reread pages 4 and 5, and model adding supporting details to the idea tree.
- Remind students that as they reread, they should also look for supporting details in the text features to add to their idea trees.

Preview Team Talk

- Preview the Team Talk questions with the class. Point out that the answer to the Write-On question, #1, must be written individually, after students discuss it in their teams.
- Ask students to underline key words or phrases in the Write-On question, or model this if necessary. Ask questions to guide students’ reflection as they determine the meaning of the question.
- Ask students to tell what key words or phrases they underlined and to state the question in their own words.
Team Talk

1. Give an example of a text feature from today’s reading that you used to find out more information. What did you learn? (Write-On) [TF]

2. How could scientists tell that *Sinocalliopteryx* was fast and a good hunter? [DC]

3. From the information on page 6, which of the following can you conclude? [DC]
   a. Reptiles get heat from their surroundings.
   b. Reptiles make their own heat.
   c. Mammals are cold blooded.
   d. All dinosaurs were warm blooded.

   Explain your thinking.

4. Which sentence below states the main idea of page 12? [MI]
   a. Paleontologists study fossils of ancient life.
   b. Paleontologists use small hammers to dig for fossils.
   c. Fossils are preserved plants and animals.
   d. Bones and other fossils can be found in rocks.

TEAMWORK

*Timing Goal: 45 minutes*

**Partner Reading**  TP

- Explain, or review if necessary, the Partner Reading routines for strategy use with sticky notes and TIGRRS before having students reread and restate:  SR
  - pages 6–15 aloud with partners.
- If some partners finish reading and filling out their graphic organizers ahead of their teammates, have them take turns rereading the pages designated for Fluency in Five.

**Team Discussion**  TP

- Ensure that students discuss the Team Talk questions thoroughly before having students individually write answers to the Write-On question. Have students revise their answers after discussion if necessary.
- Explain, or have team leaders review if necessary, how to use role cards during Team Discussion.  SR
Remind students that they will need to prepare each team member to discuss the team’s strategy use, Write-On discussion, and Think-and-Connect discussion to earn team celebration points during Class Discussion.

**Team Talk**

1. Give an example of a text feature from today’s reading that you used to find out more information. What did you learn? (Write-On) [TF]
   
   *(Answers will vary.)* **100 points =** An example of a text feature is the picture on page 3. I used it to find out what fossil bones look like before they are put together. Paleontologists have to study the bones to figure out how the pieces fit together. **90 points =** An example of a text feature is the picture on page 3. I found out what fossil bones look like before they are put together. **80 points =** The picture on page 3 shows fossil bones.

2. How could scientists tell that *Sinocalliopteryx* was fast and a good hunter? [DC]
   
   **100 points =** Scientists found evidence that *Sinocalliopteryx* was fast and a good hunter by looking in its stomach. Inside its stomach were fossils of a quick dinosaur and birds. This shows that *Sinocalliopteryx* was fast enough to catch and eat this prey. **90 points =** Scientists found evidence that *Sinocalliopteryx* was fast and a good hunter by looking in its stomach. Inside its stomach were fossils of a dinosaur and birds. **80 points =** Scientists found fossils in its stomach.

3. From the information on page 6, which of the following can you conclude? [DC]
   
   a. Reptiles get heat from their surroundings.
   b. Reptiles make their own heat.
   c. Mammals are cold blooded.
   d. All dinosaurs were warm blooded.
   
   Explain your thinking.
   
   **100 points =** The text says that cold-blooded animals like lizards get their heat from their surroundings. Lizards are reptiles, so they get heat from their surroundings. **90 points =** The text says that cold-blooded animals like lizards get their heat from their surroundings. **80 points =** Reptiles like lizards are cold blooded.

4. Which sentence below states the main idea of page 12? [MI]
   
   a. Paleontologists study fossils of ancient life.
   b. Paleontologists use small hammers to dig for fossils.
   c. Fossils are preserved plants and animals.
   d. Bones and other fossils can be found in rocks.

   If some teams finish ahead of others, have them work on their graphic organizers.

   Award team celebration points for good discussions that demonstrate effective teamwork and that use this lesson’s team cooperation goal.
Class Discussion

**Strategy-Use Discussion**
- Use Random Reporter to select two or three students to describe their team’s strategy use with the class.
- Award team celebration points.

**Think-and-Connect Discussion**
- Use the Team Talk questions, the Team Talk Extenders, and other appropriate questions (examples below) to ask students if they understood and enjoyed the reading and to reinforce understanding of the skill.
- Allow students time to discuss your questions.
- Use Random Reporter to select students to respond to your questions.

**Team Talk Extenders**
Paleontologists work in the field finding fossils. They also work in the lab preparing and studying them. Are the skills they need to work in both places the same or different? Explain your answer.

What movies have you seen that feature dinosaurs? After reading Uncovering the World of Dinosaurs, what was accurate in those movies? What was not accurate?
- Award team celebration points.

**Write-On Discussion**
- Use Random Reporter to ask one or two students to read their written answers to the class. If desired, display student answers on the board.
- Award team celebration points.
- Construct a class answer, and display it on the board. Refer to the sample answers given in the Team Talk box. Discuss with students what makes the class answer a good, complete answer or how to improve it.

**FLUENCY IN FIVE**
Timing Goal: 5 minutes

- Explain, or have team leaders review if necessary, the routine and rubric for fluency.
Tell students the page numbers and the paragraphs of the fluency passage. Write these on the board.

Remind students that partners should use the rubric to provide feedback during fluency practice. Model this with a student if necessary.

Tell the reading students when they should begin reading, and then time them for one minute. Have the listening students identify where the readers stopped, how many words they missed, and if they met their reading goal. Also have partners share their feedback using the Fluency rubric. Have partners switch roles, and repeat the process.

