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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.
We wish to acknowledge the coaches, teachers, and children who piloted the program, provided valuable feedback, and appear in classroom and professional-development videos.

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Informational

Unit 1

Clarify Words and Ideas

Pirates
Odyssey magazine
The Lightning Round

- Random Reporters share team responses; team reps from other teams may agree, disagree, or add on to these responses.
- Use the following rubrics to evaluate responses and give specific feedback.
- Award points to the teams with 100-pt. responses; add the points to the Team Celebration Points poster.
- Celebrate team successes.

### Strategy Use

**The Random Reporter:**

<table>
<thead>
<tr>
<th>Score</th>
<th>Response Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>gives a 90-pt. response and explains how using the strategy helped in better understanding the text.</td>
</tr>
<tr>
<td>90</td>
<td>gives an 80-pt. response and describes a problem and a strategy that was used to solve the problem.</td>
</tr>
<tr>
<td>80</td>
<td>identifies a problem that a team member had understanding the text.</td>
</tr>
</tbody>
</table>

### Team Talk (oral and written)

**The Random Reporter:**

<table>
<thead>
<tr>
<th>Score</th>
<th>Response Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>gives a 90-pt. response and connects the answer to the supporting evidence and uses academic language.</td>
</tr>
<tr>
<td>90</td>
<td>gives an 80-pt. response and includes supporting evidence and examples (from the text or from experience).</td>
</tr>
<tr>
<td>80</td>
<td>uses full sentences to clearly and correctly answer the question.</td>
</tr>
</tbody>
</table>

### Word Power

**The Random Reporter:**

<table>
<thead>
<tr>
<th>Score</th>
<th>Response Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>gives a 90-pt. response and expands on the meaning, for example, identifies related words, a second meaning, a word connotation, an antonym.</td>
</tr>
<tr>
<td>90</td>
<td>gives an 80-pt. response and explains the meaning in a definition and a meaningful sentence.</td>
</tr>
<tr>
<td>80</td>
<td>tells a word or phrase added to the word power journal and why it was added (what makes it important or interesting).</td>
</tr>
</tbody>
</table>

### Fluency

**The Random Reporter:**

<table>
<thead>
<tr>
<th>Score</th>
<th>Response Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>gives a 90-pt. response and reads smoothly and with expression (shows emotion and changes with punctuation and dialogue).</td>
</tr>
<tr>
<td>90</td>
<td>gives an 80-pt. response and reads at just the right pace to understand the text—not too slow and not too fast.</td>
</tr>
<tr>
<td>80</td>
<td>reads a short passage and pronounces most of the words correctly.</td>
</tr>
</tbody>
</table>

### Summary

**The Random Reporter:**

<table>
<thead>
<tr>
<th>Score</th>
<th>Response Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>gives a 90-pt. response and uses key vocabulary correctly.</td>
</tr>
<tr>
<td>90</td>
<td>gives an 80-pt. response and clearly connects relevant ideas in a logical order.</td>
</tr>
<tr>
<td>80</td>
<td>presents main ideas and important details in his or her own words and without personal opinion.</td>
</tr>
</tbody>
</table>

### Graphic Organizer/Notes

**The Random Reporter:**

<table>
<thead>
<tr>
<th>Score</th>
<th>Response Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>gives a 90-pt. response and explains how the graphic organizer helped in understanding the text.</td>
</tr>
<tr>
<td>90</td>
<td>gives an 80-pt. response and includes main points or events and important details.</td>
</tr>
<tr>
<td>80</td>
<td>selects a graphic organizer that is appropriate for the text.</td>
</tr>
</tbody>
</table>
Unit Objectives

**Reading:** Use clarifying strategies to figure out the meanings of words, phrases, and passages.

**Writing:** Write a complete answer that explains your thinking.

Unit Overview

The purpose of this unit is to teach clarifying strategies to improve your students’ reading comprehension. When students use clarifying strategies, they check to make sure that they understand what they have read, and then they go back to clear up anything confusing. Clarifying helps students monitor their comprehension at both the word and idea levels. Students need a variety of clarifying techniques to help them comprehend increasingly difficult text. Examples of clarifying strategies include:

- looking for familiar parts in words—base words, root words, prefixes, and suffixes
- using context clues to figure out a word’s meaning
- rereading to review the context
- reading ahead to add context
- using background knowledge to make connections
- visualizing what is going on in the text
- using a dictionary

This unit also introduces students to some of the student routines and rubrics in the Reading Edge. The following chart shows where these are introduced in the unit.

<table>
<thead>
<tr>
<th>Cycle 1</th>
</tr>
</thead>
</table>
| **Welcome Lesson** | • Use of the team score sheet to record team name and points
| | • Read and Respond homework |
| **Lesson 1** | • partner reading
| | • team strategy discussion
| | • strategy-use routine for class discussion |
| **Lesson 3** | • strategy-use rubric |
| **Lesson 5** | • writing a response to a strategy-use question
| | • peer feedback routine |
| **Lesson 6** | • team discussion after the test |
| **Lesson 7** | • Read and Respond discussion |
| **Lesson 8** | • Two-Minute Edit
| | • Class Council |
Unit Topic/Content
This unit’s text is *Odyssey* magazine: Pirates. The articles in this issue describe pirate attacks in recent history, the structure of pirate ships, what life was like for early pirates, and the real Captain Kidd, the man who inspired various pirate characters in movies.

Text and Media Selections

Internet/Media Options
To expand your students’ background knowledge, consider using Internet/media options with lessons. Always preview sites for availability and suitability. Please make sure you have the correct plug-ins.

At a Glance

<table>
<thead>
<tr>
<th>Cycle 1</th>
<th>Lesson</th>
<th>Text</th>
<th>Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson 1</td>
<td>pages 24 and 25 (paragraphs 1–6)</td>
<td>(Embedded) Process video: “Word-Pronunciation Strategies”</td>
<td></td>
</tr>
<tr>
<td>Lesson 5</td>
<td>writing in response to reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesson 6</td>
<td>“Pirates vs. Privateers” sidebar, page 14</td>
<td>(Embedded) Process video: “Read and Respond Homework”</td>
<td></td>
</tr>
<tr>
<td>Lesson 8</td>
<td>Getting Along Together</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesson</td>
<td>Text</td>
<td>Media</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>Lesson 1</td>
<td>“Taking Care of Shipwreck Treasure,” pages 16 and 17</td>
<td>(Embedded) Process video: “Team Talk”</td>
<td></td>
</tr>
<tr>
<td>Lesson 3</td>
<td>“Navigation,” pages 35 and 36 (stopping at “Tech of the Day”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesson 5</td>
<td>writing in response to reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesson 6</td>
<td>“What’s for Lunch?” pages 21 and 22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesson 7</td>
<td>self-selected reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesson 8</td>
<td>Getting Along Together</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Welcome Lesson

**Objective:** Form teams to help students improve one another's reading and learning skills.

**Teacher Background**

In this lesson, you will:

1. Welcome your students to their new class, the Reading Edge.
2. Form teams for the first quarter and conduct a team-building activity.
3. Pass out team score sheets.
4. Introduce students to Read and Respond homework.

**Active Instruction**

(22 minutes)

**Big Question**

Post and present this lesson's Big Question. Have students write a response to the question as they arrive for class.

**The Big Question:** What is the most important skill that you learned in Getting Started? Why?

**Set the Stage**

1. Refer students to today's Big Question. Use **Think-Pair-Share** to ask:

   **What is the most important skill that you learned in Getting Started? Why?**

   *Answers will vary.*

2. Introduce the unit objective.

   **Our objective is to help one another improve our reading and thinking skills. We'll do this by working in teams. If we work hard and help one another, everyone can and will succeed! Now let's get in our teams.**

3. Randomly assign students to teams, and tell them which tables they will move to. Use **1-2-3 Move** to prompt students to move. Give each team a team score sheet.
Teamwork (20 minutes)

Team Discussion
1. Tell partners to use the questions in their student editions and their own questions to interview each other. Tell them to note things that they have in common.

   1. What is one of your strengths?
   2. What makes you proud?
   3. What is your favorite thing to do?
   4. What is your least favorite thing to do?

2. Ask partners to introduce each other to the team. Ask students to make a web in their notebooks of things they have in common. Tell teams to choose a team name based on what they have in common and to write it on their team score sheets and a table tent.

3. Review the role cards as necessary. Randomly assign a team leader, and ask the team leader to give a card to each teammate. Tell students to follow the directions on their cards as they discuss the Team Talk questions. Point out that the team has to make sure that each member knows the answer and can share it during the Lightning Round.

   Team Talk Questions
   1. What is your team name? Why did you choose that name?
   Answers will vary.
   2. What do you and your teammates have in common? How will that help you work together?
   Answers will vary.
   3. What did you find surprising about one of your teammates? Explain your answer.
   Answers will vary.

4. Have students thoroughly discuss Team Talk questions. Remind them that all teammates need to be able to answer the questions during Class Discussion.

5. Circulate and give feedback to teams and students. Ask questions to encourage further discussion.
Class Discussion

(18 minutes)

Lightning Round

1. Remind students that you will use Random Reporter to choose the student who will answer for each team.

2. Tell them that Random Reporters will earn team celebration points for correct responses. Tell students that you will record points on the Team Celebration Points poster and that they can keep track of points that they earn on their team score sheets.

3. Have each team count off, and tell students to write their number in their notebooks so they will remember it.

4. Use Random Reporter to have teams answer the first question. Write team names on the Team Celebration Points poster, and give each team a point.

   Use Random Reporter to have teams share oral Team Talk responses for the remaining questions. Ask other teams to agree, disagree, or add on to responses.

5. Distribute Read and Respond forms. Explain the homework to the students. Tell them that they will practice reading and that they will each fill out a Read and Respond form. Review the questions on the form, and tell students that the questions relate to strategies and skills that they will practice in the Reading Edge. Tell them that completing Read and Respond forms and answering the questions will help them earn team points.

   Allow students time to choose a reading selection from the classroom library to use for their homework assignment.

Celebrate

1. Tally the team scores on the poster, and celebrate teams that are accumulating points. Have teams reflect on the following questions:

   **How many points did your team earn today?**

   **How can your team earn more points?**

   • Something to cheer about: Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.
Lesson 1

**Reading Objective:** Use clarifying strategies to figure out the meanings of words, phrases, and passages.

**Teacher Background**
In this lesson, you will introduce clarifying strategies and the use of the Clarifying Strategy Card. The Clarifying Strategy Card is a tool that prompts your students to stop when their comprehension breaks down and use strategies to fix it. The front of the card explains the clarifying process. The back of the card lists clarifying strategies. Your students will see partners in the video use the Clarifying Strategy Card as they read. Students will read the first part of an article about pirate attacks in recent history. As they read, encourage students to use sticky notes to mark what is unclear in the text and to use the strategies listed on the card to help them pronounce unfamiliar words and figure out their meanings.

In this lesson, you will also introduce the student routines for partner reading and strategy-use discussion.

Students will read the first half of “The Pirate Police.” This part of the article describes how dangerous pirates can be and how technology helps the authorities fight back.

**Active Instruction**

(22 minutes)

**Big Question**
Post and present this cycle’s Big Question. Have students write a response to the question as they arrive for class.

*The Big Question:* When you are reading and you come to something that is unclear or confusing, what do you do?

**Set the Stage**
1. Refer students to today’s Big Question. Use *Think-Pair-Share* to ask:

   *When you are reading and you come to something that is unclear or confusing, what do you do?*

   *Answers may vary. Some students may say that they skip over it. Others may say that they stop and try to figure it out. Some students may say that if it is a word they don’t know, they look it up in a dictionary.*

2. Ask students to review their cycle goal. Remind students how to earn team celebration points. Remind them that team celebration points help them to become super teams. Tell them that they earn team celebration points during the Lightning Round.
3. Refer students to the reading objective for this unit. **Our reading objective is to use clarifying strategies to figure out the meanings of words, phrases, and passages. The word clarify comes from the word *clear*. Clarifying strategies help to clear up problems we have understanding what we read. Sometimes there is a word or phrase we don’t know. Sometimes an idea is worded in a complicated way that is hard to understand at first. Using clarifying strategies can help.**

4. Refer students to the following Clarifying Strategy Card in their team folders. Have them note that the front of the card lists steps. Read the steps on the card aloud. Have them look at the back of the card, and note that it includes strategies for pronouncing unfamiliar words and strategies for figuring out word meaning.

![Clarifying Strategy Card](image)

**Clarifying**

1. When you don’t know or understand something...STOP!
2. Mark it with a sticky note.
3. Use strategies to figure it out.
4. When you clarify it, put a check mark on the sticky note. 
   *If you still don’t understand...*
5. Take the sticky-note problem to your team for help.

**To pronounce an unfamiliar word:**
- break the word into chunks.
- blend it.
- look for a base word.
- reread it.

**To figure out a word’s meaning:**
- reread or read ahead to find clues in the text.
- look for familiar word parts.
- picture what is going on in the text.
- use background knowledge.
- use a glossary or dictionary.

5. Introduce the video.

**We are going to watch a video of partners who are reading an interesting article. The partners will come to some tricky words that they don’t know. What will they do? Skip over them? Use strategies? Watch carefully to see how they deal with sticky-note problems.**

6. Show the video. Use **Think-Pair-Share** to debrief:

**What did the partners do when they came to words that they couldn’t pronounce?**

**What strategies did the partners use to help them pronounce the words?**

**Why did they use different strategies?**
Interactive Read Aloud


2. Tell students that you are going to read aloud and then think aloud as you use some clarifying strategies. Read paragraphs 1 and 2 aloud, pausing after the word vulnerable. A sample Think Aloud follows.

<table>
<thead>
<tr>
<th>Sample Think Aloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>“They have always been ruthless criminals who prey upon….” I don’t recognize this word right away. “…who prey upon (something) sailors at sea.” I’ll put a sticky note on it and look at the Clarifying Strategy Card. It gives me a few strategies to use when I can’t pronounce a word. One strategy is to break the word into chunks, vul-ner-a-ble, and blend it, vulnerable. Chunking the word made it easier to pronounce. Now I recognize this word. When an army is vulnerable, it is open to attack or not well defended, so the sailors are vulnerable, or open to attack from pirates. I can check that sticky note because I clarified the word.</td>
</tr>
<tr>
<td>(Continue reading, and stop at the word figment.)</td>
</tr>
<tr>
<td>“Indeed, Captain Jack Sparrow in Pirates of the Caribbean is a….” I’m not sure how to pronounce this word. Let me put a sticky note on it. I’ll try chunking again, fig-ment, and blend it, figment. No, I don’t know this word. Another clarifying strategy is to read on for clues. So Captain Jack Sparrow “is a figment of someone’s imagination and has no relation to real pirates.” Ah, I think I figured it out. A figment of someone’s imagination means not real. I can check that sticky note because I clarified the word.</td>
</tr>
</tbody>
</table>

3. Refer students to their Clarifying Strategy Cards. Use Think-Pair-Share to debrief the Think Aloud.

**What did I do when I came to a word that I could not pronounce?**

*You stopped and marked the word with a sticky note. You looked at the Clarifying Strategy Card for a strategy to pronounce it.***

**Which clarifying strategies did I use?**

*You broke the word vulnerable into chunks and blended it to pronounce it, and then you recognized the word. You chunked the word figment to pronounce it. You read on for clues and figured out that figment of someone’s imagination means not real.***

4. Partner Practice: Have students read the next paragraph aloud with their partners and use clarifying strategies to pronounce unfamiliar words. Remind them to use sticky notes to mark words that they need to figure out and to refer to their Clarifying Strategy Cards. When they have figured out a word, they can put a check on the sticky note.

*Use Random Reporter to debrief.*
5. Debrief partner practice. Use **Think-Pair-Share** to ask:

**Which words in the paragraph did you have to stop and figure out? Which strategies did you use?**

*(Answers will vary.)* For example, we had to stop and figure out the word telecommunications. We looked for familiar word parts to help pronounce it. *It has the word communications in it.* We knew the prefix tele- from seeing it in words such as television and telephone. We figured out that telecommunications must mean information that is sent over a distance.

In another example, we stopped at the word disguising. We broke it into a base word and ending and then recognized it as a word we knew. It means changing how something looks.

**How did clarifying the word help you better understand the text?**

Figuring out what telecommunications means helped us understand that as a result of modern technology and new ways of sending information, pirates can communicate quickly and easily with criminals.

Clarifying the word disguising helped us understand that pirates change the appearance of ships before selling them.

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**Teamwork**

(20 minutes)

**Partner Prep**

1. Refer students to the teamwork routines for partner reading in their team folders. Explain that students will be partner reading regularly in the Reading Edge.

<table>
<thead>
<tr>
<th>With Partners</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
<th>Fourth</th>
<th>Finally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Partner Reading</td>
<td>Take turns reading a paragraph or section of text aloud. Mark problems with a sticky note.</td>
<td>Clarify confusing words and passages.</td>
<td>After each paragraph or section, the listening partner restates the main ideas or events.</td>
<td>Both partners make notes about main ideas or events. Review the paragraph or section, and discuss supporting details. Add them to your notes.</td>
<td>Take unsolved sticky-note problems to team discussion.</td>
</tr>
</tbody>
</table>

Point out to students that during partner reading, partners take turns reading and restating the main ideas in the text. One partner reads a paragraph or section of text aloud. The listening partner restates the main ideas or events in that section. Then partners switch roles.

**Partner reading**—reading aloud, listening, and restating the important points—improves brain connections. It focuses attention for learning new information and helps us clarify our thinking.
2. Explain what partners should do when they come to a word, phrase, or section that needs to be clarified. When they come to anything confusing or unclear in their reading, they mark it with a sticky note and try to make sense of it using clarifying strategies. If they cannot clarify it, they take their sticky-note problem and try to solve it with the help of the rest of their team during team discussion.

3. Have students read and restate: page 25 (paragraphs 1–6, stopping at “…the skiff,’ notes Treppa.”) aloud with partners.

4. Circulate and check for comprehension and evidence of strategy use, for example, the use of sticky notes. Give students feedback. Prompt and reinforce their discussions.

**Team Discussion**

1. Refer students to the following in their student editions.

<table>
<thead>
<tr>
<th>Strategy Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Discuss sticky-note problems, and try to solve them.</td>
</tr>
<tr>
<td>• Discuss which strategies you used. How did you figure it out?</td>
</tr>
<tr>
<td>• Discuss how figuring out the problem helped you understand the text.</td>
</tr>
<tr>
<td>• Check that all team members can share your team’s strategy discussion in the Lightning Round.</td>
</tr>
</tbody>
</table>

Point out that teams will discuss their sticky-note problems and use clarifying strategies to figure them out. Point out that teams will want to prepare all team members to share their team’s clarifying discussion because any team member can be called on in the Lightning Round.

2. Preview the Team Talk questions.

<table>
<thead>
<tr>
<th>Team Talk Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What is a word or phrase that a team member marked with a sticky note? [CV]</td>
</tr>
<tr>
<td>For example, a team member marked the word humanitarian in paragraph 1 with a sticky note because she could not pronounce it.</td>
</tr>
<tr>
<td>In another example, a team member marked the word accuracy in paragraph 2 with a sticky note because he couldn’t pronounce it and didn’t know the meaning.</td>
</tr>
<tr>
<td>In another example, a team member marked the word high-tech in paragraph 4 with a sticky note because she had never heard it.</td>
</tr>
<tr>
<td>2. Explain which clarifying strategies you used to figure out the marked word or phrase. [CV]</td>
</tr>
<tr>
<td>humanitarian: We saw the familiar base word, human. We figured it out by using clues in the sentence.</td>
</tr>
<tr>
<td>accuracy: We broke the word into chunks to pronounce it: ac-cur-a-cy. We used clues in the text to figure it out.</td>
</tr>
<tr>
<td>high-tech: We reread to look for clues.</td>
</tr>
</tbody>
</table>

   continued
Team Talk Questions continued

3. Explain how figuring out the word or phrase helped you better understand the text. [CV]

   humanitarian: We figured out that people send helpful items, such as food, to poor people and people in places that are affected by natural disasters, such as Somalia. Unfortunately, pirates have stopped the items from reaching these people.

   accuracy: The sentence says, “Because of its accuracy, we could fire from a faraway position without fear of igniting....” The phrase “without fear” is a clue that accuracy means something positive. The text describes that they can fire without worrying that they’ll set off flammable items that cause fire. We guessed that accuracy means ability to be precise or get something right.

   high-tech: The sentences after this phrase describe long-range and shorter-range radar. The radar helps to locate ships with chemicals. This doesn’t seem simple to do. We guessed that high-tech means using a lot of special technology.

4. Why is the CIWS important? [MI]

   The CIWS is important because it has a radar system for tracking and destroying targets. It is very accurate, so officers can easily fire from far away. If it were less accurate, it could have caused more problems by setting items on fire.

3. Circulate and give feedback to teams and students. Use the strategy-use rubric to give specific feedback. Ask questions to encourage further discussion. Record individual scores on the teacher cycle record form.

4. Award team celebration points for good team discussions that demonstrate 100-point responses.

Class Discussion (18 minutes)

Lightning Round

1. Following is the strategy-use routine for class discussion.

<table>
<thead>
<tr>
<th>Class Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategy-Use</td>
</tr>
<tr>
<td>• Describe your team’s strategy use.</td>
</tr>
<tr>
<td>• How did you resolve a sticky note?</td>
</tr>
<tr>
<td>• How did it help you understand the text?</td>
</tr>
</tbody>
</table>

2. Remind students that Random Reporters will earn team celebration points for quality responses. Remind students that you will record points on the Team Celebration Points poster and that they can keep track of points that they earn on their team score sheets.
3. Use **Random Reporter** to have teams share their team’s strategy-use discussion. Ask Random Reporters to respond to Team Talk questions #1–3.

Award team celebration points to teams whose Random Reporter:
- identifies a word marked with a sticky note (what they needed to clarify),
- describes which strategies the team used to figure it out, and
- explains how figuring out the word helped them better understand the text.

4. Use **Random Reporter** to have teams share their discussions of Team Talk question #4.

Award team celebration points to teams whose Random Reporters answer the question and support their answers with evidence from the text.

**Celebrate**

1. Tally the team scores on the poster, and celebrate teams who are accumulating points. Have teams reflect on the following questions:

   **How many points did your team earn today?**

   **How can your team earn more points?**

   Remind students that top-scoring teams will earn bonus points that will be added to their cycle scores.
   - Something to cheer about: Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.

2. Review the Read and Respond homework. Remind students that they chose a book or article to read from the classroom library or other source. For homework each day, students will read from their selected reading for twenty minutes. They will note on their Read and Respond homework forms the date and the page numbers read and have it initialed by an adult listener.

   Refer to the questions on the form. Explain that students will write answers to the questions, and in lesson 7, they will use their answers to prepare and make presentations of their reading selections to their teams.
From Student Edition

Strategy Use

- Discuss sticky-note problems, and try to solve them.
- Discuss which strategies you used. How did you figure it out?
- Discuss how figuring out the problem helped you understand the text.
- Check that all team members can share your team’s strategy discussion in the Lightning Round.
Lesson 2

**Reading Objective:** Use clarifying strategies to figure out the meanings of words, phrases, and passages.

**Teacher Background**

Today students will finish reading “The Pirate Police.” The second half of the article describes how pirate attacks can be prevented by electronic fences and nonlethal weapons. It also discusses the relationship between politics and pirate attacks. For instance, Somalia does not have a stable government, so little is done to combat pirate attacks there.

As students discuss the comprehension problems that they mark with sticky notes, encourage them to explain which strategies they used to solve the problems. Refer students to the Clarifying Strategy Card.

**Active Instruction**

(25 minutes)

**Big Question**

Post and present this cycle’s Big Question. Have students write a response to the question as they arrive for class.

The Big Question: What is the meaning of the underlined Spanish word in this sentence? Use your Clarifying Strategy Card.

Since the book that Khalil wanted to read was very expensive, he decided to go to the biblioteca and find a copy there.

**Set the Stage**

1. Refer students to today’s Big Question. Use **Think-Pair-Share** to ask:

   What is the meaning of the underlined Spanish word in this sentence? Use your Clarifying Strategy Card.

   Since the book that Khalil wanted to read was very expensive, he decided to go to the biblioteca and find a copy there.

   Students will probably say that it means library. For example, we used clues in the sentence to guess the meaning. The words expensive and “find a copy there” show that Khalil wants to read the book but doesn’t want to pay for it. If a book is very expensive and you don’t want to buy it, you can go to the library. At the library, it is free to check out books.

   In another example, we know that the root biblio has to do with books. For example, a bibliography is a list of books.
Use **Random Reporter** to debrief, and award team celebration points to teams that describe the strategies they used.

2. Point out that students were able to figure out the meaning of a word in a different language. They used clues in the sentence. They pictured what was going on in the sentence. They used their knowledge of other related words to guess at the meaning. Then they tried it out in the sentence to see if it made sense.

3. Introduce the video.

   **These partners are trying to figure out the meanings of some tough words. As you watch, think about what advice you would give the partners about using clarifying strategies.**

   Show the first part of “Word-Meaning Strategies.”

   **The partners are stuck on some words. They figured out how to pronounce these words but haven’t figured out what they mean.**

4. Have teams discuss what advice they would give the partners in the video to figure out the meanings of these words.

   Use **Random Reporter** to have teams share their discussions.

5. Show the second part of the video to see which strategies the partners use to clarify the words.

   Use **Random Reporter** to have teams share which strategies the partners in the video used.

**Interactive Read Aloud**

1. Have students preview today’s text, the second half of “The Pirate Police,” pages 25–27 in *Odyssey* magazine. Tell students that you are going to read aloud and then think aloud as you use some clarifying strategies. Challenge students to actively listen because you will ask them to identify the strategies you used. Read pages 25 (paragraph 7) and 26 (stopping at paragraph 2) aloud. Stop at the word *sonar* to think aloud and clarify the word. A sample Think Aloud follows.
Sample Think Aloud

“Navy ships also sent a message with sonar.” I stopped because I don’t recognize this word. I’ll mark it with a sticky note and try some strategies. I think the first clarifying strategy I’m going to try is to break this word into chunks—so-nar. Now I’ll blend it—sonar. That helped me pronounce the word, and I’ve heard this word before, but I don’t know what it means. This is a short sentence, and I don’t see any clues. Let me try reading on. That’s a strategy listed on the Clarifying Strategy Card.

(Continue reading the rest of that paragraph.)

Now that I’ve read on, I see some clues. Sound waves were sent out. However, the noise made it hard for pirates to sleep. I think sonar has to do with sound. Let me substitute sound in place of sonar in the first sentence. “Navy ships also sent a message with sound.” That makes sense. Now that I’ve clarified the word sonar, let me restate this section. Sound waves help to detect objects under the surface. The sound waves may be very loud.

(Read paragraph 1.)

2. Use Think-Pair-Share to debrief the Think Aloud.

Which clarifying strategies helped me figure out the meaning of sonar?

You broke the word into chunks to pronounce it. You read on to find clues. You used the clues “sound waves” and noise to figure out the meaning of the word and then tried out the meaning in the sentence.

3. Partner Practice: Have students read page 26 (paragraphs 2 and 3) aloud to their partners and use clarifying strategies to figure out any unfamiliar words. Use Think-Pair-Share to ask:

Which words in this section did you have to stop and figure out? Which strategies did you use?

For example, we had to stop and figure out the word masterminds. It’s a compound word, so we broke it into its separate words to pronounce it. We used the familiar word parts to figure out its meaning. We know that a master is someone who is really good at something. It can also mean someone who’s in control and in charge. Everyone has a mind. So masterminds must mean people in charge of a plan that involves others.

In another example, we had to stop and figure out the word hostile. We broke it into chunks and then blended it. When we pronounced it, we recognized the word. Hostile means mean or harmful. The toxic chemical did not get into the hands of people who want to harm us.
Teamwork (20 minutes)

Partner Prep

1. Refer students to the teamwork routines for partner reading in their team folders, and review the routine. Remind students that during partner reading, partners take turns reading and restating the main ideas in the text. One partner reads a paragraph or section of text aloud. The listening partner restates the main ideas or events in that section. Then partners switch roles.

2. Remind partners what they should do when they come to a word, phrase, or section that needs to be clarified. When they come to anything confusing or unclear in their reading, they mark it with a sticky note and try to make sense of it using clarifying strategies. If they cannot clarify it, they take their sticky-note problem and try to solve it with the help of the rest of their team during team discussion.

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<td>After each paragraph or section, the listening partner restates the main ideas or events.</td>
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<td>Take unsolved sticky-note problems to team discussion.</td>
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3. Have students read and restate: pages 26 (paragraph 4) and 27 aloud with partners.

4. Circulate and check for comprehension, restating of main ideas, and evidence of strategy use, for example, the use of sticky notes. Give students feedback. Prompt and reinforce their discussions.

Team Discussion

1. Refer students to the following in their student editions.

- Discuss sticky-note problems, and try to solve them.
- Discuss which strategies you used. How did you figure it out?
- Discuss how figuring out the problem helped you understand the text.
- Check that all team members can share your team's strategy discussion in the Lightning Round.
Remind teams that they will discuss their sticky-note problems and use clarifying strategies to figure them out. Point out that teams will want to prepare all team members to share their team’s clarifying discussion because any team member can be called on during the Lightning Round.

2. Preview the Team Talk questions.

<table>
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<tr>
<th>Team Talk Questions</th>
</tr>
</thead>
</table>
| 1. What is a word or phrase that a team member marked with a sticky note and brought to the team? [CV]  
  For example, a team member marked the word deter on page 26 with a sticky note.  
  Another example: A team member marked the word regain on page 27 with a sticky note. |
| 2. Explain which clarifying strategies you used to figure out the marked word or phrase. [CV]  
  deter: We broke the word into chunks to pronounce it. We used clues in the text to figure it out.  
  regain: We broke the word into a prefix and a base word and pronounced it. We saw the familiar word part gain. Re- is a familiar prefix. |
| 3. Explain how figuring out the word or phrase helped you better understand the text. [CV]  
  deter: The text says that high-powered water cannons are a way to deter boarding. Before the paragraph that uses this word, a lot of ways that pirate attacks are prevented are mentioned. Therefore, it seems like deter means stop or prevent. This helps me understand that water cannons can stop pirate attacks.  
  regain: Gain means to get something, and the prefix re- means again. So regain must mean to get something again. This helps me understand that because the USS James Williams went to the MV Dai Hong Dan’s aid, the North Korean ship’s crew had control of their ship again. |
| 4. What are some ways that pirate attacks can be prevented? [MI]  
  According to the text, pirate attacks can be prevented by using various types of equipment. For example, sensors and alarms let crews know about possible danger. ShipLoc is a system that tracks a ship’s location. Electronic fences have a nonlethal jolt. Robot boats offer protection because they can use voice communications. |

3. Circulate and give feedback to teams and students. Use the strategy-use rubric to give specific feedback. Ask questions to encourage further discussion. Record individual scores on the teacher cycle record form.

4. Award team celebration points for good team discussions that demonstrate 100-point responses.
Class Discussion (15 minutes)

Lightning Round

1. Following is the strategy-use routine for class discussion.

<table>
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<tr>
<td>Strategy-Use</td>
</tr>
<tr>
<td>• Describe your team's strategy use.</td>
</tr>
<tr>
<td>• How did you resolve a sticky note?</td>
</tr>
<tr>
<td>• How did it help you understand the text?</td>
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</table>

2. Remind students that Random Reporters will earn team celebration points for quality responses. Remind students that you will record points on the Team Celebration Points poster and that they can keep track of points that they earn on their team score sheets.

3. Use Random Reporter to have teams share their team’s strategy-use discussion. Ask Random Reporters to respond to Team Talk questions #1–3. Award team celebration points to teams whose Random Reporter:
   • identifies a word marked with a sticky note (what they needed to clarify),
   • describes which strategies the team used to figure it out, and
   • explains how figuring out the word helped them better understand the text.

4. Use Random Reporter to have teams share their discussions of Team Talk question #4. Award team celebration points to teams whose Random Reporters use full sentences to answer the question and support it with examples from the text.

Celebrate

1. Tally the team scores on the poster, and celebrate teams that are accumulating points. Have teams reflect on the following questions:

   **How many points did your team earn today?**
   **How can your team earn more points?**

Remind students that top-scoring teams will earn bonus points that will be added to their cycle scores.

   • Something to cheer about: Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.

2. As a reminder, refer students to the Read and Respond homework assignment described in their student editions.
From Student Edition

Strategy Use

- Discuss sticky-note problems, and try to solve them.
- Discuss which strategies you used. How did you figure it out?
- Discuss how figuring out the problem helped you understand the text.
- Check that all team members can share your team’s strategy discussion in the Lightning Round.
Lesson 3

**Reading Objective:** Use clarifying strategies to figure out the meanings of words, phrases, and passages.

**Teacher Background**

In this lesson, you will introduce the strategy-use rubric. The rubrics in the Reading Edge, which can be found in the team folders, set expectations for student responses. They are tools for teams to use as they prepare for the Lightning Round to help them discuss, give feedback, and evaluate whether they have a high-quality response. The rubrics are also tools for evaluating and giving feedback during the Lightning Round. In the video that students watch today, two teams are having strategy-use discussions. Using the strategy-use rubric, your students will evaluate the teams’ responses in the video.

Today students will read “X Marks the Spot.” This article describes Captain William Kidd, who influenced pirate movie characters. However, the discovery of his lost pirate ship has historians wondering if he even was a pirate. Historians are saying that Kidd did not fit the description of a pirate but was a businessman from Manhattan. His official title was privateer, which means that he could legally seize French and Spanish ships, but when he commandeered a ship, he was considered a pirate. Kidd was tried and executed as a result.

**Teacher’s Note:**

The sidebar on page 14 will not be read today. It is the assessment reading for this cycle.

**Active Instruction**

(25 minutes)

**Big Question**

Post and present this lesson’s Big Question. Have students write a response to the question as they arrive for class.

**The Big Question:** What is the meaning of the underlined word in this sentence?

Use your Clarifying Strategy Card.

“Since you’ve been complaining that you are tired, it seems **illogical** that you keep staying up late every night,” Mr. Roberts told his daughter.
Set the Stage

1. Refer students to today’s Big Question. Use Think-Pair-Share to ask:

   **What is the meaning of the underlined word in this sentence? Use your Clarifying Strategy Card.**

   “Since you’ve been complaining that you are tired, it seems illogical that you keep staying up late every night,” Mr. Roberts told his daughter.

   *Students will probably say that illogical means not logical or something that doesn’t make sense. For example, to figure it out, we looked for a base word and recognized logic. We saw the familiar word part il-, which means not. The word part logical reminded us of something that makes sense. We tried the phrase “not logical” in the sentence, and it made sense.*

   Use Random Reporter to debrief, and award team celebration points to teams that describe the strategies they used.

2. Display the strategy-use rubric (also in the team folder).

   **Strategy Use**
   The Random Reporter:

   - **100** gives a 90-pt. response and explains how using the strategy helped in better understanding the text.
   - **90** gives an 80-pt. response and describes a problem and a strategy that was used to solve the problem.
   - **80** identifies a problem that a team member had understanding the text.

   Explain that rubrics are tools that teams will use to prepare their Random Reporters to earn points in the Lightning Round. Note that to earn points in the Lightning Round, the Random Reporter must give a 100-point answer. To earn points for strategy use, the Random Reporter will:
   - identify a sticky-note problem that a team member had in understanding the text.
   - describe a strategy that was used to solve the problem.
   - explain how using the strategy helped in better understanding the text.

3. Introduce the video.

   **We are going to watch a video of a team preparing for the Lightning Round. They are discussing sticky-note problems.**

   Show the first part of the video. Use Think-Pair-Share to debrief.

   **How did the team prepare for the Lightning Round?**
   **Do you think the team is ready for the Lightning Round? Why or why not?**
4. Introduce the second video segment.

The teams are about to enter the Lightning Round. Listen carefully to their Random Reporters, and use the strategy-use rubric to rate their answers.

Show the second part of the video. Use Think-Pair-Share to debrief.

Looking at the strategy-use rubric, how did the team earn a point on the poster?

The team earned a point because their Random Reporter gave a 100-point answer. He told about the sticky-note problem, what strategies they used to figure it out, and how it helped them better understand the text.

5. Remind students of the topic that they have been reading about: pirates. Build background about famous pirates by showing the video “Black Beard.”

Interactive Read Aloud

1. Have students preview today’s text “X Marks the Spot,” pages 12–14 in Odyssey magazine: Pirates. Tell students that you are going to read aloud and then think aloud as you use some clarifying strategies. Challenge students to actively listen because you will ask them to identify the strategies that you used. Read page 12 (paragraph 1) aloud, stopping at the word buccaneer to think aloud and clarify the word. A sample Think Aloud follows.

Sample Think Aloud

“...the inspiration for every movie buccaneer....” I stopped because I can pronounce this word, but I don’t know what it means. It must be important because it is in a lot of movies. I’ll mark it with a sticky note and try some strategies from the Clarifying Strategy Card.

I’m going to try reading on to see if there are clues in the sentence. “…from Long John Silver to Captain Jack Sparrow.” These are two movie characters who were pirates. I think buccaneer must mean pirate. Reading on for clues helped me figure out the meaning of buccaneer. I think I have clarified this sticky-note problem, so I can check it.

(Read paragraph 2.)

2. Use Think-Pair-Share to debrief the Think Aloud.

Which clarifying strategies helped me figure out the meaning of buccaneer?

You read on and found clues in the rest of the sentence, such as the names of two pirate characters in movies.

3. Partner Practice: Have students read the last sentence in paragraph 2 aloud to their partners and use clarifying strategies to figure out any unfamiliar words. Use Think-Pair-Share to ask:
Which words in the sentence did you have to stop and figure out? Which strategies did you use?

For example, we had to stop and figure out the word notorious. We broke the word into chunks to help us pronounce it. We weren’t sure of its meaning though. We reread to find clues to its meaning in the sentence. The sentence talked about how Captain Kidd was a famous figure who inspired movie characters. Archaeologists have tried to find out more about him. It seems like notorious means well known. If he inspired so many movie characters, a lot of people must know about him.

Teamwork

(20 minutes)

Partner Prep

1. Refer students to the teamwork routines for partner reading in their team folders, and review the routine.

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2. Remind partners what they should do when they come to a word, phrase, or section that needs to be clarified. When they come to anything confusing or unclear in their reading, they mark it with a sticky note and try to make sense of it using clarifying strategies. If they cannot clarify it, they take their sticky-note problem and try to solve it with the help of the rest of their team during team discussion.

3. Have students read and restate: pages 13 (paragraph 3) and 14 aloud with partners.

4. Circulate and check for comprehension, restating of main ideas, and evidence of strategy use, for example, the use of sticky notes. Give students feedback. Prompt and reinforce their discussions.
Team Discussion

1. Remind students that in their teams they will:
   - discuss sticky-note problems and try to solve them.
   - discuss which strategies they used. How did they figure it out?
   - discuss how figuring out the problem helped them understand the text.
   - check that all team members can share the team’s strategy-use discussion in the Lightning Round.

2. Remind teams to use the strategy-use rubric to prepare for the Lightning Round.

3. Preview the Team Talk questions.

Team Talk Questions

1. What is a word, phrase, or passage that a team member marked with a sticky note? Explain which clarifying strategies you used to figure out the marked word or phrase. How did figuring out the word, phrase, or passage help you better understand the text? [CV] (strategy-use rubric)
   (Answers may vary.)

   100 = A team member marked the word bristles on page 13. She knew that bristles can mean part of a brush, but she didn’t understand how the word was used in relation to undersea treasures. She reread the sentence and found clues about the different treasures in Beeker’s lab. She figured out that another meaning of bristles is “filled with something.” Rereading and figuring out the meaning of bristles helped her clear up the confusion about the right meaning and understand that Beeker’s lab is filled with various treasures that help him learn about pirates.