Assign individual fluency goals as needed, monitor practice, and assign scores.

Select two or three students to read the fluency section that they practiced for a score.

Award team celebration points. Remember to add individual scores to the teacher cycle record form.

WORD POWER

Pretend to take a message from Captain Read More out of the bottle. Use the message to review the Word Power skill (antonyms) and the Word Treasure clue for antonyms (the compass rose).

Display the graphic of the compass rose, and write the word “massive” at the top. Have students think about the meaning of massive. Use Think-Pair-Share to have students identify an antonym for massive. Randomly select a few students to share. Write the antonym at the bottom of the compass rose. The words tiny, small, or little.

massive

tiny
■ Write the word “squat” at the top of the compass rose. Use Think-Pair-Share to have students identify an antonym for squat. Randomly select a few students to share. Write the antonym at the bottom of the compass rose. The word tall.

■ Tell students that they will practice knowing the meanings of the vocabulary words and the Word Power skill in preparation for the test.

■ Explain, or have the team leaders review, as necessary, the Word Power activity before having students begin. 

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**Skill Practice**

Write an antonym for each of the following words.

1. important unimportant
2. careful careless
3. powerful weak
4. common rare

---

**Building Meaning**

<table>
<thead>
<tr>
<th>massive</th>
<th>roamed</th>
<th>squat</th>
<th>upright</th>
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<tbody>
<tr>
<td>roughly</td>
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</tr>
</tbody>
</table>

5. Choose a word from the vocabulary list, and write a meaningful sentence for that word, or revise your sentence from yesterday.

   **100 points** = The sentence uses the word correctly and includes details to create a mind movie. **90 points** = The sentence uses the word correctly and includes one detail. **80 points** = The sentence uses the word correctly.

6. The cat roamed around the house looking for a warm place to curl up and take a nap. Roamed means—
   a. tiptoed.
   b. raced.
   c. wandered.
   d. hopped.

---

■ Use Random Reporter to check responses on the skill-practice items.

■ Award team celebration points.

■ Use Random Reporter to share meaningful sentences. Discuss how students can improve sentences to make them more meaningful. Demonstrate with an example if necessary.
- Award team celebration points.
- Remember to add individual scores to the teacher cycle record form.
- Use Random Reporter to check responses on the remaining item for building meaning.
- Award team celebration points.
- Remind students to look for their vocabulary words outside of reading class so they can add them to the Vocabulary Vault tomorrow.

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DAY 4

ACTIVE INSTRUCTION
Timing Goal: 30 minutes

Team Cooperation Goal
- Remind students of this lesson’s team cooperation goal. Point out the related behavior on the team score sheet.
- Tell students that you will award team celebration points to teams whose members practice the team cooperation goal and related behavior.

Set the Stage
- Display and have students complete the Two-Minute Edit to start the class.  
- Use Random Reporter to check corrections.
- Award team celebration points.
- Remind students of the text, author, and reading objective.
- Point out the strategy target printed on the team score sheet.

Vocabulary
- Ask teams to have teammates make a tent with their hands when they are ready to tell a word the entire team rated with a “+” and a word the entire team rated with a “?”.
- Use Random Reporter to have teams share one word they know and one word they need to study further. Award team celebration points.
- Have the teams review the vocabulary words. Ask them to use the vocabulary words in new meaningful sentences, if possible, rather than reading the sentences provided.  
- Use Random Reporter to check the review.
- Open the Vocabulary Vault, and celebrate students’ words. Have each team record their Vocabulary Vault words on the team score sheet.
- Award team celebration points.

Strategic Review
- Ask teammates to summarize the ideas recorded on their graphic organizers from the passage they read/reread the previous day. Use Random Reporter to have students share these items with the class.
- If appropriate, have students survey the section of text that they will reread today and predict that ideas will become more clear. Model this if necessary. Use Random Reporter to share the predictions with the class.
Ask students if they can think of a good question to ask about the text at this point in their reading. Allow volunteers to pose their questions to the class. Model these questions if necessary; an example follows.

Were all dinosaurs cold blooded like reptiles today?

Listening Comprehension

- Review the topic and the author’s intent with students.
- Remind them of the graphic organizer you are using to help you remember the text.
- Review the information that you added to your graphic organizer during yesterday’s reading.

Yesterday we reread the first half of Uncovering the World of Dinosaurs to find supporting details. We used text features, such as illustrations and diagrams, to find more information to add to our idea trees.

- Tell students that as you reread you will look for details about the important ideas and add them to the graphic organizer. Tell students that you will also add any important information you missed the first time you read.
- Reread pages 16–20 aloud. Focus students’ attention on pages 19 and 20. Use Team Huddle to have students identify supporting details from the text features to add to their idea trees. Use Random Reporter to select students to share responses. Add the details to the idea tree accordingly.

The first time we read pages 19 and 20, we found the main idea that paleontologists work carefully to dig for and preserve fossils. Using the text features, what are some supporting details that we can add to our idea trees? (Answers will vary.) Paleontologists use special tools, such as a rock hammer to pry up fossils, brushes to remove debris, and a hand lens to look at fossils closely.

- Remind students that as they reread, they should also look for details provided by the text features to add to their idea trees.

Preview Team Talk

- Preview the Team Talk questions with the class. Point out that the answer to the Write-On question, #1, must be written individually, after students discuss it in their teams.
- Ask students to underline key words or phrases in the Write-On question, or model this if necessary. Ask questions to guide students’ reflection as they determine the meaning of the question.
- Ask students to tell what key words or phrases they underlined and to state the question in their own words.
- Point out that question #4 asks them to summarize the text using their graphic organizers. Tell them that this will complete the TIGRRS process.
Team Talk

1. Give an example of a text feature that you used to find out more information. What did you learn? (Write-On) TF

2. How do scientists figure out how old a fossil is? MI

3. What question is answered on page 26? QU
   a. How do paleontologists use shovels?
   b. Which paleontologist found a 100-year-old bone?
   c. Why are there so few paleontologists?
   d. How do you prepare to be a paleontologist?