   90 = A team member marked the word bristles on page 13. She knew that bristles can mean part of a brush, but she didn’t understand how the word was used in relation to undersea treasures. She reread the sentence and found clues about the different treasures in Beeker’s lab. She figured out that another meaning of bristles is “filled with something.”

   80 = A team member marked the word bristles on page 13. She knew that bristles can mean part of a brush, but she didn’t understand how the word was used in relation to undersea treasures.

2. Explain what made William Kidd unusual. [MI, RE]

   William Kidd was unusual because his appearance and background were different from how people think pirates looked. He did not have a peg leg. He was a businessman who helped to found a church. In the picture on page 13, I can see that the way he dressed isn’t how we expect traditional pirates to dress.

4. Circulate and give feedback to teams and students. Use the strategy-use rubric to give specific feedback. Ask questions to encourage further discussion. Record individual scores on the teacher cycle record form.

5. Award team celebration points for good team discussions that demonstrate 100-point responses.
Class Discussion (15 minutes)

Lightning Round

1. Remind students that Random Reporters will earn team celebration points for quality responses. Remind students that you will record points on the Team Celebration Points poster and that they can keep track of points that they earn on their team score sheets.

2. Display the strategy-use rubric.

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</tr>
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</tr>
<tr>
<td><strong>90</strong></td>
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<td><strong>80</strong></td>
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Remind students that the Random Reporter’s response must provide all the elements listed in the three-point levels on the rubric to earn points on the poster for the team.

3. Use Random Reporter to have teams share their team’s strategy-use discussions. Ask Random Reporters to respond to Team Talk question #1.

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<td>• How did you resolve a sticky note?</td>
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4. Award team celebration points on the poster to teams whose Random Reporters give 100-point answers.

Use Random Reporter to have teams share their discussions of Team Talk question #2.

Award team celebration points to teams whose Random Reporters use full sentences to answer the question and support it with examples from the text.

5. Record individual scores on the teacher cycle record form.
Celebrate

1. Tally the team scores on the poster, and celebrate teams that are accumulating points. Have teams reflect on the following questions:

   **How many points did your team earn today?**

   **How can your team earn more points?**

   Remind students that top-scoring teams will earn bonus points that will be added to their cycle scores.

   • Something to cheer about: Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.

2. As a reminder, refer students to the Read and Respond homework assignment described in their student editions.
Lesson 4

Reading Objective: Use clarifying strategies to figure out the meanings of words, phrases, and passages.

Teacher Background

In this lesson, students watch partners in the video use the partner reading routine as they take turns reading aloud a section of text and restating the main ideas. When trying to restate, the partners realize that they need to stop and use clarifying strategies to figure out the passage. During the Interactive Read Aloud, read a section of text aloud, and challenge students to restate the main ideas in the text with their partners. How did restating help them check their understanding?

Today students will read “An Archaeologist’s Work,” which explains how artifacts found in a shipwreck must be stored and conserved carefully. Some processes to ensure that this happens require conservation expertise and special facilities. Students will learn that a lot is involved in conserving artifacts so they can be displayed in museums.

Active Instruction

(25 minutes)

Big Question

Post and present today’s Big Question. Have students write a response to the question as they arrive for class.

The Big Question: What are the meanings of the underlined words in this sentence? Use your Clarifying Strategy Card.

When the pirates’ ship was heavy with plunder, they sailed to a remote island, carried their treasures ashore, and hid them in a subterranean location.

Set the Stage

1. Refer students to today’s Big Question. Use Think-Pair-Share to ask:

   What are the meanings of the underlined words in this sentence? Use your Clarifying Strategy Card.

   When the pirates’ ship was heavy with plunder, they sailed to a remote island, carried their treasures ashore, and hid them in a subterranean location.
Students will probably say that plunder means stolen treasures. We used clues and pictured what was happening in the sentence to figure it out. It makes sense that when the ship was heavy with the treasure that the pirates took, they would take it somewhere and hide it. To figure out the word subterranean, we recognized the word part sub, which means under. That helped us figure out that the treasure was hidden under the ground.

Use Random Reporter to debrief, and award team celebration points to teams that describe the strategies they used.

2. Point out that students have been using strategies to clarify the meanings of words. Use Think-Pair-Share to ask:

Suppose you read a sentence or paragraph, and you don’t understand it. What do you do? Which strategies could you use to figure out what the sentence or paragraph means?

If there are words that we don’t know, we could clarify them first. We could reread what we don’t understand. We could read on to see if there are clues in the text. We could picture what is happening to try to figure it out.

3. Introduce the video.

We are going to watch a video of partners who are struggling with the meaning of a passage.

Show the video. Use Think-Pair-Share to debrief.

How did the partners know that they had a sticky-note problem?

Which strategies did the partners use to figure out the meaning of the passage?

Interactive Read Aloud

1. Tell students that you are going to read aloud. Challenge students to actively listen because you will ask them to restate the ideas in these paragraphs to their partners. Point out that if they have trouble clearly restating the text in their own words, it means that they have not fully understood it. They will need to refer to their Clarifying Strategy Card and use strategies to clear up the problem.

Read page 19 (stopping at “Wood from the ocean…”) aloud. Have partners restate the ideas in this section in their own words. Use Think-Pair-Share to prompt the use of clarifying strategies.

Was your partner able to clearly restate the ideas in this section? If not, which clarifying strategies did you use?

We were unclear about why wooden artifacts had to stay wet, so we went back and reread to clarify that if they dry out, the artifacts could shrink or change shape.
2. Partner Practice: Have students read the next section on page 19 (stopping at paragraph 2) aloud to their partners. Listening partners restate the ideas in the paragraph. Use Think-Pair-Share to ask:

How did restating the ideas help you check your understanding?

When we tried to restate the ideas, we found that we didn’t really understand the difference between storing waterlogged wood in the short term and the long term. When we reread, we understood that in the short term, wood is placed in a container with water that is changed often. For the long term, the water is replaced with a chemical agent.

Teamwork

(20 minutes)

Partner Prep

1. Prepare students for partner reading. Refer students to the teamwork routines for partner reading in their team folders, and review the routine.

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2. Have students read and restate: page 19 (starting at paragraph 2) aloud with partners.

3. Circulate and check for comprehension, restating of main ideas, and evidence of strategy use, for example, the use of sticky notes. Give students feedback. Prompt and reinforce their discussions.

Team Discussion

1. Remind students that in their teams they will:
   • discuss sticky-note problems and try to solve them.
   • discuss which strategies they used. How did they figure it out?
   • discuss how figuring out the problem helped them understand the text.
   • check that all team members can share the team’s strategy-use discussion in the Lightning Round.

2. Remind teams to use the strategy-use rubric to prepare for the Lightning Round.
3. Preview the Team Talk questions.

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   For example, a team member marked paragraph 3 on page 19 with a sticky note because the fifth sentence was confusing. We had to reread the sentence several times to clarify it. We figured out that although electrolytic reduction is a useful process, there are a lot of factors that affect whether it’s successful.

   In another example, a team member marked the word numerous with a sticky note.

   2. At the end of paragraph 3 on page 22, the sentence reads: “The process requires conservation expertise and specialized facilities.” What does the phrase “specialized facilities” mean? Which strategies did you use to figure it out? [CV] (strategy-use rubric)

   (Accept reasonable responses.) For example, “specialized facilities” means places where certain processes or activities happen. We knew that the word specialized means something that is made in a special way, but we didn’t know the meaning of facilities. We recognized the word facility, which helped us pronounce it. We reread and looked for clues in the sentence. We realized that because electrolytic reduction is a complicated process, it can’t be done just anywhere. It has to be done in a certain kind of place that has specific conditions for this process.

4. Circulate and give feedback to teams and students. Use the strategy-use rubric to give specific feedback. Ask questions to encourage further discussion. Record individual scores on the teacher cycle record form.

5. Award team celebration points for good team discussions that demonstrate 100-point responses.
Class Discussion (15 minutes)

Lightning Round

1. Display the strategy-use rubric.

<table>
<thead>
<tr>
<th>Strategy Use</th>
<th>The Random Reporter:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>100</strong></td>
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</tr>
<tr>
<td><strong>80</strong></td>
<td>identifies a problem that a team member had understanding the text.</td>
</tr>
</tbody>
</table>

Remind students that the Random Reporter's response must provide all three levels on the rubric to earn points on the poster for the team.

2. Use Random Reporter to have teams share their team's strategy-use discussion. Ask each Random Reporter to respond to Team Talk question #1. Award team celebration points to teams whose Random Reporter:
   • identifies a word marked with a sticky note (what they needed to clarify),
   • describes which strategies the team used to figure it out, and
   • explains how figuring out the word helped them better understand the text.

3. Use Random Reporter to have teams share their discussions of Team Talk question #2.
   Award team celebration points to teams whose Random Reporters describe the strategies they used and how clarifying helped them understand the text.

4. Record individual scores on the teacher cycle record form.

Celebrate

1. Tally the team scores on the poster, and celebrate teams that are accumulating points. Have teams reflect on the following questions:

   **How many points did your team earn today?**

   **How can your team earn more points?**

Remind students that top-scoring teams will earn bonus points that will be added to their cycle scores.

   • Something to cheer about: Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.

2. As a reminder, refer students to the Read and Respond homework assignment described in their student editions.
Lesson 5

**Writing Objective:** Write a complete answer that explains your thinking.

**Teacher Background**
The writing project in lesson 5 prepares students for the writing section of the cycle test. In today's lesson, students will practice writing a response to a strategy-use question. Model using the strategy-use rubric as a checklist for drafting a response.

**Active Instruction**
(10 minutes)

**Big Question**
Post and present today's Big Question. Have students write a response to the question as they arrive for class.

**The Big Question:** What are the meanings of the underlined words in this sentence? Use your Clarifying Strategy Card.
Karla didn’t want to take a circuitous route to Ashley’s house, so she studied a map and deliberated about which route was best.

**Set the Stage**
1. Refer students to today's Big Question. Use Think-Pair-Share to ask:

   **What are the meanings of the underlined words in this sentence? Use your Clarifying Strategy Card.**

   Karla didn’t want to take a circuitous route to Ashley’s house, so she studied a map and deliberated about which route was best.

   *For example, circuitous means long or not direct. We figured it out by using clues in the sentence. Karla didn’t want to take a circuitous route, so the word probably means something negative. A long or indirect route isn’t what most people want to take. Also, the word part circ made us think of a circle. A circular route might not be direct.*

   *For example, we think deliberated means thought about carefully. We pictured Karla studying a map. Since she’s taking her time and trying to find the best route, she is probably trying to make a careful decision.*

   Use Random Reporter to debrief, and award team celebration points to teams that describe the strategies they used.
2. Remind students that this cycle they have been using clarifying strategies, answering questions, and explaining their thinking. Refer students to the writing objective. Tell them that today they will practice writing a complete answer to a strategy-use question in preparation for the test in the next lesson.

3. Refer students to the following writing prompt in their student editions. Read the writing prompt aloud.

![Writing Prompt]

The following passage is from an article titled “It’s a Cook, It’s a Carpenter...It’s a Surgeon?” Read the passage, and mark with a sticky note a word, phrase, or sentence that you needed to clarify. Describe the problem and the strategy that you used to solve the problem. Explain how using the strategy helped you better understand the text.

When you think of a surgeon, you probably visualize someone wearing scrubs and gloves. On pirate ships, though, surgeons do not wear scrubs or gloves. There weren’t many surgeons on pirate ships, so carpenters often acted as surgeons because they had the tools necessary for amputating limbs. They needed to act immediately because infections could form quickly since there weren’t antibiotics. Cooks sometimes acted as surgeons, but their medical skills were scarce compared to carpenters.


Model a Skill

1. Refer students to the strategy-use rubric. Remind students that a complete strategy-use written answer includes the same three levels outlined by the rubric. Review the rubric.

![Strategy Use]

100 gives a 90-pt. response and explains how using the strategy helped in better understanding the text.

90 gives an 80-pt. response and describes a problem and a strategy that was used to solve the problem.

80 identifies a problem that a team member had understanding the text.

2. Model writing an answer to a strategy-use question. Point out that first you will tell what you had to mark with a sticky note.

A word in the passage that confused me was the word limbs.

Point out that next you will describe the problem and what you did—which strategy you used to figure it out.
One meaning of the word *limb* is a branch of a tree, but it doesn’t make sense in the sentence. I stopped and reread the sentence to look for clues to figure it out.

Point out that next you will explain how using the strategy helped you better understand the text.

*It says that carpenters had to get to work right away because infections could form quickly.* Infections form in the body, so from these clues, I guessed that *limbs* means body parts in this sentence. I tried out this meaning, and it made sense. Understanding that a *limb* is a body part helped me understand what carpenters were doing—like a surgeon, they were cutting off infected body parts.

**Teamwork**

(20 minutes)

**Independent Work**

Tell students that they have 10 minutes to plan and write drafts of their responses to the writing prompt. Remind them to write on every other line to leave room for revisions. Suggest that they refer to the writing prompt to be sure that they answer all parts of the question and to the strategy-use rubric to check the quality of their response.

**Team Discussion**

1. Refer students to the peer feedback checklist in their student editions. Introduce the peer feedback routine.

   **Peer Feedback**

   1. Read your writing project to your teammates. Remember to read with expression.

   2. Ask each of the questions below. Note your teammates’ suggestions in the margin of your writing project.

      - Did I identify a problem I had in understanding the text?
      - Did I describe the problem and which strategy I used to solve it?
      - Did I explain how using the strategy helped me better understand the text?

   3. Make revisions.

2. Have students share their drafts in teams. Allow 5 minutes for students to revise their writing projects based on feedback.

3. Have teams put their writing projects in a pile in the middle of their tables so a writing project can be randomly selected.
Class Discussion

(30 minutes)

Lightning Round
Randomly select a writing project from one or two teams’ piles without revealing their authors. Display a writing project, and read it aloud.

Refer students to the strategy-use rubric. Using the rubric, discuss and evaluate the selected writing project(s) with the class.

For example, ask:

- Does the writer identify a problem that he or she had understanding the text?
- Does the writer describe the problem and which strategy was used to solve it?
- Does the writer explain how using the strategy helped him or her better understand the text?

Award points to teams whose writing projects meet the criteria. Record these points on the team poster.

Reflection on Writing
Have students reflect on their use of the writing process. Ask:

Did using the rubric help you write a complete answer? How?

Answers will vary.

What was the most useful feedback that you received? How did it affect your revisions?

Answers will vary.

Celebrate
1. Tally the team scores on the poster, and celebrate teams that are accumulating points. Have teams reflect on the following questions:

How many points did your team earn today?

How can your team earn more points?

Remind students that top-scoring teams will earn bonus points that will be added to their cycle scores.

- Something to cheer about: Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.

2. As a reminder, refer students to the Read and Respond homework assignment described in their student editions.
Writing Prompt

The following passage is from an article titled “It’s a Cook, It’s a Carpenter...It’s a Surgeon?” Read the passage, and mark with a sticky note a word, phrase, or sentence that you needed to clarify. Describe the problem and the strategy that you used to solve the problem. Explain how using the strategy helped you better understand the text.

When you think of a surgeon, you probably visualize someone wearing scrubs and gloves. On pirate ships, though, surgeons do not wear scrubs or gloves. There weren’t many surgeons on pirate ships, so carpenters often acted as surgeons because they had the tools necessary for amputating limbs. They needed to act immediately because infections could form quickly since there weren’t antibiotics. Cooks sometimes acted as surgeons, but their medical skills were scarce compared to carpenters.


Peer Feedback

1. Read your writing project to your teammates. Remember to read with expression.

2. Ask each of the questions below. Note your teammates’ suggestions in the margin of your writing project.
   - Did I identify a problem I had in understanding the text?
   - Did I describe the problem and which strategy I used to solve it?
   - Did I explain how using the strategy helped me better understand the text?

3. Make revisions.
Lesson 6

Reading Objective: Use clarifying strategies to figure out the meanings of words, phrases, and passages.

Writing Objective: Write a complete answer that explains your thinking.

Teacher Background
During today’s cycle test, students will use strategies to clarify what they read and will identify which strategies they used to clear up anything confusing. Students may use the Clarifying Strategy Card as they read and answer the test questions.

Be prepared to pass out a colored pen to each student. After taking the test, students will discuss their answers with their teams, receive feedback, and have the opportunity to improve their answers using the colored pens. When you are scoring the test, score students’ original answers, and add extra points for improved answers.

For today’s assessment, students will read the “Pirates vs. Privateers” sidebar on page 14. The sidebar explains that privateers are pirates; however, they have been hired by a government. Pirates work independently, on the other hand. The sidebar also describes the role of privateers in the Revolutionary War.

Active Instruction

Big Question
Post and present today’s Big Question. Have students write a response to the question as they arrive for class.

The Big Question: What is the meaning of the underlined word in this sentence? Use your Clarifying Strategy Card.
Daisy had always thought her house was indestructible, but the storm was so powerful that her roof was damaged.

Set the Stage
1. Refer students to today’s Big Question. Use Think-Pair-Share to ask:

What is the meaning of the underlined word in this sentence? Use your Clarifying Strategy Card.
Daisy had always thought her house was indestructible, but the storm was so powerful that her roof was damaged.
For example, indestructible means unable to be damaged. To figure it out, we used familiar word parts. Destruct means to damage. The prefix in- means not. We also used context clues. Daisy thought her house was indestructible, but it was damaged in a storm.

2. Use Random Reporter to debrief, and award team celebration points to teams that describe the strategies they used.

3. Spot check the Read and Respond homework.

Prepare Students for the Test

(5 minutes)

Partner Review

1. Remind students that they have been practicing using clarifying strategies and writing a complete answer that explains their thinking. Tell students that they will use these strategies and explain their thinking as they take the cycle test.

2. Have partners review their Clarifying Strategy Cards and writing projects. Allow 2 or 3 minutes for this activity.

Test Directions

1. Remind students that the test is independent work. Students should not ask their partners for help as they read, but they may use sticky notes if they would like.

2. Distribute the test so students can preview the questions. Point out that some of the test questions are multiple choice for which they will choose the best answer. Other questions require them to write a short answer. Part II of the cycle test requires them to write a complete answer to a strategy-use question. Remind them that their writing project was practice for writing the answer to the strategy-use question for part II of the test.

3. Point out that questions #3 and #5 ask about clarifying strategies and require students to explain their thinking.

4. Ask students to identify key words and phrases in question #5.

5. “Privately owned ships were permitted to sail forth and, ‘by Force of Arms, attack subdue, and take all Ships and other Vessels belonging to the Inhabitants of Great-Britain.’ ” Which strategies did you use to help you pronounce the word inhabitants? Which strategies did you use to figure out the meaning of inhabitants? [CV]

5. Introduce the text that students will read. Tell what it is about, but do not give additional information or details.

Today you will read about privateers.
Tell students that they have 20 minutes for the test and that they may begin. Give students a 5-minute warning before the end of the test.

### Teamwork tp
(10 minutes)

#### Team Discussion
1. Pass out a colored pen to each student.
2. Explain the student routine for team discussion after the test.

<table>
<thead>
<tr>
<th>After the Test</th>
<th>Independent Strategy Use</th>
<th>Skill-Question Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Describe your strategy use.</td>
<td>• Discuss the skill question in teams.</td>
</tr>
<tr>
<td></td>
<td>• How did you resolve a sticky note?</td>
<td>• Say the question in your own words, and tell what key words or phrases you identified.</td>
</tr>
</tbody>
</table>

3. Have teams discuss their answers to the test questions. As you monitor team discussions, ask additional questions to prompt their thinking about the important ideas in the reading and about the skills and strategies that they have been using.

### Class Discussion tp
(10 minutes)

#### Lightning Round
1. Use Random Reporter to have teams share team discussions of the test questions and explain their thinking.
2. Award team celebration points.
3. Collect test answers. Score original answers, and add extra points for improved answers.
Celebrate

1. Tally the team scores on the poster, and celebrate teams that are accumulating points. Have teams reflect on the following questions:

   **How many points did your team earn today?**

   **How can your team earn more points?**

   Remind students that top-scoring teams will earn bonus points that will be added to their cycle scores.

   • Something to cheer about: Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.

2. Explain that in the next lesson, with the help of their teams, students will each prepare an oral presentation about their homework reading selections. Students will use the questions and their answers on the Read and Respond homework form to discuss with their teams and prepare their presentations.

   Introduce the video.

   **We will watch a video of a team discussing their homework reading selections and preparing for presentations in the Lightning Round.**

   Show the video. Debrief the video.

   **How did the team use the Read and Respond form to prepare their presentations?**

3. Remind students to bring their Read and Respond forms and homework reading selections to the next reading class.
Cycle 1 Test

Clarify Words and Ideas

**Directions:** Read the “Pirates vs. Privateers” sidebar, page 14. Answer the following questions on a separate piece of paper. You may use the Clarifying Strategy Card.

**Part I. Comprehension** (100 points)

1. When you are reading, what can you do if you come to something that is unclear or confusing? [CV]
   
   *(Accept reasonable responses.)* For example, when I am reading and come to something unclear, I can stop and use clarifying strategies to figure it out. If it is an unfamiliar word, I can break it into chunks to pronounce it. I can reread or read on to find clues in the sentence. I can picture what is happening in the text.

2. In the sentence “...the 13 colonies found themselves at a disadvantage against the mighty imperial British Navy,” the word *imperial* most nearly means— [CV]
   
   A. weak.
   
   B. royal.
   
   C. poor.
   
   D. small.

3. In the sentence “...the Continental Congress issued instructions for American privateers,” the word *issued* most nearly means—
   
   A. taught.
   
   B. lied.
   
   C. sketched.
   
   D. gave.

   How did you figure out the meaning of *issued*? [CV]
   
   *(Answers will vary.)* For example, I used clues in the paragraph. After the sentence that uses this word, it says that privately-owned ships were allowed to sail, and they could attack British ships. This is information about what privateers could do, so it makes sense that they were given this information that told them what to do.

4. How can you tell that bad behavior from privateers wasn’t accepted? [MI]

   I can tell that Congress didn’t accept bad behavior from privateers because there were a lot of rules for them to follow. For example, abuse of captured officers was prohibited.
5. “Privately owned ships were permitted to sail forth and, ‘by Force of Arms, attack subdue, and take all Ships and other Vessels belonging to the Inhabitants of Great-Britain.’” Which strategies did you use to help you pronounce the word *inhabitants*? Which strategies did you use to figure out the meaning of *inhabitants*? [CV]

(Answers will vary.) For example, I broke the word *inhabitants* into chunks and then blended to pronounce it. I saw that the ships belonged to *inhabitants*, and they were from Great Britain, so I used the context to figure out that *inhabitants* means people who live in a certain place.

**Part II. Writing** (100 points)

Write at least a paragraph to answer the following question:

What is a word, phrase, or passage in today’s reading that you clarified? Explain which clarifying strategies you used to figure out the word, phrase, or passage. Explain how figuring out the word, phrase, or passage helped you better understand the text.

(Answers will vary.)

100 points = I had to clarify the word *orderly* on page 14 because I didn’t know what it meant. I looked for a familiar word part and saw *order*. I know that the word *order* means that everything is organized, and there’s no chaos. So orderly must mean organized or without chaos. Figuring out the meaning of orderly helped me understand that both pirates and privateers divided captured loot in an organized way. This makes sense because if there were rules about how it was divided, there wouldn’t be any fighting about who got what.

90 points = I had to clarify the word *orderly* on page 14 because I didn’t know what it meant. I looked for a familiar word part and saw *order*. I know that the word *order* means that everything is organized, and there’s no chaos. So orderly must mean organized or without chaos.

80 points = I had to clarify the word *orderly* on page 14 because I didn’t know what it meant.

The following guide is used to score part II of the cycle test.

<table>
<thead>
<tr>
<th>Strategy Use</th>
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</table>
### Question Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[DC]</td>
<td>Make inferences; interpret data; draw conclusions.</td>
</tr>
<tr>
<td>[SA]</td>
<td>Support an answer; cite supporting evidence.</td>
</tr>
<tr>
<td>[MI]</td>
<td>Identify the main idea that is stated or implied.</td>
</tr>
<tr>
<td>[CV]</td>
<td>Clarify vocabulary.</td>
</tr>
<tr>
<td>[AP]</td>
<td>Identify author's intent or purpose.</td>
</tr>
<tr>
<td>[RE]</td>
<td>Analyze relationships (ideas, story elements, text structures).</td>
</tr>
<tr>
<td>[AC]</td>
<td>Author's craft; literary devices.</td>
</tr>
</tbody>
</table>
Lesson 7

**Reading Objective:** Use clarifying strategies to figure out the meanings of words, phrases, and passages.

**Teacher Background**

During Class Discussion, students orally present evaluations of their homework reading selections. During Teamwork, students use their Read and Respond notes and answers to the homework questions to make final preparations for these presentations. Team members share their responses and give one another feedback. During the oral presentations, students use their revised responses to the questions to describe the kind of texts they read, the strategies that helped them understand the text, and whether they will recommend their reading selections to others.

**Active Instruction**

(20 minutes)

**Big Question**

Post and present today’s Big Question. Have students write a response to the question as they arrive for class.

*The Big Question:* What are the meanings of the underlined words in this sentence? Use your Clarifying Strategy Card.

Everyone had a wonderful time at Sheryl’s cookout because of the scrumptious food and the ideal weather.

**Set the Stage**

1. Refer students to today’s Big Question. Use **Think-Pair-Share** to ask:

   **What are the meanings of the underlined words in this sentence? Use your Clarifying Strategy Card.**

   Everyone had a wonderful time at Sheryl’s cookout because of the scrumptious food and the ideal weather.

   *For example, scrumptious means delicious or tasty. We used context clues to figure it out. The food is one reason that everyone had a great time at the cookout. If the food wasn’t good, they probably wouldn’t have had a great time.*

   *For example, we think ideal must mean perfect or really great. We figured it out from clues because the weather was another reason that everyone had a great time. Cookouts are done outside. If the weather was too hot or too cold or rainy, people probably wouldn’t have had a great time.*

   Use **Random Reporter** to debrief, and award team celebration points to teams that describe the strategies they used.
2. Have students get out their reading selections and Read and Respond forms. Remind them that today, with the help of their teams, they will each prepare a presentation about their individual reading selections.

Challenge students to think about the strategies and skills that they used to read their self-selected texts, share their answers to the Read and Respond questions, discuss their thinking, and prepare evaluations of their selections.

3. Remind students to add to the notes on their Read and Respond forms as they discuss their selections and prepare oral presentations about their selections. Students will use their answers to the questions on the Read and Respond form as the basis for their presentations.

Teamwork (25 minutes)

Team Discussion

1. Tell students that they will use the Read and Respond questions as a guide as they discuss their homework reading and prepare evaluations of their reading selections to share with their teams.

2. As you visit teams, take this opportunity to check students’ homework for completion (Read and Respond forms). Enter the information on your teacher cycle record form.

Teacher’s Note:

Have students who are ready for a new selection take turns choosing reading material from the classroom library. Make sure that every student has a Read and Respond form for next cycle.

Read and Respond Questions

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Is your selection informational or literature? Summarize your reading. (summary rubric)</td>
</tr>
<tr>
<td>2.</td>
<td>Why did you choose this reading? What is your purpose for reading? (Team Talk rubric)</td>
</tr>
<tr>
<td>3.</td>
<td>Choose a word, phrase, or passage that you did not understand at first. How did you figure it out? (strategy-use rubric)</td>
</tr>
<tr>
<td>4.</td>
<td>Write down a question that you had or a prediction that you made as you read. Were you able to answer or confirm it? Explain. (strategy-use rubric)</td>
</tr>
<tr>
<td>5.</td>
<td>Would you recommend this selection to others to read? State your opinion, and support it with reasons. (Team Talk rubric)</td>
</tr>
<tr>
<td>6.</td>
<td>Choose a short section of the text that you think is important or especially interesting. Tell your teammates why you chose it. Read it aloud smoothly and with expression. (fluency rubric)</td>
</tr>
</tbody>
</table>
Class Discussion

(15 minutes)

Lightning Round

Use Random Reporter to have students present their evaluations of their homework reading selections (responses to the Read and Respond questions). Award points for complete answers that explain the student’s thinking. Use the strategy-use rubric to evaluate responses to question #3, give specific feedback, and award points.

Celebrate

1. Tally up this cycle’s points on the poster.
2. Tell students that their scored tests will be returned at the beginning of the next lesson. Poster points and the teams’ test scores will determine which teams earn the status of super team, great team, or good team for the cycle.
3. Be sure to record each team’s total celebration points from the poster into the teacher cycle record form. Remind students that team celebration points and team test averages are used to determine team scores.
4. Collect students’ Read and Respond forms, and pass out new forms.
5. Tally up the number of Read and Respond signatures on students’ forms, and record the number on the teacher cycle record form after class.
Lesson 8

**Objectives:** Celebrate successes, and set new goals. Hold a Class Council meeting.

**Teacher Background**

In this lesson, students learn and complete a new opening activity, the Two-Minute Edit. Next, they review their test results and their final scores for the cycle and compare them with their goals. They celebrate success and set new goals. Then students hold their first Class Council in which they practice using “I” Messages, Think-It-Through, and the Peace Path to resolve a class problem. The class reflects on the process, sets a goal for improving teamwork, and identifies criteria for evaluating success. The lesson ends with a brain game and a short debriefing of the thinking that students used to play the game.

**Active Instruction**

(2 minutes)

**Two-Minute Edit**

1. As students arrive for class, introduce the Two-Minute Edit. Tell them the types of mistakes to look for in the sentence. Challenge teams to find and fix the mistakes in the following sentence.

   **There are four mistakes in this sentence. Can you find them and fix them?**
   A clarifying strategy we used are clues in the sentence and using the dictionary.

   **Answer:** Two clarifying strategies we used were clues in the sentence and using the dictionary.

2. Use Random Reporter to debrief, and award team celebration points to teams that find the mistakes and explain the edits that they made.

**Celebrate/Set Goals**

(28 minutes)

1. Explain how the Team Celebration Points poster scores and test results are combined to identify super teams, great teams, and good teams using the video.

   **A team is about to find out how they did this cycle. Will they be a super team, a great team, or a good team?**

2. Introduce the video by telling students that it will explain how their team celebration points factor into their scores. Show the video.
3. Debrief the video. Use **Think-Pair-Share** to ask:

   **How do team celebration points help team scores?**

   Team celebration points increase team scores and help teams become super teams.

4. Distribute students’ scored cycle tests. Allow a few moments for students to review them.

5. Distribute team score sheets to teams and celebration certificates to students. Remind students that the cycle’s top-scoring teams are determined by their points on the poster and their test scores.

6. Recognize and celebrate the super, great, and good teams. Remind the teams of the impact of bonus points that are added to team members’ cycle scores.

7. Introduce the process for selecting a team goal using the video. Debrief the video. Use **Think-Pair-Share** to ask:

   **How did the team use the team score sheet?**

   They used it to check their team scores from the cycle to see how they were doing. They used it to figure out what they wanted to improve and to set a goal for next cycle.

   **What is the team’s goal for next cycle? Why did they choose that goal?**

   **Why would it help the team to set a goal for the next cycle?**

8. Have each team discuss and set a goal for the next cycle and record it on their team score sheet.

   Use **Random Reporter** to ask:

   **What is your team’s goal for the next cycle? Why did you choose that goal?**

   Accept supported answers.

   Use the poster to award team celebration points for responses that include the team’s reasons for choosing the goal, thus beginning the accumulation of points for the next cycle.

9. Have students record their cycle test scores and their areas of greatest strength and improvement on their progress charts.

   **How do you think your progress chart will help you in the Reading Edge?**

   My progress chart will help me see how far I’ve come in the Reading Edge and what I need to do to grow.
Class Council

(25 minutes)

Introduce students to the parts of a Class Council meeting.

1. Share class compliments.
2. Discuss a class concern, or use the scenario and discussion hints provided.
3. After debriefing how they resolved the problem, help students set a goal and a measure of progress that they can use at the next Class Council.

**Class compliments:** Explain that every Class Council begins with class compliments. They are encouraging words that anyone in the class can share during Class Council to acknowledge others. Class compliments provide an opportunity to recognize someone in class for helping others meet a goal or for treating others with kindness and respect at any time, even other classes or times during the school day. Class compliments recognize behavior, but not how someone looks or what they have.

Read the sample compliment.

> “I would like to compliment Ava for helping me with my math word problems. After she listened to what was confusing to me, she asked me questions and helped me clarify the question.”

Use **Think-Pair-Share** to ask:

**What did Ava do that earned a class compliment?**

*Ava listened actively and asked questions until her friend figured out the math problem. She didn’t do the problem for her. She helped her friend do it herself.*

Ask teams to discuss the following statements and suggest which one is not a class compliment.

> “I would like to compliment Derek because he actively listened while I explained my thinking, even when he disagreed.”
> “I would like to compliment Matt on his new football jersey. It is awesome.”
> “I would like to compliment Susan for making sure that everyone contributed to our team discussion.”
> “I would like to compliment my team for not getting distracted by all the noise in the hallway. We had a great discussion.”

Use **Random Reporter** to ask for responses.

*The comment about Matt’s football jersey is not an appropriate class compliment. It is not about something that Matt did for someone else; it is about something that he has.*
Review progress:
Since this is the first Class Council, there is not a goal to review.

Discuss a concern:
This is a time for you and your students to bring up concerns or problems that are getting in the way of successful teamwork. Since this is a new process, a scenario and discussion hints are provided for the first three cycles to launch this process. A bank of scenarios and discussion hints for possible use in future Class Councils is included in The Reading Edge 2nd Edition Middle Grades Teacher’s Guide and in the online resources.

Scenario:
Our class is having trouble keeping an appropriate noise level during teamwork. It is hard for partners to hear each other during partner reading. The Thundercats are part of the problem. Sarah keeps talking about a new TV show that she wants to watch this weekend, and her partner Thomas is getting angry and frustrated as Sarah ignores his requests to pay attention to what he is reading.

What would you do if you were Thomas? What can the class do to maintain an appropriate noise level?

Discussion Hints:
• Thomas recognizes that his emotional temperature is rising. He can stop and use a cool-down strategy that works for him before he speaks to Sarah again.
• Next, he could use an “I” Message rather than an accusing “You” statement to clearly ask Sarah to participate in partner reading with him.
• Thomas and Sarah could go to a thinking spot and use a Think-It-Through sheet to organize their thoughts and consider alternate solutions and their consequences.
• Finally, if Thomas and Sarah are still having trouble communicating, they can use the Peace Path process. This will give both of them the chance to express how they feel and to think through alternative solutions until they find one that works well for them.

Set a class goal:
Identify a way to measure success so students can determine if they have met their goal by the next Class Council. For example, the class could decide to have the teacher signal the class by switching the lights on and off when the noise level gets too high. They could keep track of how many warnings are needed each day to see if they are becoming more aware of when they are too loud.
Brain Game

(5 minutes)

1. Choose a brain game from the card set, and then play the game.

2. Use the following questions to debrief and remind students of self-regulatory strategies:

   What did this game require your brain to do?

   How will use of this skill improve your success in other classes?
Lesson 1

**Reading Objective:** Use clarifying strategies to figure out the meanings of words, phrases, and passages.

**Teacher Background**

In this lesson, you will introduce the Team Talk rubric. Like the strategy-use rubric, the Team Talk rubric sets the expectations for a quality response. You and your students will use it to evaluate their answers in team discussion and the Lightning Round. Students will view a video of teams using the rubric to build a quality answer. They will also evaluate a team’s answer using the rubric. Is it a 100-point answer? Why or why not?

The rubric specifies the use of academic language in a quality answer. Academic language is defined for students as the language used in school. Guide students and teams to an understanding of academic language by discussing examples of it in student answers. Sample 80-point, 90-point, and 100-point answers are provided for each Team Talk question in the Reading Edge, and examples of academic language are indicated.

Students will also use role cards during team discussion.

Today students will read “Taking Care of Shipwreck Treasure.” This article describes the effects of Kip Wagner finding gold coins on a beach in the 1950s. At that time, many people were determined to find treasure, but many people found treasure and sold it for their own profit. As a result, scientists can’t use this gold and silver to learn about the past. There is also a description of the *Cayo Nuevo* wreck, which was properly handled.

**Active Instruction**

(22 minutes)

**Big Question**

Post and present this cycle’s Big Question. Have students write a response to the question as they arrive for class.

**The Big Question:** When you are answering a question in school, how do you know when you have a quality answer?
1. Refer students to today’s Big Question. Use Think-Pair-Share to ask:

   **When you are answering a question in school, how do you know when you have a quality answer?**

   A quality answer correctly answers the question. It explains your thinking and how you got to that answer.

   Record student responses on the board.

2. Ask students to review their cycle goal. Remind students how to earn team celebration points. Remind them that team celebration points help them to become super teams. Tell them that they can earn team celebration points during the Lightning Round.

3. Introduce the texts, authors, and reading objective.

4. Display and introduce the Team Talk rubric. The rubric can also be found in the team folders.

   **Team Talk (oral and written)**

   **The Random Reporter:**

   - **100** gives a 90-pt. response and connects the answer to the supporting evidence and uses academic language.
   - **90** gives an 80-pt. response and includes supporting evidence and examples (from the text or from experience).
   - **80** uses full sentences to clearly and correctly answer the question.

5. Explain to students that the rubrics are tools for teams to use when they prepare for the Lightning Round. When they discuss and answer Team Talk questions, they will need to have a high-quality 100-point answer to get points for their teams.

6. Review the Team Talk rubric, noting that correctly answering a question in full sentences is the bottom level of the rubric. Answering correctly in full sentences and including evidence to support the answer is the second level. The top level of the rubric describes a high-quality answer. Point out that the top level requires an explanation of the thinking behind an answer and the use of academic language, in other words, the language of school.

7. Display the following sample answers to a Team Talk question, and use the rubric to discuss the elements that make up a 100-point answer. Note the color coding in the answers that indicates a correct answer, supporting evidence and examples, a wrap-up that connects the answer to the evidence, and examples of academic language.
Sample Team Talk Question

Explain what made William Kidd unusual.

Team A’s answer:
William Kidd was unusual because the way he looked and the way he behaved were different from how people think pirates looked and behaved. He did not have a peg leg. He was a businessman who helped to found a church.

Team B’s answer:
William Kidd was unusual because the way he looked and the way he behaved were different from how people think pirates looked and behaved.

Team C’s answer:
William Kidd was unusual because his appearance and background were different from how people think pirates looked and behaved. He did not have a peg leg. He was a businessman who helped to found a church. In the picture on page 13, I can see that the way he dressed isn’t how you expect a pirate to dress. William Kidd did not fit the typical description of a pirate.

Correct answer in complete sentences
Supporting evidence and examples
Wrap-up that connects the answer to the evidence

Academic language

8. Introduce the video.

Now you will see a team discussing the answer to another Team Talk question and using the rubric to get ready for the Lightning Round. Let’s see if they prepare a 100-point answer.

Show the first part of the video. Use Think-Pair-Share to debrief.

How did the team use the rubric to prepare for the Lightning Round?

Show the second part of the video. Use Think-Pair-Share to debrief.

Why didn’t the team earn a team celebration point? What was missing from their answer?

Show the third part of the video. Use Think-Pair-Share to debrief.

Did the team use academic language in their answer? How?

Remind students that the rubrics will help them prepare high-quality answers and earn team celebration points in the Lightning Round.
Interactive Read Aloud

1. Have students preview today’s text “Taking Care of Shipwreck Treasure,” page 16 in Odyssey magazine.

Refer to the reading objective, and review the skill if necessary. Tell students that you are going to read aloud and then think aloud as you use some clarifying strategies. Read the first sentence of page 16 aloud, stopping after the word beachcomber. A sample Think Aloud follows.

**Sample Think Aloud**

I am confused by the word beachcomber. I haven’t seen that word before. I know the word comb. You can use a comb for your hair. You can also comb your hair or comb through something. I’m not sure this is helping me. Let me read on to see if that helps. (Finish reading the first sentence.) Kip Wagner walked on the beach and found gold coins. I think a beachcomber may be a person who looks for things on the beach.