4. Use your idea tree to summarize the information in the text Uncovering the World of Dinosaurs. SU

TEAMWORK

Timing Goal: 45 minutes

Partner Reading TP

- Explain, or review if necessary, the Partner Reading routines for strategy use with sticky notes and TIGRRS before having students reread and restate: SR
  - pages 21–27 aloud with partners.
- If some partners finish reading and filling out their graphic organizers ahead of their teammates, have them take turns rereading the pages designated for Fluency in Five.

Team Discussion TP

- Ensure that students discuss the Team Talk questions thoroughly before having students individually write answers to the Write-On question. Have students revise their answers after discussion if necessary.
- Explain, or have team leaders review if necessary, how to use role cards during Team Discussion. SR
- Remind students that they will need to prepare each team member to discuss the team’s strategy use, Write-On discussion, and Think-and-Connect discussion to earn team celebration points during Class Discussion.
Team Talk

1. Give an example of a text feature that you used to find out more information. What did you learn? (Write-On) [TF]

100 points = An example of a text feature that I used is the two photographs of bones on page 24. The caption explains that scientists use previously discovered bones to make comparisons. This helps me understand how paleontologists identify dinosaurs.

90 points = An example of a text feature that I used are the two photographs on page 24. I found out how they identify dinosaurs.

80 points = Text feature on page 24 shows how dinosaurs are identified.

2. How do scientists figure out how old a fossil is? [MI]

100 points = To find out how old a fossil is, scientists use a mass spectrometer. It measures the number of certain types of atoms in a fossil that help to tell the fossil's age.

90 points = To find out how old a fossil is, scientists use a mass spectrometer. It measures atoms in a fossil.

80 points = A mass spectrometer.

3. What question is answered on page 26? [QU]

a. How do paleontologists use shovels?

b. Which paleontologist found a 100-year-old bone?

c. Why are there so few paleontologists?

d. How do you prepare to be a paleontologist?

4. Use your idea tree to summarize the information in the text Uncovering the World of Dinosaurs. [SU]

100 points = Dinosaurs lived mostly between 145 and 65 million years ago, long before there were any people. Dinosaurs came in all sizes and body shapes. Some were meat eaters, and some were plant eaters. Paleontologists study fossils of ancient plants and animals, including dinosaurs. One theory is that dinosaurs are related to birds. Another theory is that dinosaurs became extinct because an asteroid hit the earth. Paleontologists study where to look for dinosaur fossils and work carefully to dig and preserve the fossils.

90 points = Dinosaurs lived mostly between 145 and 65 million years ago, long before there were any people. Some were meat eaters, and some were plant eaters. Paleontologists study fossils of ancient plants and animals, including dinosaurs. They study where to look for dinosaur fossils and work carefully to dig and preserve them.

80 points = Dinosaurs lived mostly between 145 and 65 million years ago, long before there were any people. Paleontologists study fossils of ancient plants and animals, including dinosaurs.

- If some teams finish ahead of others, have them work on their graphic organizers.
- Award team celebration points for good discussions that demonstrate effective teamwork and that use this lesson’s team cooperation goal.
### Class Discussion

<table>
<thead>
<tr>
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<tbody>
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<td>- Use <strong>Random Reporter</strong> to select two or three students to describe their team’s strategy use with the class.</td>
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<tr>
<td>- Use the Team Talk questions, the Team Talk Extenders, and other appropriate questions (examples below) to ask students if they understood and enjoyed the reading and to reinforce understanding of the skill.</td>
</tr>
<tr>
<td>- Allow students time to discuss your questions.</td>
</tr>
<tr>
<td>- Use <strong>Random Reporter</strong> to select students to respond to your questions.</td>
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**Team Talk Extenders**

- How has new technology like 3D printers changed the way paleontologists work? |
- Why would you need to know science and math to be a paleontologist and study dinosaurs? |

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<th>Write-On Discussion</th>
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<td>- Use <strong>Random Reporter</strong> to ask one or two students to read their written answers to the skill question to the class. If desired, display student answers on the board.</td>
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<td>- Construct a class answer, and display it on the board. Refer to the sample answers given in the Team Talk box. Discuss with students what makes the class answer a good, complete answer or how to improve it.</td>
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**FLUENCY IN FIVE**

Timing Goal: 5 minutes

- Explain, or have team leaders review if necessary, the routine and rubric for fluency.
- Tell students the page numbers and the paragraphs of the fluency passage. Write these on the board.

**Pages 21 and 22 (not including sidebar), 10 and 11, or page 25**

- Remind students that partners should use the rubric to provide feedback during fluency practice. Model this with a student if necessary.
- Tell the reading students when they should begin reading, and then time them for one minute. Have the listening students identify where the readers stopped, how many words they missed, and if they met their reading goal. Also have partners share their feedback using the Fluency rubric. Have partners switch roles, and repeat the process.
- Assign individual fluency goals as needed, monitor practice, and assign scores.
- Select two or three students to read the fluency section that they practiced for a score.
- Award team celebration points. Remember to add individual scores to the teacher cycle record form.

**WORD POWER**

Timing Goal: 10 minutes

**Preparation:** Display the Word Power Challenge.

- Remind students of the Word Power skill (antonyms) and the Word Treasure clue for antonyms (a compass rose).
- Direct students’ attention to the Word Power Challenge. Tell students that they will work in teams to identify an antonym for the underlined word in each sentence and then discuss how use of the antonym changes the meaning of the sentence. Remind students that they may find more than one antonym for a word.
Word Power Challenge

It was gloomy in the castle where Jared worked as a servant to the prince. If she keeps still, the other team won’t be able to find her.