(Read the next sentence.)

I’m not sure about the word provisional. I see the word provision, which is familiar. I know that provisions are supplies. When you go camping, you need provisions such as food. Since Kip Wagner found coins that helped him do research, maybe provisional means relating to supplies. I think I’ll check the dictionary to confirm. (Look up provisional in a dictionary.) Provisional means for the time being or temporary. This is not what I thought. Let me see if it makes sense in the sentence. He just found the coins, so he needed to do more research to learn more. So “for the time being” does make sense. It’s good to check the dictionary if you’re not sure that context clues are helping.

2. Use **Think-Pair-Share** to debrief the Think Aloud.

**Which clarifying strategies did I use?**

You read on and found clues in the rest of the paragraph about what Kip Wagner did on the beach. That helped you clarify what a beachcomber is. You also used a familiar word part but then used the dictionary to figure out the meaning of provisional.

3. Partner Practice: Have students read the rest of paragraph 1 on page 16 aloud to their partners. Listening partners restate the ideas in the paragraph. Use **Think-Pair-Share** to ask:

**How did restating the ideas help you check your understanding?**

My partner restated the main idea as gold coins were a huge clue about a sunken ship. I added that the gold coins also made people want to search for treasure so they could have gold.
Teamwork

(20 minutes)

Partner Prep

1. Refer students to the teamwork routines for partner reading in their team folders, and review the routine.

<table>
<thead>
<tr>
<th>With Partners</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
<th>Fourth</th>
<th>Finally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Partner Reading</td>
<td>Take turns reading a paragraph or section of text aloud. Mark problems with a sticky note.</td>
<td>Clarify confusing words and passages.</td>
<td>After each paragraph or section, the listening partner restates the main ideas or events.</td>
<td>Both partners make notes about main ideas or events. Review the paragraph or section, and discuss supporting details. Add them to your notes.</td>
<td>Take unsolved sticky-note problems to team discussion.</td>
</tr>
</tbody>
</table>

2. Have students read and restate: page 16 (starting at “Individuals and entire companies...”) aloud with partners.

3. Circulate and check for comprehension, restating of main ideas, and evidence of strategy use, for example, the use of sticky notes. Give students feedback. Prompt and reinforce their discussions.

Team Discussion

1. Prepare students for team discussion. Refer them to the role cards in their team folders, and explain that the role cards will help to guide their discussions of Team Talk questions. Have teams distribute a role card to each team member.

Point out that teams will discuss their sticky-note problems and then go on to a discussion of the other Team Talk questions.

<table>
<thead>
<tr>
<th>First</th>
<th>Second</th>
<th>Third</th>
<th>Finally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read the question.</td>
<td>Answer the question.</td>
<td>Agree OR disagree.</td>
<td>Summarize.</td>
</tr>
<tr>
<td>1. Read the question to your teammates. 2. Make sure everyone practices active listening. 3. Ask if everyone heard and understood the question. 4. Identify the right rubric.</td>
<td>1. Restate the question in your own words. 2. Use the rubric to form your answer. 3. Tell and explain your answer. 4. Ask if everyone heard your answer.</td>
<td>1. Restate your teammate’s answer. 2. Agree and add additional information, OR disagree and explain why. 3. Ask if everyone heard your answer.</td>
<td>1. Restate the group’s agreed-upon answer. 2. Check to make sure each teammate understands the answer. 3. Make sure each teammate is ready for the Lightning Round. 4. Pass the role cards to the right.</td>
</tr>
</tbody>
</table>

2. Remind teams to use the rubrics to prepare for the Lightning Round.

3. Preview the Team Talk questions.
### Team Talk Questions

1. What is a word, phrase, or passage that a team member marked with a sticky note? Explain which clarifying strategies you used to figure out the marked word or phrase. How did figuring out the word, phrase, or passage help you better understand the text?  

<table>
<thead>
<tr>
<th>Score</th>
<th>Example</th>
<th>Clarification Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>A team member marked the word <em>unscientific</em> because he didn’t know what it meant. He looked for familiar word parts and saw the word part <em>scientific</em> and the prefix <em>un-</em> . This prefix means not. He reread the sentence and substituted <em>unscientific</em> with the phrase “not scientific.” This helped him understand that since valuable items are sold, scientists can’t study them or learn from them.</td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>A team member marked the word <em>unscientific</em> because he didn’t know what it meant. He looked for familiar word parts and saw the word part <em>scientific</em> and the prefix <em>un-</em> . This prefix means not. He reread the sentence and substituted <em>unscientific</em> with the phrase “not scientific.”</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>A team member marked the word <em>unscientific</em> because he didn’t know what it meant.</td>
<td></td>
</tr>
</tbody>
</table>

2. According to the article, what is the right way to handle the discovery of treasure?  

<table>
<thead>
<tr>
<th>Score</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>According to the article, if you find an item that may be valuable, you should <strong>contact</strong> the authorities. The authorities can <strong>investigate</strong> the artifacts. Some people want to keep the items so they can earn money. <strong>However</strong>, that approach is not responsible and doesn’t <strong>allow</strong> scientists to learn about history. <strong>Although</strong> it may appear that keeping valuable items can <strong>benefit</strong> you, it is not the right thing to do.</td>
</tr>
<tr>
<td>90</td>
<td>If you find an item that may be valuable, you should call the authorities. Some people want to keep the items so they can earn money. That approach doesn’t let scientists learn about history.</td>
</tr>
<tr>
<td>80</td>
<td>If you find an item that may be valuable, you should call the authorities.</td>
</tr>
</tbody>
</table>

3. Explain the importance of the discovery of the *Cayo Nuevo* wreck.  

<table>
<thead>
<tr>
<th>Score</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>The discovery of the Cayo Nuevo wreck is very important because it is an <strong>excellent</strong> example of how wrecks and treasures can be handled well. When two friends found some cannons near the Yucatan Peninsula, they found that one cannon <strong>contained</strong> an early date. Instead of keeping their discovery for their own <strong>benefit</strong>, they took pictures of their discovery and <strong>contacted</strong> archaeological and historical institutes. Reporting the discovery makes it more likely that possible treasures will be handled properly.</td>
</tr>
<tr>
<td>90</td>
<td>The discovery of the Cayo Nuevo wreck is very important because it is a great example of how wrecks and treasures can be handled well. When two friends found some cannons, they found that one cannon had an early date. Instead of keeping their discovery for themselves, they took pictures of it and called historical institutes.</td>
</tr>
<tr>
<td>80</td>
<td>The discovery of the Cayo Nuevo wreck is very important because it is a great example of how wrecks and treasures can be handled well.</td>
</tr>
</tbody>
</table>

*continued*
4. In paragraph 2 on page 17, the author writes “The good judgment and responsible behavior of the two divers made all the difference.” What do you think the author means? [AP, DC, SA] (Team Talk rubric)

100 = I think the author means that because of how the divers handled their discovery, a lot can be learned from the artifacts. Since the divers reported their findings, cannons and Spanish artifacts were excavated. The site was not looted, so treasures were saved. As a result, people can learn about history from these artifacts. This is different from other shipwrecks where artifacts were lost. If the divers had kept their findings for themselves, a part of history would be gone.

90 = I think the author means that because of how the divers handled their discovery, a lot can be learned from the artifacts. The divers reported their findings, so Spanish artifacts were dug up. The site was not looted, so treasures were saved. People can learn about history from these artifacts.

80 = I think he means that because of how the divers handled their discovery, a lot can be learned from the artifacts.

4. Circulate and give feedback to teams and students. Use rubrics to give specific feedback. Ask questions to encourage further discussion. Record individual scores on the teacher cycle record form.

5. Award team celebration points for good team discussions that demonstrate 100-point responses.

Class Discussion

Lightning Round

1. Remind students that Random Reporters will earn team celebration points for quality responses. Remind students that you will record points on the Team Celebration Points poster and that they can keep track of points that they earn on their team score sheets.

Class Discussion

<table>
<thead>
<tr>
<th>Strategy-Use</th>
<th>Team Talk (written and oral)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Describe your team’s strategy use.</td>
<td>• Did you enjoy your reading? Why or why not?</td>
</tr>
<tr>
<td>• How did you resolve a sticky note?</td>
<td>• Discuss Team Talk questions.</td>
</tr>
<tr>
<td>• How did it help you understand the text?</td>
<td>• Explain your team’s discussion.</td>
</tr>
<tr>
<td></td>
<td>• Read your team’s written answer to the class.</td>
</tr>
<tr>
<td></td>
<td>• What makes it a good answer? How can you improve it?</td>
</tr>
</tbody>
</table>
2. Use **Random Reporter** to have teams share their strategy-use responses (question #1). Display and use the strategy-use rubric to evaluate responses and give specific feedback. Award points on the poster for teams with 100-point responses. Record individual scores on the teacher cycle record form.

3. Use **Random Reporter** to have teams share their Team Talk responses (questions #2–4). Display and use the Team Talk rubric to evaluate responses and give specific feedback. Award points on the poster for teams with 100-point responses. Record individual scores on the teacher cycle record form.

**Celebrate**

1. Tally the team scores on the poster, and celebrate teams that are accumulating points. Have teams reflect on the following questions:

   **How many points did your team earn today?**

   **How can your team earn more points?**

   Remind students that top-scoring teams will earn bonus points that will be added to their cycle scores.

   • **Something to cheer about:** Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.

2. As a reminder, refer students to the Read and Respond homework assignment described in their student editions.
Lesson 2

**Reading Objective:** Use clarifying strategies to figure out the meanings of words, phrases, and passages.

**Teacher Background**

In this lesson, you will introduce vocabulary words for this cycle and the partner vocabulary study routine. Emphasize the value of the vocabulary study routine. Remind students that when partners quiz each other on a regular basis, they are strengthening their brain connections and their memories. This studying will help them not only to do well on the cycle test, but also to build their vocabulary knowledge and their ability to understand and use more words.

Today students will read “The Whydah’s Odyssey.” This article describes Barry Clifford’s search for the Whydah. Once the ship was uncovered, excavations of it provided a lot of information about pirates’ everyday lives. For instance, writing instruments show that pirates could write. There are also records that show how diverse the Whydah’s crew was.

**Active Instruction**

(25 minutes)

**Partner Vocabulary Study**

1. Display the vocabulary words and the following partner vocabulary study routine.

| Partner Vocabulary Study |  
|--------------------------|---|
| 1. Rate your knowledge of each vocabulary word. | + I know this word and can use it. |
| 2. Discuss with your partner a vocabulary word you know and one that needs further study. | ✓ This word looks familiar; it has something to do with... |
| 3. Take turns pronouncing the vocabulary words, telling their meanings, and using the words in new sentences. | ? I don’t know this word; it’s totally new to me. |
| 4. Listening partners give thumbs up if the word is used correctly or add ideas to help their partners. | |

2. As they arrive for class, have students copy the vocabulary words in their notebooks and rate their knowledge of each word using +, ✓, or ? as outlined in step 1 of the partner vocabulary study routine. The routine can also be found in the team folder.

3. Spot check the Read and Respond homework.
Vocabulary

1. Have teams discuss their ratings of the words. Ask teams to 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 “?”.

2. Use Random Reporter to have the teams share one word that they know and one word that they need to study further. Award team celebration points.

3. Explain that each cycle, students will learn vocabulary words from the text they are reading that will be on the cycle test. The vocabulary section of the test makes up one third of their cycle test score. Throughout the cycle, partners will have the opportunity to review and study the vocabulary words in preparation for the test.

4. Introduce the vocabulary for this cycle. Read each word aloud, and model chunking as needed. Then read the meaning of each word.

<table>
<thead>
<tr>
<th>Word</th>
<th>Pronunciation</th>
<th>Definition</th>
<th>Sample Sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>enticing</td>
<td>en-tic-ing</td>
<td>appealing; interesting</td>
<td>The commercial for the movie was <em>enticing</em>, so Marah made plans to see it in the movie theater.</td>
</tr>
<tr>
<td>irreparable</td>
<td>ir-rep-a-ra-ble</td>
<td>not able to be fixed or repaired</td>
<td>Large oil spills can do <em>irreparable</em> damage because thousands of marine animals, including sea otters and seals, died.</td>
</tr>
<tr>
<td>excavated</td>
<td>ex-ca-vat-ed</td>
<td>made hollow; removed material inside of something</td>
<td>Darshewn's parents <em>excavated</em> their backyard since they planned to have a swimming pool built.</td>
</tr>
<tr>
<td>eluded</td>
<td>e-lud-ed</td>
<td>puzzled; stumped</td>
<td>The cause of the disease has <em>eluded</em> researchers for years, but they will continue their research until they identify the cause.</td>
</tr>
<tr>
<td>engraved</td>
<td>en-graved</td>
<td>carved words or designs into a hard surface</td>
<td>To honor the man who founded the small town, a plaque was <em>engraved</em> with his image and placed in the town square.</td>
</tr>
<tr>
<td>prototypes</td>
<td>pro-to-types</td>
<td>models or examples</td>
<td>The Sherlock Holmes stories are the <em>prototypes</em> for modern detective stories.</td>
</tr>
</tbody>
</table>

continued
<table>
<thead>
<tr>
<th>Word</th>
<th>Pronunciation</th>
<th>Definition</th>
<th>Sample Sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>deficiency</td>
<td>de-fi-cien-cy</td>
<td>a lack of something</td>
<td>Brayden’s mother always tells him to drink a lot of milk so he will not have a calcium deficiency.</td>
</tr>
<tr>
<td>galley</td>
<td>gal-ley</td>
<td>kitchen area on a ship</td>
<td>A ship’s galley often has special features, such as overhead cabinets, since there is limited space on a ship.</td>
</tr>
</tbody>
</table>

5. Refer to the partner vocabulary study routine chart, and explain that students will use this routine for reviewing their vocabulary during the cycle in preparation for the cycle test.

Introduce the video.

A team is using the partner vocabulary study routine to practice and learn the vocabulary words.

Show the video. Debrief the video.

Why did the partners put a ✓ and not a + next to some words?

When partners use the vocabulary study routine, they are testing each other. Research has shown that learners who test themselves on vocabulary words are able to remember them better with each test. More practice improves memory of the words and their meanings. This study routine will help you not only to do well on the vocabulary part of the cycle test, but also to build your vocabulary knowledge so you can understand and use more words.

6. Have partners practice the study routine with the next words in the vocabulary list.

Use Random Reporter to have teams report on a new sentence using a vocabulary word.

7. Explain how teams can use the Vocabulary Vault to earn points.

Another way to earn points is by bringing in a word from the vocabulary list used in another place, such as in a magazine, textbook, TV ad, etc. Bring in or copy the sentence in which the word was used, and share it with your team. Write the team name on it, and put it in the Vocabulary Vault. We’ll check the vault at the end of the cycle, and teams can earn points by reporting on their word findings.
Set the Stage

1. Ask students to review their team’s goal for this cycle and assess their progress.
2. Review the Team Celebration Points poster, and challenge teams to build on their successes.
3. Remind students of the texts, authors, and reading objective.

Interactive Read Aloud

1. Tell students that you are going to read aloud. Challenge students to actively listen because you will ask them to restate the ideas in these beginning paragraphs to their partners. Point out that if they have trouble clearly restating the text in their own words, it means they have not fully understood it. They will need to refer to their Clarifying Strategy Card and use strategies to clear up the problem.
2. Read pages 6 and 7 (introduction and paragraph 1, stopping at “Convinced that…”) aloud. Have partners restate the ideas in the paragraph in their own words. Use Think-Pair-Share to prompt the use of clarifying strategies.

Was your partner able to clearly restate the ideas in the paragraph? If not, which clarifying strategies did you use?

*My partner was unclear on the phrase “extensive study.” We knew that the word study means learning about something, but we didn’t know extensive. We had to read on to figure out that extensive means large or major. We figured it out because Clifford used old charts and accounts. It must have taken a great deal of studying to understand all these old documents.*

3. Partner Practice: Have students read paragraph 1 on page 7 aloud to their partners. Listening partners restate the ideas in the paragraph. Use Think-Pair-Share to ask:

How did restating the ideas help you check your understanding?

*When we tried to restate the ideas, we found that we had to stop and reread the second sentence because it was a little confusing. We had to figure out the meaning of the word authenticated because when we tried to restate the ideas, we realized that it was an important word. We looked up authenticated in the dictionary, and it means proved that it is real. They didn’t know if it was the Whydah until it was proved, or authenticated.*
Teamwork

(20 minutes)

Partner Prep

1. Refer students to the teamwork routines for partner reading in their team folders, and review the routine.

2. Have students read and restate: pages 7 (beginning with “Clifford had...”) and 8 aloud with partners.

3. Circulate and check for comprehension, restating of main ideas, and evidence of strategy use, for example, the use of sticky notes. Give students feedback. Prompt and reinforce their discussions.

Team Discussion

1. Prepare students for team discussion. Refer them to the team discussion role cards in their team folders, and review them. Point out that teams will discuss their sticky-note problems and then go on to a discussion of the other Team Talk questions.

- First
  1. Read the question.
  2. Make sure everyone practiced active listening.
  3. Ask if everyone heard and understood the question.
  4. Identify the right rubric.

- Second
  1. Restate the question in your own words.
  2. Use the rubric to form your answer.
  3. Ask if everyone heard your answer.
  4. Tell and explain your answer.

- Third
  1. Restate your teammate’s answer.
  2. Agree and add additional information, or disagree and explain why.
  3. Ask if everyone heard your answer.

- Finally
  1. Restate the group’s agreed-upon answer.
  2. Check to make sure each teammate understands the answer.
  3. Make sure each teammate is ready for the Lightning Round.
  4. Pass the role cards to the right.

2. Remind teams to use the rubrics to prepare for the Lightning Round.

3. Preview the Team Talk questions.
### Team Talk Questions

1. What is a word, phrase, or passage that a team member marked with a sticky note? Explain which clarifying strategies you used to figure out the marked word or phrase. How did figuring out the word, phrase, or passage help you better understand the text?  

   **CV** (strategy-use rubric)  
   100 = A team member marked the word yielded with a sticky note. He’s seen the word yield on a traffic sign, but he didn’t know the meaning of yielded in this text. The strategy he used to clarify the word was reading on for clues in the sentence. He figured out from the phrase “new information” that yielded must mean produced or resulted in. This makes sense because a lot of research was done, so the result was new information.  
   90 = A team member marked the word yielded with a sticky note. He’s seen the word yield on a traffic sign, but he didn’t know the meaning of yielded in this text. The strategy he used to clarify the word was reading on for clues in the sentence. He figured out from the phrase “new information” that yielded must mean produced or resulted in.  
   80 = A team member marked the word yielded with a sticky note. He’s seen the word yield on a traffic sign, but he didn’t know the meaning of yielded in this text.  

2. What can be learned from the excavations of the Whydah shipwreck?  

   **MI, SA** (Team Talk rubric)  
   100 = A lot of information about pirates’ everyday lives can be learned from the excavations of the Whydah shipwreck. For example, writing instruments and inkwells show that some pirates could write. Gaming tokens show how pirates passed the time on a ship. Also, carpenter’s tools show that pirates had to construct items. Artifacts at the Whydah shipwreck site provide various clues about pirates’ lives.  
   90 = A lot of information about pirates’ everyday lives can be learned from the excavations of the Whydah shipwreck. Writing instruments and inkwells show that some pirates could write. Gaming tokens show how pirates passed the time.  
   80 = A lot of information about pirates’ everyday lives can be learned from the excavations.  

3. Describe what crews on pirate ships were like.  

   **MI, SA** (Team Talk rubric)  
   100 = Crews on pirate ships were composed of people from various backgrounds. For example, the Whydah’s crew members included Englishmen and former slaves. Most pirate ships were multinational. Some were even multiethnic. However, once pirates were on board pirate ships, they simply identified themselves as pirates. Although some people may believe that all pirates came from the same background, this was not the case.  
   90 = Crews on pirate ships had people from different backgrounds. The Whydah’s crew members included former slaves. Most pirate ships were multinational. Some were even multiethnic.  
   80 = Crews on pirate ships had people from different backgrounds.  

(continued)
### Team Talk Questions continued

4. Why do you think the author includes the sidebar on page 7? [AP, DC, SA]
   (Team Talk rubric)
   
   A. to explain that gold and silver were recovered
   
   B. to explain that Clifford isn’t just a treasure hunter
   
   C. to explain the museum in Provincetown
   
   D. to explain that a website about the *Whydah* exists

   Why is it important to explain this?

   100 = It is important to explain that Clifford isn’t just a treasure hunter because people thought he only cared about what the treasures were worth, but this wasn’t true. Although Clifford found a lot of artifacts, he didn’t sell any. He opened a museum to display his findings so visitors can learn about the men who sailed the Whydah. This shows that he wants people to better understand history. The sidebar helps a reader understand that Clifford did not use his findings for his own benefit.

   90 = It is important to explain that Clifford isn’t just a treasure hunter because people thought he only cared about what the treasures were worth, but this wasn’t true. Clifford found a lot of artifacts, but he didn’t sell any. He opened a museum so visitors can learn about the men who sailed the Whydah.

   80 = It is important to explain that Clifford isn’t just a treasure hunter because people thought he only cared about what the treasures were worth, but this wasn’t true.

5. Which word from the vocabulary list belongs in the blank? How do you know? [CV]

   Kamar’s mom always warns him not to listen to music that is too loud because she thinks it will cause ________ damage to his hearing.

   Irreparable belongs in the blank. Since Kamar’s mom is warning him, she is worried about something that may cause a problem. If something causes a problem, it needs to be fixed. Also, the word damage is a clue because damage can’t always be fixed.
Class Discussion (15 minutes)

Lightning Round
1. Remind students that Random Reporters will earn team celebration points for quality responses. Remind students that you will record points on the Team Celebration Points poster and that they can keep track of points that they earn on their team score sheets.

2. Use Random Reporter to have teams share their strategy-use responses (question #1). Display and use the strategy-use rubric to evaluate responses and give specific feedback. Award team celebration points for teams with 100-point responses. Record individual scores on the teacher cycle record form.

3. Use Random Reporter to have teams share their Team Talk responses (questions #2–4). Display and use the Team Talk rubric to evaluate responses and give specific feedback. Award team celebration points for teams with 100-point responses. Record individual scores on the teacher cycle record form.

Celebrate
1. Tally the team scores on the poster, and celebrate teams that are accumulating points. Have teams reflect on the following questions:

   How many points did your team earn today?

   How can your team earn more points?

   Remind students that top-scoring teams will earn bonus points that will be added to their cycle scores.

   • Something to cheer about: Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.

2. As a reminder, refer students to the Read and Respond homework assignment described in their student editions.
<table>
<thead>
<tr>
<th>Word</th>
<th>Pronunciation</th>
<th>Definition</th>
<th>Sample Sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>enticing</td>
<td>en-tic-ing</td>
<td>appealing; interesting</td>
<td>The commercial for the movie was <em>enticing</em>, so Marah made plans to see it in the movie theater.</td>
</tr>
<tr>
<td>(adjective)</td>
<td>(en-TAHYS-ing)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>irreparable</td>
<td>ir-rep-a-ra-ble</td>
<td>not able to be fixed or repaired</td>
<td>Large oil spills can do <em>irreparable</em> damage because thousands of marine animals, including sea otters and seals, died.</td>
</tr>
<tr>
<td>(adjective)</td>
<td>(ih-REP-er-uh-buhl)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>excavated</td>
<td>ex-ca-vat-ed</td>
<td>made hollow; removed material inside of something</td>
<td>Darshewnn’s parents <strong>excavated</strong> their backyard since they planned to have a swimming pool built.</td>
</tr>
<tr>
<td>(verb)</td>
<td>(EKS-kuh-veyt-id)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>eluded</td>
<td>e-lud-ed</td>
<td>puzzled; stumped</td>
<td>The cause of the disease has <em>eluded</em> researchers for years, but they will continue their research until they identify the cause.</td>
</tr>
<tr>
<td>(verb)</td>
<td>(ih-LOOD-id)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>engraved</td>
<td>en-graved</td>
<td>carved words or designs into a hard surface</td>
<td>To honor the man who founded the small town, a plaque was <strong>engraved</strong> with his image and placed in the town square.</td>
</tr>
<tr>
<td>(verb)</td>
<td>(en-GREYVd)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>prototypes</td>
<td>pro-to-types</td>
<td>models or examples</td>
<td>The Sherlock Holmes stories are the <strong>prototypes</strong> for modern detective stories.</td>
</tr>
<tr>
<td>(noun)</td>
<td>(PROH-tuh-tahypz)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>deficiency</td>
<td>de-fi-cien-cy</td>
<td>a lack of something</td>
<td>Brayden’s mother always tells him to drink a lot of milk so he will not have a calcium <em>deficiency</em>.</td>
</tr>
<tr>
<td>(noun)</td>
<td>(dih-FISH-uhn-see)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>galley</td>
<td>gal-ley</td>
<td>kitchen area on a ship</td>
<td>A ship’s <strong>galley</strong> often has special features, such as overhead cabinets, since there is limited space on a ship.</td>
</tr>
<tr>
<td>(noun)</td>
<td>(GAL-ee)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Lesson 3

**Reading Objective:** Use clarifying strategies to figure out the meanings of words, phrases, and passages.

**Teacher Background**

Today students will read the first half of “Navigation.” This part of the article focuses on how pirates navigated their ships at sea, though this posed many challenges. For example, pirates could not determine their longitude. Pirates often used indirect routes and routes that didn’t take advantage of the best currents. There is also a description of how pirates identified their latitude.

**Active Instruction**

(25 minutes)

**Partner Vocabulary Study**

1. Display the vocabulary words. Have students use the vocabulary study routine as they re-rate their knowledge of each vocabulary word as they arrive for class.

- **Partner Vocabulary Study**

  1. Rate your knowledge of each vocabulary word.
  2. Discuss with your partner a vocabulary word you know and one that needs further study.
  3. Take turns pronouncing the vocabulary words, telling their meanings, and using the words in new sentences.
  4. Listening partners give thumbs up if the word is used correctly or add ideas to help their partners.

- I know this word and can use it.
- This word looks familiar; it has something to do with...
- I don’t know this word; it’s totally new to me.

2. Spot check the Read and Respond homework.

**Vocabulary**

1. Have teams discuss their ratings of the words. Ask teams to 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 “?”.

2. Use Random Reporter to have the teams share one word that they know and one word that they need to study further. Use Random Reporter to have teams report on a new sentence using a vocabulary word. Award team celebration points.
3. Remind teams that if they find a word from the vocabulary list used in another place, such as in a magazine, textbook, TV ad, etc., they can bring in or copy the sentence in which the word was used and put it in the Vocabulary Vault to earn team points.

**Set the Stage**

1. Ask students to review their team’s goal for this cycle and assess their progress.
2. Review the Team Celebration Points poster, and challenge teams to build on their successes.
3. Remind students of the texts, authors, and reading objective.

**Interactive Read Aloud**

1. Tell students that you are going to read aloud. Challenge students to actively listen because you will ask them to restate the ideas in these initial paragraphs with their partners. Point out that if they have trouble clearly restating the text in their own words, it means they have not fully understood it. They will need to refer to their Clarifying Strategy Card and use strategies to clear up the problem.

   *Partner pairs: Read aloud/think aloud with the next passage to practice the skill/strategy.*

   *Teacher: Read aloud.*
   *Students: Practice the skill or strategy.*

2. Read page 35 (paragraph 1) aloud. Have partners restate the ideas in the paragraph in their own words. Use **Think-Pair-Share** to prompt the use of clarifying strategies.

   **Was your partner able to clearly restate the ideas in the paragraph? If not, which clarifying strategies did you use?**

   *My partner had trouble explaining how pirates traveled across the Atlantic and around the Caribbean. She didn’t know what the word interpretations means. We identified the base word, interpret. This means to figure out the meaning of something, so interpretations must mean meanings. We reread, and my partner understood that by using the meaning of the ocean’s color or the positions of stars, pirates could travel.*

3. Partner Practice: Have students read paragraph 2 (stopping at “But sailors and…”) on page 35 aloud to their partners. Listening partners restate the ideas in the paragraph. Use **Think-Pair-Share** to ask:

   **To check your understanding, why was navigation important to pirates?**

   *Navigation was important to pirates because it allowed them to determine the location of their ship, how far the ship had traveled, and which direction the ship was traveling in. Without navigation, pirates wouldn’t have known where their ship was or where it was going.*
Teamwork (20–30 minutes)

Partner Prep
1. Refer students to the teamwork routines for partner reading in their team folders, and review the routine.
3. Circulate and check for comprehension, restating of main ideas, and evidence of strategy use, for example, the use of sticky notes. Give students feedback. Prompt and reinforce their discussions.

Team Discussion
1. Prepare students for team discussion. Refer them to the team discussion role cards in their team folders, and review them. Point out that teams will discuss their sticky-note problems and then go on to a discussion of the other Team Talk questions.

First
Read the question.
1. Read the question to your teammate.
2. Make sure everyone practices active listening.
3. Ask if everyone heard and understood the question.
4. Identify the right rubric.

Second
Answer the question.
1. Restate the question in your own words.
2. Use the rubric to form your answer.
3. Tell and explain your answer.
4. Ask if everyone heard your answer.

Third
Agree or disagree.
1. Restate your teammate’s answer.
2. Agree and add additional information, or disagree and explain why.
3. Ask if everyone heard your answer.

Finally
Summarize.
1. Restate the group’s agreed-upon answer.
2. Check to make sure each teammate understands the answer.
3. Make sure each teammate is ready for the Lightning Round.
4. Pass the role cards to the right.

2. Remind teams to use the rubrics to prepare for the Lightning Round.
3. Preview the Team Talk questions.
**Team Talk Questions**

1. What is a word, phrase, or passage that a team member marked with a sticky note? Explain which clarifying strategies you used to figure out the marked word or phrase. How did figuring out the word, phrase, or passage help you better understand the text? [CV] (strategy-use rubric)

   100 = On page 36, we read that sailors had almanacs of the declination of Polaris, but we didn’t know the word almanacs. We couldn’t figure it out from clues in the text, so we looked it up in the dictionary. Almanacs are books that have a calendar of the year and astronomical information. They contain times for sunrises and phases of the moon. So that helped us understand why almanacs for positions of stars were important to sailors when they were using celestial navigation.

   90 = On page 36, we read that sailors had almanacs of the declination of Polaris, but we didn’t know the word almanacs. We couldn’t figure it out from clues in the text, so we looked it up in the dictionary. Almanacs are books that have a calendar of the year and astronomical information.

   80 = On page 36, we read that sailors had almanacs of the declination of Polaris, but we didn’t know the word almanacs. We couldn’t figure it out from clues in the text.

2. Did not knowing their longitude keep pirates from sailing during the Golden Age of Piracy? Explain. [MI, SA] (Team Talk rubric)

   100 = Not knowing their longitude did not keep pirates from sailing because they sailed without it. Once pirates identified their destination’s latitude, they sailed north or south. Then, they sailed east or west along the latitude line. This was referred to as easting or westing. Although many years ago pirates did not know their longitude, they used another method so they could still sail.

   90 = Not knowing their longitude did not keep pirates from sailing because they sailed without it. Once pirates found the latitude of the place they were traveling to, they sailed north or south. Then, they sailed east or west.

   80 = It did not keep pirates from sailing because they sailed without it.

3. How did easting and westing affect pirates? [DC, RE, SA] (Team Talk rubric)

   100 = Although easting and westing allowed pirates to travel, it meant that pirates did not always use the best routes. As a result of easting and westing, pirates used indirect routes. Long routes meant that a crew could be in trouble because the supply of food and water could become low. Easting and westing helped pirates sail, but it created a lot of problems for them.

   90 = Easting and westing let pirates travel, but it meant that pirates did not always use the best routes. Pirates used indirect routes. Long routes meant that the supply of food and water could become low.

   80 = Easting and westing let pirates travel, but it meant that pirates did not always use the best routes.

continued
Team Talk Questions continued

4. Why was measuring the altitude of the sun or a star important to pirates? [MI, DC, SA] (Team Talk rubric)
   100 = Measuring altitude was important to pirates because it helped them identify latitude. Since pirates couldn’t identify their longitude, they needed to know their latitude to figure out which direction to sail. They used a mariner’s quadrant to measure the altitude of the sun or a star above the horizon and made calculations to figure out their latitude. Without knowing the altitude of the sun or stars, pirates may not have been able to sail.
   90 = Altitude was important to pirates because it helped them figure out latitude. They used a mariner’s quadrant to measure the altitude of the sun or a star above the horizon and then figured out their latitude.
   80 = Altitude was important to pirates because it helped them figure out latitude.

5. What is a synonym for the word enticing? What is an antonym for the word enticing? (Reminder: An antonym is a word meaning the opposite.) [CV]
   The word enticing means appealing, so a synonym is the word pleasant. An antonym for enticing is disgusting.

4. Circulate and give feedback to teams and students. Use rubrics to give specific feedback. Ask questions to encourage further discussion. Record individual scores on the teacher cycle record form.

5. Award team celebration points for good team discussions that demonstrate 100-point responses.

Class Discussion (20 minutes)

Lightning Round

1. Remind students that Random Reporters will earn team celebration points for quality responses. Remind students that you will record points on the Team Celebration Points poster and that they can keep track of points that they earn on their team score sheets.

2. Use Random Reporter to have teams share their strategy-use responses (question #1). Display and use the strategy-use rubric to evaluate responses and give specific feedback. Award team celebration points for teams with 100-point responses. Record individual scores on the teacher cycle record form.

3. Use Random Reporter to have teams share their Team Talk responses (questions #2–4). Display and use the Team Talk rubric to evaluate responses and give specific feedback. Ask other teams to agree, disagree, or add on to responses. Award team celebration points for teams with 100-point responses. Record individual scores on the teacher cycle record form.
Celebrate team successes!

1. Tally the team scores on the poster, and celebrate teams that are accumulating points. Have teams reflect on the following questions:

   **How many points did your team earn today?**

   **How can your team earn more points?**

   Remind students that top-scoring teams will earn bonus points that will be added to their cycle scores.

   • Something to cheer about: Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.

2. As a reminder, refer students to the Read and Respond homework assignment described in their student editions.

The top team chooses a cheer.

Remind students of the Read and Respond homework assignment.
Lesson 4

Reading Objective: Use clarifying strategies to figure out the meanings of words, phrases, and passages.

Teacher Background

Today students will finish reading “Navigation,” which describes some ancient technology that pirates used to help them navigate their ships. This technology includes the mariner’s quadrant and the mariner’s astrolabe. There is also a description of the quest that began in the early 1700s to determine longitude.

Active Instruction

(25 minutes)

Partner Vocabulary Study

1. Display the vocabulary words. Have students use the vocabulary study routine as they rerate their knowledge of each vocabulary word as they arrive for class.

2. Spot check the Read and Respond homework.

Vocabulary

1. Have teams discuss their ratings of the words. Ask teams to 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 “?”.

2. Use Random Reporter to have the teams share one word that they know and one word that they need to study further. Use Random Reporter to have teams report on a new sentence using a vocabulary word. Award team celebration points.

3. Remind teams that if they find a word from the vocabulary list used in another place, such as in a magazine, textbook, TV ad, etc., they can bring in or copy the sentence in which the word was used and put it in the Vocabulary Vault to earn team points.

Set the Stage

1. Ask students to review their team’s goal for this cycle and assess their progress.

2. Review the Team Celebration Points poster, and challenge teams to build on their successes.

3. Remind students of the texts, authors, and reading objective.
Interactive Read Aloud

1. Tell students that you are going to read aloud. Challenge students to actively listen because you will ask them to restate the ideas in these initial paragraphs to their partners. Point out that if they have trouble clearly restating the text in their own words, it means that they have not fully understood it. They will need to refer to their Clarifying Strategy Card and use strategies to clear up the problem.

2. Read pages 36 (starting at “Tech of the Day”) and 37 (stopping at “The bob provides…”) aloud. Have partners restate the ideas in the paragraph in their own words. Use Think-Pair-Share to prompt the use of clarifying strategies.

**Was your partner able to clearly restate the ideas in the paragraph? If not, which clarifying strategies did you use?**

*My partner had trouble explaining the quadrant. She didn’t understand what the quadrant was for or the origin of its name. We reread and looked at the picture on page 36 so we better understood the quadrant. When we reread, we saw that the quadrant was used to measure latitude. The picture also helped her understand that a quadrant is part of a circle.*

3. Partner Practice: Have students read page 37 (starting at “The bob provides…” and stopping at paragraph 1) aloud to their partners. Listening partners restate the ideas in the paragraph. Use Think-Pair-Share to ask:

**To check your understanding, why was a plumb bob important?**

*A plumb bob was important because it allowed the string to hang straight down. Without the plumb bob, the string might have swung around, and then the quadrant wouldn’t have worked correctly.*

---

**Teamwork (20 minutes)**

**Partner Prep**

1. Prepare students for partner reading. Have students read and restate: *pages 37 (paragraph 1) and 38 aloud with partners.*

2. Circulate and check for comprehension, restating of main ideas, and evidence of strategy use, such as the use of sticky notes. Give students feedback. Prompt and reinforce their discussions.
Team Discussion

1. Prepare students for team discussion. Refer them to the team discussion role cards in their team folders, and review them. Point out that teams will discuss their sticky-note problems and then go on to a discussion of the other Team Talk questions.

2. Remind teams to use the rubrics to prepare for the Lightning Round.

3. Preview the Team Talk questions.

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<th>Team Talk Questions</th>
</tr>
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<tbody>
<tr>
<td>1. What is a word, phrase, or passage that a team member marked with a sticky note? Explain which clarifying strategies you used to figure out the marked word or phrase. How did figuring out the word, phrase, or passage help you better understand the text? [CV] (strategy-use rubric)</td>
</tr>
</tbody>
</table>

100 = A team member marked the word incentive because he could not pronounce it. The clarifying strategy he used was to break the word into chunks and blend it. That helped him pronounce it, and then he read on to look for clues about the meaning. He figured out that an incentive is something that makes you want to do something because the incentive for finding a way to determine longitude was a reward. The reward made people want to find a way to determine longitude.

90 = A team member marked the word incentive because he could not pronounce it. The clarifying strategy he used was to break the word into chunks and blend it. That helped him pronounce it, and then he read on to look for clues about the meaning. He figured out that an incentive is something that makes you want to do something.

80 = A team member marked the word incentive because he could not pronounce it and didn’t think he knew the meaning.

continued
Team Talk Questions *continued*

2. Explain why compasses were not always helpful during earlier centuries.  
   [DC, RE, SA] (Team Talk rubric)
   
   **100** = **Compasses were not always helpful during earlier centuries because they often provided sailors with incorrect information.** There was a lot of iron on ships, so compasses did not always work properly. **For example,** iron nails and natural metals affected the compasses' magnetic readings. **As a result,** iron balls were placed below a compass to prevent iron's negative effects. **Despite** the belief that compasses are a helpful tool, this wasn’t always true.

   **90** = **Compasses were not always helpful during earlier centuries because they often gave sailors wrong information.** There was a lot of iron on ships, so compasses did not always work. Natural metals affected the compasses' magnetic readings. Iron balls were placed under a compass to fix this.

   **80** = **Compasses were not always helpful because they often gave sailors wrong information.**

3. Describe the importance of John Harrison's invention.  
   [DC, RE, SA] (Team Talk rubric)
   
   **100** = **John Harrison's invention made it easier to determine a ship's longitude.** **Prior** to Harrison's invention, clocks ran according to the back and forth movement of a pendulum. **However,** ships rolled due to the wind, so clocks were not accurate. **Therefore,** longitude couldn’t be determined. Harrison’s chronometer used springs and metals working together. Harrison won a prize for his successful invention. **Thanks to Harrison's invention, clocks were much more accurate at sea, so sailors could determine both their latitude and longitude and know their position.**

   **90** = **John Harrison’s invention made it easier to determine a ship’s longitude.** **Before** Harrison’s invention, clocks ran on the back and forth movement of a pendulum. **Ships rolled,** so clocks were not accurate. **Harrison’s chronometer used springs and metals working together.**

   **80** = **His invention made it easier to determine a ship’s longitude.**

4. In paragraph 2 on page 38, it says “Scientists found a way to neutralize this effect.” What does the phrase “neutralize this effect” mean? How did you clarify it?  
   [CV] (strategy-use rubric)
   
   The phrase “neutralize this effect” means that the effect could be stopped from happening. We recognized the word part neutral. If you’re neutral about something, you don’t have feelings one way or another. This didn’t seem to relate to this sentence, so we looked for clues. There were false readings, but “found a way” is a clue that scientists solved the problem. When they placed the iron balls under the compass, it stopped natural metals from affecting the compass's readings.

5. Choose a word from the vocabulary list, and write a meaningful sentence using the word correctly.  
   [CV]
   
   Accept a sentence that shows that the student knows the meaning of the word and can use it correctly. **For example:** Luis was frustrated when his teacher called on him to solve a math problem, but the answer eluded him.
4. Circulate and give feedback to teams and students. Use rubrics to give specific feedback. Ask questions to encourage further discussion. Record individual scores on the teacher cycle record form.

5. Award team celebration points for good team discussions that demonstrate 100-point responses.

**Class Discussion**

(20 minutes)

**Lightning Round**

1. Remind students that Random Reporters will earn team celebration points for quality responses. Remind students that you will record points on the Team Celebration Points poster and that they can keep track of points that they earn on their team score sheets.

2. Use **Random Reporter** to have teams share their strategy-use responses (question #1). Display and use the strategy-use rubric to evaluate responses and give specific feedback. Award team celebration points for teams with 100-point responses. Record individual scores on the teacher cycle record form.

3. Use **Random Reporter** to have teams share their Team Talk responses (questions #2–4). Display and use the Team Talk rubric to evaluate responses and give specific feedback. Ask other teams to agree, disagree, or add on to responses. Award team celebration points for teams with 100-point responses. Record individual scores on the teacher cycle record form.

**Celebrate**

1. Tally the team scores on the poster, and celebrate teams that are accumulating points. Have teams reflect on the following questions:

   **How many points did your team earn today?**

   **How can your team earn more points?**

   Remind students that top-scoring teams will earn bonus points that will be added to their cycle scores.

   - **Something to cheer about:** Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.

2. As a reminder, refer students to the Read and Respond homework assignment described in their student editions.
Lesson 5

Writing Objective: Write a quality answer that includes supporting facts or examples.

Teacher Background
In this lesson, students will practice writing a paragraph in preparation for the cycle test. Emphasize for students the qualities of an informative paragraph, beginning with a clearly introduced topic followed by examples or facts that support the topic and ending with a closing statement that supports the information.

Active Instruction
(10 minutes)

Partner Vocabulary Study
1. Display the vocabulary words. Have students use the vocabulary study routine as they rerate their knowledge of each vocabulary word as they arrive for class.

<table>
<thead>
<tr>
<th>Partner Vocabulary Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Rate your knowledge of each vocabulary word.</td>
</tr>
<tr>
<td>2. Discuss with your partner a vocabulary word you know and one that needs further study.</td>
</tr>
<tr>
<td>3. Take turns pronouncing the vocabulary words, telling their meanings, and using the words in new sentences.</td>
</tr>
<tr>
<td>4. Listening partners give thumbs up if the word is used correctly or add ideas to help their partners.</td>
</tr>
</tbody>
</table>

2. Spot check the Read and Respond homework.

Vocabulary
1. Have teams discuss their ratings of the words. Ask teams to 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 “?”.

2. Use Random Reporter to have the teams share one word that they know and one word that they need to study further. Use Random Reporter to have teams report on a new sentence using a vocabulary word. Award team celebration points.

3. Remind teams that if they find a word from the vocabulary list used in another place, such as in a magazine, textbook, TV ad, etc., they can bring in or copy the sentence in which the word was used and put it in the Vocabulary Vault to earn team points.

Students use the vocabulary study routine to rate their knowledge of each vocabulary word:

+ I know this word and can use it.
✓ This word looks familiar; it has something to do with...
? I don’t know this word; it’s totally new to me.

Teams discuss their vocabulary ratings.

Review Vocabulary Vault.
Set the Stage

1. Ask students to review their team’s goal for this cycle and assess their progress.
2. Review the Team Celebration Points poster, and challenge teams to build on their successes.
3. Remind students of the texts, authors, and writing objective.
4. Remind students that this cycle they have been using the Team Talk rubric to help them prepare quality answers that include supporting examples or facts. Refer students to the writing objective. Tell them that today they will practice writing a quality answer to a question in preparation for the test in the next lesson.
5. Refer students to the following writing prompt in their student editions. Read the writing prompt aloud.

<table>
<thead>
<tr>
<th>Writing Prompt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why is it important for artifacts to be handled properly? Explain and include facts or examples to support your answer.</td>
</tr>
</tbody>
</table>

Use **Think-Pair-Share** to ask:

**Read the prompt. What is it asking you to do: support a claim with reasons, explain ideas or information on a topic, or write a literary response? How do you know?**

*The prompt is asking me to explain information on a topic. I know because it has the word explain, and I have to share information about handling artifacts properly, which is the topic.*

6. Refer students to the following writer’s guide in their student editions. Point out that this guide for writing to inform or explain is the criteria for writing. Point out that using the writer’s guide will help them write a quality response.

<table>
<thead>
<tr>
<th>Writing to Inform or Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ideas</strong></td>
</tr>
<tr>
<td>• Clearly introduce the topic.</td>
</tr>
<tr>
<td>• Develop the topic with relevant details.</td>
</tr>
<tr>
<td><strong>Organization</strong></td>
</tr>
<tr>
<td>• Begin by introducing the topic.</td>
</tr>
<tr>
<td>• In the middle, provide facts, examples, or events that help a reader understand the information.</td>
</tr>
<tr>
<td>• End with a closing statement that supports the information.</td>
</tr>
<tr>
<td><strong>Style</strong></td>
</tr>
<tr>
<td>• Use words and phrases that help a reader understand how the facts or events are related.</td>
</tr>
<tr>
<td>• Include details or examples that help a reader make a mind movie.</td>
</tr>
<tr>
<td><strong>Mechanics</strong></td>
</tr>
<tr>
<td>• Use correct punctuation, capitalization, spelling, and grammar.</td>
</tr>
</tbody>
</table>
Briefly review the guide, noting the four aspects of writing: ideas, organization, style, and mechanics.

Use Think-Pair-Share to ask:

**Which guideline relates to our writing objective: to write a quality answer that includes supporting facts or examples?**

*Under Organization, the guideline to provide facts, examples, or events that help a reader understand the information is related to the writing objective.*

7. Tell students that this 10-minute writing project is practice to prepare them to write a quality answer for the writing section (part II) of the cycle test. Remind them that this section of the test is worth one third of their test score.

**Model a Skill**

Tell students that before writing, it can be useful to organize their ideas. Demonstrate the use of a graphic organizer for prewriting. A sample graphic organizer follows.

<table>
<thead>
<tr>
<th>Sample Graphic Organizer</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>handling artifacts properly</th>
</tr>
</thead>
<tbody>
<tr>
<td>learn about the past</td>
</tr>
<tr>
<td>activities</td>
</tr>
<tr>
<td>coins</td>
</tr>
<tr>
<td>clothing</td>
</tr>
</tbody>
</table>
**Teamwork**

(20 minutes)

**Independent Work**

Tell students that they have 10 minutes to plan and write drafts of their responses to the writing prompt. Remind them to write on every other line to leave room for revisions. Suggest that they refer to the writing prompt to be sure that they include all the required elements and to the writer's guide to check the quality of their response.

**Team Discussion**

1. Refer students to the peer feedback checklist in their team folders, and review how to get/give feedback.

<table>
<thead>
<tr>
<th>Peer Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> Read your writing project to your teammates. Remember to read with expression.</td>
</tr>
<tr>
<td><strong>2.</strong> Ask each of the questions below. Note your teammates’ suggestions in the margin of your writing project.</td>
</tr>
<tr>
<td>– Did I identify a problem I had in understanding the text?</td>
</tr>
<tr>
<td>– Did I describe the problem and which strategy I used to solve it?</td>
</tr>
<tr>
<td>– Did I explain how using the strategy helped me better understand the text?</td>
</tr>
<tr>
<td><strong>3.</strong> Make revisions.</td>
</tr>
</tbody>
</table>

2. Have students share their drafts in teams. Allow 5 minutes for students to revise their writing projects based on feedback and to edit them using the editing checklist.

<table>
<thead>
<tr>
<th>Editing Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ capitalization and punctuation</td>
</tr>
<tr>
<td>✓ words spelled correctly</td>
</tr>
<tr>
<td>✓ no sentence fragments or run-on sentences</td>
</tr>
<tr>
<td>✓ verb tense consistent</td>
</tr>
<tr>
<td>✓ Subjects and verbs agree.</td>
</tr>
<tr>
<td>✓ standard English</td>
</tr>
</tbody>
</table>

3. Have teams put their writing projects in a pile in the middle of their tables so a writing project can be randomly selected.
Class Discussion

(30 minutes)

Lightning Round
Randomly select a writing project from one or two teams’ piles without revealing their authors. Display a writing project, and read it aloud.

Refer students to the writer’s guide for writing to inform or explain and the writing objective—to write a quality answer that includes supporting facts or examples.

Using the writer’s guide, discuss and evaluate the selected writing project(s) with the class.

For example, ask:

- Does the writer introduce the topic clearly?
- Does the writer include supporting facts or examples to help a reader understand the information?
- Does the writer end with a closing statement that supports the information?
- Does the writer use appropriate academic language and full sentences?

Award points to teams whose writing projects meet the criteria. Record these points on the team poster.

Reflection on Writing
Have students reflect on their use of the writing process. Ask:

- How did creating and using a graphic organizer work for you? How did it help you write your draft?
  
  Answers will vary.

- What was the most useful feedback that you received? How did it affect your revisions?
  
  Answers will vary.
Celebrate

1. Tally the team scores on the poster, and celebrate teams that are accumulating points. Have teams reflect on the following questions:

   **How many points did your team earn today?**

   **How can your team earn more points?**

   Remind students that top-scoring teams will earn bonus points that will be added to their cycle scores.

   • Something to cheer about: Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.

2. As a reminder, refer students to the Read and Respond homework assignment described in their student editions.
Writing Prompt

Why is it important for artifacts to be handled properly? Explain and include facts or examples to support your answer.

Writing to Inform or Explain

| Ideas       | Clearly introduce the topic.  
|            | Develop the topic with relevant details.  |
| Organization| Begin by introducing the topic.  
|            | In the middle, provide facts, examples, or events that help a reader understand the information.  
|            | End with a closing statement that supports the information.  |
| Style      | Use words and phrases that help a reader understand how the facts or events are related.  
|            | Include details or examples that help a reader make a mind movie.  |
| Mechanics  | Use correct punctuation, capitalization, spelling, and grammar.  |
Lesson 6

Reading Objective: Use clarifying strategies to figure out the meanings of words, phrases, and passages.

Writing Objective: Write a quality answer that includes supporting facts or examples.

Teacher Background
During today’s cycle test, students will use strategies to clarify what they read and will identify which strategies they used to clear up anything confusing. Students may use the Clarifying Strategy Card as they read and answer the test questions.

Be prepared to pass out a colored pen to each student. After taking the test, students will discuss their answers with their teams, receive feedback, and have the opportunity to improve their answers using the colored pens. When you are scoring the test, score students’ original answers, and add extra points for improved answers.

For today’s assessment reading, students will read “What’s for Lunch?” This article describes the foods that pirates ate and the parts of a ship where food was stored, prepared, and eaten. For example, cooking was done in the galley. There is also a description of the different dishes and utensils that pirates used to eat, including that pirates ate their meals at night to avoid seeing the insects that infested their food.

Active Instruction

(5 minutes)

Partner Vocabulary Study
1. Display the vocabulary words. Have students use the vocabulary study routine as they rerate their knowledge of each vocabulary word as they arrive for class.
2. Spot check the Read and Respond homework.

Set the Stage
1. Ask students to review their team’s goal for this cycle and assess their progress.
2. Review the Team Celebration Points poster, and challenge teams to build on their successes.
3. Remind students of the texts, authors, and reading and writing objectives.
4. Remind teams that if they find a word from the vocabulary list used in another place, such as in a magazine, textbook, TV ad, etc., they can bring in or copy the sentence in which the word was used and put it in the Vocabulary Vault to earn team points.
Prepare Students for the Test

(5 minutes)

Partner Review
1. Remind students that they have been practicing using clarifying strategies and writing a quality answer that includes supporting facts or examples. Tell students that they will use this skill as they take the cycle test.

2. Have partners review their notes for this cycle. Allow 2 or 3 minutes for this activity.

Test Directions
1. Remind students that the test is independent work. Students should not ask their partners for help as they read, but they may use sticky notes if they would like.

2. Distribute the test so students can preview the questions. Point out that some of the test questions are multiple choice for which they will choose the best answer. Other questions require them to write a short answer. Part II of the cycle test requires them to write a long answer. Remind them that their writing project was practice for writing the long answer for part II of the test.

3. Point out that questions #1, #2, and #5 ask about clarifying strategies.

4. Ask students to identify key words and phrases in question #5.

5. “Pirates tapped their biscuits to knock the weevils out before eating.”

If your partner could not pronounce the word weevils, which strategies should he or she try? Which strategies should your partner try to figure out the meaning of weevils? [CV]

5. Introduce the text that students will read. Tell what it is about, but do not give additional information or details.

Today you will read about what food was like on pirate ships.
Tell students that they have 30 minutes for the test and that they may begin. Give students a 5-minute warning before the end of the test.

### Teamwork

(10 minutes)

**Team Discussion**

1. Pass out a colored pen to each student.
2. Explain the student routine for team discussions after the test.

<table>
<thead>
<tr>
<th>After the Test</th>
<th></th>
</tr>
</thead>
</table>
| **Independent Strategy Use** | • Describe your strategy use.  
• How did you resolve a sticky note? |
| **Skill-Question Discussion** | • Discuss the skill question in teams.  
• Say the question in your own words, and tell what key words or phrases you identified.  
• Read your answer to the team.  
• Think about what you like about your answer and what you could have said differently.  
• Use your colored pen to add comments to your answer. |

3. Have teams discuss their answers to the test questions. As you monitor team discussions, ask additional questions to prompt their thinking about the important ideas in the reading and about the skills and strategies that they have been using.

### Class Discussion

(10 minutes)

**Lightning Round**

1. Use Random Reporter to have teams share team discussions of the test questions and explain their thinking.
2. Award team celebration points.
3. Collect test answers. Score original answers, and add extra points for improved answers.
Celebrate

1. Tally the team scores on the poster, and celebrate teams that are accumulating points. Have teams reflect on the following questions:

   **How many points did your team earn today?**

   **How can your team earn more points?**

   Remind students that top-scoring teams will earn bonus points that will be added to their cycle scores.

   - Something to cheer about: Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.

2. As a reminder, refer students to the Read and Respond homework assignment described in their student editions.
Cycle 2 Test
Clarify Words and Ideas

Directions: Read “What’s for Lunch?,” pages 21 and 22. Answer the following questions on a separate piece of paper. You may use the Clarifying Strategy Card.

Part I. Comprehension (100 points)
1. “I'll bet those Brussels sprouts on your plate look a lot more appetizing to you!” In this sentence, the word appetizing most nearly means— [CV]
   A. disgusting.
   B. healthy.
   C. tasty.
   D. cooked.

2. “Both flour and biscuits were soon infested with large, black-headed maggots and crawling weevils.” In this sentence, the word infested most nearly means— [CV]
   A. overrun.
   B. baked.
   C. soggy.
   D. likely.

Explain how you figured out the meaning of this word.

20 points = To figure out the word infested, I used clues in the sentence. Bugs in biscuits would be a bad thing, and there would probably be a lot of them. Overrun means a lot, so it is the best meaning for infested and makes sense in the sentence.

15 points = To figure out the word infested, I used clues in the sentence. Bugs in biscuits would be a bad thing, and there would probably be a lot of them.

10 points = To figure out the word infested, I used clues in the sentence.
3. Why did pirates eat at night? How do you think pirates felt as they ate? 
[DC, RE, SA]

20 points = Pirates ate at night so they wouldn’t see the insects in their food. Sea biscuits were bought in sacks or carried off raided ships. Flour and biscuits became infested with maggots and weevils. Pirates knocked the weevils off their biscuits before eating them. I think pirates felt sick as they ate. Knowing that bugs had been all over their food probably affected how the food tasted. Due to all the insects on the food, pirates probably didn’t enjoy eating.

15 points = Pirates ate at night so they wouldn’t see the bugs in their food. Sea biscuits were bought in sacks. Flour and biscuits became infested with weevils. Pirates knocked the weevils off their biscuits. I think pirates felt sick as they ate. Knowing about the bugs probably made the food taste bad.

10 points = Pirates ate at night so they wouldn’t see the bugs in their food. I think pirates felt sick as they ate.

4. Describe the importance of animals to pirates in the Caribbean. [DC, RE, SA]

20 points = Animals were a source of food, so they were very important to pirates in the Caribbean. Pirates often caught fish, which gave them a break from dried foods. At some shipwreck sites, pig and cattle bones have been discovered. These bones provide evidence that live animals, including pigs and chickens, were kept on pirate ships. Live animals were used for their eggs, milk, and meat. It appears that without live animals, pirates would have had fewer choices of what to eat.

15 points = Animals were used for food, so they were very important to pirates in the Caribbean. Pirates often caught fish. At some shipwreck sites, pig bones have been found. These bones show that live animals, such as pigs, were kept on pirate ships. Live animals were used for their meat.

10 points = Animals were used for food, so they were very important to pirates in the Caribbean.

5. “Pirates tapped their biscuits to knock the weevils out before eating.”

If your partner could not pronounce the word weevils, which strategies should he or she try? Which strategies should your partner try to figure out the meaning of weevils? [CV]

Accept responses that identify a strategy. For example, I would advise my partner to try breaking the word into chunks and then blending the chunks to pronounce the word. To figure out the word, I would advise my partner to look for clues in the sentence or to look it up in the dictionary.
Part II. Writing (100 points)
Write at least a paragraph to answer the following question:
What challenges did early pirates face? Explain and include facts or examples to support your answer.

Early pirates faced challenges that included a lack of good food and problems with sailing. Since early pirates could not determine their longitude, they had to sail without knowing it. After figuring out their destination's latitude, they sailed north or south to reach it and then sailed east or west. Although this worked, it took a long time for pirates to sail to their destination because the routes they used were indirect. Also, the routes they took didn't always use the best currents. Not only did pirates experience problems sailing to their destinations, but they had a lack of healthy foods on their ships. As a result, many pirates got scurvy, a disease that caused bleeding. Their food was infested with insects that they knocked off of their food before eating it. Pirates faced many challenges that made their journey to their destination very difficult.

The following guide is used to score part II of the cycle test.

<table>
<thead>
<tr>
<th>Writing to Inform or Explain</th>
<th>0–25 pts.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ideas</strong></td>
<td></td>
</tr>
<tr>
<td>• Clearly introduces the topic</td>
<td></td>
</tr>
<tr>
<td>• Develops the topic with relevant details</td>
<td></td>
</tr>
<tr>
<td><strong>Organization</strong></td>
<td></td>
</tr>
<tr>
<td>• Begins by introducing the topic</td>
<td></td>
</tr>
<tr>
<td>• In the middle, provides facts, examples, or events that help a reader understand the information</td>
<td></td>
</tr>
<tr>
<td>• Ends with a closing statement that supports the information</td>
<td></td>
</tr>
<tr>
<td><strong>Style</strong></td>
<td></td>
</tr>
<tr>
<td>• Uses words and phrases that help a reader understand how the facts or events are related</td>
<td></td>
</tr>
<tr>
<td>• Includes details or examples that help a reader make a mind movie</td>
<td></td>
</tr>
<tr>
<td><strong>Mechanics</strong></td>
<td></td>
</tr>
<tr>
<td>• Uses correct punctuation, capitalization, spelling, and grammar</td>
<td></td>
</tr>
<tr>
<td><strong>Writing Objective</strong></td>
<td></td>
</tr>
<tr>
<td>• Includes supporting facts or examples</td>
<td></td>
</tr>
</tbody>
</table>
Part III. Vocabulary (100 points)

1. Which word from the vocabulary list belongs in the blank? [CV]
   A stove in a ________ often has bars so the cook will not fall against the hot stove if a ship moves suddenly.
   A. deficiency
   B. prototypes
   C. galley
   D. engraved

2. Use the word engraved in a meaningful sentence. [CV]
   Example: Keyana had her class ring engraved with her initials so she could easily identify it if it got lost.

3. What is a synonym for the word excavated? [CV]
   A. filled
   B. painted
   C. studied
   D. emptied

4. Which word from the vocabulary list belongs in the blank? [CV]
   Although Stefano had studied a lot for the test, the name of the battle ________ him, and he had to guess the answer.
   A. eluded
   B. irreparable
   C. galley
   D. engraved

5. What is an antonym (opposite) for the word deficiency? [CV]
   A. absence
   B. plenty
   C. amount
   D. poverty

6. Which word from the vocabulary list belongs in the blank? [CV]
   The ________ smell of burgers cooking on the grill made Bruce’s mouth water.
   A. deficiency
   B. enticing
   C. prototypes
   D. engraved

7. Use the word irreparable in a meaningful sentence. [CV]
   Example: Although Valerie tried to help Leticia and Keira make up after their fight, it seemed their friendship was irreparable.
8. What is a synonym for the word *prototypes*? [CV]
   A. examples  
   B. pictures  
   C. buildings  
   D. choices

9. As used on page 38 in the sentence “…accurately maintained the time at Greenwich, England (designated as zero degrees longitude), he could…,” *designated* most nearly means— [CV]
   A. sailed.  
   B. rejected.  
   C. labeled.  
   D. invented.

10. As used on page 16 in the sentence “Unfortunately, stories describing treasure hunting rather than responsible reporting abound,” *abound* most nearly means— [CV]
    A. lack.  
    B. overflow.  
    C. teach.  
    D. concern.

Explain how you figured out the meaning of *abound*.

*Students will explain their thinking. For example, I used the context. The paragraph discusses many examples of ships in which treasures were lost, so it makes sense that there are plenty of these stories. Abound must mean overflow.*

<table>
<thead>
<tr>
<th>Question Codes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>[DC]</strong></td>
<td>Make inferences; interpret data; draw conclusions.</td>
</tr>
<tr>
<td><strong>[AA]</strong></td>
<td>Analyze an argument.</td>
</tr>
<tr>
<td><strong>[SA]</strong></td>
<td>Support an answer; cite supporting evidence.</td>
</tr>
<tr>
<td><strong>[AP]</strong></td>
<td>Identify author’s intent or purpose.</td>
</tr>
<tr>
<td><strong>[MI]</strong></td>
<td>Identify the main idea that is stated or implied.</td>
</tr>
<tr>
<td><strong>[RE]</strong></td>
<td>Analyze relationships (ideas, story elements, text structures).</td>
</tr>
<tr>
<td><strong>[CV]</strong></td>
<td>Clarify vocabulary.</td>
</tr>
<tr>
<td><strong>[AC]</strong></td>
<td>Author’s craft; literary devices</td>
</tr>
</tbody>
</table>
Lesson 7

Reading Objective: Use clarifying strategies to figure out the meanings of words, phrases, and passages.

Teacher Background
During Class Discussion, students orally present evaluations of their homework reading selections. During Teamwork, students use their Read and Respond notes and answers to the homework questions to make final preparations for these presentations. Team members share their responses and give one another feedback. During the oral presentations, students use their revised responses to the questions to describe the kind of texts they read, the strategies that helped them understand the text, and whether they will recommend their reading selections to others.

Active Instruction
(20 minutes)

Two-Minute Edit
1. Display a sentence that could be improved. For example, a sentence that is incomplete, awkwardly worded, uninteresting, lacks punctuation, or in which the subject and verb do not agree. As students arrive, have teams discuss how they would improve the sentence. A sample Two-Minute Edit sentence follows.

There are three mistakes in this sentence. Can you find them and fix them?
Pirates didn’t want to eat their biscuits during the day when they could see the bugs in them.

2. Use Random Reporter to debrief, and award team celebration points to teams that find the mistakes and explain the edits that they made.

Vocabulary
Ask teams if they have a Vocabulary Vault word that they would like to share. Award team celebration points.

Set the Stage
1. Ask students to review their team’s goal for this cycle and assess their progress.
2. Review the Team Celebration Points poster, and challenge teams to build on their successes.
3. Have students get out their reading selections and Read and Respond forms. Remind them that today, with the help of their teams, they will each prepare a presentation about their individual reading selections.
Challenge students to think about the strategies and skills that they used to read their self-selected texts, share their answers to the Read and Respond questions, discuss their thinking, and prepare evaluations of their selections.

4. Remind students to add to the notes on their Read and Respond forms as they discuss their selections and prepare oral presentations about their selections. Students will use their answers to the questions on the Read and Respond form as the basis for their presentations.

**Teamwork**

(25 minutes)

**Team Discussion**

1. Tell students that they will use the Read and Respond questions as a guide as they discuss their homework reading and prepare evaluations of their reading selections to share with their teams.

2. As you visit teams, take this opportunity to check students’ homework for completion (Read and Respond forms). Enter the information on your teacher cycle record form.

**Teacher’s Note:**

Have students who are ready for a new selection take turns choosing reading material from the classroom library. Make sure that every student has a Read and Respond form for next cycle.

**Read and Respond Questions**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Is your selection informational or literature? Summarize your reading. (summary rubric)</td>
</tr>
<tr>
<td>2.</td>
<td>Why did you choose this reading? What is your purpose for reading? (Team Talk rubric)</td>
</tr>
<tr>
<td>3.</td>
<td>Choose a word, phrase, or passage that you did not understand at first. How did you figure it out? (strategy-use rubric)</td>
</tr>
<tr>
<td>4.</td>
<td>Write down a question that you had or a prediction that you made as you read. Were you able to answer or confirm it? Explain. (strategy-use rubric)</td>
</tr>
<tr>
<td>5.</td>
<td>Would you recommend this selection to others to read? State your opinion, and support it with reasons. (Team Talk rubric)</td>
</tr>
<tr>
<td>6.</td>
<td>Choose a short section of the text that you think is important or especially interesting. Tell your teammates why you chose it. Read it aloud smoothly and with expression. (fluency rubric)</td>
</tr>
</tbody>
</table>
Lightning Round

Use Random Reporter to have students present their evaluations of their homework reading selections (responses to the Read and Respond questions). Use rubrics to evaluate responses, give specific feedback, and award points.

Celebrate

1. Tally up this cycle’s points on the poster.

2. Tell students that their scored tests will be returned at the beginning of the next lesson. Poster points and the teams’ test scores will determine which teams earn the status of super team, great team, or good team for the cycle.

3. Be sure to record each team’s total celebration points from the poster into the teacher cycle record form. Remind students that team celebration points and team test averages are used to determine team scores.

4. Collect students’ Read and Respond forms, and pass out new forms.

5. Tally up the number of Read and Respond signatures on students’ forms, and record the number on the teacher cycle record form after class.
Lesson 8

**Objectives:** Celebrate successes, and set new goals. Hold a Class Council meeting.

**Teacher Background**

In the first part of this lesson, students review their test results and their final scores for the cycle and compare them with their goals. They celebrate success and set new objectives for further improvement.

In the second part of the lesson, students participate in Class Council.

**Active Instruction**

(20 minutes)

**Two-Minute Edit**

1. Display and have students complete the Two-Minute Edit as they arrive for class. A sample Two-Minute Edit sentence follows.

   **What would you do to make this sentence better?**

   Brian realized on wednesday night that his math test was Thursday, and he leave his textbook in his locker

   *Brian realized on Wednesday night that his math test was Thursday, and he left his textbook in his locker.*

2. Use Random Reporter to check corrections. Award team celebration points.

**Celebrate/Set Goals**

(20 minutes)

1. Distribute students’ scored cycle tests. Allow a few moments for students to review them.

2. Distribute team score sheets and celebration certificates to students. Remind students that the cycle’s top-scoring teams are determined by their points on the poster and their test scores.

3. Recognize and celebrate the super, great, and good teams. Remind the teams of the impact of bonus points that are added to team members’ cycle scores.
4. Have each team discuss and set a goal for the next cycle and record it on their team score sheet. Use the questions below to analyze and discuss students’ scores.

   **What was your team’s highest score?**
   **What score do you want to improve?**
   **What can the team do to improve that score?**

   Use Random Reporter to ask:

   **What is your team’s goal for the next cycle? Why did you choose that goal?**

   *Accept supported answers.*

5. Use the poster to award team celebration points for responses that include the team’s reasons for choosing the goal, thus beginning the accumulation of points for the next cycle.

6. Have students record their cycle test scores and their areas of greatest strength and improvement on their progress charts.

---

### Class Council

*(30 minutes)*

1. Share class compliments.

2. Review the class goal that was set at the last Class Council. Using the agreed-upon measure of progress, was the goal met? Why or why not?

3. Discuss a class concern, or use the scenario and discussion hints provided.

4. Have teams discuss and then use Random Reporter to share responses.

5. After debriefing how they resolved the problem, help students set a goal and a measure of progress that they can use at the next Class Council.

   **Scenario:**

   Some kids in Jana’s reading class have been teasing her because she always gets good grades. Jana has been thinking about messing up on the next reading test.

   **Pretend that you are Jana. What would you do?** **Pretend that you are one of Jana’s teammates. What would you do?**

   Some kids have been teasing Carson because he is having trouble keeping up in reading class. He’s been thinking about going to the nurse during the next reading class—after all, reading does make him feel queasy.

   **Pretend that you are Carson. What would you do?** **Pretend that you are one of Carson’s teammates. What would you do?**
Discussion Hints:

- Putting yourself in another's shoes is one way to better understand how to be a good friend. Help students develop empathy for others with role-playing and taking on someone else's point of view.

- Model how to show respect for one another while giving feedback, asking for help, and recognizing successes. Make your classroom a sarcasm-free zone.

- Support teamwork: Use team-building activities, review team goals regularly, and celebrate as a class when goals are met. Present the beginning of each cycle as a fresh starting point and another opportunity to set goals and move ahead with one another's help.

- Be an active listener. Model how to ask open-ended questions. Paraphrase what the other person tells you, and check your understanding. Provide examples of situations in which you can see each situation from someone else's point of view.

- The middle grades are a time for learning how to be a good friend and how to choose new friends. Change teams once or twice each grading period to give students a chance to get to know a broader circle of people. Make class celebrations meaningful and participatory for students. Emphasize how great it feels to set and meet goals when everyone participates.

Brain Game

(5 minutes)

1. Choose a brain game from the card set, and then play the game.

2. Use the following questions to debrief and remind students of self-regulatory strategies:

   What did this game require your brain to do?

   How will use of this skill improve your success in other classes?
Common Core State Standards

The following Common Core State Standards are addressed in this unit. Full program alignments can be found on the Reading Edge online resources. Contact your SFA coach for more information.

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<thead>
<tr>
<th>Level 7</th>
<th>Clarify Words and Ideas</th>
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<tbody>
<tr>
<td><strong>English Language Arts Standards: Reading: Informational Text</strong></td>
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</tr>
<tr>
<td><strong>Key Ideas and Details</strong></td>
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</tr>
<tr>
<td>RI.7.1. Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</td>
<td></td>
</tr>
<tr>
<td><strong>Craft and Structure</strong></td>
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<tr>
<td>RI.7.4. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone.</td>
<td></td>
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<tr>
<td><strong>English Language Arts Standards: Writing</strong></td>
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</tr>
<tr>
<td>W.7.2d. Use precise language and domain-specific vocabulary to inform about or explain the topic.</td>
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</tbody>
</table>
Media Acknowledgements

We wish to acknowledge the following organizations and individuals for allowing their background videos to be included in the Reading Edge:

- Twin Cities Public Television (DragonflyTV)
- National Science Foundation (Science Nation online magazine)
- The National Park Service
- The Maryland Zoo and Gorilla Doctors (gorilladoctors.org)
- National Oceanic and Atmospheric Administration, National Ocean Service (Ocean Today video series)
- Pardada Pardadi Educational Society and Rohit Ghandi
- WNET
- Charles R. Smith, Jr.
- National Aeronautics and Space Administration and the California Institute of Technology

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Informational

Unit 2

Recognize Text Patterns

Mars
One Thing Leads to Another
Research
The Lightning Round

- Random Reporters share team responses; team reps from other teams may agree, disagree, or add on to these responses.
- Use the following rubrics to evaluate responses and give specific feedback.
- Award points to the teams with 100-pt. responses; add the points to the Team Celebration Points poster.
- Celebrate team successes.

<table>
<thead>
<tr>
<th>Strategy Use</th>
<th>Team Talk (oral and written)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Random Reporter:</strong></td>
<td><strong>The Random Reporter:</strong></td>
</tr>
<tr>
<td>100 gives a 90-pt. response and explains how using the strategy helped in better understanding the text.</td>
<td>100 gives a 90-pt. response and connects the answer to the supporting evidence and uses academic language.</td>
</tr>
<tr>
<td>90 gives an 80-pt. response and describes a problem and a strategy that was used to solve the problem.</td>
<td>90 gives an 80-pt. response and includes supporting evidence and examples (from the text or from experience).</td>
</tr>
<tr>
<td>80 identifies a problem that a team member had understanding the text.</td>
<td>80 uses full sentences to clearly and correctly answer the question.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Word Power</th>
<th>Fluency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Random Reporter:</strong></td>
<td><strong>The Random Reporter:</strong></td>
</tr>
<tr>
<td>100 gives a 90-pt. response and expands on the meaning, for example, identifies • related words • a second meaning • a word connotation • an antonym</td>
<td>100 gives a 90-pt. response and reads smoothly and with expression (shows emotion and changes with punctuation and dialogue).</td>
</tr>
<tr>
<td>90 gives an 80-pt. response and explains the meaning in a definition and a meaningful sentence.</td>
<td>90 gives an 80-pt. response and reads at just the right pace to understand the text—not too slow and not too fast.</td>
</tr>
<tr>
<td>80 tells a word or phrase added to the word power journal and why it was added (what makes it important or interesting).</td>
<td>80 reads a short passage and pronounces most of the words correctly.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Summary</th>
<th>Graphic Organizer/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Random Reporter:</strong></td>
<td><strong>The Random Reporter:</strong></td>
</tr>
<tr>
<td>100 gives a 90-pt. response and uses key vocabulary correctly.</td>
<td>100 gives a 90-pt. response and explains how the graphic organizer helped in understanding the text.</td>
</tr>
<tr>
<td>90 gives an 80-pt. response and clearly connects relevant ideas in a logical order.</td>
<td>90 gives an 80-pt. response and includes main points or events and important details.</td>
</tr>
<tr>
<td>80 presents main ideas and important details in his or her own words and without personal opinion.</td>
<td>80 selects a graphic organizer that is appropriate for the text.</td>
</tr>
</tbody>
</table>
Unit Objectives

**Reading:** Use strategies to help identify important information and the relationship of ideas.

**Writing:** Organize ideas and use signal words to help a reader understand how the ideas are related.

Unit Overview

This unit introduces the TIGRRS process, a process that will help students prepare to read and understand informational text. The acronym stands for topic, intent, graphic organizer, read and restate, reread and review, and summarize.

Following is an explanation of the TIGRRS process that is included in the student edition.

As students become familiar with the TIGRRS process, they will also focus on using clues and strategies to identify main ideas. Scaffolded instruction and practice in this skill is provided in the Interactive Read Aloud and in Team Talk questions.
The reading objective for this unit is to use strategies to identify important information and to recognize how the information is organized, such as in a compare-and-contrast pattern, main-ideas-and-details pattern, or cause-and-effect pattern. Understanding how a text is set up can help students identify the important ideas, take effective notes, and be able to summarize. Text features, such as pictures, captions, and graphs are often clues to the text pattern. The texts that students read in this unit, *Mars* and *One Thing Leads to Another*, include many text features that can help students recognize text patterns and important ideas. As part of the TIGRRS process, students preview the text and decide on a graphic organizer that they will use to make notes. In cycle 1, model use of the Venn diagram for a compare-and-contrast text pattern and the web for a main-ideas-and-details pattern. In cycle 2, model use of a T-chart for a cause-and-effect text pattern.

The writing objective is to organize ideas and use signal words to help a reader understand how the ideas are related, for example, using signal words such as “as a result” or *because* to show a cause-and-effect relationship.

**Unit Topic/Content**

The book used in cycle 1 is *Mars* by Mary Kay Carson. The book describes the differences between Mars and Earth and includes a variety of text features, such as pictures, captions, and diagrams, to illustrate what the text discusses. Carson also explains Mars exploration in detail. She also discusses the possibility that life once existed on Mars.

The book used in cycle 2 is *One Thing Leads to Another* by Debra Lucas. Each chapter of the book focuses on different inventions, ranging from roller skates to windshield wipers to chocolate chip cookies. The author describes how in many cases, inventions were created purely by accident. This is a text that lends itself well to a cause-and-effect graphic organizer since the text is composed of multiple causes and effects.

**Text and Media Selections**

**Internet/Media Options**

To expand your students’ background knowledge, consider using Internet/media options with lessons. Always preview sites for availability and suitability. Please make sure you have the correct plug-ins.
## At a Glance

### Mars

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<th>Media</th>
</tr>
</thead>
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<tr>
<td>Lesson 1</td>
<td>pages 4–9</td>
<td>(Embedded) Background video: “How Hard is it to Land Curiosity on Mars?” NASA (1:00)</td>
</tr>
<tr>
<td>Lesson 2</td>
<td>pages 10–15</td>
<td>(Embedded) Background video: “Curiosity’s Seven Minutes of Terror” NASA (5:08)</td>
</tr>
<tr>
<td>Lesson 4</td>
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<td>writing in response to reading</td>
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<td>Lesson 7</td>
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<td>Lesson 8</td>
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</tbody>
</table>

### One Thing Leads to Another

<table>
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<tr>
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<th>Text</th>
<th>Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson 1</td>
<td>pages 4–11</td>
<td>(Embedded) Background video: “Inventor: Ryan Patterson” Dragonfly TV (Optional) Background website: “Young Inventors” <a href="http://www.pbslearningmedia.org/content/eng06.sci.engin.design.younginvent/">www.pbslearningmedia.org/content/eng06.sci.engin.design.younginvent/</a></td>
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<tr>
<td>Lesson 2</td>
<td>pages 12–17</td>
<td>(Embedded) Background video: “Engineer: Lonnie Johnson” Dragonfly TV (Optional) Background video: “Middle School Launches Stratosphere Balloon” PBS LearningMedia (3:10) <a href="http://www.pbslearningmedia.org/content/78b13fc5-5f4e-4e2e-8ed8-9e3c1058751/">www.pbslearningmedia.org/content/78b13fc5-5f4e-4e2e-8ed8-9e3c1058751/</a></td>
</tr>
<tr>
<td>Lesson 4</td>
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<tr>
<td>Lesson 5</td>
<td>writing in response to reading</td>
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</tr>
<tr>
<td>Lesson 6</td>
<td>pages 28–30</td>
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<tr>
<td>Lesson 8</td>
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</tbody>
</table>
Lesson 1

Reading Objective: Use strategies to help identify important information and the relationship of ideas.

Teacher Background

In Active Instruction, you will begin to introduce the TIGRRS process for reading informational texts. In upcoming lessons, there will be numerous opportunities to review TIGRRS, so don’t feel that students have to master the process in the first lesson.