- Use Random Reporter to select students to share. Gloomy: bright, cheerful, sunny; still: moving.
- Tell students that they will practice knowing the meanings of the vocabulary words and the Word Power skill in preparation for the test.
- Explain, or have the team leaders review, as necessary, the Word Power activity before having students begin. SR

Skill Practice

Write an antonym for each of the following words.

1. positive negative
2. fancy plain
3. complex simple
4. brave cowardly

Building Meaning

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5. Choose a word from the vocabulary list, and write a meaningful sentence for that word, or revise your sentence from yesterday.

**100 points =** The sentence uses the word correctly and includes details to create a mind movie. **90 points =** The sentence uses the word correctly and includes one detail. **80 points =** The sentence uses the word correctly.

6. Choose the word that best fits in the blank.

Mummies found in the ancient pyramids are the preserved bodies of Egyptian rulers.

- Use Random Reporter to check responses on the skill-practice items.
- Award team celebration points.
- Use Random Reporter to share meaningful sentences. Discuss how students can improve sentences to make them more meaningful. Demonstrate with an example if necessary.
- Award team celebration points.
- Remember to add individual scores to the teacher cycle record form.
- Use **Random Reporter** to check responses on the remaining item for building meaning.
- Award team celebration points.
- Remind students to look for their vocabulary words outside of reading class so they can add them to the **Vocabulary Vault** tomorrow.

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DAY 5

ACTIVE INSTRUCTION
Timing Goal: 20 minutes

Team Cooperation Goal
- Remind students of this lesson’s team cooperation goal. Point out the related behavior on the team score sheet.
- Tell students that you will award team celebration points to teams whose members practice the team cooperation goal and related behavior.

Set the Stage
- Tell students that their reading test today includes comprehension questions and Word Power items.
- Remind students that their scores on this test will contribute to their team scores.
- Introduce the text students will read for their test. Relate it to their cycle text by telling what it is about, but do not give additional information or details.

Today you will read about other creatures that lived at the same time as the dinosaurs.

Vocabulary
- Remind students that the meanings of the vocabulary words and the Word Power skill will be assessed on their written test.
- Have the teams review the vocabulary words. Remind them to use the vocabulary words in new meaningful sentences.

Prepare Students for the Test
- Distribute the test, and preview it with students without providing information about the answers. Point out that question #3 asks about using text features to gather more information.
- Ask students to underline key words or phrases in question #3.
- Make sure that students understand that the test is independent work and that they should continue to use their strategies with sticky notes as they read without their partners’ assistance.
- Tell students to add any relevant ideas from this reading to their graphic organizers and to do so without assistance.
- Remind students that they have 35 minutes for the test.
TEST
Timing Goal: 35 minutes

- Allow students to begin.
- Help students monitor their timing by indicating once or twice how much time remains.
- When students are finished, collect pencils or pens, but have students retain the test and graphic organizers.

TEAMWORK
Timing Goal: 35 minutes

Team Discussion
- Modify the procedures for Team Discussion to have students discuss independent strategy use and answers to the test.
- Remind students that they will need to prepare each team member to discuss the team’s strategy use during Class Discussion.
- Pass out a colored pen (e.g., red or green ink) to each student.
- Point to the skill question. Ask students to specifically discuss the skill question.
- Ask students to state the question in their own words and tell what key words or phrases they underlined.
- Have students read their answers to the question. Ask the teams to think about what they like about their answers and what they wish they had said differently. Tell them to use their colored pens to add comments to their answers.
- Circulate during Team Discussion, and listen to discussions about test answers.
- Use Random Reporter to have students share additions they made to the targeted skill question.
- Award team celebration points.
- Have students share the information that they put on their graphic organizers.
Class Discussion

- Ask the class to share the comments that they wrote on their test answers. Ask them why these comments made their answers better or more complete.
- Collect the test answers.
- Use Random Reporter to have students discuss their strategy use.
- Award team celebration points.
- Use Random Reporter to review and celebrate the team discussions, including new information added to test answers and graphic organizers.
- Award team celebration points.
- Open the Vocabulary Vault, and celebrate students’ words. Have each team record their Vocabulary Vault words on the team score sheet.
- Award team celebration points.

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<tr>
<td>- How can you earn more points?</td>
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Test Passage

Read the test passage, and complete a graphic organizer. Then reread the passage, and add more ideas to your organizer.

Swimming and Flying Reptiles of the Dinosaur World

Let’s go back in time to 75 million years ago. The middle of North America is covered by a shallow sea. This inland sea is home to many swimming reptiles, including Mosasaur. Mosasaur grows up to fifty feet long. It is the largest carnivore of the sea. Mosasaur swims by using large flippers and the back-and-forth motion of its tail. It has huge jaws and sharp teeth similar to a crocodile.

Soaring over the inland sea is a flying reptile called Pteranodon. Pteranodon has a long beak and narrow leathery wings. The wings are flaps of skin stretched between the animal’s hind legs and one very long finger of each hand. Pteranodon flies a bit like a pelican, with a flap-flap of its wings and then long glides.
Pteranodon [ter-AN-o-don] had a wingspan of about 18 feet. Fish bones have been found in the stomachs of pteranodon fossils.

Sources: Mosasaurs: Last of the Great Marine Reptiles (www.oceansofkansas.com/Greatrep.html)
Pteranodons (www.ucmp.berkeley.edu/museum/public/ingensmount.html)

Comprehension Questions

Use your graphic organizer to answer the following questions. The score for comprehension questions equals 90 points. The graphic organizer is worth 10 points. The total possible score equals 100 points.

20 points

1. What is the topic of this text? How do you know? [MI]
   
   20 points = The topic of this text is swimming and flying reptiles from the time of the dinosaurs. I know because of the title and because the text gives some facts about Mosasaur, a type of swimming reptile, and about Pteranodon, a type of flying reptile. 15 points = The topic of this text is swimming and flying reptiles. I know because of the title and because the text tells about them. 10 points = It tells about two reptiles.

30 points

2. What is the intent of the author? [AP]
   
   a. to compare and contrast two kinds of reptiles
   b. to explain why there was an inland sea
   c. to describe a flying reptile and a swimming reptile
   d. to give more information about dinosaurs

   How do you know?

   20 points = I know that this is the intent of the author because the text gives information about these two reptiles, but it doesn’t compare or contrast them. 15 points = I know that this is the intent of the author because it tells what these two reptiles were like. 10 points = It tells about two reptiles.
3. Give an example of a text feature that you used to find out more information about the topic. What did you learn? [TF]

(Answers will vary.) 20 points = An example of a text feature that I used is the picture of the Mosasaur and the caption. I found out what Mosasaur looked like and that it ate fish, sea turtles, and shellfish. Its teeth and jaws must have been strong to crush a sea turtle shell. 15 points = An example of a text feature that I used is the picture of the Mosasaur and the caption. I found out what Mosasaur ate. 10 points = The picture of the Mosasaur. It ate sea turtles.

4. Use information from your graphic organizer to summarize the text. [SU]

20 points = There were many swimming reptiles that lived 75 million years ago in the inland sea. Mosasaurs were meat eaters with teeth like a crocodile. There were also flying reptiles. Pteranodons had a long beak and leathery wings and probably ate fish. They flew like pelicans. 15 points = There were many swimming reptiles that lived 75 million years ago. One kind was Mosasaurs, which were meat eaters. A flying reptile was Pteranodon, which had leathery wings. 10 points = Flying and swimming reptiles lived 75 million years ago. A swimming reptile was Mosasaur, and a flying reptile was Pteranodon.

Word Power

Number your paper from 1 to 12. Write your answers next to the matching numbers on your paper. The total possible score for Word Power questions equals 100 points.

Skill Questions

Write the following words on your paper. Then write an antonym for each of the words.

5 points 1. gentle rough, harsh
5 points 2. ancient modern, new
5 points 3. forget remember
5 points 4. complete incomplete, unfinished
Building Meaning

<table>
<thead>
<tr>
<th>massive</th>
<th>roamed</th>
<th>squat</th>
<th>upright</th>
</tr>
</thead>
<tbody>
<tr>
<td>roughly</td>
<td>preserved</td>
<td>reveal</td>
<td>previously</td>
</tr>
</tbody>
</table>

5. Write a meaningful sentence for the word massive.

**10 points =** The dinosaur was so massive that it weighed as much as four elephants and was as tall as a house. **5 points =** The dinosaur was as massive as four elephants. **1 point =** The dinosaur was massive.

6. The movie was about the Old West and a time when herds of bison ___________ the Great Plains.

**10 points**

7. The library had a collection of maps from the 1800s that were preserved in a special storage box. *Preserved* means—
   a. made unavailable.
   b. stored by date.
   c. *protected from aging.*
   d. stacked neatly.

**10 points**

8. Ben built a wooden ladder and then raised it to a(n) ___________ position against the treehouse.

**10 points**

9. Joni looked where the sun was in the sky and figured that it was roughly eleven o’clock. *Roughly* means—
   a. just before.
   b. earlier than.
   c. *just about.*
   d. later than.

**10 points**

10. That dog’s body is very ___________ because it gets too much food and too little exercise.

**10 points**

11. Melanie returned the coat that she bought *previously* because it was the wrong size. *Previously* means—
   a. before.
   b. after.
   c. online.
   d. on sale.

**10 points**

12. We had to remove the lid from the paint can to ___________ what color Mom chose for the living room.
ACTIVE INSTRUCTION

Set the Stage **TP** (5 minutes)
- Introduce the main topic of study for this research project.

The main topic of study for our research project is dinosaurs.

- Use **Team Huddle** to have students identify one fact about the topic and one thing that they want to learn about the topic. Use **Random Reporter** to share student responses, and record them on chart paper.

- Introduce the research purpose.

<table>
<thead>
<tr>
<th>Research Purpose</th>
<th>In this unit, you will ask questions, find information, and present your findings to others.</th>
</tr>
</thead>
</table>

Team Cooperation Goal **TP** (5 minutes)
- Remind students of this lesson’s team cooperation goal. Point out the related behavior on the team score sheet.
- Tell students that you will award team celebration points to teams whose members practice the team cooperation goal and related behavior.

Get Organized **TP** (10 minutes)
- Present the research focus and product.

<table>
<thead>
<tr>
<th>Research Focus</th>
<th>Dinosaur life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Product</td>
<td>You will write at least one paragraph with the answers to your research question. You will prepare a presentation of your findings and deliver it to your team.</td>
</tr>
</tbody>
</table>
Display the routine for asking research questions. Review each step.  

<table>
<thead>
<tr>
<th>Asking Research Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST</strong></td>
</tr>
</tbody>
</table>
| **NEXT** | Write down every question.  
Turn statements into questions. |
| **NEXT** | Make sure that every teammate is ready to share one or two questions with the class. |

- Have teams use the routine to ask as many questions about the research focus as possible in five to six minutes.  
- Use Random Reporter to select a student from each team to share a question or two with the class.  
- Explain that the type of questions that they ask can affect their research and the amount of information that they find.