In today’s reading, the author describes what it is like on Mars and how this planet compares with Earth in terms of appearance and other characteristics. Olympus Mons, a huge crater on Mars, is also compared with Mount Everest, which is regarded as a spectacular sight on Earth. Mars’s atmosphere and gravity is compared with those of Earth.

The video “How Hard is it to Land Curiosity on Mars?” demonstrates the challenges faced by the scientists involved in the mission to land a rover on Mars.

Active Instruction (22 minutes)

Big Question

Post and present this cycle’s Big Question. Have students write a response to the question as they arrive for class.

The Big Question: Do you think there is life on other planets in our solar system? Explain.

Set the Stage

1. Refer students to today’s Big Question. Use Think-Pair-Share to ask:

   Do you think there is life on other planets in our solar system?

   (Answers may vary.) There is no proof of life on other planets, but some people think there is. I’ve read science-fiction books about aliens living on planets in our solar system. It’s hard to imagine that there is life on other planets.
Use **Think-Pair-Share** to ask:

**What do you know about other planets?**

*(Answers may vary.)* I know that Saturn has a lot of rings, and Mercury doesn’t have moons. All the planets have different characteristics, sizes, and are made of different materials. I know that Pluto used to be considered a planet, but now it is called a dwarf planet. It is not actually considered a planet because of its characteristics.

2. Ask students to review their cycle goal. Remind students how to earn team celebration points. Remind them that team celebration points help them to become super teams. Tell them that they earn team celebration points during the Lightning Round.

3. Introduce the text, author, and reading objective.

4. Distribute copies of the book *Mars*. Have students preview the text. Use **Think-Pair-Share** to ask:

**Is this literature or informational text? How do you know?**

*This text is informational. The table of contents, section titles and headings, and diagrams are evidence that the text is informational.*

5. Introduce the TIGRRS process for reading informational text. Refer students to the explanation of the TIGRRS steps in their student editions. Tell students that using the TIGRRS process can help them better understand informational text. Review the first two steps of the TIGRRS process: topic and intent of author.
6. Have partners survey the text to determine the topic and the author’s intent. Use **Think-Pair-Share** to ask:

**What is the topic of this text? How do you know?**

*The topic of this text is Mars. I know because of the title. Some chapter titles have the word Mars in them, and when I looked through the book; I saw the word Mars repeated often.*

**From your initial look at the text, what do you think is the author’s intent? What kind of information does the author want the reader to learn? Explain your thinking.**

*The author’s intent is to inform the reader about Mars. I think the author wants the reader to learn what the planet Mars is like.*

Point out that by previewing the text and using clues, the reader can predict the topic and the author’s intent or purpose.

7. Explain that the next step in the TIGRRS process is to choose a graphic organizer for making notes.

Discuss the different graphic organizers that can be used with informational text to show the relationship of ideas. These might include:

- a web or outline to show main ideas and supporting details,
- a Venn diagram to compare and contrast,
- a timeline or sequence chain to show the order of events, or
- a chart to show categories of information or to show cause-and-effect connections.

Model choosing a graphic organizer, and explain your thinking.

*When I previewed the book, I noticed that there are pictures and diagrams that show Mars compared with Earth. For example, on page 5, there is an illustration comparing the sizes of Mars and Earth. On page 6, there is an illustration showing a comparison of the Grand Canyon and a valley on Mars. I think that the author will compare and contrast these two planets. A Venn diagram is a graphic organizer that shows the compare-and-contrast pattern. I think I will use a Venn diagram to make notes, with Mars in one circle and Earth in the other. I’ll record the features that are common to both planets where the two circles overlap.*

Point out to students that the first three steps in the TIGRRS process—predicting the topic, author’s intent, and choosing a graphic organizer—help to prepare them to read the text more effectively.

**Topic:** Mars  
**Intent:** To provide information about what it’s like on Mars  
**Graphic Organizer:** Venn diagram
8. Build background about recent exploration of Mars. Explain that scientists at NASA have faced many challenges trying to land a rover on the planet.

Show the video “How Hard is it to Land Curiosity on Mars?” Use Think-Pair-Share to debrief.

Imagine you were a design engineer for NASA working on this project to land the rover Curiosity on the surface of Mars. What part of the landing would worry you most? Why?

Answers will vary. For example, I would worry about the rover burning up in the atmosphere or not slowing down and crashing into the planet’s surface. I would worry that the parachute wouldn’t open and the rover would crash land.

**Interactive Read Aloud**

1. **This cycle our reading goal is to use strategies to help identify important information and the relationship of ideas.** We can use text features, such as diagrams, pictures, captions, and charts, to help us identify how the information is organized in the text. Knowing how the text is organized can help us set up our notes to show how the ideas are related.

2. Tell students that you will use the next step in the TIGRRS process—read. Tell students that as you read, you will think aloud to demonstrate how a reader identifies main ideas and how they are related.

3. Read page 4 aloud. A sample Think Aloud follows.

<table>
<thead>
<tr>
<th>Sample Think Aloud</th>
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</thead>
<tbody>
<tr>
<td>Remember that in step 3 of the TIGRRS process, I identified a Venn diagram as a useful graphic organizer because it looked like the author was going to make some comparisons between Mars and Earth. The author described what Mars looks like if you were to stand on that planet. The sky is red, not blue like on Earth. The ground is covered with rocks and dust. Earth has trees and plants. The planet is very quiet, and there are no signs of life. That is a contrast from Earth, which has lots of life. Looking at the illustrations, I notice that Earth is like a blue marble while Mars is a reddish planet. The details the author included helped me understand what Mars looks like and how it’s different from Earth. The author didn’t just explain these differences in words; she also included pictures that helped me see how Mars is different. Mars is farther from the sun than Earth, and it looks smaller than Earth.</td>
</tr>
</tbody>
</table>

4. Use Think-Pair-Share to ask:

   **How does the information in the Venn diagram show the relationship of ideas in the text?**

   *The information is arranged to show what characteristics Earth and Mars have in common and how the two planets are different.*
5. Partner Practice: Student partner pairs use the read-aloud/think-aloud process to practice the skill or strategy with the next passage in the text. Have students read page 6. Use Think-Pair-Share to ask:

What relationship is the author presenting on page 6? How did you identify this?

The author is presenting a comparison of a volcano, Olympus Mons on Mars, and Mt. Everest on Earth. Olympus Mons is a huge volcano. If it were on Earth, it would cover three whole states. The illustration on page 6 helped me understand how huge this volcano is because of its relationship to the size of Mount Everest, which is just more than five miles high, according to the graph. Olympus Mons is fifteen miles high, so Mount Everest looks tiny in comparison.

Use Random Reporter to debrief.

6. Refer to the reread-and-review step of the TIGRRS process. Review the points in this step of TIGRRS.

Rereading is an important step because it can help us clarify anything confusing in the text. By rereading, we can also identify the details that support a main idea and add them to the graphic organizer. Reviewing the notes on the graphic organizer will help us make connections and ask new questions.

Ask partners to review this section of text, check their understanding with each other, reread what they need to clarify, and add notes to their graphic organizers.

Use Random Reporter to debrief. Add student responses to the graphic organizer.

7. Have partners preview the text that they will be reading in Teamwork. Use Think-Pair-Share to ask:

Looking at pages 7–9, do you think we will read compare-and-contrast information about Mars and Earth? Why or why not?

I think the information on page 7 is compare-and-contrast information because the diagram shows a comparison. From the title and pictures on pages 8 and 9, the information seems to be just about Mars and not a comparison.

How will you record the important information that is just about Mars?

One way is to add it to the Mars circle. Another way is to make a web and add information that is just about Mars.

Point out that when we use the TIGRRS process and predict the topic and intent and choose a graphic organizer, we can change our graphic organizer to reflect the text, in this case, to show main ideas and details.
A sample graphic organizer follows.

Sample Graphic Organizer

<table>
<thead>
<tr>
<th>Mars</th>
<th>Earth</th>
</tr>
</thead>
<tbody>
<tr>
<td>sky is red</td>
<td>sky is blue</td>
</tr>
<tr>
<td>dry ground</td>
<td>mostly water on surface</td>
</tr>
<tr>
<td>rocks and dust</td>
<td>like a blue marble</td>
</tr>
<tr>
<td>reddish color</td>
<td></td>
</tr>
<tr>
<td>Olympus Mons</td>
<td>Mt. Everest</td>
</tr>
<tr>
<td>15 mi</td>
<td>5.5 mi</td>
</tr>
</tbody>
</table>

Teamwork (20 minutes)

Partner Prep

1. Explain, or review if necessary, the student routines for partner reading and the TIGRRS process before having students read and restate: pages 7–9 aloud with partners.

2. Circulate and check for comprehension, evidence of strategy use, and use of the TIGRRS process, for example, restating ideas on the graphic organizer. Give students feedback. Prompt and reinforce their discussions.

3. If some partners finish ahead of their teammates, have them begin looking over the Team Talk questions.
Team Discussion

1. Explain, or review if necessary, how to use role cards and the student routines for strategy use and Team Talk discussion.

2. Remind students to use the rubrics on their team folders to prepare each team member to discuss the team’s strategy use, and oral and written Team Talk responses. Each team member must be able to summarize the text and discuss the team’s graphic organizer/notes during Class Discussion as indicated.

3. Preview the Team Talk questions. If necessary, ask questions to guide students’ reflection as they determine the meaning of the “(Write)” question.

Team Talk Questions

1. Why do you think the author includes the picture, caption, and diagram on page 7? What relationship does she want to show? (Write) [MI, RE, SA]
   (Team Talk rubric)
   
   100 = I think the author includes the picture, caption, and diagram on page 7 because she wants to show the comparison between a canyon on Mars and the Grand Canyon on Earth. The author explains that Mars’s canyon Valles Marineris is so long that it makes the Grand Canyon, which is considered huge, look small. The picture shows the width of the Grand Canyon as 18 miles and the width of Valles Marineris as 150 miles. Without these text features, it would be harder to understand the tremendous size of Valles Marineris.

   90 = I think the author included the picture, caption, and diagram on page 7 because she wants to show the size of canyons on Mars and Earth. The author says that Valles Marineris is so long that it makes the Grand Canyon look small. The caption says that if you and another person stood on each side of it, you would be 150 miles apart.

   80 = I think the author included them because she wants to show the size of canyons on Mars and Earth.

2. If Mars’s atmosphere had not floated off into space, would the planet still be as cold? Explain. [DC, RE, SA] (Team Talk rubric)

   100 = If Mars’s atmosphere had not floated off into space, the planet probably would not be as cold because of the atmosphere’s function. The atmosphere is layers of gas or air around a planet and acts like a blanket. Basically, the atmosphere keeps Mars warm. The atmosphere on Mars floating off affected the climate on that planet.

   90 = If Mars’s atmosphere had not floated off into space, the planet probably would not be as cold because of what the atmosphere does. The atmosphere acts like a blanket and keeps Mars warm.

   80 = If Mars’s atmosphere had not floated off into space, the planet probably would not be as cold because of what the atmosphere does.
### Team Talk Questions continued

3. Which of the following is the main point in paragraph 1 on page 9?  
   [MI, DC]
   - A. Mars has a night sky.
   - B. Mars’s gravity holds two moons in orbit.
   - C. Phobos is the Greek word for terror.
   - D. Deimos is a small moon.

4. Words such as *gravity* are in boldface print on page 9 because they are included in the glossary for this book. How can the glossary help you improve your notes?  
   [AP, DC] (Team Talk rubric)
   - **100** = The glossary defines important words in the text. It can help me improve my notes by identifying the important words and what they mean. For example, noting that gravity is a force that pulls objects toward the center of the planet helps me understand how Mars holds on to its two moons. Adding the meanings of words to my notes will help me summarize what I’ve learned from the text.
   - **90** = The glossary tells the meanings of important words in the text. It can help me improve my notes by adding the meanings of words. Noting that gravity is a force that pulls objects toward the center of the planet helps me understand how Mars holds on to its two moons.
   - **80** = The glossary can help me improve my notes by adding the meanings of words.

4. Have students thoroughly discuss Team Talk questions before they write individual answers to the skill question marked “(Write).” Allow students to revise their written answers after further discussion if necessary.

5. Prompt teams to discuss comprehension problems and strategy use (their sticky notes) and important ideas that they added to their graphic organizers.

6. Circulate and give feedback to teams and students. Use rubrics to give specific feedback. Ask questions to encourage further discussion. Record individual scores on the teacher cycle record form.

7. Award team celebration points for good team discussions that demonstrate 100-point responses.
Class Discussion

Lightning Round

1. Use Random Reporter to have teams share strategy use, and oral and written Team Talk responses. Ask other teams to agree, disagree, or add on to responses.

2. Use rubrics to evaluate responses and give specific feedback. Award team celebration points for 100-point responses. Record individual scores on the teacher cycle record form.

Celebrate

1. Tally the team scores on the poster, and celebrate teams that are accumulating points. Have teams reflect on the following questions:

   - **How many points did your team earn today?**
   - **How can your team earn more points?**

   Remind students that top-scoring teams will earn bonus points that will be added to their cycle scores.

   - **Something to cheer about:** Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.

2. As a reminder, refer students to the Read and Respond homework assignment described in their student editions.
Lesson 2

**Reading Objective:** Use strategies to help identify important information and the relationship of ideas.

**Teacher Background**

Today students will finish chapter 1 and will read chapter 2. At the end of chapter 1, the author explains how a person’s age and weight on Mars would be much different than on Earth because of the planet’s orbit around the sun and gravity, respectively. The author also provides a chart that makes comparisons between different features on Mars and Earth, including the temperature, seasons, and number of moons. This provides students with a clear comparison of the two planets. Chapter 2 focuses on the ways that people on Earth have learned about Mars. For example, *Mariner 4* and *Mariner 9* sent back pictures of Mars. Also, *Viking* landers used instruments so they could gather information about gases and minerals found on Mars. They were especially interested in finding evidence of life on Mars.

**Active Instruction** (25 minutes)

**Partner Vocabulary Study**

1. Display the vocabulary words. Have students use the vocabulary study routine as they copy the words in their word power journals and rate their knowledge of each as they arrive for class.

2. Spot check the Read and Respond homework.

**Vocabulary**

1. Have teams discuss their ratings of the words. Ask teams to 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 “?.”

2. Use Random Reporter to have the teams share one word that they know and one word that they need to study further. Award team celebration points.

3. Introduce the vocabulary for this cycle. Read each word aloud, and model chunking as needed. Then read the meaning of each word.

<table>
<thead>
<tr>
<th>Word</th>
<th>Pronunciation</th>
<th>Definition</th>
<th>Sample Sentence</th>
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(continued)
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<td>(LAWNCHD)</td>
<td>sent out</td>
<td>In 1783, the first hot air balloon was launched but crashed to the ground very quickly.</td>
</tr>
</tbody>
</table>

4. **Use Random Reporter** to have teams share a new sentence that uses one of their vocabulary words. Award team celebration points.

5. Remind teams that if they find a word from the vocabulary list used in another place, such as in a magazine, textbook, TV ad, etc., they can bring in or copy the sentence in which the word was used and put it in the Vocabulary Vault to earn team points.

**Set the Stage**

1. Ask students to review their team’s goal for this cycle and assess their progress.

2. Review the Team Celebration Points poster, and challenge teams to build on their successes.

3. Remind students of the text, author, and reading objective.

Review Vocabulary Vault.

Teams review their cycle goal.

Post and present the reading objective.
4. Introduce the video by telling students they are about to hear NASA scientists and engineers tell what worried them most about landing a rover on Mars. Have students jot down a fact that they learned about Mars from the video.

Show the video “Seven Minutes of Terror.” Use Think-Pair-Share to debrief.

**Why is this video called “Seven Minutes of Terror”?**

*It is called “Seven Minutes of Terror” because it takes the spacecraft seven minutes to go through the atmosphere and reach the surface. It takes fourteen minutes for signals from Mars to reach Earth, so for seven minutes, the scientists won’t know whether the rover landed successfully. The terror is the fear that after all the planning and work, the rover will crash land and be destroyed.*

**What did you learn about the atmosphere on Mars? How does it affect the landing of the rover?**

*According to the video, the atmosphere on Mars is 100 times thinner than Earth’s. The spacecraft moves through the atmosphere at 1,000 miles per hour and heats up to 1600 degrees, but the atmosphere is not thick enough to slow the spacecraft so there is a parachute to slow it down.*

**What other facts about Mars did you jot down in your notes?**

*Answers will vary. For example, I noted that there are craters and mountains six kilometers high on Mars. The surface of Mars has a lot of dust.*

5. Refer students to the TIGRRS process. Remind students that they previewed the text and predicted the topic and author’s intent.

**Topic:** Mars

**Intent:** To provide information about what it’s like on Mars

**Graphic Organizer:** A Venn diagram for comparing and contrasting and a web for main ideas and details

6. Remind students to make notes about the important ideas on a graphic organizer as they read. Review the graphic organizer(s) that students selected in the previous lesson.

**Interactive Read Aloud**

1. Refer students to the reading objective. Point out that in the previous lesson, students made notes about important ideas on a Venn diagram when the text compared and contrasted Mars and Earth. They also made notes on a web when the text presented main ideas and details about Mars.
Use **Think-Pair-Share** to ask:

**Looking at pages 10 and 11, do you think we will read compare-and-contrast information? Why?**

*I think it will be compare-and-contrast information because I see the words Mars and Earth repeated in the text, and the chart on page 11 is titled “Mars/Earth Comparisons.”*

2. Tell students that you will use the next step in the TIGRRS process—read. Tell students that as you read, you will think aloud to demonstrate how a reader identifies main ideas and how they are related.

Read page 10 (paragraph 1) aloud. A sample Think Aloud follows.

<table>
<thead>
<tr>
<th>Sample Think Aloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>I just read more information about what it is like on Mars. The author also made another comparison between Mars and Earth. Your weight on Mars would be fifty pounds less than your weight on Earth, so you could jump much higher on Mars. The gravity on Mars is lower than on Earth. I think that is an important difference, so I’ll record it on my graphic organizer.</td>
</tr>
</tbody>
</table>

3. Use **Think-Pair-Share** to ask:

**How did I identify important information in this passage?**

*You read the information, and then you thought about how the ideas were related. You looked for the comparisons and identified an important difference between the two planets to record in your graphic organizer.***

4. Partner Practice: Student partner pairs use the read-aloud/think-aloud process to practice the skill or strategy with the next passage in the text. Have students read the rest of pages 10 and 11.

Use **Think-Pair-Share** to ask:

**What important information did you and your partner add to your graphic organizers?**

*We added some important differences between Mars and Earth, such as that a year on Mars is twice as long as a year on Earth, that Mars is much colder than Earth, and that Mars has two moons instead of one.*

Use **Random Reporter** to debrief.

5. Ask partners to review this section of text, check their understanding with each other, reread what they need to clarify, and add notes to their graphic organizers.

Use **Random Reporter** to debrief. Add student responses to the graphic organizer.
6. Have partners preview the text that they will be reading in Teamwork. Use Think-Pair-Share to ask:

Looking at pages 12–15, do you think we will read compare-and-contrast information about Mars and Earth? Why or why not?

No, from the title and pictures, it appears that the author is presenting information about exploration of Mars.

How will you record the important information that is just about Mars?

We can add the main ideas and details that are just about Mars to a web.

Point out that when we use the TIGRRS process and predict the topic and intent and choose a graphic organizer, we can change our graphic organizer to reflect the text, in this case, to show main ideas and details.

A sample graphic organizer follows.

<table>
<thead>
<tr>
<th>Sample Graphic Organizer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mars</td>
</tr>
<tr>
<td>sky is red</td>
</tr>
<tr>
<td>dry ground—rocks and dust</td>
</tr>
<tr>
<td>Olympus Mons—15 mi</td>
</tr>
<tr>
<td>Year = 687 days</td>
</tr>
<tr>
<td>Avg. temp: –81, very cold</td>
</tr>
</tbody>
</table>

Earth

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>part of solar system</td>
</tr>
<tr>
<td>4 seasons</td>
</tr>
</tbody>
</table>

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>sky is blue</td>
</tr>
<tr>
<td>mostly water on surface</td>
</tr>
<tr>
<td>Mt. Everest—5.5 mi</td>
</tr>
<tr>
<td>Year = 365 days</td>
</tr>
<tr>
<td>Avg. temp 57</td>
</tr>
</tbody>
</table>

Exploration of Mars
Teamwork

(20 minutes)

Partner Prep
1. Explain, or review if necessary, the student routines for partner reading, word power, fluency, and the TIGRRS process before having students read and restate: pages 12–15 aloud with partners.
2. Circulate and check for comprehension, evidence of strategy use, and use of the TIGRRS process, for example, restating ideas on the graphic organizer. Give students feedback. Prompt and reinforce their discussions.
3. If some partners finish ahead of their teammates, have them begin looking over the Team Talk questions.

Team Discussion
1. Explain, or review if necessary, how to use role cards and the student routines for strategy use and Team Talk discussion.
2. Remind students to use the rubrics on their team folders to prepare each team member to discuss the team’s strategy use, and oral and written Team Talk responses. Each team member must be able to summarize the text and discuss the team’s graphic organizer/notes during Class Discussion as indicated.
3. Preview the Team Talk questions. If necessary, ask questions to guide students’ reflection as they determine the meaning of the “(Write)” question.

Team Talk Questions

1. What did scientists learn about Mars from the Mariner spacecraft and the Viking mission? [MI] (Team Talk rubric)

100 = From the Mariner spacecraft and the Viking mission, scientists learned about the surface of the planet Mars. They discovered that there are a lot of craters on Mars but no oceans or cities. They learned about the soil and climate from instruments at the landing site. They did not find any sign of microbes or other life.

90 = From the Mariner spacecraft and the Viking mission, scientists learned about the surface of the planet Mars. They learned that there are a lot of craters but no oceans or cities. They learned about the soil and climate at the landing site.

80 = From the Mariner spacecraft and the Viking mission, scientists learned about the surface of the planet Mars.
### Team Talk Questions continued

2. Would it have made a difference if the landers had taken only television cameras? Why or why not? [DC, SA] (Team Talk rubric)

<table>
<thead>
<tr>
<th>Score</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>Yes. If the landers had taken only television cameras, it would have made a difference because the instruments also had an important role. Although the television cameras were necessary for identifying possible signs of life, the instruments were needed to examine gases and minerals on Mars. These instruments also searched for small living things that are only visible with instruments. Without the instruments, it probably would have been difficult to study materials on Mars.</td>
</tr>
<tr>
<td>90</td>
<td>Yes. If the landers had taken only television cameras, it would have made a difference because the instruments also had an important job. The television cameras were needed for identifying signs of life, but the instruments were needed to study the gases on Mars.</td>
</tr>
<tr>
<td>80</td>
<td>Yes. If the landers had taken only television cameras, it would have made a difference because the instruments also had an important job.</td>
</tr>
</tbody>
</table>

3. What is a main idea in the section titled “Little Rover”? What details support it? (Write) [MI, SA] (Team Talk rubric)

<table>
<thead>
<tr>
<th>Score</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>A main idea in “Little Rover” is that a spacecraft with a rover was sent to Mars, and it successfully sent back information about the planet’s surface. Scientists found out that in the past, Mars had water and was warmer. The supporting details are that the rover Sojourner took pictures and analyzed rocks for gases and minerals. Sojourner was equipped with a solar panel for power, a rock analyzer, and an antenna for sending and receiving signals from the spacecraft.</td>
</tr>
<tr>
<td>90</td>
<td>A main idea in “Little Rover” is that a rover was sent to Mars, and it sent back information about the planet’s surface. The supporting details are that the rover Sojourner took pictures of rocks and sent back information about what gases and minerals were in them. Sojourner had a solar panel for power and an antenna for sending and receiving signals to and from the spacecraft.</td>
</tr>
<tr>
<td>80</td>
<td>A main idea in “Little Rover” is that a rover was sent to Mars, and it sent back information about the planet. A supporting detail is that it took pictures of rocks and sent back information about what they were made of.</td>
</tr>
</tbody>
</table>
Team Talk Questions continued

4. Why do you think the author included the diagram of Sojourner on page 15? [AP, DC, SA] (Team Talk rubric)

100 = I think that the author included the diagram of Sojourner because although she describes what Sojourner’s function was once it reached Mars, it is hard to understand exactly how it worked. The author explains that the rover analyzed gases and minerals, but it is not clear how this was done. The diagram shows the rock analyzer, so I see what it looked like. Also, I can see the unusual wheels made especially for traveling over rocks and the antenna for communicating with Pathfinder and Earth. Without the diagram, I would not be able to visualize Sojourner.

90 = I think that the author included the diagram of Sojourner because she describes what Sojourner’s job was once it reached Mars, but it is hard to understand how it worked. The author explains that the rover studied gases, but it is not clear how this was done. The diagram shows the rock analyzer. I can see the wheels made just for traveling over rocks.

80 = She describes what Sojourner’s job was, but it is hard to understand how it worked.

5. What is a synonym for combined? What is an antonym for combined? [CV] (Accept reasonable responses.)

A synonym for combined is joined. An antonym for combined is separated.

4. Have students thoroughly discuss Team Talk questions before they write individual answers to the skill question marked “(Write).” Allow students to revise their answers after further discussion if necessary.

5. Prompt teams to discuss comprehension problems and strategy use (their sticky notes), and important ideas that they added to their graphic organizers.

6. Circulate and give feedback to teams and students. Use rubrics to give specific feedback. Ask questions to encourage further discussion. Record individual scores on the teacher cycle record form.

7. Award team celebration points for good team discussions that demonstrate 100-point responses.

Cue students to discuss strategy use, graphic organizers, and word power journals.
Class Discussion

(15 minutes)

Lightning Round

1. Use Random Reporter to have teams share strategy use, and oral and written Team Talk responses. Ask other teams to agree, disagree, or add on to responses.

2. Use rubrics to evaluate responses and give specific feedback. Award team celebration points for 100-point responses. Record individual scores on the teacher cycle record form.

Celebrate

1. Tally the team scores on the poster, and celebrate teams that are accumulating points. Have teams reflect on the following questions:

   **How many points did your team earn today?**

   **How can your team earn more points?**

   Remind students that top-scoring teams will earn bonus points that will be added to their cycle scores.

   - Something to cheer about: Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.

2. As a reminder, refer students to the Read and Respond homework assignment described in their student editions.

Randomly select team representatives who will share:

- strategy use
- oral and written Team Talk responses

Celebrate team successes!

The top team chooses a cheer.

Remind students of the Read and Respond homework assignment.
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<td>(verb) page 6</td>
<td>(kuhm-BYND)</td>
<td></td>
<td></td>
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<td><strong>panic</strong></td>
<td>pan-ic</td>
<td>a feeling of fear</td>
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<td>(noun) page 9</td>
<td>(PAN-ik)</td>
<td></td>
<td></td>
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<td>to travel or go to</td>
<td>Shari’s family planned to <em>journey</em> across the country for their vacation.</td>
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<td>(verb) page 25</td>
<td>(JUR-nee)</td>
<td></td>
<td></td>
</tr>
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<td><strong>launched</strong></td>
<td>(LAWNCHD)</td>
<td>sent out</td>
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<td>(verb) page 29</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Lesson 3

**Reading Objective:** Use strategies to help identify important information and the relationship of ideas.

**Teacher Background**

Today students will read the first half of chapter 3. The author describes the significance of a piece of rock that scientists believe came from Mars. This piece of rock was studied so scientists could learn about the materials that composed it. They also wanted to learn whether it contained fossils of a life form that proved there was life on Mars. Scientists learned that the rock contained some of the same gases found in rocks on Mars, which created a lot of excitement.

In this lesson, before Teamwork, you will also introduce the partner routine for practicing fluency and the fluency rubric. The fluency rubric will help partners give feedback to each other to improve their fluency. It is also a tool for evaluating and giving feedback to students in the Lightning Round.

**Active Instruction**

(25 minutes)

**Partner Vocabulary Study**

1. Display the vocabulary words. Have students use the vocabulary study routine as they rerate their knowledge of each vocabulary word as they arrive for class.
2. Spot check the Read and Respond homework.

**Vocabulary**

1. Have teams discuss their ratings of the words. Ask teams to 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 “?”.
2. Use Random Reporter to have the teams share one word that they know and one word that they need to study further. Use Random Reporter to have teams report on a new sentence using a vocabulary word. Award team celebration points.
3. Remind teams that if they find a word from the vocabulary list used in another place, such as in a magazine, textbook, TV ad, etc., they can bring in or copy the sentence in which the word was used and put it in the Vocabulary Vault to earn team points.
Set the Stage

1. Ask students to review their team’s goal for this cycle and assess their progress.
2. Review the Team Celebration Points poster, and challenge teams to build on their successes.
3. Remind students of the text, author, and reading objective.
4. Refer students to the TIGRRS process. Remind students that they previewed the text and predicted the topic and the author’s intent.
   - **Topic:** Mars
   - **Intent:** To provide information about what it’s like on Mars
   - **Graphic Organizer:** A Venn diagram for comparing and contrasting and a web for main ideas and details
5. Introduce the video by telling students that they are about to see what it was like to be in NASA’s Jet Propulsion Laboratory during the seven minutes of terror.

Show the video “Curiosity Has Landed.” Use **Think-Pair-Share** to debrief.

**What conclusions can you draw about the teams that worked on sending Curiosity to Mars?**

*Answers will vary.* For example, I can conclude that the teams worked hard to do something that seemed impossible. The teams solved a lot of problems but still didn’t know whether it would work because everything had to go perfectly. They celebrated when Curiosity landed successfully because they had invested hard work to make it happen. It was a big accomplishment to land Curiosity on Mars.

Interactive Read Aloud

1. Tell students that you will use the next step in the TIGRRS process—read. Tell students that as you read, you will think aloud to demonstrate how a reader identifies main ideas and how they are related.
2. Read page 17 (stopping after “…materials it is made of”) aloud. Use **Think-Pair-Share** to prompt the use of the skill or strategy.

   **Judging from what I have read so far, which graphic organizer do you think you will use for the reading? Why?**

*Accept supported responses.* For example, I think I will use a web. The text is not comparing and contrasting, but it is telling about a rock from Mars and giving details about it. I think a web will let me organize the information with the main ideas about the rock and supporting details.
3. Partner Practice: Student partner pairs use the read-aloud/think-aloud process to practice the skill or strategy with the next passage in the text. Have students read the second half of page 17 (starting with “When the scientists...”). Also have them look at the picture on page 16 and read the caption.

Use Think-Pair-Share to ask:

**What does the caption on page 16 help you understand?**

*The caption helps me understand that the fossil is very small because the photo is a magnified view. It also explains that if it is a fossil, then it is 3.6 billion years old and might prove that there was once life on Mars.*

Use Random Reporter to debrief.

4. Ask partners to reread this section of text, check their understanding with each other, and add notes to their graphic organizers.

Use Random Reporter to debrief. Add student responses to the graphic organizer.

<table>
<thead>
<tr>
<th>Sample Graphic Organizer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>rock from Mars</strong></td>
</tr>
<tr>
<td>scientists studied: 3.6 billion yrs. old</td>
</tr>
<tr>
<td>fossil: evidence of past life, preserved remains</td>
</tr>
<tr>
<td>Debate: Does the rock contain a fossil of the smallest life form?</td>
</tr>
<tr>
<td>found on Earth, very rare</td>
</tr>
</tbody>
</table>

**Partner pairs:** Read aloud/think aloud with the next passage to practice the skill or strategy.

**Partner pairs:** Review, reread to clarify, and add to the graphic organizer.
5. Introduce the partner routine for practicing fluency and the fluency rubric. Explain that fluency is about pronouncing words correctly, reading smoothly and with expression, and at a speed that is just right for understanding the text. Point out that when we practice fluency, we become better and more fluent readers.

6. Refer students to the teamwork routine for fluency, and review the routine.

<table>
<thead>
<tr>
<th>With Partners</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
<th>Fourth</th>
<th>Finally</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Fluency</td>
<td>Choose a short passage from the text.</td>
<td>Practice reading it aloud with your partner.</td>
<td>Use the fluency rubric to give your partner feedback.</td>
<td>Make sure all team members are prepared for a fluency check in the Lightning Round.</td>
<td></td>
</tr>
</tbody>
</table>

7. Display the following fluency rubric (also on the team folder). Remind students that the rubrics are tools to help teams get ready for the Lightning Round. Explain that teams can earn points on the poster when they practice and prepare their team members to read a short passage fluently. Review the levels on the rubric.

- **Fluency Rubric**
  - **100** gives a 90-pt. response and reads smoothly and with expression (shows emotion and changes with punctuation and dialogue).
  - **90** gives an 80-pt. response and reads at just the right pace to understand the text—not too slow and not too fast.
  - **80** reads a short passage and pronounces most of the words correctly.

8. Introduce the video.

Let’s watch as these partners practice fluency. Using the fluency rubric, think about what feedback you would give the partner. Does he pronounce words correctly? Does he read at the right rate for the text? Does he read smoothly and with expression?

Show the first part of the video. Use Think-Pair-Share to debrief.

Using the fluency rubric, what feedback would you give the partner?

Accept reasonable responses.

Show the second part of the video.
Use **Think-Pair-Share** to debrief.

**What feedback did the listening partner give the reading partner?**

9. Refer again to the fluency teamwork routine, and tell partners to practice the routine during partner reading. Point out that teams earn points for fluency during the Lightning Round if their Random Reporter gives a 100-point response. Teams will want to be sure that all team members are ready to read a passage fluently.

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**Partner Prep**

1. Explain, or review if necessary, the student routines for partner reading, fluency, and the TIGRRS process before having students read and restate: pages 18 and 19 aloud with partners.

2. Circulate and check for comprehension, evidence of strategy use, and use of the TIGRRS process, for example, restating ideas on the graphic organizer. Give students feedback. Prompt and reinforce their discussions.

3. If some partners finish ahead of their teammates, have them begin looking over the Team Talk questions.

**Team Discussion**

1. Explain, or review if necessary, how to use role cards and the student routines for strategy use and Team Talk discussion.

2. Remind students to use the rubrics on their team folders to prepare each team member to discuss the team’s strategy use, oral and written Team Talk responses, and fluency. Each team member must be able to summarize the text and discuss the team’s graphic organizer/notes during Class Discussion as indicated.

3. Preview the Team Talk questions. If necessary, ask questions to guide students’ reflection as they determine the meaning of the “(Write)” question.
## Team Talk Questions

1. **Could the rock from Mars that was found on Earth have had XYZ65 in its name instead of ALH84? Why or why not? [DC, SA] (Team Talk rubric)**

   **100** = No, the rock could not have had XYZ65 instead of ALH84 in its name because the letters and numbers represented specific information. The rock was found in Allan Hills, an area in Antarctica, which is where the ALH part of the name came from. Also, the rock was found in 1984, which is why 84 is included in the name. The letters and numbers in the rock’s name were not just chosen at random, but they told scientists when and where the rock was found. *If the letters and numbers had been XYZ65, they would not have been as meaningful.*

   **90** = No, the rock could not have had XYZ65 instead of ALH84 in its name because the letters and numbers stood for things. The rock was found in Allan Hills, which is the ALH part of the name. The rock was found in 1984, which is why there is an 84. The letters and numbers in the rock’s name were not just chosen any way that someone wanted.

   **80** = No, because the letters and numbers stood for things.

2. **What is a main idea in the section “Blast from the Past”? What details support it? (Write) [MI, SA] (Team Talk rubric)**

   **100** = A rock from Mars that was found on Earth may have the fossil of a very small life form preserved in it. The rock’s structure and materials were carefully studied. There is debate about the rock. It may prove that there was once life on Mars.

   **90** = A rock from Mars that was found on Earth may have the fossil of a very small life form in it. The rock’s structure and materials were carefully studied. There is debate about the rock.

   **80** = A rock from Mars was found on Earth. It may have the fossil of a very small life form in it.

3. **How does the image on page 16 help you understand more about the Martian rock slices that scientists studied? [RE, SA] (Team Talk rubric)**

   **100** = The image on page 16 gives me a better idea about the size of the tube-shaped things that were found in the Martian rock when scientists studied the rock. The author explains that the tube-shaped things were extremely small and were less than one-hundredth of the width of a human hair. This is hard to visualize, so the image shows a human hair. As a result, I understand more clearly just how small the tube-shaped things were since they were less than one-hundredth of the size of the image shown. Without the picture, it would have been harder to visualize the size of the tube-shaped things.

   **90** = The image on page 16 gives me a better idea about the size of the tube-shaped things that were found in the Martian rock. The author explains that the tube-shaped things were less than one-hundredth of the width of a human hair. This is hard to picture, so the image shows a human hair. I understand just how small the tube-shaped things were.

   **80** = It gives me a better idea about the size of the tube-shaped things that were found in the Martian rock.
4. At the end of page 19, the author asks, “If they are fossil bacteria, and life did exist on Mars, what happened to it?” Use what you have read so far to explain what you think happened to any life that may have existed on Mars.  
[DC, MI, SA] (Team Talk rubric)  
(Answers may vary.)

100 = I think that any life that may have existed on Mars died out because of certain features on the planet. For example, Mars’s atmosphere floated off, which resulted in the planet’s climate becoming extremely cold. The atmosphere had been protecting the planet and keeping it warm. The cold climate may have made it impossible for life to survive. Also, the atmosphere is mostly carbon dioxide. On Earth, this gas is very dangerous. It may have caused the population on Mars to die out. On Earth, people need oxygen to breathe, but there is no oxygen on Mars. The climate and gases that both do and do not exist on Mars may have caused life to die out.

90 = I think that any life that may have existed on Mars died out because of changes to the planet. Mars’s atmosphere floated off, which meant that the planet became very cold. The atmosphere had been protecting the planet. The atmosphere is mostly carbon dioxide. On Earth, this gas is very dangerous. It may have caused life on Mars to die out.

80 = Life died out because of changes to the planet.

5. What word from the vocabulary list belongs in the blank? How do you know? [CV]

“Even though Sonia has the fastest time for running the track, I am _______ to beat her score!” Ariel exclaimed.

Determined. The use of “even though” is a clue. Sonia has the fastest time, but Ariel will still work hard to beat Sonia’s score.
Class Discussion (15 minutes)

Lightning Round
1. Use Random Reporter to have teams share strategy use, oral and written Team Talk responses, and fluency. Ask other teams to agree, disagree, or add on to responses.
2. Use rubrics to evaluate responses and give specific feedback. Award team celebration points for 100-point responses. Record individual scores on the teacher cycle record form.

Celebrate
1. Tally the team scores on the poster, and celebrate teams that are accumulating points. Have teams reflect on the following questions:
   - How many points did your team earn today?
   - How can your team earn more points?

   Remind students that top-scoring teams will earn bonus points that will be added to their cycle scores.
   - Something to cheer about: Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.
2. As a reminder, refer students to the Read and Respond homework assignment described in their student editions.

Randomly select team representatives who will share:
- strategy use
- oral and written Team Talk responses
- fluency selection

Celebrate team successes!

The top team chooses a cheer.

Remind students of the Read and Respond homework assignment.
Lesson 4

**Reading Objective:** Use strategies to help identify important information and the relationship of ideas.

**Teacher Background**
During the Interactive Read Aloud, model the reread-and-review step in the TIGRRS process. Demonstrate how rereading can help to clarify confusing parts of the text and help in finding evidence to support the main ideas. Model how reviewing your notes helps you make new connections or raise new questions.

Today students will read the second half of chapter 3. This part of the chapter focuses on whether life could survive on Mars. Based on life as we know it, we could not survive on Mars as it is today; however, it is possible that the conditions on Mars used to be different. Mars may have been warmer and wetter and had more air, so it is possible that life could have existed there at one point. The author also includes a helpful visual that illustrates how the amount of water on Mars has decreased over time.

**Active Instruction**

(25 minutes)

**Partner Vocabulary Study**
1. Display the vocabulary words. Have students use the vocabulary study routine as they rerate their knowledge of each vocabulary word as they arrive for class.
2. Spot check the Read and Respond homework.