Research is supposed to help you explore a topic in more detail. How you ask a question can impact the amount of information that you find when you research. There are two types of questions: close-ended and open-ended. Close-ended questions have one-word answers, such as “yes” or “no,” or require very little detail. For example, “Does a plant need sunlight to grow?” is a close-ended question. Close-ended questions are a lot like our Right There questions. You don’t have to search very far for the answer.  

Open-ended questions have longer, more descriptive answers. For example, “How does sunlight help a plant to grow?” is an open-ended question. Open-ended questions are a lot like our Think questions. You have to search in more than one place for the answer.  

Both types of questions are important when you read, but open-ended questions are best for research because they require you to find more information and give you more to write about your topic.
Get Ready to Research (10 minutes)

- Refer students to the routine for choosing a research question and the Research Question Checklist.

<table>
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<th>Choose a research question.</th>
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<tr>
<td><strong>FIRST</strong></td>
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<tr>
<td>Choose or write up to three open-ended questions about the topic.</td>
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<tr>
<td><strong>NEXT</strong></td>
</tr>
<tr>
<td>Take turns reading your questions to your teammates. Use the Research Question Checklist to discuss which question the team should research.</td>
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<tr>
<td><strong>NEXT</strong></td>
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<tr>
<td>Each team chooses one question to research.</td>
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Research Question Checklist

- Is the question open-ended?
- Will the question help me learn something new about the topic?
- Can the question be answered with the materials that I have?
- Can I answer the question in a paragraph or page?

- Tell students that they will use resources for their research, including Uncovering the World of Dinosaurs. Distribute the materials that students may use.
- Have students follow the routine for choosing a research question for their team. When students finish, check to make sure that each team has chosen one research question.
- Tell students that one step in getting ready to research is to search for information about the topic in the glossary, index, table of contents of the student text and resource materials and to use search engines to find information on the Internet.
- Use Think-Pair-Share to ask students what key words they might look for during their search.
Use [Random Reporter](#) to have students share their ideas. List any suggested key words on chart paper (optional).

<table>
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<td>15 points</td>
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<td>Reasons that support the opinion are stated.</td>
<td>45 points</td>
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<tr>
<td>Linking words and phrases are used to connect ideas.</td>
<td>20 points</td>
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<tr>
<td>A concluding statement is included.</td>
<td>15 points</td>
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<tr>
<td>Correct punctuation, capitalization, spelling, and grammar are used.</td>
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Refer students to the scoring guides for writing to inform or explain and writing to state an opinion. Explain that they need to choose the appropriate guide based on their question. Post the sample research questions, and model identifying which guide to use. SR

1. Which dinosaur was the best hunter?
2. What features helped dinosaurs hunt?

Read the first question. **This question asks about the best hunter.** When I answer it, I will have to state an opinion because not all dinosaurs can be the best and not everyone will agree. I will also have to include good reasons that support my opinion, so I would use the Writing to State an Opinion scoring guide to help me with my research and writing of the product.

Read the second question. **This question asks what features helped dinosaurs hunt.** When I answer it, I’m just explaining what those features are. I don’t need to give an opinion. I need to provide facts and details that help others understand the information. For this question, I will use the Writing to Inform or Explain guide to help me with my research and writing of the product.
Use **Team Huddle** to have students identify which scoring guide they should use and why. Use **Random Reporter** to have students share.

Award team celebration points.

**Interactive Skill Instruction** (25 minutes)

- Present the mini-lesson on note taking and citing sources.
- Remind students about the graphic organizers that they use to record ideas as they read. Explain that taking notes for a research project is similar, except that they must also be sure to write down exactly where they found the information.
- Explain that we can’t copy from a book. Point out that we need to paraphrase the information, or put the information in our own words. Tell students that taking notes helps us paraphrase.
- Display the graphic organizer. Tell students that this is a sample organizer for a project in which the student will write to inform or explain.

**Sample Notes**

- **What do insects look like?**
  - Six legs (p. 14, source #1)
  - Some insects have wings and antennae (p. 12, source #1).
  - Have three parts: head, thorax, and abdomen (p. 14, source #1)
  - Have an exoskeleton (source #2)

**Sources:**
1. *Bugs Are Insects* by Anne Rockwell

Point out that the research question appears in the middle of the web. Explain that the supporting details branch out from the research question.

Notice that the question is written in the middle of the organizer. This is the topic of the research product. The facts and details are listed around the question. The page number and source is listed for each fact. I also listed all the sources at the bottom of the page.
- Explain how the organizer can also be used when writing to state an opinion. Point out that the question goes in the middle, and the reasons that support the opinion go around it.
- Remind students that taking notes and citing sources will help them write their research product.

**Start Searching TP (35 minutes)**

- Have students use the research materials to search for information, and have them use a graphic organizer or notecards to make notes and record source information.
- Ask students to write the research question on their graphic organizer page or on the first notecard.

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TEAMWORK

Interactive Skill Instruction TP (15 minutes)

- Review the research purpose, team goal, and team cooperation goal.
- Have students refer to the scoring guide for their research project. Remind students about their topics and how they will record the information they find and the sources on their organizers.
- Display the sample graphic organizer.

Sample Notes

What do insects look like?

- Some insects use smell to scare enemies away. (p. 20, source #3)
- Some insects have wings and antennae. (p. 12, source #1).
- Have an exoskeleton (source #2)
- Have three parts: head, thorax, and abdomen. (p. 14, source #1)
- Six legs (p. 14, source #1)

Sources:
1. Bugs Are Insects by Anne Rockwell
3. Insects and Spiders by Dr. George Else and specialist staff
Point out that you added more notes to the web. Use a **Think Aloud** to identify that one fact does not support the question.

I added another fact to my organizer. Let’s take a look at it. “Some insects use smell to scare enemies away.” Does that answer the question “What do insects look like?” Use **Think-Pair-Share** to have students respond. That’s right; it doesn’t answer my question about the way insects look. I am going to cross that fact out. Remember, you should only record facts or reasons that support your question.

Use **Team Huddle** to have students review the graphic organizers that they have created to determine whether the notes are facts or reasons that support their questions.

Use **Random Reporter** to have teams share information that they still need to find.

**Keep Searching TP** (70 minutes)

- Have students use the research materials to continue their search for information, and have them use their graphic organizers or notecards to record relevant information.
- Circulate to check each student’s progress.
- Ask partners to share what they have found with each other and prepare to share an important piece of information and its source with the class.

**Class Discussion TP** (5 minutes)

- Use **Random Reporter** to have students share an important piece of information, its source, and why they think the information is important.

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- How many points did you earn today?
- How well did you use the team cooperation goal and behavior?
- How can you earn more points?
ADVENTURES IN WRITING

Drafting (45 minutes)

- Tell students that they will use their plans to write a first draft.
- Review the scoring guides for each research purpose. Tell students that they need to check their writing against the scoring guide to make sure that they include all parts of the research product.
- Model making a plan to develop your notes into the final product. Display your graphic organizer as you think aloud.

According to the scoring guide, I need to introduce the topic. I will do that first. That’s called a topic sentence. My topic is what insects look like. I will write, “There are special features that make an insect an insect.” Looking at my notes, I think a clear way to identify insects is that they have three body parts. So I will write that next. “Insects have three main parts to their bodies. They have a head, a thorax, and an abdomen.” Remember, we need to write our ideas in our own words. Model writing one or two more ideas. Then model writing a concluding statement. Once I finish writing my facts or reasons, I need to write a concluding statement. I will write, “The body parts and legs are the main features that identify an insect.”

- Remind students to include all of their ideas, writing in sentences and skipping lines to make room for revisions. Also, suggest that they include new thoughts as they occur.
- While they have their notes in front of them, have students review their ideas with partners and begin to write.
- Remind students to periodically check their writing against the scoring guide to make sure they are meeting the goal for the activity.
- Monitor students as they begin working. Give specific feedback to reinforce good drafting, and assist students as needed.
- As students complete their drafts, have each student read his or her writing aloud to a partner to see if it includes the intended ideas and makes sense.
- Ask one or two students to share their first drafts with the class to celebrate.
Sharing, Responding, and Revising TP (10 minutes)

- Tell students that they will work with partners to improve their writing. They will share and respond to provide feedback for each other’s drafts.
- Using the chart in the student routines, explain and model, or review if necessary, how to share and respond with partners. SR
- Ask students to share and respond with their partners.
- Using the chart in the student routines, review how to make revisions. SR
- Ask one or two students to share how they might revise their own work based on their partners’ feedback. Then tell the class to make changes as suggested to their own drafts. Monitor students as they work, giving specific feedback to reinforce and assist as needed.

Editing TP (10 minutes)

- Tell students that they will edit their work to get it ready for rewriting.
- Develop a checklist with students by asking them what kinds of errors they should look for when they edit. Add to, or modify, students’ suggestions with your own list of possible capitalization, punctuation, grammar, and spelling errors. If necessary, go over a few examples of each kind of error.
- If helpful, have students copy the checklist in their journals as a reference.
- Have students reread their first drafts, looking for the types of errors listed and correcting these on their drafts. If your students are familiar with proofreading marks, encourage students to use them.
- Ask students to read their partners’ drafts to check them against the editing list a second time. If they find additional errors, ask them to mark the errors on their partners’ papers.
- Have students share their edits with their partners.

Rewriting TP (25 minutes)

- Tell students that they will rewrite their drafts to include their revisions and edits.
- Ask students to begin rewriting, and assist them as needed.
- When they are finished, have students read over their writing and then read it aloud to their partners as a final check.
- Celebrate by asking one or two volunteers to share their work with the class.

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PRESENT AND EVALUATE

Interactive Skill Instruction TP (15 minutes)

- Review the research purpose, team goal, and team cooperation goal.
- Tell students that good presenters have certain skills. Explain that good presenters make good eye contact, speak clearly, and can be heard by all members of the audience.
- Model a lack of presentation skills by reading your research product while omitting one or more of the presentation skills. Use Think-Pair-Share to have students give you feedback on which skills they did and did not observe.
- Repeat the activity, this time modeling all three presentation skills.
- Explain that these criteria are part of the research evaluation form.
- Display the evaluation criteria for a presentation. Explain that team members will give feedback to each presenter by writing on the form. Tell students that you will collect the evaluation forms.
- Distribute the evaluation forms.

Present TP (45 minutes)

- Tell students that they will present their research to their teams. Explain that each team member will have a turn.
- Have students begin their presentations. Students have approximately eight to ten minutes for each presentation.
- Make sure that each student presents and receives evaluations after the presentation.

Team Discussion TP (20 minutes)

- When all presentations are finished, have students review the feedback that they received.
- Ask team members to share their strengths and suggestions in each category.
Class Discussion **TP** (10 minutes)

- Use **Random Reporter** to have students share their strengths and areas in need of improvement. Award team celebration points.
- Collect the written materials, including the plans, drafts, and evaluations. Plan to score and return the research products by the end of the next cycle.

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</tr>
</tbody>
</table>

- What is your team celebration score?
- How well did you use the team cooperation goal and behavior?
- How can you earn more points?
Sample Notes

What do insects look like?

- Some insects have wings and antennae (p. 12, source #1).
- Have three parts: head, thorax, and abdomen (p. 14, source #1).
- Have an exoskeleton (source #2).
- Six legs (p. 14, source #1).

Sources: 1. *Bugs Are Insects* by Anne Rockwell
Sample Notes

What do insects look like?

Some insects use smell to scare enemies away. (p. 20, source #3)

Some insects have wings and antennae (p. 12, source #1).