**Vocabulary**
1. Have teams discuss their ratings of the words. Ask teams to 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 “?”.
2. Use Random Reporter to have the teams share one word that they know and one word that they need to study further. Use Random Reporter to have teams report on a new sentence using a vocabulary word. Award team celebration points.
3. Remind teams that if they find a word from the vocabulary list used in another place, such as in a magazine, textbook, TV ad, etc., they can bring in or copy the sentence in which the word was used and put it in the Vocabulary Vault to earn team points.
Set the Stage
1. Ask students to review their team’s goal for this cycle and assess their progress.
2. Review the Team Celebration Points poster, and challenge teams to build on their successes.
3. Remind students of the text, author, and reading objective.

Interactive Read Aloud
1. Read page 20 aloud. Use Think-Pair-Share to prompt the use of the skill or strategy.

   **Judging from what I have read so far, which graphic organizer do you think you will use for the reading? Why?**

   Accept supported responses. For example, I think I will use a web because the main idea is that Mars has changed, and the details tell about how it has changed. Some students may say they will use a Venn diagram because the text is telling the differences between what Mars is like now and what it may have been like in the past.

   **What do you learn from the timeline at the top of pages 20 and 21?**

   The diagram shows that over time, there has gradually been less water on Mars. Four billion years ago, a large section of the planet was covered in water. According to the diagram, it looks like there’s barely any water anymore. The text explains that the surface on Mars contains remains of ancient lakes and channels. The diagram is a visual for what the author explains.

2. Refer to the reread-and-review step of the TIGRRS process. Review the points in this step of TIGRRS.

   **Rereading is an important step because it can help us clarify anything confusing in the text. By rereading, we can also identify the details that support a main idea and add them to the graphic organizer. Reviewing the notes on the graphic organizer will help us make connections and ask new questions.**
Reread page 20 (paragraph 1) aloud. Model this step with the text. A sample Think Aloud follows.

**Sample Think Aloud**

I chose to reread the first paragraph on page 20 because there is a lot of information about how Mars may have been different at one point. I want to make sure that I understand what the author is telling me about a theory that Mars was once covered in water.

*(Read the paragraph aloud.)*

After rereading this section, I understand that scientists were able to create maps of Mars based on pictures that were sent to Earth from spacecraft. The maps are the evidence for the theory. Now I understand the connection between the theory and the evidence to support it. That was an important point to understand, so I’ll add it to my graphic organizer. Reviewing my notes, I’m wondering what kind of evidence scientists would need to prove this theory. Is it evidence that can be collected by spacecraft, or will scientists need to go to Mars to find it?

Add notes to the graphic organizer. A sample graphic organizer follows.
Teamwork

(25 minutes)

Partner Prep

1. Explain, or review if necessary, the student routines for partner reading, fluency, and the TIGRRS process before having students read and restate: **pages 21–23 aloud with partners.**

2. Circulate and check for comprehension, evidence of strategy use, and use of the TIGRRS process, for example, restating ideas on the graphic organizer. Give students feedback. Prompt and reinforce their discussions.

3. If some partners finish ahead of their teammates, have them begin looking over the Team Talk questions.

Team Discussion

1. Explain, or review if necessary, how to use role cards and the student routines for strategy use and Team Talk discussion.

2. Remind students to use the rubrics on their team folders to prepare each team member to discuss the team’s strategy use, oral and written Team Talk responses, and fluency. Each team member must be able to summarize the text and discuss the team’s graphic organizer/notes during Class Discussion as indicated.

3. Preview the Team Talk questions. If necessary, ask questions to guide students’ reflection as they determine the meaning of the “(Write)” question.
Team Talk Questions

1. Which section of text did you choose to reread and why? What new connection did you make by rereading and reviewing your notes?

100 = I reread paragraph 1 on page 22. The author explains that scientists are trying to prove that Mars was once a hot spring, just like Earth. Hot springs produce very warm water. I connected this to the pictures and caption on the previous pages. The pictures showed Mars over time, and the caption explained that the blue represented water. In the earliest image, Mars was shown as it looked four billion years ago. Since there was a lot of water compared with now, it seems to be a logical theory that Mars may have once been a hot spring. Rereading this paragraph helped me better understand a theory.

90 = I reread paragraph 1 on page 22. The author explains that scientists are trying to prove that Mars was once a hot spring. I connected this to the pictures and caption on the previous pages. The pictures showed Mars over time, and the caption explained that the blue represented water. Mars was shown as it looked four billion years ago. It seems to be a logical theory that Mars may once have been a hot spring.

80 = I reread paragraph 1 on page 22. Scientists are trying to prove that Mars was once a hot spring. I connected this to the pictures and caption. Mars was shown as it looked four billion years ago. It seems logical that Mars may have once been a hot spring.

2. Write a summary of the section of text you reread. (Write) [MI] (summary rubric)

100 = Scientists are looking for microbes, or microscopic living organisms, right here on Earth. They are studying hot springs to look for microbes similar to what may have existed on Mars. In early times, Earth was just a hot spring, and scientists think that Mars was too. Therefore, it makes sense to study hot springs here on Earth and compare their findings with the materials in the meteorite from Mars.

90 = Scientists are looking for microscopic living things on Earth. They are studying hot springs to look for things similar to what may have existed on Mars. Earth was once just a hot spring, and scientists think that Mars was too.

80 = Scientists are looking for very small living things on Earth. They are studying hot springs. Earth was once just a hot spring. Scientists think that Mars was too.

continued
3. Explain the importance of hot springs for scientists studying Mars. [MI, DC, SA] (Team Talk rubric)

100 = Hot springs play an important role for scientists studying Mars because they can help to prove a theory that scientists have. They are looking for microbes, or small living things, in the waters of natural hot springs that may be similar to those found on Mars. Water in a hot spring contains minerals and a form of life called bacteria. In earlier times, Earth was just one big hot spring, and scientists think that Mars possibly was too. Therefore, they need to compare the tube-shaped things in the meteorite from Mars with the microbes in hot springs to prove that Mars was a hot spring.

90 = Hot springs play an important role for scientists studying Mars because they can help support an idea about Mars that scientists have. Scientists are looking for microbes in hot springs that may be like those found on Mars. Water in a hot spring has minerals. In the past, Earth was just a hot spring, and scientists think that Mars was too.

80 = Hot springs are important because they can help to support an idea about Mars that scientists have.

4. How does the caption on page 23 improve your understanding of the text on page 22? [RE, SA] (Team Talk rubric)

100 = The caption improves my understanding because it tells me about the different types of people who are studying hot springs. I know that hot springs are very important to scientists, and the caption tells me that people who have training in geology, chemistry, and biology are involved in studying hot springs. These people all have knowledge that is useful for learning about hot springs. For example, they know about rocks, gases, and life on our planet. All this knowledge helps scientists make predictions about what Mars may have been like in the past. If this caption were not included, I would not realize how much knowledge is needed for studying hot springs.

90 = The caption improves my understanding because it tells me about the different people who are studying hot springs. The caption tells me that people who have training in geology, chemistry, and biology are studying hot springs. They know about rocks, gases, and life on our planet. This helps scientists make guesses about what Mars may have been like.

80 = It tells me about the different people studying hot springs.

5. In which of the following sentences is panic used incorrectly? [CV]

A. Mrs. Thomas felt a sense of panic when she realized that she overcooked the dinner for her guests.

B. There was panic throughout the school when a stomach virus spread from one class to the next.

C. A look of panic came over Jamie’s face when she saw a snake on her porch.

D. There was panic when Mr. Carroll told his students they could have a pizza party.
4. Have students thoroughly discuss Team Talk questions before they write individual answers to the skill question marked “(Write).” Allow students to revise their written answers after further discussion if necessary.

5. Prompt teams to discuss comprehension problems and strategy use (their sticky notes) and important ideas that they added to their graphic organizers.

6. Circulate and give feedback to teams and students. Use rubrics to give specific feedback. Ask questions to encourage further discussion. Record individual scores on the teacher cycle record form.

7. If some teams finish ahead of others, have them practice their fluency.

8. Award team celebration points for good team discussions that demonstrate 100-point responses.

**Class Discussion**

**(15 minutes)**

**Lightning Round**

1. Use **Random Reporter** to have teams share strategy use, oral and written Team Talk responses, and fluency. Ask other teams to agree, disagree, or add on to responses.

2. Use rubrics to evaluate responses and give specific feedback. Award team celebration points for 100-point responses. Record individual scores on the teacher cycle record form.

**Celebrate**

1. Tally the team scores on the poster, and celebrate teams that are accumulating points. Have teams reflect on the following questions:

   **How many points did your team earn today?**

   **How can your team earn more points?**

   Remind students that top-scoring teams will earn bonus points that will be added to their cycle scores.

   - Something to cheer about: Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.

2. As a reminder, refer students to the Read and Respond homework assignment described in their student editions.
Lesson 5

Writing Objective: Organize ideas and use signal words to help a reader understand how the ideas are related.

Teacher Background
The writing objective includes using signal words to show a reader how ideas are related. For example, words that signal that the author is making a comparison would include similar, alike, and compare. Words that signal that an author is contrasting information would include different, unlike, and “in contrast.” Signal words show that connections are being made among the ideas discussed in writing.

Active Instruction
(10 minutes)

Partner Vocabulary Study
1. Display the vocabulary words. Have students use the vocabulary study routine as they rerate their knowledge of each vocabulary word as they arrive for class.
2. Spot check the Read and Respond homework.

Vocabulary
1. Have teams discuss their ratings of the words. Ask teams to 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 “?”
2. Use Random Reporter to have the teams share one word that they know and one word that they need to study further. Award team celebration points.
3. Use Random Reporter to have teams share a new sentence that uses one of their vocabulary words. Award team celebration points.
4. Remind teams that if they find a word from the vocabulary list used in another place, such as in a magazine, textbook, TV ad, etc., they can bring in or copy the sentence in which the word was used and put it in the Vocabulary Vault to earn team points.

Set the Stage
1. Ask students to review their team’s goal for this cycle and assess their progress.
2. Review the Team Celebration Points poster, and challenge teams to build on their successes.
3. Remind students of the text, author, and writing objective.
4. Refer students to the writing prompt and writing objective for this cycle. Remind students that during this cycle they identified how ideas in a text were related, for example, whether the author was comparing and contrasting or telling about a main point and supporting it with details.

5. Refer students to the following writing prompt in their student editions. Read the writing prompt aloud.

<table>
<thead>
<tr>
<th>Writing Prompt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explain how Mars and Earth are similar and how they are different. Support your answer with information from the text.</td>
</tr>
</tbody>
</table>

Use **Think-Pair-Share** to ask:

**Read the prompt. What is it asking you to do: support a claim with reasons, explain ideas or information on a topic, or write a literary response? How do you know?**

_The prompt is asking me to explain information. I know this because the prompt asks me to explain how the two planets are alike and different._

6. Refer students to the following writer’s guide in their student editions. Point out that this guide for writing to inform or explain is the criteria for writing. Point out that using the writer’s guide will help them write a quality response.

<table>
<thead>
<tr>
<th>Writing to Inform or Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ideas</strong></td>
</tr>
<tr>
<td>• Clearly introduce the topic.</td>
</tr>
<tr>
<td>• Develop the topic with relevant details.</td>
</tr>
<tr>
<td><strong>Organization</strong></td>
</tr>
<tr>
<td>• Begin by introducing the topic.</td>
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<td>• In the middle, provide facts, examples, or events that help a reader understand the information.</td>
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<tr>
<td>• End with a closing statement that supports the information.</td>
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<td><strong>Style</strong></td>
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<tr>
<td>• Use words and phrases that help a reader understand how the facts or events are related.</td>
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<td><strong>Mechanics</strong></td>
</tr>
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<td>• Use correct punctuation, capitalization, spelling, and grammar.</td>
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Briefly review the guide, noting the four aspects of writing: ideas, organization, style, and mechanics.

Use **Think-Pair-Share** to ask:

**Which guideline relates to our writing objective: to organize ideas and use signal words to help a reader understand how the ideas are related?**

_The first guideline under Style relates to the writing objective because it says to use words that help a reader understand how facts are related._
7. Tell students that this 10-minute writing project is practice to prepare them to write a quality answer for the writing section (part II) of the cycle test. Remind them that this section of the test is worth one third of their test score.

**Model a Skill**

Point out that as we read, certain signal words tell us how ideas are related. For example, when we see the words *compare, similar,* and *alike,* we know the author is making a comparison. Words and phrases that signal that an author is contrasting information would include *different, unlike,* and “in contrast.” Point out that because the prompt is asking students to compare and contrast, they will use these signal words in their writing to show the relationship of ideas.

<table>
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<th>Compare-and-Contrast Signal Words and Phrases</th>
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**Teamwork**

(20 minutes)

**Independent Work**

Tell students that they have 10 minutes to plan and write drafts of their responses to the writing prompt. Remind them to write on every other line to leave room for revisions. Suggest that they refer to the writing prompt to be sure that they include all the required elements and to the writer’s guide to check the quality of their response.

**Team Discussion**

1. Refer students to the peer feedback checklist in their student editions, and review how to get/give feedback.

2. Have students share their drafts in teams. Allow 5 minutes for students to revise their writing projects based on feedback and to edit them using the editing checklist in their student editions.

3. Have teams put their writing projects in a pile in the middle of their tables so a writing project can be randomly selected.
Class Discussion

(30 minutes)

Lightning Round
Randomly select a writing project from one or two teams’ piles without revealing their authors. Display a writing project, and read it aloud.

Refer students to the writer’s guide for writing to inform or explain and the writing objective—to organize ideas and use signal words to help a reader understand how the ideas are related.

Using the writer’s guide, discuss and evaluate the selected writing project(s) with the class.

For example, ask:

- Does the writer introduce the topic clearly?
- Does the writer include facts and examples to help a reader understand the information?
- Does the writer end with a closing statement that supports the information?
- Does the writer use appropriate academic language and full sentences?
- Does the writer use signal words to show how ideas are related?

Award points to teams whose writing projects meet the criteria. Record these points on the team poster.

Reflection on Writing
Have students reflect on their use of the writing process. Ask:

How did creating and using a graphic organizer work for you? How did it help you write your draft?

*Answers will vary.*

What was the most useful feedback that you received? How did it affect your revisions?

*Answers will vary.*

Did you find it easy or difficult to include signal words in your writing?

*Answers will vary.*
Celebrate

1. Tally the team scores on the poster, and celebrate teams that are accumulating points. Have teams reflect on the following questions:

   **How many points did your team earn today?**

   **How can your team earn more points?**

   Remind students that top-scoring teams will earn bonus points that will be added to their cycle scores.

   • Something to cheer about: Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.

2. As a reminder, refer students to the Read and Respond homework assignment described in their student editions.
Writing Prompt

Explain how Mars and Earth are similar and how they are different. Support your answer with information from the text.

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Lesson 6

**Reading Objective:** Use strategies to help identify important information and the relationship of ideas.

**Writing Objective:** Organize ideas and use signal words to help a reader understand how the ideas are related.

**Teacher Background**

Today’s cycle test challenges students to continue using strategies to identify important information and relationships between ideas in the assessment reading.

Chapters 4 and 5 are the assessment reading today. Chapter 4 describes different experiments on Earth that may make it possible for scientists to learn about Mars from right here on our own planet. Biosphere 2 is a system that can be contained within special housing because everything needed for life is included. If the plan succeeds, scientists could set up places like this on Mars. Haughton Crater is a place where scientists have built a research station. Haughton Crater has many similarities to Mars; for example, its climate and lack of life resemble Mars.

Chapter 5 ties together the ideas in the book and explains that more needs to be learned about Mars, but missions to Mars are a difficult proposition because certain conditions must exist to send a mission. A timeline at the end is a great text feature that offers students a visual representation of Mars exploration that starts in 2001 and ends at 2015, when humans will travel to Mars.

**Active Instruction**

(5 minutes)

**Partner Vocabulary Study**

1. Display the vocabulary words. Have students use the vocabulary study routine as they rereate their knowledge of each vocabulary word as they arrive for class.

2. Spot check the Read and Respond homework.

**Set the Stage**

1. Ask students to review their team’s goal for this cycle and assess their progress.

2. Review the Team Celebration Points poster, and challenge teams to build on their successes.

3. Remind students of the text, author, and reading and writing objectives.

4. Remind teams that if they find a word from the vocabulary list used in another place, such as in a magazine, textbook, TV ad, etc., they can bring in or copy the sentence in which the word was used and put it in the Vocabulary Vault to earn team points.
Partner Review

1. Remind students that they have been practicing using strategies to help identify important information and the relationship of ideas. Use Think-Pair-Share to ask:

   **How have you practiced the skill this cycle? Give an example.**

   *Answers may vary.* I practiced the skill by using text and diagrams to figure out when the author was making a comparison or telling about main ideas and details.

   Tell students that they will use this skill as they take the cycle test.

   Use Think-Pair-Share to ask:

   **How did the TIGRRS process help you better understand the text?**

   The TIGRRS process helped me better understand the text because I had a clear idea about what the topic was, why I was reading about the topic, what the author wanted me to learn, and how to organize the information I was reading. I also had a chance to reread and review, and that helped me clarify difficult parts of the text. Summarizing helped me select the most important parts of the reading that I want to remember from this book.

2. Have partners review their notes and word power journals for this cycle. Allow 2 or 3 minutes for this activity.

Test Directions

1. Remind students that the test is independent work. Students should not ask their partners for help as they read, but they may use sticky notes if they would like.

2. Distribute the test so students can preview the questions. Point out that some of the test questions are multiple choice for which they will choose the best answer. Other questions require them to write a short answer or create a graphic organizer. Part II of the cycle test requires them to write a long answer. Remind them that their writing project was practice for writing the long answer for part II of the test.

3. Point out that question #1 asks about the main ideas and how they organized the information.
4. Ask students to identify key words or phrases in question #1.

<table>
<thead>
<tr>
<th>1. What is the topic?</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the author's intent?</td>
</tr>
<tr>
<td>Write a short summary of the text. Include the graphic organizer or notes that you used to organize the information and your thoughts.</td>
</tr>
</tbody>
</table>

[MI, RE, AP]

5. Introduce the text that students will read. Tell what it is about, but do not give additional information or details.

*Today you will read about some ways that scientists are studying Mars from right here on Earth.*

### Test

(30 minutes)

Tell students that they have 30 minutes for the test and that they may begin. Give students a 5-minute warning before the end of the test.

### Teamwork

(10 minutes)

**Team Discussion**

1. Pass out a colored pen to each student.

2. Explain or review, if necessary, the student routine for team discussions after the test.

3. Have teams discuss their answers to the test questions. As you monitor team discussions, ask additional questions to prompt their thinking about the important ideas in the reading and about the skills and strategies that they have been using.
**Class Discussion**

(15 minutes)

**Lightning Round**

1. Use **Random Reporter** to have teams share team discussions of the test questions and explain their thinking.

   Use **Think-Pair-Share** to ask:

   **Were you able to make connections between Biosphere 2 and information from your earlier reading? Explain.**

   *Yes. I made a connection between Biosphere 2 and hot springs. These are two ways that Mars is being studied from right here on Earth. Biosphere 2 in Arizona is an experiment to create Earthlike conditions on the planet Mars. For example, hot springs on Earth are used to learn about what Mars may have been like a long time ago. I see that there are different ways to study Mars without leaving Earth.*

2. Award team celebration points.

3. Collect test answers. Score original answers, and add extra points for improved answers.

**Celebrate**

1. Tally the team scores on the poster, and celebrate teams that are accumulating points. Have teams reflect on the following questions:

   **How many points did your team earn today?**

   **How can your team earn more points?**

   Remind students that top-scoring teams will earn bonus points that will be added to their cycle scores.

   - Something to cheer about: Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.

2. As a reminder, refer students to the Read and Respond homework assignment described in their student editions.
Cycle 1 Test

Recognize Text Patterns

Directions: Read Mars, pages 24–30. Use the TIGRRS process, and answer the following questions on a separate piece of paper.

Part I. Comprehension (100 points)

1. What is the topic?
   
   5 points = The topic is studying Mars.

   What is the author’s intent?
   
   5 points = The author’s intent is to describe how Mars will be studied.

   Write a short summary of the text. Include the graphic organizer or notes that you used to organize the information and your thoughts. [MI, RE, AP]
   
   10 points = “A Home on Mars” explains that Mars may be studied closely sooner than expected. At Biosphere 2, scientists are creating a system, including plants and water, that can be contained in special housing. People would have everything they need for survival in this housing. If it works, similar biospheres could be set up on Mars. Haughton Crater is another place being used to study Mars. It is a place in Canada where scientists set up a research station because of its similarities in climate and lack of life to Mars. Scientists try out tools here that would be used by astronauts who go to Mars.

2. Would Biosphere 2 be effective if plants were not included? [DC, SA]
   
   20 points = No, Biosphere 2 would not be effective if plants were not included because they have an important function. In Biosphere 2, the plants create oxygen. As a result, people can breathe and eat the plants. If the plants were left out of the biosphere, people would not have oxygen and would not be able to survive. For the biosphere to be successful and allow people to study Mars, plants must be included.

   15 points = No, Biosphere 2 would not be effective if plants were not included because they have an important job. In Biosphere 2, the plants make oxygen so people can breathe. If the plants were left out, people would not be able to live.

   10 points = No, it would not be effective if plants were not included because they have an important job.

3. The question in the caption on page 27 asks, “How do the details in this picture compare with the scenes at the rim of Haughton Crater?” What is your answer to this question? [RE, SA]
   
   20 points = The picture of a colony on Mars is very similar to the scenes near Haughton Crater. For example, the outfit that the person on Mars is wearing is very similar to the space suit the astronaut is
wearing at Haughton Crater. The ground in both pictures looks very rocky. The type of transportation shown on Mars looks very similar to the buggy used at Haughton Crater. However, on Mars it looks like the transportation has more wheels that progress from large to small. The way a colony on Mars might look someday is very similar to the scene shown near Haughton Crater, so it seems like Haughton Crater is a good place for scientists to study.

15 points = The picture of a colony on Mars is a lot like the scenes near Haughton Crater. What the person on Mars is wearing is like the space suit the astronaut is wearing. The ground in both pictures looks very rocky. The buggy shown on Mars looks like the buggy used at Haughton Crater.

10 points = The picture of a colony on Mars is like the scenes near Haughton Crater.

4. Do you think the last chapter, “The Future,” is an important part of the book? Why or why not? [MI, DC]

20 points = Yes, I think the last chapter is an important part of the book because it wraps up all the other chapters. Throughout the book, there are various examples of how Mars has been studied. Examples are hot springs and a meteorite from Mars. These examples support the idea that a lot of research has been done about Mars, and a lot has been learned. The last chapter helps a reader reflect on the book’s main idea of the exploration of Mars. The last chapter draws the conclusion that Mars may be settled one day, but there is more work to be done, and it also leaves the reader with some questions to consider.

15 points = Yes, I think the last chapter is an important part of the book because it wraps up all the other chapters. The book shows ways that Mars has been studied such as by studying a meteorite from Mars. These show the idea that a lot of research has been done. The last chapter helps a reader think about the main idea.

10 points = Yes, the last chapter is important because it wraps up all the other chapters.

5. Why do you think the author included the timeline on page 30? [AP, RE]

20 points = I think the author included the timeline on page 30 because she discussed the different ways that Mars may be explored. The timeline gives a reader a visual of what will happen in which year. It also shows the progress of Mars exploration. Odyssey was supposed to take pictures of the planet’s surface in 2001, and by 2015, humans are expected to travel to Mars. The timeline shows me how the exploration develops. Without the timeline, it would not be as easy to see this progression.
15 points = I think the author included the timeline on page 30 because she wrote about the different ways that Mars may be explored, and the timeline helps a reader picture this. It also shows the ways that Mars will be explored. Odyssey was supposed to take pictures of the planet’s surface in 2001, and by 2015, humans will travel to Mars.

10 points = She wrote about the ways that Mars may be explored, and the timeline helps a reader picture this.

Part II. Writing (100 points)
Write at least a paragraph to answer the following question:
Explain how studying Earth helps scientists to understand Mars.

Studying some extreme conditions on Earth helps scientists to understand what it might be like on Mars and whether there may have been life on Mars in the past. For example, scientists think Mars may have once been a giant hot spring. Studying the bacteria that live in hot springs on Earth may help scientists compare them with the microbes in the meteorite from Mars. The similarities between Haughton Crater near the North Pole and the surface of Mars make the crater a good place for scientists to do research. For example, both have very cold climates. No life has been found on the surface of Mars, and almost no plants or animals live at Haughton Crater. Despite the many differences between Earth and Mars, Earth plays a very important role in the exploration of Mars by giving scientists a basis for comparison.

The following guide is used to score part II of the cycle test.

<table>
<thead>
<tr>
<th>Writing to Inform or Explain</th>
<th>Ideas</th>
<th>Organization</th>
<th>Style</th>
<th>Mechanics</th>
<th>Writing Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Clearly introduces the topic</td>
<td>• Begins by introducing the topic</td>
<td>• Uses words and phrases that help a reader understand how the facts or events are related</td>
<td>• Uses correct punctuation, capitalization, spelling, and grammar</td>
<td>• Organize ideas and use signal words to help a reader understand how the ideas are related.</td>
</tr>
<tr>
<td></td>
<td>• Develops the topic with relevant details</td>
<td>• In the middle, provides facts, examples, or events that help a reader understand the information</td>
<td>• Includes details or examples that help a reader make a mind movie</td>
<td>0–10 pts.</td>
<td>0–15 pts.</td>
</tr>
</tbody>
</table>
Part III. Vocabulary (100 points)

1. Write a meaningful sentence using the word combined. [CV]
   
   Accept responses that show that the student knows the meaning of the word and can use it correctly. For example: Charlotte combined the money she got from her parents and grandparents for graduation to buy a new computer.

2. What is a synonym for the word panic? What is an antonym for the word panic? [CV]
   
   A synonym for the word panic is fear. An antonym is calmness.

3. “Since no talking is allowed during the test, place your paper face down to _______ that you are finished,” Mrs. Wyle instructed.
   
   Choose the word that belongs in the blank. [CV]
   
   A. analyze
   B. launched
   C. indicate
   D. journey

4. In which of the following sentences is determined used incorrectly? [CV]
   
   A. Mrs. Wu can tell that Sally is very determined to earn good grades because Sally never completes her homework.
   B. Brandon is not very athletic, but he still is determined to play basketball the best he can.
   C. Jamal was determined to make it to school on time despite oversleeping.
   D. Even though Kayla is not the best artist, she was determined to draw a beautiful card for her mother.

5. Isabella had to carefully _______ the results of the survey so she could improve her cupcakes.
   
   Choose the word that belongs in the blank. [CV]
   
   A. indicate
   B. journey
   C. combined
   D. analyze

6. What is a synonym for the word launched? What is an antonym for the word launched? [CV]
   
   (Accept reasonable responses.) A synonym for the word launched is started. An antonym for the word launched is ended.

7. Write a meaningful sentence using the word journey. [CV]
   
   Accept responses that show that the student knows the meaning of the word and can use it correctly. For example: I hope to journey all over the world and see many countries.
8. In which of the following sentences is magnified used incorrectly? [CV]

A. The magnified view under the microscope made it easier to see the colors in the rock.
B. Since I was in the first row of the movie theater, everything on the screen looked magnified.
C. Since the pictures were magnified, everything looked much smaller to Jayden.
D. Once she put on her glasses, she was able to read the magnified text.

9. At the meeting, Leon raised his hand to _______ that he had something to say. [CV]

A. analyze
B. indicate
C. magnified
D. determined

10. As used on page 17 in the sentence, “When the scientists announced their findings, a great debate began…,” announced most nearly means— [CV]

A. hid.
B. told.
C. shouted.
D. whispered.

Explain how you figured out the meaning of announced.

Students will explain their thinking. For example, I used the context. The passage talks about a debate starting after the findings were announced, so told makes sense. The scientists told people about their findings. If they hid their findings, there couldn’t have been a debate, and there aren’t clues about how loudly or quietly they actually said the findings.

<table>
<thead>
<tr>
<th>Question Codes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[DC]</td>
<td>Make inferences; interpret data; draw conclusions.</td>
</tr>
<tr>
<td>[SA]</td>
<td>Support an answer; cite supporting evidence.</td>
</tr>
<tr>
<td>[AP]</td>
<td>Identify author’s intent or purpose.</td>
</tr>
<tr>
<td>[MI]</td>
<td>Identify the main idea that is stated or implied.</td>
</tr>
<tr>
<td>[RE]</td>
<td>Analyze relationships (ideas, story elements, text structures).</td>
</tr>
<tr>
<td>[CV]</td>
<td>Clarify vocabulary.</td>
</tr>
<tr>
<td>[AC]</td>
<td>Author’s craft; literary devices</td>
</tr>
</tbody>
</table>
Lesson 7

**Reading Objective:** Use strategies to help identify important information and the relationship of ideas.

**Teacher Background**

During Class Discussion, students orally present evaluations of their homework reading selections. During Teamwork, students use their Read and Respond notes and answers to the homework questions to make final preparations for these presentations. Team members share their responses and give one another feedback. During the oral presentations, students use their revised responses to the questions to describe the kind of texts they read, the strategies that helped them understand the text, and whether they will recommend their reading selections to others.

**Active Instruction**

**(20 minutes)**

**Two-Minute Edit**

1. Display and have students complete the Two-Minute Edit as they arrive for class.

2. Use Random Reporter to check corrections. Award team celebration points.

**Vocabulary**

Ask teams if they have a Vocabulary Vault word that they would like to share. Award team celebration points.

**Set the Stage**

1. Ask students to review their team’s goal for this cycle and assess their progress.

2. Review the Team Celebration Points poster, and challenge teams to build on their successes.

3. Have students get out their reading selections and Read and Respond forms. Remind them that today, with the help of their teams, they will each prepare a presentation about their individual reading selections.

   Challenge students to think about the strategies and skills that they used to read their self-selected texts, share their answers to the Read and Respond questions, discuss their thinking, and prepare evaluations of their selections.

4. Remind students to add to the notes on their Read and Respond forms as they discuss their selections and prepare oral presentations about their selections. Students will use their answers to the questions on the Read and Respond form as the basis for their presentations.
Teamwork

(38 minutes)

Team Discussion

1. Tell students that they will use the Read and Respond questions as a guide as they discuss their homework reading and prepare evaluations of their reading selections to share with their teams.

2. As students prepare their answers, check in with those students for whom you do not have individual scores for graphic organizer/notes, written Team Talk responses, and/or a fluency score. Have them show you examples from the cycle. Point out areas of success, and give feedback to improve student performance.

3. As you visit teams, take this opportunity to check students’ homework for completion (Read and Respond forms). Enter the information on your teacher cycle record form.

Teacher’s Note:

Have students who are ready for a new selection take turns choosing reading material from the classroom library. Make sure that every student has a Read and Respond form for next cycle.

Read and Respond Questions

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is your selection informational or literature? Summarize your reading. (summary rubric)</td>
<td></td>
</tr>
<tr>
<td>2. Why did you choose this reading? What is your purpose for reading? (Team Talk rubric)</td>
<td></td>
</tr>
<tr>
<td>3. Choose a word, phrase, or passage that you did not understand at first. How did you figure it out? (strategy-use rubric)</td>
<td></td>
</tr>
<tr>
<td>4. Write down a question that you had or a prediction that you made as you read. Were you able to answer or confirm it? Explain. (strategy-use rubric)</td>
<td></td>
</tr>
<tr>
<td>5. Would you recommend this selection to others to read? State your opinion, and support it with reasons. (Team Talk rubric)</td>
<td></td>
</tr>
<tr>
<td>6. Choose a short section of the text that you think is important or especially interesting. Tell your teammates why you chose it. Read it aloud smoothly and with expression. (fluency rubric)</td>
<td></td>
</tr>
</tbody>
</table>
Team responses and feedback
Teams report on their review of the texts and Read and Respond discussions.

Celebrate team successes!
Final tally for this cycle

Record team celebration points on the teacher cycle record form.

Collect Read and Respond forms for this cycle.

Class Discussion (15 minutes)

Lightning Round
Use Random Reporter to have students present their evaluations of their homework reading selections (responses to the Read and Respond questions). Use rubrics to evaluate responses, give specific feedback, and award points.

Celebrate
1. Tally up this cycle's points on the poster.
2. Tell students that their scored tests will be returned at the beginning of the next lesson. Poster points and the teams' test scores will determine which teams earn the status of super team, great team, or good team for the cycle.
3. Be sure to record each team's total celebration points from the poster into the teacher cycle record form. Remind students that team celebration points and team test averages are used to determine team scores.
4. Collect students' Read and Respond forms, and pass out new forms.
5. Tally up the number of Read and Respond signatures on students' forms, and record the number on the teacher cycle record form after class.
Lesson 8

**Objectives:** Celebrate successes, and set new goals. Hold a Class Council meeting.

**Teacher Background**

In the first part of this lesson, students review their test results and their final scores for the cycle and compare them with their goals. They celebrate success and set new goals for further improvement.

In the second part of the lesson, students participate in Class Council.

### Active Instruction

**(2 minutes)**

**Two-Minute Edit**

1. Display and have students complete the Two-Minute Edit as they arrive for class.
2. Use Random Reporter to check corrections. Award team celebration points.

### Celebrate/Set Goals

**(20 minutes)**

1. Distribute students’ scored cycle tests. Allow a few moments for students to review them.
2. Distribute team score sheets to teams and celebration certificates to students. Remind students that the cycle’s top-scoring teams are determined by their points on the poster and their test scores.
3. Recognize and celebrate the super, great, and good teams. Remind the teams of the impact of bonus points that are added to team members’ cycle scores.
4. Have each team discuss and set a goal for the next cycle and record it on their team score sheet. Use the questions below to analyze and discuss the students’ scores.

   - **What was your team’s highest score?**
   - **What score do you want to improve?**
   - **What can the team do to improve that score?**

Class celebration! Celebrate team successes with a class cheer.

Each team sets a team goal for the next cycle.
Use **Random Reporter** to ask:

**What is your team’s goal for the next cycle? Why did you choose that goal?**

*Accept supported answers.*

5. Use the poster to award team celebration points for responses that include the team’s reasons for choosing the goal, thus beginning the accumulation of points for the next cycle.

6. Have students record their cycle test scores and their areas of greatest strength and improvement on their progress charts.

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### Class Council

**(30 minutes)**

1. Share class compliments.

2. Review the class goal that was set at the last Class Council. Using the agreed-upon measure of progress, was the goal met? Why or why not?

3. Discuss a class concern, or use the scenario and discussion hints provided.

4. Have teams discuss and then use **Random Reporter** to share responses.

5. After debriefing how they resolved the problem, help students set a goal and a measure of progress that they can use at the next Class Council.

**Scenario:**

Every day Collin promises his teammates that he will do his reading homework. But when he gets home, he turns on the TV, and pretty soon he just doesn’t feel like reading. Does this ever happen to you? What can Collin do to keep his promise? What can Collin’s teammates do to help?

**Discussion Hints:**

- Connect small, short-term goals with long-term goals.

- It is easy to feel overwhelmed by all the demands of the school day. Help students set team goals that are clearly defined and easily met. For example, we will use the strategy rubric to make sure that we have clarified every team member’s sticky-note problems. We will be ready to earn points for strategy use every day this cycle.

- Collin’s predicament is a common one. Help students brainstorm ways to help and support one another and put first things first so they can meet short-term goals. Help students choose materials that interest them so they will be more likely to read every day.

- Help students track their progress so they can see how meeting daily and weekly goals will ensure that the whole team will meet its quarter goal or semester goal of moving up a level or two.
Brain Game

(5 minutes)

1. Choose a brain game from the card set, and then play the game.

2. Use the following questions to debrief and remind students of self-regulatory strategies:

   What did this game require your brain to do?

   How will use of this skill improve your success in other classes?
Lesson 1

**Reading Objective:** Use strategies to help identify important information and the relationship of ideas.

**Teacher Background**
In this cycle, students will identify examples of cause and effect by making connections between inventions and the ideas and events that led to them.

Today students will read about how roller skates were invented and what led to design improvements over the years, in addition to leading to skateboards. Chapter 2 focuses on Eadweard Muybridge and how he created a method for producing moving images. His invention led to the development of the movie camera and the motion picture industry.

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**Active Instruction**

(22 minutes)

**Big Question**
Post and present this cycle's Big Question. Have students write a response to the question as they arrive for class.

**The Big Question:** What do you think are the five most important things that were ever invented? Why are they the most important?

**Set the Stage**
1. The purpose of today's Big Question is to get students thinking about inventions and the impact of inventions on our daily lives.

   Refer students to today's Big Question. Use **Think-Pair-Share** to ask:

   **What do you think are the five most important things that were ever invented? Why are they the most important?**

   *(Answers may vary.) Students may identify inventions such as the car, airplane, cell phone, microwave, computer, camera, television or other. They may explain the importance of an invention, such as the airplane, in providing transportation worldwide or the invention of the computer for changing the way people communicate and get information.*

2. Introduce the video by telling students that they are about to learn about a young modern-day inventor and his invention.

   Show the video “Inventor: Ryan Patterson.” Use **Think-Pair-Share** to debrief.

   **What problem was Ryan trying to solve with his invention? What impact do you think his invention could have?**
Ryan wanted to help hearing-impaired people who used sign language communicate with people who didn’t understand sign language. He invented a translator glove. I think his invention could have a big impact for hearing-impaired people because they could use the glove to talk to anyone who can read the words on the display. It does not limit them to speaking only to those who use sign language.

3. Ask students to review their cycle goal. Remind students how to earn team celebration points. Remind them that team celebration points help them to become super teams. Tell them that they can earn team celebration points during the Lightning Round.

4. Introduce the text, author, and reading objective.

5. Distribute copies of the book *One Thing Leads to Another*. Have students preview the text. Use Think-Pair-Share to ask:

   **Is this literature or informational text? How do you know?**

   *This text is informational. The table of contents, chapter titles and headings, pictures and captions, and instructions are evidence that the text is informational.*

6. Refer students to the next steps in the TIGRRS process. Use Think-Pair-Share to have students predict the topic and identify clues and predict the author’s intent. Randomly select a few students to share.

7. Remind students that the next step in the TIGRRS process is to choose a graphic organizer for making notes. Discuss the different graphic organizers that can be used with informational text to show the relationship of ideas. These might include:
   - a web or outline to show main ideas and supporting details,
   - a Venn diagram to compare and contrast,
   - a timeline or sequence chain to show the order of events, or
   - a chart to show categories of information or to show cause-and-effect connections.

   Model choosing a graphic organizer, and explain your thinking.

   **When I previewed the book, I noticed that the title is *One Thing Leads to Another*. This makes me think that the book will talk about causes and effects. “One thing” would be the cause, and “another” would be the effect. Another way to think about cause and effect is one thing leading to another.**
I think a T-chart would be a good format for making notes because I can record a cause on one side and the effect on the other.

**T:** Inventions. It looks like each chapter focuses on a different invention.

**I:** To explain how different inventions came to be and the effects of certain inventions

**G:** A cause-and-effect T-chart

**Interactive Read Aloud**

1. Refer to the reading objective, and review the skill if necessary.

2. Read pages 4–6 aloud. Use **Think-Pair-Share** to prompt use of the skill or strategy.

   **Do you think the chapter title “One Thing Can Lead to Another” is a good title? Why or why not?**

   Yes, I think the chapter title is good because the chapter is about the invention of roller skates. Because of Merlin’s invention, others began to create their own roller skates made out of different materials. This also led to Plimpton creating roller skates that could make turns and move backward. If Merlin hadn’t created his skates for a grand entrance, all these different kinds of skates may never have been created.

3. Partner Practice: Student partner pairs use the read-aloud/think-aloud process to practice the skill or strategy with the next passage in the text. Have students read page 7 (paragraph 1). Use **Think-Pair-Share** to ask:

   **What connections do you see between what you just read and what I read earlier?**

   I see that because of Merlin’s invention, roller skates were improved through the years. Skateboards even came about as a result of roller skates.

   Use **Random Reporter** to debrief.

4. Ask partners to review this section of text, check their understanding with each other, reread what they need to clarify, and add notes to their graphic organizers.

   Use **Random Reporter** to debrief. Add student responses to the graphic organizer.
A sample graphic organizer follows.

Remind students that causes can have multiple effects, so in some cases, students will have more than one effect that corresponds to a cause.

<table>
<thead>
<tr>
<th>Cause</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1760—Merlin wants to make grand entrance like an ice skater</td>
<td>Gets idea to put wheels on his shoes</td>
</tr>
<tr>
<td>Puts wheels on shoes</td>
<td>Invents roller skates</td>
</tr>
<tr>
<td>Roller skates can’t turn</td>
<td>1867—Plimpton invents 4-wheel skates that can turn and go backwards</td>
</tr>
<tr>
<td>Brothers find antique in-line skates</td>
<td>Brothers inspired to make new in-line skates from new materials</td>
</tr>
<tr>
<td></td>
<td>Skateboards invented based on Merlin’s idea</td>
</tr>
</tbody>
</table>

**Teamwork**

(25 minutes)

**Partner Prep**

1. Explain, or review if necessary, the student routines for partner reading, fluency, and the TIGRRS process before having students read and restate: pages 7–11 aloud with partners.

2. Circulate and check for comprehension, evidence of strategy use, and use of the TIGRRS process, for example, restating ideas on the graphic organizer. Give students feedback. Prompt and reinforce their discussions.

3. If some partners finish ahead of their teammates, have them begin looking over the Team Talk questions.

**Team Discussion**

1. Explain, or review if necessary, how to use role cards and the student routines for strategy use and Team Talk discussion.

2. Remind students to use the rubrics on their team folders to prepare each team member to discuss the team’s strategy use, oral and written Team Talk responses, and fluency. Each team member must be able to summarize the text and discuss the team’s graphic organizer/notes during Class Discussion as indicated.
3. Preview the Team Talk questions. If necessary, ask questions to guide students’ reflection as they determine the meaning of the “(Write)” question.

## Team Talk Questions

### 1. The caption to the picture on page 7 asks a question. Why do you think the inventor made the wheels so large? [DC] (Team Talk rubric)

<table>
<thead>
<tr>
<th>Score</th>
<th>Response</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>The inventor made the wheels large so the skater could move faster. Smaller wheels have to go around more times than larger wheels to cover the same distance. That means that larger wheels cover more distance with less effort than smaller wheels. The result is that a skater can travel a greater distance in less time (go faster) with larger wheels.</td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>The inventor made the wheels large so the skater could move faster. Smaller wheels have to go around more times than larger wheels to cover the same distance. That means that larger wheels cover more distance with less effort than smaller wheels.</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>The inventor made the wheels large so the skater could move faster.</td>
<td></td>
</tr>
</tbody>
</table>

### 2. As used on page 9 in the sentence, “…a man named Eadweard Muybridge became the special effects wizard of his day…,” wizard most nearly means— [CV, SA] (Team Talk rubric)

A. a person who rides horses.
B. a person who doesn’t know much.
C. a person with amazing skill.
D. a person who uses computers.

Why do you think the author uses the word *wizard* to describe Muybridge?

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<tr>
<td>100</td>
<td>I think the author uses the word wizard to describe Muybridge because he came up with an idea that was unusual for his time. Today special effects and computer images are extremely common and are not something that we think of as being special. However, in the 1800s, this was not the case. Muybridge realized that he could make pictures move, and this likely took amazing skill since modern technology did not exist. The word wizard shows how unusual Muybridge’s accomplishment was.</td>
<td></td>
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<tr>
<td>90</td>
<td>I think the author uses the word wizard to describe Muybridge because he came up with an idea that was very different for his time. Today special effects are very common. In the 1800s, this was not the case. Muybridge saw that he could make pictures move.</td>
<td></td>
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<tr>
<td>80</td>
<td>She uses the word wizard to describe Muybridge because he came up with an idea that was very different for his time.</td>
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*continued*
3. What role did Leland Stanford play in Muybridge discovering that all four of a horse’s feet may be in the air at once? (Write) [MI, DC, SA] (Team Talk rubric)

100 = Leland Stanford wanted to know if horses have all four feet in the air at once while running. Therefore, he asked Muybridge if he could use photography to record how Occident (Stanford’s horse) moved. Muybridge set up twenty-seven cameras so he could take pictures quickly, one after the other. As a result, he realized that if the pictures moved, people would understand Occident’s motion. If Stanford had not had this question, Muybridge may not have thought to make pictures move.

90 = Leland Stanford wanted to know if horses have all four feet in the air at once while running. He asked Muybridge if he could record how Occident (Stanford’s horse) moved. Muybridge set up many cameras so he could take pictures quickly.

80 = Leland Stanford wanted to know if horses have all four feet in the air at once while running.

4. Why do you think the author includes the pictures of a person on a horse? Explain. [AP, RE, SA] (Team Talk rubric)

100 = I think the author includes the pictures of a person on a horse because they provide a visual for what the author explains in the text. The author says that Muybridge proved that all four feet of a galloping horse may be in the air at one time. Without the pictures, it would be difficult to visualize all four of the horse’s feet in the air at once.

90 = I think the author includes the picture of a person on a horse because it shows what the author explains in the text. The author says that Muybridge proved that all four feet of a galloping horse may be in the air at one time.

80 = I think the author includes the picture of a person on a horse because it shows what the author explains in the text.

4. Have students thoroughly discuss Team Talk questions before they write individual answers to the skill question marked “(Write).” Allow students to revise their written answers after further discussion if necessary.

5. Prompt teams to discuss comprehension problems and strategy use (their sticky notes), and important ideas that they added to their graphic organizers.

6. Circulate and give feedback to teams and students. Use rubrics to give specific feedback. Ask questions to encourage further discussion. Record individual scores on the teacher cycle record form.

7. If some teams finish ahead of others, have them practice their fluency.

8. Award team celebration points for good team discussions that demonstrate 100-point responses.
Class Discussion

(18 minutes)

Lightning Round

1. Use Random Reporter to have teams share strategy use, oral and written Team Talk responses, and fluency. Ask other teams to agree, disagree, or add on to responses.

2. Use rubrics to evaluate responses and give specific feedback. Award team celebration points for 100-point responses. Record individual scores on the teacher cycle record form.

Celebrate

1. Tally the team scores on the poster, and celebrate teams who are accumulating points. Have teams reflect on the following questions:

   **How many points did your team earn today?**

   **How can your team earn more points?**

   Remind students that top-scoring teams will earn bonus points that will be added to their cycle scores.

   - Something to cheer about: Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.

   2. As a reminder, refer students to the Read and Respond homework assignment described in their student editions.
Lesson 2

**Reading Objective:** Use strategies to help identify important information and the relationship of ideas.

**Teacher Background**

Today students will finish chapter 2. The last part of this chapter describes Muybridge's zoopraxiscope and how it worked. It also includes directions for how to make still pictures move using a few simple materials. Students will also read chapter 3, which focuses on Mary Anderson, who created a windshield wiper using a lever that would be inside the car. Her invention led to something that is crucial for all drivers!

The video in this lesson features an inventor who saw new applications for an old idea.

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**Active Instruction**

(25 minutes)

**Partner Vocabulary Study**

1. Display the vocabulary words. Have students use the vocabulary study routine as they copy the words in their word power journals and rate their knowledge of each as they arrive for class.

2. Spot check the Read and Respond homework.

**Vocabulary**

1. Have teams discuss their ratings of the words. Ask teams to 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 “?”.

2. Use Random Reporter to have the teams share one word that they know and one word that they need to study further. Award team celebration points.

3. Introduce the vocabulary for this cycle. Read each word aloud, and model chunking as needed. Then read the meaning of each word.

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<th>Definition</th>
<th>Sample Sentence</th>
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<td>stiff; unable to bend</td>
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<td>ability to last for a long time and still work</td>
<td>Mason's backpack has great durability since it's full of heavy textbooks and hasn't yet fallen apart.</td>
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<td>de-light-ed (dee-LIE-tid)</td>
<td>very happy; pleased</td>
<td>Autumn was delighted that her father liked the cake she baked especially for his birthday.</td>
</tr>
</tbody>
</table>

4. Use Random Reporter to have teams share a new sentence that uses one of their vocabulary words. Award team celebration points.

5. Remind teams that if they find a word from the vocabulary list used in another place, such as in a magazine, textbook, TV ad, etc., they can bring in or copy the sentence in which the word was used and put it in the Vocabulary Vault to earn team points.
**Set the Stage**

1. Ask students to review their team’s goal for this cycle and assess their progress.
2. Review the Team Celebration Points poster, and challenge teams to build on their successes.
3. Remind students of the text, author, and reading objective.
4. Introduce the video by telling students that they are about to learn about and engineer/inventor who saw a way to improve an old idea.
   
   Show the video “Engineer: Lonnie Johnson.” Remind the students of the NASA engineers in previous videos who landed Curiosity on Mars. Use Think-Pair-Share to debrief.

   **From the videos you’ve seen, what would you conclude is the job of an engineer?**

   An engineer figures out the best way to build something to do a certain job. For example, the NASA engineers wanted to land Curiosity safely on Mars so they figured out how to do that and the best way to build all the necessary equipment. Engineers solve problems using math and physics. Like Lonnie Johnson, they experiment to find out what works best.

5. Remind students that they have been reading about inventions and what events led to them in One Thing Leads to Another. Remind students that when reading about comparisons in the last cycle, they used words in their writing that signaled comparisons. Tell students that there are also words that signal when an author is presenting information about cause-and-effect relationships. Use Think-Pair-Share to ask:

   **What are some words that you might expect to see when an author is talking about causes and effects?**

   (Answers will vary.) For example, I would expect to see words and phrases such as “because of,” “as a result,” and effect.

   List student responses. Following is a sample list.

<table>
<thead>
<tr>
<th>Cause-and-Effect Signal Words and Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>cause</td>
</tr>
<tr>
<td>because</td>
</tr>
<tr>
<td>as a consequence</td>
</tr>
<tr>
<td>therefore</td>
</tr>
<tr>
<td>since</td>
</tr>
<tr>
<td>led to</td>
</tr>
<tr>
<td>as a result of</td>
</tr>
<tr>
<td>outcome</td>
</tr>
<tr>
<td>due to</td>
</tr>
<tr>
<td>impact</td>
</tr>
<tr>
<td>effect</td>
</tr>
<tr>
<td>resulted in</td>
</tr>
</tbody>
</table>
Interactive Read Aloud

1. Read pages 12 and 13 (text only, excluding “How to Make Still Pictures Move!” box) aloud. Use Think-Pair-Share to prompt use of the skill or strategy.

   What was an outcome of Muybridge’s invention? What is its impact on the world today?

   The outcome of Muybridge’s invention of the zoopraxiscope was that moving pictures were invented. Due to his invention, moving picture cameras were invented, and people began making films. The impact on the world today is that we can record and see moving images anytime we want on computers or cell phones.

2. Partner Practice: Student partner pairs use the read-aloud/think-aloud process to practice the skill or strategy with the next passage in the text. Have students read pages 12 and 13 (the “How to Make Still Pictures Move!” box).

   Use Think-Pair-Share to ask:

   Why do you think the author included directions for how to make still pictures move?

   I think the directions are included because it lets a reader try out for himself or herself what Muybridge did to prove that a horse could have all four feet in the air at once while running. It is one thing to read about how something is possible, but it is another to actually try it out. Using the directions would help a reader to really understand firsthand how to create moving pictures.

   Use Random Reporter to debrief.

3. Ask partners to review this section of text, check their understanding with each other, reread what they need to clarify, and add notes to their graphic organizers.

   Use Random Reporter to debrief. Add student responses to the graphic organizer.

   A sample graphic organizer follows.

---

### Sample Graphic Organizer

<table>
<thead>
<tr>
<th>Cause</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argument about a horse</td>
<td>Muybridge called in to settle argument</td>
</tr>
<tr>
<td>Muybridge takes a series of 27 photos of a horse</td>
<td>Gets the idea for motion pictures</td>
</tr>
<tr>
<td>Muybridge invents a zoopraxiscope</td>
<td>The device creates illusion of moving pictures</td>
</tr>
<tr>
<td>Movie cameras are invented</td>
<td>We can see or record moving images anytime we want.</td>
</tr>
</tbody>
</table>
Teamwork (25 minutes)

Partner Prep

1. Explain, or review if necessary, the student routines for partner reading, fluency, and the TIGRRS process before having students read and restate: pages 14–17 aloud with partners.

2. Circulate and check for comprehension, evidence of strategy use, and use of the TIGRRS process, for example, restating ideas on the graphic organizer. Give students feedback. Prompt and reinforce their discussions.

3. If some partners finish ahead of their teammates, have them begin looking over the Team Talk questions.

Team Discussion

1. Explain, or review if necessary, how to use role cards and the student routines for strategy use and Team Talk discussion.

2. Remind students to use the rubrics on their team folders to prepare each team member to discuss the team’s strategy use, oral and written Team Talk responses, and fluency. Each team member must be able to summarize the text and discuss the team’s graphic organizer/notes during Class Discussion as indicated.

3. Preview the Team Talk questions. If necessary, ask questions to guide students’ reflection as they determine the meaning of the “(Write)” question.

Team Talk Questions

1. What caused Mary Anderson to take out her notebook and draw an idea? What was the idea? (Write) [MI, RE, SA] (Team Talk rubric)

   100 = Mary saw the motorman’s problem and took out her notebook to draw a solution. The motorman had a problem clearing the snowy window of the streetcar with his hands. Mary drew a device with a lever that operated an arm outside the streetcar that would sweep the snow away from the windshield. Her invention was a windshield wiper. Mary’s solution made the driver’s job easier.

   90 = Mary saw the motorman’s problem and took out her notebook to draw a solution. The motorman had a problem clearing the snowy window of the streetcar with his hands. Mary drew a lever that moved an arm outside the streetcar that would sweep the snow away from the windshield. Her invention was a windshield wiper.

   80 = Mary saw the motorman’s problem and took out her notebook to draw a solution. Her invention was a windshield wiper.

   70 = Mary saw the motorman’s problem and took out her notebook to draw a solution. Her invention was a windshield wiper.

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   30 = Mary saw the motorman’s problem and took out her notebook to draw a solution. Her invention was a windshield wiper.

   20 = Mary saw the motorman’s problem and took out her notebook to draw a solution. Her invention was a windshield wiper.

   10 = Mary saw the motorman’s problem and took out her notebook to draw a solution. Her invention was a windshield wiper.

   0 = Mary saw the motorman’s problem and took out her notebook to draw a solution. Her invention was a windshield wiper.

continued
2. What is a patent? Why would receiving a patent be important to an inventor? [DC] (Team Talk rubric)
   100 = A patent is government papers that give an inventor exclusive rights to his or her invention for a certain length of time. Having a patent means that the inventor is the only one who can make or sell an invention until the patent time period runs out. If people or companies want to make or use the patented invention, the inventor can charge them and make money.
   90 = A patent is government papers that give an inventor rights to his or her invention for a certain length of time. Having a patent means that the inventor is the only one who can make or sell an invention until the patent time period runs out.
   80 = A patent gives an inventor rights to his or her invention for a certain length of time.

3. Mary Anderson referred to her invention as a “window cleaning device.” Do you think it was more than just a cleaning device? Why or why not? [DC, SA] (Team Talk rubric)
   100 = Yes, I think Mary’s invention was more than just a cleaning device because it also improved safety. Before Mary’s invention, motormen had to scrape snow off their windshields by hand. This was dangerous because it meant that if the motorman didn’t clean the snow right away, he couldn’t see. Therefore, Mary’s invention was not just for cleaning, but for safety too.
   90 = Yes, I think Mary’s invention was more than just a cleaning device because it also made people safer. Before Mary’s invention, motormen had to scrape snow off their windshields by hand. This was dangerous because it meant that if the motorman didn’t clean the snow right away, he couldn’t see.
   80 = It was more than just a cleaning device because it made people safer.

4. Think about the following quote: “Discovery consists of seeing what everybody has seen and thinking what nobody has thought.” What does this statement mean? How does it relate to Mary Anderson? [DC, RE] (Team Talk rubric)
   100 = This statement means that discoveries happen because someone sees something in a whole new way. One person may see a solution to a problem that no one else has recognized yet. Or a person may put together two ideas that no one has ever put together before. Mary Anderson was looking at everyday things that everyone else was seeing, but she had new ideas about them.
   90 = It means that discoveries happen because someone sees something in a whole new way. One person may see a solution to a problem that no one else has recognized yet. Or a person may put together two ideas that no one has ever put together before.
   80 = It means that discoveries happen because someone sees something in a whole new way.
Team Talk Questions continued

5. Which of the following is an example of something that is rigid? Explain your choice. [CV]
   - A. a piece of licorice
   - B. a metal fence
   - C. a piece of clay
   - D. a squishy toy

   A metal fence is rigid because metal is very stiff. On the other hand, a piece of licorice, a piece of clay, and a squishy toy are things that are not stiff at all. You can easily bend licorice and clay.

4. Have students thoroughly discuss Team Talk questions before they write individual answers to the skill question marked “(Write).” Allow students to revise their written answers after further discussion if necessary.

5. Prompt teams to discuss comprehension problems and strategy use (their sticky notes), and important ideas that they added to their graphic organizers.

6. Circulate and give feedback to teams and students. Use rubrics to give specific feedback. Ask questions to encourage further discussion. Record individual scores on the teacher cycle record form.

7. If some teams finish ahead of others, have them practice their fluency.

8. Award team celebration points for good team discussions that demonstrate 100-point responses.

Class Discussion (15 minutes)

Lightning Round

1. Use Random Reporter to have teams share strategy use, oral and written Team Talk responses, and fluency. Ask other teams to agree, disagree, or add on to responses.

2. Use rubrics to evaluate responses and give specific feedback. Award team celebration points for 100-point responses. Record individual scores on the teacher cycle record form.
Celebrate

1. Tally the team scores on the poster, and celebrate teams that are accumulating points. Have teams reflect on the following questions:

   **How many points did your team earn today?**

   **How can your team earn more points?**

   Remind students that top-scoring teams will earn bonus points that will be added to their cycle scores.

   • Something to cheer about: Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.

2. As a reminder, refer students to the Read and Respond homework assignment described in their student editions.
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Lesson 3

**Reading Objective:** Use strategies to help identify important information and the relationship of ideas.

**Teacher Background**

In this lesson, you will introduce the word power journal and the word power rubric. As part of the partner reading routine, students identify a word or words from their reading that they think are important or interesting. They explore the words and create word maps in their word power journals to show what they learn about the word. Each cycle in lesson 3, you will model identifying a word and exploring it in a word map. Sample words, Think Alouds, and word maps are provided in the lessons.

The word power rubric will help partners give feedback on word maps and also guide the team's word power discussion. Encourage students to look beyond a word and its definition for related words, synonyms and antonyms, and multiple meanings or connotations of words. Use the word power rubric as a tool for evaluating and giving feedback to Random Reporters in the Lightning Round.

This lesson includes a video “Word Power Journal” that shows partners identifying an important word in their reading, talking about why it is an important word, and then looking it up in the dictionary to find out the definition. A partner makes a word map that shows the meaning, a related word, and a sample sentence. The team discusses the word and thinks of some more related words to add to the word map.

Today students will read about the history of the lightbulb. Inventors throughout the world have tried to create a lightbulb that would last a long time and not burn out as quickly as previous ones had. Lewis Latimer found a way to make the filament better. As a result, he set up lighting systems in major cities in the U.S. and abroad.

**Active Instruction**

(15–25 minutes)

**Partner Vocabulary Study**

1. Display the vocabulary words. Have students use the vocabulary study routine as they rerate their knowledge of each vocabulary word as they arrive for class.

2. Spot check the Read and Respond homework.

**Vocabulary**

1. Have teams discuss their ratings of the words. Ask teams to 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 “?”.
2. Use Random Reporter to have the teams share one word that they know and one word that they need to study further. Use Random Reporter to have teams report on a new sentence using a vocabulary word. Award team celebration points.

3. Explain that students will keep word power journals.

To build our knowledge of words, we will keep word power journals. When we find important or interesting words during partner reading, we record them in our word power journals and then find out more about them. To explore a word in the word power journal, we make a word map.

4. Choose an important word from the text or class discussion, and model how to explore it in a word power journal entry. A sample Think Aloud and word map follow.

### Sample Think Aloud

As I read, I came across the word *illusion* on page 11, which is not at all familiar to me. It seems like an important word, so I want to make sure that I understand what it means. The author says that Muybridge “became the first person to use still photography to give the illusion of motion.” Since a photo doesn’t actually move, he was creating the idea that the photo moved. Maybe *illusion* means seeing something that’s not really there. Let me check. (Model looking up the word *illusion* in a dictionary.) The dictionary says that *illusion* means something that gives a false idea about reality. This is similar to what I had thought *illusion* meant. A synonym for *illusion* is *fantasy* because that means something that is not real. An antonym is *truth* because that means what is actually there or what is real. Let me see if I can make a sentence with this word. “The magician amazed the audience with the illusion that he was flying.”

### Sample Word Map

<table>
<thead>
<tr>
<th>Meaning: see something not there; false idea about reality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>illusion</strong></td>
</tr>
<tr>
<td><strong>antonym: truth</strong></td>
</tr>
<tr>
<td><strong>sentence: The magician amazed the audience with the illusion that he was flying.</strong></td>
</tr>
<tr>
<td><strong>synonym: fantasy</strong></td>
</tr>
</tbody>
</table>
5. Explain that a word map shows what you learned about a word, for example, its meaning, a sample sentence using the word, related words, maybe a second meaning of the word, or an antonym (opposite meaning) for the word.

6. Display the following word power journal rubric (also on the team folder). Remind students that the rubrics are tools to help teams get ready for the Lightning Round. Explain that teams can earn points on the poster when they share words that they explored in their word power journals. Review the levels on the rubric.

<table>
<thead>
<tr>
<th>Word Power</th>
<th>The Random Reporter:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>100</strong></td>
<td>gives a 90-pt. response and expands on the meaning, for example, identifies • related words • a second meaning • a word connotation • an antonym</td>
</tr>
<tr>
<td><strong>90</strong></td>
<td>gives an 80-pt. response and explains the meaning in a definition and a meaningful sentence.</td>
</tr>
<tr>
<td><strong>80</strong></td>
<td>tells a word or phrase added to the word power journal and why it was added (what makes it important or interesting).</td>
</tr>
</tbody>
</table>

7. Introduce the video.

**Let’s watch a team’s word power discussion as they get ready for the Lightning Round.**

Show the video. Use Think-Pair-Share to debrief.

**How did the team prepare for the Lightning Round?**

Using the word power rubric, do you think the team earned a point for their response in the Lightning Round? Why or why not?

8. Refer students to the teamwork routines and the routine for word power.

Review the routine, and remind teams that they can earn points on the poster for 100-point word power responses.

<table>
<thead>
<tr>
<th>With Partners</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
<th>Fourth</th>
<th>Finally</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Partners</strong></td>
<td>Add a word to your word power journals, and discuss why you added it. What makes this word important or interesting?</td>
<td>Find out the word’s definition. Use the word in a meaningful sentence.</td>
<td>Explore the word’s meaning, for example, add to your journal: - related words, - a second meaning, - a connotation of the word, or - an antonym.</td>
<td>As a team, share word power. Check to see that all team members are ready for word power in the Lightning Round.</td>
<td></td>
</tr>
</tbody>
</table>
9. Remind teams that if they find a word from the vocabulary list used in another place, such as in a magazine, textbook, TV ad, etc., they can bring in or copy the sentence in which the word was used and put it in the Vocabulary Vault to earn team points.

Set the Stage
1. Ask students to review their team’s goal for this cycle and assess their progress.
2. Review the Team Celebration Points poster, and challenge teams to build on their successes.
3. Remind students of the text, author, and reading objective.

Interactive Read Aloud
1. Read page 18 (stopping at paragraph 2) aloud. Use Think-Pair-Share to prompt use of the skill or strategy.

   Since lightbulbs are common, why do you think the author names some things that lightbulbs allow you to do?

   I think the author wants to remind us that although lightbulbs provide us with light to do everyday tasks, lightbulbs used to work differently. People may not have always been provided with light so easily.

2. Partner Practice: Student partner pairs use the read-aloud/think-aloud process to practice the skill or strategy with the next passage in the text. Have students read the rest of page 18 (including the caption).

   Why were inventors in a race to invent a reliable lightbulb?

   Inventors were in a race to invent a reliable lightbulb because the bulbs of the time were expensive and burned out quickly. If there were a reliable bulb, people would buy it, and many would be sold. The idea of making money caused inventors to want to invent a reliable lightbulb.

   Use Random Reporter to debrief.

3. Ask partners to review this section of text, check their understanding with each other, reread what they need to clarify, and add notes to their graphic organizers.

   Use Random Reporter to debrief. Add student responses to the graphic organizer.
Sample Graphic Organizer

<table>
<thead>
<tr>
<th>Cause</th>
<th>Effect(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulbs burned out fast &amp; cost a lot of $</td>
<td>People don’t want to use electric lights.</td>
</tr>
<tr>
<td>If there were a longer-lasting bulb…</td>
<td>many more people could afford to use electric lights.</td>
</tr>
<tr>
<td>If many more bulbs could be sold…</td>
<td>the maker of a long-lasting bulb could make lots of money.</td>
</tr>
<tr>
<td>The idea of making a lot more money…</td>
<td>inventors race to invent a reliable lightbulb.</td>
</tr>
</tbody>
</table>

Teamwork

(25–30 minutes)

Partner Prep

1. Explain, or review if necessary, the student routines for partner reading, word power, fluency, and the TIGRRS process before having students read and restate: pages 20 and 21 aloud with partners.
   (if skipping Interactive Read Aloud, pages 18–21)

2. Circulate and check for comprehension, evidence of strategy use, and use of the TIGRRS process, for example, restating ideas on the graphic organizer. Give students feedback. Prompt and reinforce their discussions.

3. If some partners finish ahead of their teammates, have them begin looking over the Team Talk questions.

Team Discussion

1. Explain, or review if necessary, how to use role cards and the student routines for strategy use and Team Talk discussion.

2. Remind students to use the rubrics on their team folders to prepare each team member to discuss the team’s strategy use, oral and written Team Talk responses, word power, and fluency. Each team member must be able to summarize the text and discuss the team’s graphic organizer/notes during Class Discussion as indicated.
3. Preview the Team Talk questions. If necessary, ask questions to guide students’ reflection as they determine the meaning of the “(Write)” question.

<table>
<thead>
<tr>
<th>Team Talk Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Why did Latimer want to improve the filament used in lightbulbs? [MI, SA] (Team Talk rubric)</td>
</tr>
<tr>
<td>100 = Latimer wanted to improve the filament used in lightbulbs because it had an important function. The filament, which is a thin wire, heats the bulb and gives off light. However, the filaments in lightbulbs in the 1800s were very fragile and did not last long. This was an issue because not only did the lightbulbs need to be replaced often, but they were expensive. <strong>Due to the function and cost of lightbulbs, Latimer wanted to improve the filament.</strong></td>
</tr>
<tr>
<td>90 = Latimer wanted to improve the filament used in lightbulbs because it had an important job. The filament heats the bulb and gives off light. The filaments in lightbulbs in the 1800s did not last long. This was a problem because lightbulbs were expensive.</td>
</tr>
<tr>
<td>80 = The filament had an important job.</td>
</tr>
<tr>
<td>2. How would you describe the impact of Latimer’s new method for making filaments? (Write) [MI, DC, RE] (Team Talk rubric)</td>
</tr>
<tr>
<td>100 = Latimer’s new method for making filaments had a huge impact for many people. The company he worked for had him set up lighting systems throughout U.S. cities and also abroad in London. He wrote a book that served as a guide for electrical engineers, and he worked with Thomas Edison on new inventions. Since he traveled, wrote a book, and worked with another inventor, the impact of Latimer’s new method affected many people.</td>
</tr>
<tr>
<td>90 = Latimer’s new method for making filaments had a huge impact. The company he worked for had him set up lighting systems in the U.S. and in London. He wrote a book, and he worked with Thomas Edison.</td>
</tr>
<tr>
<td>80 = It had a huge impact for people.</td>
</tr>
</tbody>
</table>

---

continued
3. As used on page 21 in the sentence, “Latimer later became one of the first members of the Edison Pioneers...,” pioneers most nearly means— [CV, SA]
   A. people who are last.
   B. people who write books.
   C. people who go to London.
   D. people who are first.

Explain how you clarified this word.

100 = I clarified pioneers by using context clues and prior knowledge. It says that the Edison Pioneers were a group of inventors who were early leaders. If they were early, then they wouldn’t have been last. The author doesn’t say whether they traveled or wrote books, so I eliminated choices B and C. Since they were early, choice D made sense. Also, I know that there were pioneers in American history who explored land first. Using other text and knowledge of history helped me clarify pioneers.

90 = I clarified pioneers by using context clues. It says that the Edison Pioneers were early leaders. They wouldn’t have been last. The author doesn’t say whether they traveled or wrote books. They were early. Choice D made sense.

80 = I used context clues.

4. The caption on page 21 asks, “How is the modern lightbulb like Latimer’s?” What is your answer to this question? [RE, SA] (Team Talk rubric)

100 = The modern lightbulb is similar to Latimer’s lightbulb in several ways. The first way is the shape of the bulb. Both the modern and Latimer’s lightbulbs are rounded at the top and then curve down. However, Latimer’s bulb seemed to curve down more. The next similarity is that the filament appears in the middle of the bulb, although the shape differs slightly. In Latimer’s bulb, the space inside the filament was narrower than in the modern bulb. Finally, the filament looks very thin in both bulbs. The visuals help me compare the modern lightbulb with Latimer’s.

90 = The modern lightbulb is like Latimer’s lightbulb in many ways. The first way is the shape. Both bulbs are rounded at the top. The filament is in the middle of both bulbs. In Latimer’s bulb, the space inside was narrower. The filament is thin.

80 = The shape is the same, the filament is in the middle, and the filament is thin.

5. In which of the following sentences is delighted used incorrectly? [CV]

A. Lucas was delighted to learn that he won the student council election.
B. Nina felt delighted when all her friends told her they could come to her party.
C. Jason had a delighted look on his face after getting all A’s on his report card.
D. Mrs. Lender knew her students would be delighted to have homework over the holiday weekend.
4. Have students thoroughly discuss Team Talk questions before they write individual answers to the skill question marked "(Write)." Allow students to revise their written answers after further discussion if necessary.

5. Prompt teams to discuss comprehension problems and strategy use (their sticky notes), important ideas that they added to their graphic organizers, and words that a team member added to the word power journal.

6. Circulate and give feedback to teams and students. Use rubrics to give specific feedback. Ask questions to encourage further discussion. Record individual scores on the teacher cycle record form.

7. If some teams finish ahead of others, have them practice their fluency.

8. Award team celebration points for good team discussions that demonstrate 100-point responses.

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**Class Discussion**

(20 minutes)

**Lightning Round**

1. Use **Random Reporter** to have teams share strategy use, oral and written Team Talk responses, word power discussions, and fluency. Ask other teams to agree, disagree, or add on to responses.

2. Use rubrics to evaluate responses and give specific feedback. Award team celebration points for 100-point responses. Record individual scores on the teacher cycle record form.

**Celebrate**

1. Tally the team scores on the poster, and celebrate teams who are accumulating points. Have teams reflect on the following questions:

   **How many points did your team earn today?**

   **How can your team earn more points?**

   Remind students that top-scoring teams will earn bonus points that will be added to their cycle scores.

   - Something to cheer about: Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.

2. As a reminder, refer students to the Read and Respond homework assignment described in their student editions.
Lesson 4

**Reading Objective:** Use strategies to help identify important information and the relationship of ideas.

**Teacher Background**

Today students will read chapter 5, which is about a delicious invention known as chocolate chip cookies. Ruth Wakefield owned an inn and was trying to put a twist on a recipe for Butter Drop Dos when she accidentally created a well-known treat. She was trying to create chocolate swirls in her cookies, but the chocolate bar pieces did not melt, and they stayed in large chunks. People loved the cookies, and her accidental treat became very popular. Her invention also led to packaged chocolate chips so people would not have to spend time breaking up chocolate bars for their chocolate chip cookies.

During the Interactive Read Aloud, model the reread-and-review step in the TIGRRS process. Demonstrate how rereading can help clarify confusing parts of the text and help in finding evidence to support the main ideas. Model how reviewing your notes helps you make new connections or raise new questions.

**Active Instruction**

(15–25 minutes)

**Partner Vocabulary Study**

1. Display the vocabulary words. Have students use the vocabulary study routine as they rereate their knowledge of each vocabulary word as they arrive for class.

2. Spot check the Read and Respond homework.

**Vocabulary**

1. Have teams discuss their ratings of the words. Ask teams to 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 “?”.

2. Use Random Reporter to have the teams share one word that they know and one word that they need to study further. Use Random Reporter to have teams report on a new sentence using a vocabulary word. Award team celebration points.

3. Remind teams that if they find a word from the vocabulary list used in another place, such as in a magazine, textbook, TV ad, etc., they can bring in or copy the sentence in which the word was used and put it in the Vocabulary Vault to earn team points.
Set the Stage
1. Ask students to review their team’s goal for this cycle and assess their progress.
2. Review the Team Celebration Points poster, and challenge teams to build on their successes.
3. Remind students of the text, author, and reading objective.

Interactive Read Aloud
1. Read pages 22–24 aloud. Use Think-Pair-Share to prompt use of the skill or strategy.

   **Is it important that Ruth tried to add a new twist to her Butter Drop Dos? Why or why not?**

   Yes, it is important. If Ruth had not tried to add a twist to the cookies that she often made, chocolate chip cookies may not even exist. Since the pieces of chocolate bar didn’t melt the way she expected and chunks of chocolate remained, that is how chocolate chip cookies were created. Now, more than seventy years later, not only does everyone know what these cookies are, but most people also know how to bake them. Chocolate chip is a very popular type of cookie.

A sample graphic organizer follows.

<table>
<thead>
<tr>
<th>Sample Graphic Organizer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cause</strong></td>
</tr>
<tr>
<td>Ruth wanted to try something different with her cookie recipe.</td>
</tr>
<tr>
<td>Choc. didn’t melt</td>
</tr>
</tbody>
</table>

2. Refer to the reread-and-review step of the TIGRRS process. Review the points in this step of TIGRRS.

   **Rereading is an important step because it can help us clarify anything confusing in the text.** By rereading, we can also identify the details that support a main idea and add them to the graphic organizer. Reviewing the notes on the graphic organizer will help us make connections and ask new questions.

3. Reread page 22 (paragraph 2) aloud. Model this step with the text. A sample Think Aloud follows.
Sample Think Aloud

I chose to reread this part because I’m wondering why the author went into all the detail about the house the Wakefields bought. I see the words “toll house” are in bold, so I’ll look it up in the glossary. Maybe I can figure out why “toll house” is important. The glossary gives me the same information as the text: a house by the side of the road where tolls are collected. Wait...I think there is a connection. I remember that another name for chocolate chip cookies is toll house cookies. So that is where the name came from—the Wakefields’ Toll House Inn. By rereading, I made a new connection.

Teamwork

(20–30 minutes)

Partner Prep

1. Explain, or review if necessary, the student routines for partner reading, word power, fluency, and the TIGRRS process before having students read and restate: pages 25–27 aloud with partners.

2. Circulate and check for comprehension, evidence of strategy use, and use of the TIGRRS process, for example, restating ideas on the graphic organizer. Give students feedback. Prompt and reinforce their discussions.

3. If some partners finish ahead of their teammates, have them begin looking over the Team Talk questions.

Team Discussion

1. Explain, or review if necessary, how to use role cards and the student routines for strategy use and Team Talk discussion.

2. Remind students to use the rubrics on their team folders to prepare each team member to discuss the team's strategy use, oral and written Team Talk responses, word power, and fluency. Each team member must be able to summarize the text and discuss the team's graphic organizer/notes during Class Discussion as indicated.
3. Preview the Team Talk questions. If necessary, ask questions to guide students’ reflection as they determine the meaning of the “(Write)” question.

<table>
<thead>
<tr>
<th>Team Talk Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Which section of text did you choose to reread and why? What new connection did you make by rereading and reviewing your notes? (Answers will vary.)</td>
</tr>
<tr>
<td>100 = I chose to reread pages 12 and 13 because I wasn’t quite sure that I understood what a zoopraxiscope was. After I reread, I understood better how it worked. By rereading, I realized that although this was considered a huge development at the time, today special effects are very common and are seen all the time in movies. It was interesting to realize the history of special effects and how they first started. A new connection I made is that although inventions improve things, they can continue to be improved upon such as the way that special effects came about because of the zoopraxiscope.</td>
</tr>
<tr>
<td>90 = I chose to reread pages 12 and 13 because I wasn’t quite sure that I understood what a zoopraxiscope was. After I reread, I understood better how it worked. By rereading, I realized that although this was considered a huge development at the time, today special effects are very common. A new connection I made is that although inventions improve things, they can continue to be improved upon.</td>
</tr>
<tr>
<td>80 = I chose to reread pages 12 and 13 because I didn’t understand what a zoopraxiscope was. After I reread, I understood better how it worked. By rereading, I realized that although this stood out at the time, today special effects are very common.</td>
</tr>
<tr>
<td>2. Write a summary of the section of text you reread. (Write) [MI] (summary rubric) (Answers will vary.)</td>
</tr>
<tr>
<td>100 = A zoopraxiscope was a machine for projecting motion. It was a glass disk that had images lined up around the circle. The pictures were very similar. When the pictures were quickly shown in front of a person, though, the pictures seemed to move. Muybridge used this machine to make photographs in a sequence of animals and people. Although he was considered a genius when he created this machine, today movies are basically a series of moving pictures.</td>
</tr>
<tr>
<td>90 = A zoopraxiscope was a machine for projecting motion. It was a glass disk that had images lined up around the circle. When the pictures were quickly shown in front of a person, though, the pictures seemed to move. Muybridge made photographs in a sequence of animals and people. He was considered a genius when he created this machine.</td>
</tr>
<tr>
<td>80 = A zoopraxiscope was a machine for projecting motion. It was a glass disk that had images around the circle. When the pictures were shown in front of a person, the pictures seemed to move. Muybridge was considered a genius when he created this machine.</td>
</tr>
</tbody>
</table>
### Team Talk Questions continued

#### 3. Which of the following statements is true? **[MI, DC, SA]** (Team Talk rubric)

- A. Ruth’s cookies only had an impact on her.
- B. Ruth’s cookies did not have an impact on her.
- C. Ruth’s cookies only had an impact on the Nestlé company.
- D. Ruth’s cookies impacted both her and the Nestlé company.

Explain your answer.