Have an exoskeleton (source #2)

Have three parts: head, thorax, and abdomen (p. 14, source #1)

Six legs (p. 14, source #1)

Sources: 1. Bugs Are Insects by Anne Rockwell
3. Insects and Spiders by Dr. George Else and specialist staff
### Step Up to Research Evaluation

**Presenter ________________________ Evaluator ________________________ Date _____________**

**Writing Purpose**
(circle one):  To state an opinion  To inform or explain

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<tr>
<th><strong>Writing to State an Opinion</strong> (Note one area of strength.)</th>
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### Research Skills (Note one or two strengths.)

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<td>Cites trustworthy sources</td>
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### Presentation Skills (Note one or two strengths.)

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<td>Is heard by all members of the audience</td>
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</tbody>
</table>
Paleontologists study dinosaurs to learn how plants and animals changed. (pp. 4 and 5)

Dinos lived mostly between 145 to 65 million years ago.

Some may have been warm-blooded, some cold-blooded.

Dinos lived millions of years ago when there were no people. (pp. 2 and 3)

Dinos may have moved in flocks like birds.

Dino fossils may help show how animals dev. flight.

Huge asteroid hit Earth

Kicked up dust that blocked sun’s heat

The earth cooled, and plants died.

No food: plant eaters die off, then meat eaters died

Some dinos had beaks.

Archaeopteryx: small, feathered, birdlike, carnivore

Argentinosaurus: massive, herbivore, eggs the size of footballs

Twenty bones same in birds and dinos

Examples of different dinos (pp. 6–9)

Some may have been warm-blooded, some cold-blooded

Dinos on earth much longer than people

Dinosaur means terrible lizard.

Dinosaurs on earth much longer than people

Dinosaurs lived millions of years ago when there were no people. (pp. 2 and 3)

Apatosaurus: 75-foot-long plant-eating dinosaur

T-rex: meat-eating dinosaur in North America 68–66 million years ago

Paleontologists study fossils of ancient life. (p. 12)

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Compare fossils from different places and times

Find out how animals, plants have changed

Theory that birds are related to dinosaurs (p. 10)

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Paleontologists figure out where to look for dinosaur fossils. (p. 16)

- Places where building roads
- Places where wind and water have worn away dirt
- Deserts where not covered by plants

Continents were connected in one big land mass: Pangaea.

Dinosaurs walked between continents until they broke up.

They take pictures of a find to show where it was found.

Almost never find full skeleton but scattered bones

Use special tools like rock hammer, brushes, and hand lens.

Wrap fossil finds in plaster casts to protect them.

Paleontologists work carefully to dig up and preserve fossils. (pp. 19 and 20)

- Use microscopes to study and mass spectrometer to figure out age
- Scientists use 3D printing to make dinosaur robots. (p. 22)
- Create copies of dino bones and connect to make models

Fossils are taken back to the lab for study. (p. 21)

- From Nyasasaurus, 7 ft. tall, walked upright
- Oldest dinosaur bone: 245 million years old

Conclusion: S. must have been fast and a good hunter

Evidence: Bones and feathers of fast dinosaur and two early birds in stomach of Sinocalliopteryx

Can learn about dino diet and behavior

Paleontologists study what's in dino stomach. (pp. 13–15)

- Almost never find full skeleton but scattered bones
- Wrap fossil finds in plaster casts to protect them
- Use special tools like rock hammer, brushes, and hand lens

Over millions of years, continents drifted apart.

Explains why similar bones on different continents

Uncovering the World of Dinosaurs, cont.

Plants where lots of fossils found: Cedar Mt., Utah
Preparing to become a paleontologist (pp. 26 and 27)

Fossil evidence:
- Velociraptor attacking plant-eating dinosaur

Living evidence:
- Behavior of birds and crocodiles related to dinos

Feathers were trapped in plant resin that hardened into amber.

Feathers are similar to ones from Sinocalliopteryx

Fossil evidence:
- Dino feathers in amber (p. 23)

Paleontologists use computers to compare new finds with old ones. (p. 24)

Paleontologists draw conclusions about dino behavior from fossils and watching live animals (p. 25)

Many kinds of dinos, so many types of behaviors

Need to learn lots of math and science

Find out if it is new type of dino or not

Conclusion: V. was a hunter/carnivore

Have to have patience and go step by step

Prep visit natural history museums, take classes, go to a dino summer camp

Many kinds of dinos, so many types of behaviors

Read and learn about prehistoric plants and animals

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Common Core State Standards

The following Common Core State Standards are addressed in this unit. Full program alignments can be found in the Reading Wings section of the SFAF Online Resources. Contact your SFAF coach for more information.

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<tr>
<th>LEVEL 4 / Uncovering the World of Dinosaurs</th>
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<tr>
<td><strong>English Language Arts Standards:</strong> Reading: Informational Text</td>
</tr>
<tr>
<td><strong>Integration of Knowledge and Ideas</strong></td>
</tr>
<tr>
<td>RI.4.7. Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.</td>
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<td><strong>English Language Arts Standards:</strong> Language</td>
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<tr>
<td><strong>Vocabulary Acquisition and Use</strong></td>
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<tr>
<td>L.4.5c Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).</td>
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<td><strong>English Language Arts Standards:</strong> Writing</td>
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<td><strong>Research to Build and Present Knowledge</strong></td>
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<tr>
<td>W.4.7 Conduct short research projects that build knowledge through investigation of different aspects of a topic.</td>
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<td><strong>English Language Arts Standards:</strong> Speaking and Listening</td>
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<td><strong>Presentation of Knowledge and Ideas</strong></td>
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<tr>
<td>SL.4.4 Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.</td>
</tr>
<tr>
<td>SL.4.6 Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation.</td>
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