<table>
<thead>
<tr>
<th>Score</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>Ruth’s cookies impacted her because she got a lot of attention for her recipe. It impacted the Nestlé company because some of their <strong>products</strong> changed. Once Ruth learned that her guests at the toll house loved her chocolate chip cookies, she began baking them a lot. She shared her recipe with the people who asked for it, and her recipe was published in several newspapers. Not only did Ruth’s invention impact her, but the Nestlé company <strong>modified</strong> their chocolate bar by adding marks so people could easily break the bars. They also created a chopper just for cutting the chocolate. If Ruth had not invented these cookies, she probably would not have gotten as much attention, and Nestlé wouldn’t have modified their products.</td>
</tr>
<tr>
<td>90</td>
<td>Ruth’s cookies impacted her because she got a lot of attention for her recipe. It impacted the Nestlé company because some of their items changed. Once Ruth learned that her guests at the toll house loved her chocolate chip cookies, she began making them a lot. Her recipe was published. Not only did Ruth’s invention impact her, but the Nestlé company changed their chocolate bar by adding marks so people could easily break the bars.</td>
</tr>
<tr>
<td>80</td>
<td>Ruth’s cookies impacted her because she got a lot of attention for her recipe. It impacted the Nestlé company because some of their items changed.</td>
</tr>
</tbody>
</table>

#### 4. Why do you think the author included the pie chart on page 26? **(Write)** **[AP, DC, SA]** (Team Talk rubric)

<table>
<thead>
<tr>
<th>Score</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>Yes, I think the author included the pie chart because it helps a reader see the impact of an invention. Ruth Wakefield’s cookies became very popular. The pie chart shows the results of a poll from 2001, and 60 percent of people voted chocolate chip as their favorite cookie. The other types of cookies, such as peanut butter, got much fewer votes in comparison. The pie chart emphasizes the popularity of Ruth Wakefield’s invention years later.</td>
</tr>
<tr>
<td>90</td>
<td>I think the author included pie chart because it helps a reader see how popular an invention became. I know that chocolate chip cookies came about by accident in 1930 when the pieces of chocolate bar didn’t melt like Ruth Wakefield thought. The pie chart shows the votes from a poll, and 60 percent of people voted chocolate chip as their favorite cookie. The other types of cookies got fewer votes.</td>
</tr>
<tr>
<td>80</td>
<td>It helps a reader see how popular an invention became.</td>
</tr>
</tbody>
</table>
5. What word from the vocabulary list belongs in the blank? How do you know? [CV]
Sharon’s drawing was so _______ that I couldn’t tell if it was of our dog or our cat.

Crude belongs in the blank. I know because it means rough. If you do a rough draft or sketch of something, it’s not in its final form and doesn’t look its best.

4. Have students thoroughly discuss Team Talk questions before they write individual answers to the skill question marked “(Write).” Allow students to revise their written answers after further discussion if necessary.

5. Prompt teams to discuss comprehension problems and strategy use (their sticky notes), important ideas that they added to their graphic organizers, and words that a team member added to the word power journal.

6. Circulate and give feedback to teams and students. Use rubrics to give specific feedback. Ask questions to encourage further discussion. Record individual scores on the teacher cycle record form.

7. If some teams finish ahead of others, have them practice their fluency.

8. Award team celebration points for good team discussions that demonstrate 100-point responses.

Randomly select team representatives who will share:
- strategy use
- oral and written Team Talk responses
- word power discussions
- fluency selection

Class Discussion
(20 minutes)

Lightning Round
1. Use Random Reporter to have teams share strategy use, oral and written Team Talk responses, word power discussions, and fluency. Ask other teams to agree, disagree, or add on to responses.

2. Use rubrics to evaluate responses and give specific feedback. Award team celebration points for 100-point responses. Record individual scores on the teacher cycle record form.
Celebrate

1. Tally the team scores on the poster, and celebrate teams that are accumulating points. Have teams reflect on the following questions:

   **How many points did your team earn today?**

   **How can your team earn more points?**

   Remind students that top-scoring teams will earn bonus points that will be added to their cycle scores.

   • **Something to cheer about:** Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.

2. As a reminder, refer students to the Read and Respond homework assignment described in their student editions.
Lesson 5

**Writing Objective:** Organize ideas and use signal words to help a reader understand how the ideas are related.

**Teacher Background**

The writing objective includes using signal words to show a reader how ideas are related. Since *One Thing Leads to Another* is composed of various causes and effects, students will likely use a lot of signal words specific to cause and effect. These words and phrases include *so, because, therefore,* and “as a result,” just to name a few. These words will signal cause-and-effect relationships.

**Active Instruction**

(10 minutes)

**Partner Vocabulary Study**

1. Display the vocabulary words. Have students use the vocabulary study routine as they rerate their knowledge of each vocabulary word as they arrive for class.
2. Spot check the Read and Respond homework.

**Vocabulary**

1. Have teams discuss their ratings of the words. Ask teams to 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 “?.”
2. Use Random Reporter to have the teams share one word that they know and one word that they need to study further. Use Random Reporter to have teams report on a new sentence using a vocabulary word. Award team celebration points.
3. Remind teams that if they find a word from the vocabulary list used in another place, such as in a magazine, textbook, TV ad, etc., they can bring in or copy the sentence in which the word was used and put it in the Vocabulary Vault to earn team points.

**Set the Stage**

1. Ask students to review their team’s goal for this cycle and assess their progress.
2. Review the Team Celebration Points poster, and challenge teams to build on their successes.
3. Remind students of the text, author, and writing objective.
4. Refer students to the writing prompt and writing objective for this cycle.

Remind students that during this cycle they identified how ideas in a text were
related, for example, whether the author was connecting causes and effects or
telling about a main point and supporting it with details.

5. Refer students to the following writing prompt in their student editions. Read
the writing prompt aloud.

<table>
<thead>
<tr>
<th>Writing Prompt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose an invention that is discussed in <em>One Thing Leads to Another</em>. Explain what events led to its invention and what impact the invention has had.</td>
</tr>
</tbody>
</table>

Use **Think-Pair-Share** to ask:

**Read the prompt.** What is it asking you to do: support a claim with reasons, explain ideas or information on a topic, or write a literary response? How do you know?

*It is asking me to explain information on a topic. I have to explain the causes and effects of an invention.*

6. Refer students to the following writer’s guide in their student editions. Point out that this guide for writing to inform or explain is the criteria for writing. Point out that using the writer’s guide will help them write a quality response.

<table>
<thead>
<tr>
<th>Writing to Inform or Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ideas</strong></td>
</tr>
<tr>
<td>• Clearly introduce the topic.</td>
</tr>
<tr>
<td>• Develop the topic with relevant details.</td>
</tr>
<tr>
<td><strong>Organization</strong></td>
</tr>
<tr>
<td>• Begin by introducing the topic.</td>
</tr>
<tr>
<td>• In the middle, provide facts, examples, or events that help a reader understand the information.</td>
</tr>
<tr>
<td>• End with a closing statement that supports the information.</td>
</tr>
<tr>
<td><strong>Style</strong></td>
</tr>
<tr>
<td>• Use words and phrases that help a reader understand how the facts or events are related.</td>
</tr>
<tr>
<td>• Include details or examples that help a reader make a mind movie.</td>
</tr>
<tr>
<td><strong>Mechanics</strong></td>
</tr>
<tr>
<td>• Use correct punctuation, capitalization, spelling, and grammar.</td>
</tr>
</tbody>
</table>

Briefly review the guide, noting the four aspects of writing: ideas, organization, style, and mechanics.

Use **Think-Pair-Share** to ask:

**Which guideline relates to our writing objective: to organize ideas and use signal words to help a reader understand how the ideas are related?**

*The first guideline under Style is related to the writing objective because it says to use words that help a reader understand how facts are related.*

7. Tell students that this 10-minute writing project is practice to prepare them to write a quality answer for the writing section (part II) of the cycle test. Remind them that this section of the test is worth one third of their test score.
Model a Skill

1. Remind students that they identified some cause-and-effect signal words.

<table>
<thead>
<tr>
<th>Compare-and-Contrast Signal Words and Phrases</th>
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<tr>
<td>cause</td>
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<td>because</td>
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<td>therefore</td>
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Using signal words is important because it helps a reader make connections. This cycle our book was filled with causes and effects, so these words are especially important to show these relationships.

2. Display the following sample.

Early lightbulbs were unreliable and expensive. As a result, not many people used them. Because there was money to be made by the inventor of a reliable lightbulb, inventors raced to invent one. Lewis Latimer set out to improve the fragile filament of the lightbulb. Due to his efforts, lightbulbs became reliable and affordable, and consequently, more people bought them.

3. Have partners read and identify examples of cause-and-effect signal words in the sample text. The words and phrases “as a result,” because, “due to,” and consequently.

Teamwork

(25 minutes)

Independent Work

Tell students that they have 10 minutes to plan and write drafts of their responses to the writing prompt. Remind them to write on every other line to leave room for revisions. Suggest that they refer to the writing prompt to be sure that they include all the required elements and to the writer’s guide to check the quality of their response.

Team Discussion

1. Refer students to the peer feedback checklist in their student editions, and review how to get/give feedback.
2. Have students share their drafts in teams. Allow 5 minutes for students to revise their writing projects based on feedback and to edit them using the editing checklist in their student editions.

3. Have teams put their writing projects in a pile in the middle of their tables so a writing project can be randomly selected.

Class Discussion

(30 minutes)

Lightning Round

Randomly select a writing project from one or two teams’ piles without revealing their authors. Display a writing project, and read it aloud.

Refer students to the writer’s guide for writing to inform or explain and the writing objective—to organize ideas and use signal words to help a reader understand how the ideas are related.

Using the writer’s guide, discuss and evaluate the selected writing project(s) with the class.

For example, ask:

- Does the writer introduce the topic clearly?
- Does the writer include facts and examples to help a reader understand the information?
- Does the writer use words that show how facts are related?
- Does the writer end with a closing statement that supports the information?
- Does the writer use appropriate academic language and full sentences?

Award points to teams whose writing projects meet the criteria. Record these points on the team poster.

Reflection on Writing

Have students reflect on their use of the writing process. Ask:

- How did creating and using a graphic organizer work for you? How did it help you write your draft?
  
  Answers will vary.

- What was the most useful feedback that you received? How did it affect your revisions?
  
  Answers will vary.
Did you find it easy or difficult to include signal words in your writing? Do you think the words you used were effective?

*Answers will vary.*

**Celebrate**

1. Tally the team scores on the poster, and celebrate teams that are accumulating points. Have teams reflect on the following questions:

   **How many points did your team earn today?**

   **How can your team earn more points?**

   Remind students that top-scoring teams will earn bonus points that will be added to their cycle scores.

   • Something to cheer about: Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.

2. As a reminder, refer students to the Read and Respond homework assignment described in their student editions.
Writing Prompt

Choose an invention that is discussed in *One Thing Leads to Another*. Explain what events led to its invention and what impact the invention has had.

<table>
<thead>
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<th>Writing to Inform or Explain</th>
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| **Ideas**                    | • Clearly introduce the topic.  
                                | • Develop the topic with relevant details. |
| **Organization**             | • Begin by introducing the topic.  
                                | • In the middle, provide facts, examples, or events that help a reader understand the information.  
                                | • End with a closing statement that supports the information. |
| **Style**                    | • Use words and phrases that help a reader understand how the facts or events are related.  
                                | • Include details or examples that help a reader make a mind movie. |
| **Mechanics**                | • Use correct punctuation, capitalization, spelling, and grammar. |
Early lightbulbs were unreliable and expensive. As a result, not many people used them. Because there was money to be made by the inventor of a reliable lightbulb, inventors raced to invent one. Lewis Latimer set out to improve the fragile filament of the lightbulb. Due to his efforts, lightbulbs became reliable and affordable, and consequently, more people bought them.
Lesson 6

**Reading Objective:** Use strategies to help identify important information and the relationship of ideas.

**Writing Objective:** Organize ideas and use signal words to help a reader understand how the ideas are related.

**Teacher Background**

Today’s cycle test challenges students to continue using strategies to identify important information and the relationship between ideas in the assessment reading and earlier reading in the cycle.

Chapter 6 is this cycle’s assessment reading, and it focuses on Jennifer Garcia, who invented the Vacuum Dirt Mat when she was in seventh grade. Her invention won first place in her state’s invention competition. The author explains how she got the idea for the Vacuum Dirt Mat and her process for creating her invention. This chapter teaches students that anyone can invent something, and you don’t have to be a certain age to create an invention.

**Active Instruction**

(5 minutes)

**Partner Vocabulary Study**

1. Display the vocabulary words. Have students use the vocabulary study routine as they rate their knowledge of each vocabulary word as they arrive for class.

2. Spot check the Read and Respond homework.

**Set the Stage**

1. Ask students to review their team’s goal for this cycle and assess their progress.

2. Review the Team Celebration Points poster, and challenge teams to build on their successes.

3. Remind students of the text, author, and reading and writing objectives.

4. Remind teams that if they find a word from the vocabulary list used in another place, such as in a magazine, textbook, TV ad, etc., they can bring in or copy the sentence in which the word was used and put it in the Vocabulary Vault to earn team points.

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Students use the vocabulary study routine to rate their knowledge of each vocabulary word:

+ I know this word and can use it.
✓ This word looks familiar; it has something to do with...
? I don’t know this word; it’s totally new to me.

Teams review their cycle goal.

Post and present the reading and writing objectives.

Review Vocabulary Vault.
Prepare Students for the Test

(5 minutes)

Partner Review

1. Remind students that they have been practicing using strategies to identify important information and the relationship of ideas and organizing ideas by using signal words to show how the ideas are related. Use Think-Pair-Share to ask:

   **How did you identify important information this cycle?**

   *I identified important information by using captions that gave me more information about the text. For example, I read the caption that told me about people rubbing a cut onion on a windshield before the invention of windshield wipers.*

   **Why are signal words important when reading about cause and effect?**

   *They are important because they give the reader a clue that there are relationships between the pieces of information that they are reading. Without these words, the relationships wouldn’t be as clear.*

   Tell students that they will use this skill as they take the cycle test.

2. Have partners review their notes and word power journals for this cycle. Allow 2 or 3 minutes for this activity.

Test Directions

1. Remind students that the test is independent work. Students should not ask their partners for help as they read, but they may use sticky notes if they would like.

2. Distribute the test so students can preview the questions. Point out that some of the test questions are multiple choice for which they will choose the best answer. Other questions require them to write a short answer or create a graphic organizer. Part II of the cycle test requires them to write a long answer. Remind them that their writing project was practice for writing the long answer for part II of the test.

3. Point out that question #1 asks about the main ideas and how they organized the information.

4. Ask students to identify key words or phrases in question #1.

   1. What is the topic?

   2. What is the author’s intent?

   3. Write a short summary of the text. Include the graphic organizer or notes that you used to organize the information and your thoughts. [MI, RE, AP]
5. Introduce the text that students will read. Tell what it is about, but do not give additional information or details.

Today you will read about an invention created by a seventh-grade student.

Test

(30 minutes)

Tell students that they have 30 minutes for the test and that they may begin. Give students a 5-minute warning before the end of the test.

Teamwork

(10 minutes)

Team Discussion

1. Pass out a colored pen to each student.

2. Explain or review, if necessary, the student routine for team discussions after the test.

3. Have teams discuss their answers to the test questions. As you monitor team discussions, ask additional questions to prompt their thinking about the important ideas in the reading and about the skills and strategies that they have been using.

Class Discussion

(15 minutes)

Lightning Round

1. Use Random Reporter to have teams share team discussions of the test questions and explain their thinking.

Use Think-Pair-Share to ask:

After reading about Jennifer Garcia, what do you think you will remember most from this chapter?

(Answers may vary.) I will remember that anyone can invent something. You don’t have to be a certain age or have a certain background. If you see something that you want to be different, you can create an idea for how to make this happen.
Why do you think the author includes the chapter about Jennifer Garcia last?

*I think she includes it last because all the other inventions are made by adults. This chapter shows that you don’t have to be an adult to be an inventor.*

2. Award team celebration points.

3. Collect test answers. Score original answers, and add extra points for improved answers.

**Celebrate**

1. Tally the team scores on the poster, and celebrate teams that are accumulating points. Have teams reflect on the following questions:

   **How many points did your team earn today?**

   **How can your team earn more points?**

   Remind students that top-scoring teams will earn bonus points that will be added to their cycle scores.

   • **Something to cheer about:** Choose a behavior or learning outcome that you would like to reinforce, and reward that behavior by asking students to lead a cheer of their choice.

2. As a reminder, refer students to the Read and Respond homework assignment described in their student editions.
Cycle 2 Test
Recognize Text Patterns

**Directions:** Read *One Thing Leads to Another*, pages 28–30. Use the TIGRRS process, and answer the following questions on a separate piece of paper.

**Part I. Comprehension** (100 points)

1. What is the topic?
   
   5 points = The topic is the invention of the Vacuum Dirt Mat.

What is the author’s intent?

   5 points = The author’s intent is to explain how an invention came about.

Write a short summary of the text. Include the graphic organizer or notes that you used to organize the information and your thoughts. [MI, RE, AP]

   10 points = A seventh-grade girl named Jennifer Garcia invented the Vacuum Dirt Mat because she had to keep vacuuming the dirt that was coming into the house from her family’s unpaved driveway. She thought that it would make sense for her shoes to be vacuumed. This led her to create a floor mat that had an attached vacuum. She created a drawing to carefully plan out her invention and then built it. The result was that the Vacuum Dirt Mat won first place in an invention competition.

2. Which of the following best states the author’s message in the section “Meet a Young Inventor”? [AP, SA]
   
   A. Floor mats don’t clean shoes well.
   B. New York has an invention competition.
   C. Anyone can invent something.
   D. Jennifer put slots in her floor mat.

Explain how you determined the message.

   20 points = I determined the message by thinking about the overall idea of this section. Choices A, B, and D are details about Jennifer’s invention. All the other inventions described in the book were created by adults. The section “Meet a Young Inventor” shows that anyone can invent something with a little creativity and that you can be any age.

   15 points = I figured out the message by thinking about the big idea of this section. Choices A, B, and D are details about Jennifer’s invention. All the other inventions described in the book were made by adults.

   10 points = I thought about the big idea. Choices A, B, and D are details about Jennifer’s invention.
3. As used on page 29 in the sentence, “She had identified her problem and come up with a partial solution,” partial most nearly means— [CV, SA]
   A. incomplete.
   B. excellent.
   C. complete.
   D. difficult.

Explain what partial helps you understand about Jennifer’s plan.

20 points = The word partial helps me understand that Jennifer’s plan is not complete. Although she has identified the problem and thought of vacuuming her shoes as a solution. For the problem to be completely solved, she needs to make her invention a reality. This is done by creating a plan for how a floor mat with a vacuum would work. Partial helps me understand that more work needs to be done.

15 points = The word partial helps me understand that Jennifer’s plan is not complete. She knew the problem and she thought of a solution. She has to come up with a plan for how a floor mat with a vacuum would work.

10 points = It helps me understand that Jennifer’s plan is not complete.

4. Why do you think the author includes the diagram on page 29? [AP, DC, SA]

20 points = I think the author includes the diagram because it helps a reader visualize Jennifer’s invention. The author describes the different parts, such as slots, the cord, and the hose, that Jennifer included in her drawing and how the different parts were built. However, the diagram provides a helpful visual to show the reader how the different parts of the Vacuum Dirt Mat were connected.

15 points = I think the author includes the diagram because it helps a reader picture Jennifer’s invention. The author describes the different parts that Jennifer included in her drawing and how the different parts were built.

10 points = It helps a reader picture Jennifer’s invention.
5. Do you see any similarities between Jennifer Garcia and the other inventors whom you read about this cycle? Explain. [RE, SA]

20 points = Yes. I see similarities between Jennifer Garcia and Mary Anderson because of their process for planning their inventions. They both observed a problem and created drawings of their solutions. Mary saw a streetcar operator clearing away snow on his windshield by using his hands and immediately began thinking of a solution. She drew her idea of a wiper with a lever. Jennifer noticed that the floor mat in her house did not clean the dirt from her shoes well, so she thought her shoes should be vacuumed. She drew her plan of how the mat would work and included all the parts of the mat. The drawing helped her build her invention. Both Jennifer and Mary used the same process for creating an invention by identifying a problem, thinking of a solution, and drawing their ideas.

15 points = Yes. I see similarities between Jennifer Garcia and Mary Anderson because of how they planned their inventions. They both saw a problem and made drawings of their solutions. Mary saw a streetcar operator clearing away snow on his windshield by using his hands and began thinking of a solution. She drew her idea. Jennifer saw that the floor mat in her house did not clean the dirt from her shoes well, so she thought her shoes should be vacuumed. She drew her plan of how the mat would work.

10 points = Yes. They both saw a problem and made drawings of their solutions.

Part II. Writing (100 points)
Write at least one paragraph to answer the following question:
Explain why One Thing Leads to Another is a good title for this book. Support your answer with examples from the text.

One Thing Leads to Another is a good title for this book because it is about inventions, the events that led up to them, and the effects of the inventions. For example, roller skates were first designed in 1760 by a violinist. His design did not allow for turning and stopping, so he ended up crashing. Although this design was rough, it led to improved skates later on that allowed for making turns and skating backward. Consequently, skateboards were developed based on the skate design. Another example is how windshield wipers came about. Mary Anderson watched the operator on her streetcar clean off the snow-covered windshield with his hands. That led her to come up with the idea of windshield wipers that the operator could control from inside the streetcar. Although these were originally used on streetcars, they eventually began to be used in cars. This book’s title reflects the book’s main idea—one thing leads to another, which is shown through one invention often resulting in more inventions throughout time.
The following guide is used to score part II of the cycle test.

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<td><strong>Organization</strong></td>
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<td>• Ends with a closing statement that supports the information</td>
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<td><strong>Style</strong></td>
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<td><strong>Mechanics</strong></td>
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<tr>
<td>• Uses correct punctuation, capitalization, spelling, and grammar</td>
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<tr>
<td><strong>Writing Objective</strong></td>
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<tr>
<td>• Organize ideas and use signal words to help a reader understand how the ideas are related.</td>
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**Part III. Vocabulary** (100 points)

1. In which of the following sentences is *frantic* used incorrectly? [CV]
   - A. Madelyn was frantic when she realized that there were five minutes left for the test, and she still had an essay to write.
   - B. *Frantic for the great movie to end, Lily was glued to her seat.*
   - C. When Kevin saw his opponent catching up to him, he made a frantic dash to the finish line.
   - D. Cole grew frantic as the wasp flew around his head and buzzed loudly.

2. Write a meaningful sentence using the word *astounded*. [CV]
   
   *Accept responses that show that the student knows the meaning of the word and can use it correctly. For example: Oliver was astounded that he played so well in the game because he had hardly practiced.*

3. Stella noticed that the plug was not ________ firmly in the outlet, which was why the hair dryer didn’t work.
   
   Choose the word that belongs in the blank. [CV]
   - A. clamped
   - B. delighted
   - C. rigid
   - D. antique
4. Which of the following is an example of something that could not be an antique? [CV]
   A. a chair
   B. a video game
   C. a doll
   D. a dish

5. Write a meaningful sentence using the word crude. [CV]
   Accept responses that show that the student knows the meaning of the word
   and can use it correctly. For example: Saralee’s graphic organizer was drawn in
   such a crude way that her teacher couldn’t tell what type it was.

6. Which of the following sentences uses rigid incorrectly? [CV]
   A. The rubberband was so rigid that it snapped easily.
   B. Kyle has a rigid schedule and does the exact same activities every day.
   C. “Make sure that you keep yourself rigid while I check to see your
      height,” the nurse told her young patient.
   D. Since the clay was rigid, Mara formed it into all types of
different shapes.

7. It was clear that the umbrella had excellent _______ since it was still in one
   piece after being blown around in many rainstorms.
   Choose the word that belongs in the blank. [CV]
   A. durability
   B. frantic
   C. crude
   D. clamped

8. In which of the following examples would a person most likely feel
delighted? [CV]
   A. after scoring a winning goal
   B. during a difficult test
   C. tripping over a box
   D. having recess taken away

9. What is one word that you or your teammates explored in your word power
   journal this cycle? Give the meaning of this word, and then use it in a
   meaningful sentence. [CV]
   A word that we explored was complex. It means difficult or complicated.
   For example: The surgery is so complex that only a few doctors are able to
   perform it.
10. As used in the sentence on page 28, “You have read about how mistakes or discoveries can eventually evolve into something new,” evolve most nearly means— [CV]
   A. grow.
   B. stop.
   C. find.
   D. annoy.

   Explain how you figured out the meaning of evolve.

   Students will explain their thinking. For example, I used the context. The passage talks about the results of mistakes and discoveries, so it makes sense that mistakes grow into something new, which would be the inventions.

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<tr>
<th>Question Codes</th>
<th>Description</th>
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<tr>
<td>[SA] Support an answer; cite supporting evidence.</td>
<td>[AP] Identify author’s intent or purpose.</td>
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<tr>
<td>[MI] Identify the main idea that is stated or implied.</td>
<td>[RE] Analyze relationships (ideas, story elements, text structures).</td>
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<tr>
<td>[CV] Clarify vocabulary.</td>
<td>[AC] Author’s craft; literary devices</td>
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Lesson 7

**Reading Objective:** Use strategies to help identify important information and the relationship of ideas.

**Teacher Background**

During Class Discussion, students orally present evaluations of their homework reading selections. During Teamwork, students use their Read and Respond notes and answers to the homework questions to make final preparations for these presentations. Team members share their responses and give one another feedback. During the oral presentations, students use their revised responses to the questions to describe the kind of texts they read, the strategies that helped them understand the text, and whether they will recommend their reading selections to others.

**Active Instruction**

(20 minutes)

**Two-Minute Edit**

1. Display and have students complete the Two-Minute Edit as they arrive for class.
2. Use Random Reporter to check corrections. Award team celebration points.

**Vocabulary**

Ask teams if they have a Vocabulary Vault word that they would like to share. Award team celebration points.

**Set the Stage**

1. Ask students to review their team’s goal for this cycle and assess their progress.
2. Review the Team Celebration Points poster, and challenge teams to build on their successes.
3. Have students get out their reading selections and Read and Respond forms. Remind them that today, with the help of their teams, they will each prepare a presentation about their individual reading selections.

   Challenge students to think about the strategies and skills that they used to read their self-selected texts, share their answers to the Read and Respond questions, discuss their thinking, and prepare evaluations of their selections.

4. Remind students to add to the notes on their Read and Respond forms as they discuss their selections and prepare oral presentations about their selections. Students will use their answers to the questions on the Read and Respond form as the basis for their presentations.
Teamwork (38 minutes)

Team Discussion

1. Tell students that they will use the Read and Respond questions as a guide as they discuss their homework reading and prepare evaluations of their reading selections to share with their teams.

2. As students prepare their answers, check in with those students for whom you do not have individual scores for graphic organizer/notes, written Team Talk responses, word power journal, and/or a fluency score. Have them show you examples from the cycle. Point out areas of success, and give feedback to improve student performance.

3. As you visit teams, take this opportunity to check students’ homework for completion (Read and Respond forms). Enter the information on your teacher cycle record form.

Teacher’s Note:

Have students who are ready for a new selection take turns choosing reading material from the classroom library. Make sure every student has a Read and Respond form for next cycle.

Read and Respond Questions

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<tr>
<td><strong>1.</strong></td>
<td>Is your selection informational or literature? Summarize your reading. (summary rubric)</td>
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<tr>
<td><strong>2.</strong></td>
<td>Why did you choose this reading? What is your purpose for reading? (Team Talk rubric)</td>
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<tr>
<td><strong>3.</strong></td>
<td>Choose a word, phrase, or passage that you did not understand at first. How did you figure it out? (strategy-use rubric)</td>
</tr>
<tr>
<td><strong>4.</strong></td>
<td>Write down a question that you had or a prediction that you made as you read. Were you able to answer or confirm it? Explain. (strategy-use rubric)</td>
</tr>
<tr>
<td><strong>5.</strong></td>
<td>Would you recommend this selection to others to read? State your opinion, and support it with reasons. (Team Talk rubric)</td>
</tr>
<tr>
<td><strong>6.</strong></td>
<td>Choose a short section of the text that you think is important or especially interesting. Tell your teammates why you chose it. Read it aloud smoothly and with expression. (fluency rubric)</td>
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Class Discussion

(15 minutes)

Lightning Round

Use Random Reporter to have students present their evaluations of their homework reading selections (responses to the Read and Respond questions). Use rubrics to evaluate responses, give specific feedback, and award points.

Celebrate

1. Tally up this cycle’s points on the poster.
2. Tell students that their scored tests will be returned at the beginning of the next lesson. Poster points and the teams’ test scores will determine which teams earn the status of super team, great team, or good team for the cycle.
3. Be sure to record each team’s total celebration points from the poster into the teacher cycle record form. Remind students that team celebration points and team test averages are used to determine team scores.
4. Collect students’ Read and Respond forms, and pass out new forms.
5. Tally up the number of Read and Respond signatures on students’ forms, and record the number on the teacher cycle record form after class.
Lesson 8

**Objectives:** Celebrate successes, and set new goals. Hold a Class Council meeting.

**Teacher Background**

In the first part of this lesson, students review their test results and their final scores for the cycle and compare them with their goals. They celebrate success and set new goals for further improvement.

In the second part of the lesson, students participate in Class Council.

**Active Instruction**

*(2 minutes)*

**Two-Minute Edit**

1. Display and have students complete the Two-Minute Edit as they arrive for class.

2. Use Random Reporter to check corrections. Award team celebration points.

**Celebrate/Set Goals**

*(20 minutes)*

1. Distribute students’ scored cycle tests. Allow a few moments for students to review them.

2. Distribute team score sheets to teams and celebration certificates to students. Remind students that the cycle’s top-scoring teams are determined by their points on the poster and their test scores.

3. Recognize and celebrate the super, great, and good teams. Remind the teams of the impact of bonus points that are added to team members’ cycle scores.

4. Have each team discuss and set a goal for the next cycle and record it on their team score sheet. Use the questions below to analyze and discuss the students’ scores.

   - **What was your team’s highest score?**
   - **What score do you want to improve?**
   - **What can the team do to improve that score?**
Use **Random Reporter** to ask:

**What is your team’s goal for the next cycle? Why did you choose that goal?**

*Accept supported answers.*

5. Use the poster to award team celebration points for responses that include the team’s reasons for choosing the goal, thus beginning the accumulation of points for the next cycle.

6. Have students record their cycle test scores and their areas of greatest strength and improvement on their progress charts.

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**Class Council**

(30 minutes)

1. Share class compliments.

2. Review the class goal that was set at the last Class Council. Using the agreed-upon measure of progress, was the goal met? Why or why not?

3. Discuss a class concern, or use the scenario and discussion hints provided.

4. Have teams discuss and then use **Random Reporter** to share responses.

5. After debriefing how they resolved the problem, help students set a goal and a measure of progress that they can use at the next Class Council.

**Scenario:**

Joseph feels like his English teacher just doesn’t like him. She hardly ever calls on him, and when she does, she doesn’t agree with his thoughts and opinions about what the class is reading. What would you do if you were Joseph?

**Discussion Hints:**

Teach students that they can use “I” Messages, active listening, and Think-It-Through with adults too. Adults will likely be very impressed by students who solve problems using win-win solutions.

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**Brain Game**

(5 minutes)

1. Choose a brain game from the card set, and then play the game.

2. Use the following questions to debrief and remind students of self-regulatory strategies:

   **What did this game require your brain to do?**

   **How will use of this skill improve your success in other classes?**
Word Power Journal Sample Entry

Sample Word Map
Cycle 2

meaning: see something not there; false idea about reality

antonym: truth

illusion

synonym: fantasy

sentence: The magician amazed the audience with the illusion that he was flying.
1. Team score sheets for this unit should be distributed during lesson 1. Students will use this modified version of the team score sheet to review their goals, track their progress through the six-step research process, and tally team celebration points throughout each lesson.

2. All teams will have the same team goal for this unit—to earn as many team celebration points as possible.

3. The teacher cycle record form has also been modified for the research unit.
   - Track student completion of the research steps, using check marks to indicate done or not done.
   - Note the writing purpose each student selects to evaluate the individual research presentations.
   - Record the writing/presentation score for each student based on the scoring guide for writing that each student chose. This is the only score from the research unit that will roll up into the averages on the classroom assessment summary for the grading period.
   - Record tallies for completion of Read and Respond homework.

4. This is a short, focused research opportunity. While a two- to three-page written product and a three- to five-minute presentation are recommended at this level, please consider your available time and research materials and your students' Internet access and needs when choosing a product that is appropriate for your class.

Unit Overview

The purpose of the research unit is for students to ask questions, find and organize information, and present their findings to others. Students will present their answers in the form of a research product. Level 7 students will each write two to three pages to answer the research question and include at least one text feature to help inform the reader. The text features can be anything that supports the information in their research product, for example, a photograph, drawing, graph, or audio recording. Students will present their findings in a three- to five-minute presentation.

In this lesson, students will be introduced to the research process using a routine based on the Question Formulation Technique (Rothstein, 2012). After students ask questions, they will prioritize and refine their questions, narrowing their list to three researchable questions. Using the Research Question Checklist and team discussion, each student chooses one that they would like to explore through research.

As part of this lesson, you will introduce the difference between open-ended and closed-ended questions. As students learn to refine their questions, we want them to consider how the type of questions they ask can impact their research and, ultimately, their research product.
You will also instruct students on common research skills: taking notes, citing sources, and avoiding plagiarism. There are three common note-taking methods that are used for researching.

- Use a web. The research question is entered in the center and information is added to branches. Note the source information.

- Use notecards. Students record information on one side of the card and the source information on the other. Notecards can easily be arranged and rearranged to match the sequence of information in students’ first drafts.

- Use a digital log. This can only be used if students have regular access to a digital device. Students keep a growing log or web with their information and sources as they would if they were using one of the other two methods. However, students may color code information to track connections and easily make edits as they work.

Use your school’s format for citations and bibliographies or the format included in this lesson.

You may want to visit Ask Smithsonian: www.smithsonianmag.com/video/Introducing-Ask-Smithsonian.html. This optional video is useful in motivating students to ask questions. Students can utilize the website to ask their own questions.
Lesson 1

**Teacher Background**

This unit’s focus is “I think, at a child’s birth, if a mother could ask a fairy godmother to endow it with the most useful gift, that gift would be curiosity.” — Eleanor Roosevelt

This unit’s mini-lesson is on common research skills: taking notes, citing sources, and avoiding plagiarism.

In the introductory unit, students answer a Big Question as they enter the classroom. In subsequent research units, the research focus will be posted, and students will generate questions as they enter the classroom.

**Big Question** (5 minutes)

1. Post and present today’s Big Question. Have students write a response to the question as they arrive for class.

**The Big Question:** Why do people want to know what Mars is like?

2. Refer students to today’s Big Question. Use Think-Pair-Share to ask:

   **Why do people want to know what Mars is like?**

   *(Answers may vary.)* Mars is next to Earth. People can see interesting features through a telescope and wonder what is really there.

3. Post and present the research purpose. Tell students that this unit will be different from the reading units. They will use the books that they have just read in the last unit to ask questions, search for answers, and present their findings to others.

**Active Instruction**

**Generate Questions** (15 minutes)

1. Present the research purpose and focus. Have students write their focus-related questions as they enter the classroom.

   - **Research Purpose:** In this unit, you will ask questions, find and organize information, and present your findings to others.
   - **Research Focus:** “I think, at a child’s birth, if a mother could ask a fairy godmother to endow it with the most useful gift, that gift would be curiosity.” — Eleanor Roosevelt

2. Explain to students that they will now be the ones asking most of the questions. They will start by asking as many questions as they can about this idea, or focus: “I think, at a child’s birth, if a mother could ask a fairy godmother to endow it with the most useful gift, that gift would be curiosity.” — Eleanor Roosevelt
3. Introduce the student routine based on the Questioning Formulation Technique (Rothstein, 2012) for generating lots of questions.

<table>
<thead>
<tr>
<th>QFT Asking Questions</th>
<th>First</th>
<th>Next</th>
<th>Next</th>
<th>Next</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ask as many questions as you can.</td>
<td>Do not stop to answer, discuss, or judge the questions.</td>
<td>Write down every question just as you hear it. If a teammate makes a statement, turn it into a question.</td>
<td>Make sure that every teammate is ready to share one or two questions with the class.</td>
<td></td>
</tr>
</tbody>
</table>

4. Use **Think-Pair-Share** to ask:

**Why will it be difficult to follow this routine?**

*Answers will vary. It will be hard to come up with lots of questions related to the focus. (Remind them to think about the two books that they read in the last unit.) We may want to answer our questions as we think of them, or it may be hard not to talk about the questions.*

Encourage students to stick to the routines.

5. Have teams use the QFT routine to write as many questions about the research focus as they can in ten minutes.

6. Use **Random Reporter** to select a student from each team to share a question or two.

7. Explain the two basic types of questions. Point out that the types of questions students ask may impact their research and the amount of information that they find.

**Sample Think Aloud**

*How you ask a question can influence the kind of answer that you get. For example, some questions are closed-ended, and some are open-ended. Closed-ended questions have one-word answers such as “yes” or “no,” for example, “Did you do your homework?”

Open-ended questions have answers that are longer and more descriptive, for example, “Why didn’t you do your homework?”

While both types of questions are encouraged when reading, open-ended questions are more appropriate for research because you have more information to search through and write about.*

Discuss closed-ended and open-ended questions.
Prioritize and Improve Your Questions (10 minutes)

1. Present the research product: You will write two to three pages that answer your research question and include at least one text feature that helps to inform the audience. You will prepare and deliver a three- to five-minute presentation of your findings.

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

<table>
<thead>
<tr>
<th>First</th>
<th>Next</th>
<th>Next</th>
<th>Next</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose a research question.</td>
<td>Each student writes down up to three researchable questions.</td>
<td>Student 1 reads his or her questions.</td>
<td>Teammates use the Research Question Checklist to discuss which question is most researchable.</td>
</tr>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

Research Question Checklist

| Is the question interesting and important? | Do the question help me learn something new? | Is the question open-ended? |
| Do I need to narrow down the question? | Can the question be answered with the materials available to me? | Can I answer the question in the time that I have to complete my research? |

3. Distribute copies of Mars and One Thing Leads to Another, the books from the previous unit. Tell students that they will use these books to look for answers. Explain that reviewing these books will help students eliminate some questions that they may not have enough information to answer.

Optional: Display any other materials students may use, and discuss computer use if available.

4. Have students share their questions with their teams and discuss how realistic it is to research each question, given the time and materials available. Teammates help one another narrow down questions to make them more researchable. Each student chooses one question to research.
5. Refer students to the scoring guides for writing to support a claim with reasons and writing to inform or explain. Explain that they need to choose the guide based on the research product and question. Post the sample research questions and model identifying which guide to use.

<table>
<thead>
<tr>
<th>Sample Think Aloud</th>
</tr>
</thead>
</table>
| (Read the first question.) This question asks which invention is most important. When I answer it, I will have to state a position—that it has an impact or that it doesn’t. I will also have to include good reasons that support my position, so I would use Writing to Support a Claim with Reasons to guide my research and writing of the product.

(Read the second question.) This question asks how something works. When I answer it, I’m just explaining how it works. I don’t need to make a statement or claim, I need to provide facts, examples, or events that help others understand the information. For this question, I will use Writing to Inform or Explain to guide my research and writing of the product. |

6. Use Random Reporter, and award team celebration points to teams whose representatives can share the research question and scoring guide that they chose and explain why.

7. Refer students to the team score sheets. Explain that the team score sheet for research is used to track their progress through each step of the research process and is used to record team celebration points. Have students review their research purpose, team goal, and team cooperation goal for this cycle. Tell teams to discuss how they are going to earn more team celebration points during this unit, and have them write that goal in the allotted space.

8. Explain to students that they will earn super, great, or good team status based only on the team celebration points that they earn in this unit.

9. Tell students that the only score they will earn this cycle is a writing score that will be based on the scoring guide that they select for evaluation of their research presentation.

10. Tell students to initial each step of the writing process as it is completed during the unit.
Interactive Skill Instruction (25 minutes)

1. Present the mini-lesson on note-taking, citing sources, and plagiarism.

2. Remind students of the graphic organizers they use to take notes while they read. Explain that taking notes for a research project is much the same thing except that they must also be careful to write down exactly where the information was found.

3. Explain that there is an old expression that says, “Give credit where credit is due.” Use Think-Pair-Share to ask:

   What do you think that means?

   Answers will vary. To give credit means to acknowledge what someone has done.

   Explain that intellectual property or someone’s work can be stolen too. Point out that when one uses words that someone else wrote without giving them credit, that’s a kind of robbery called plagiarism.

4. Review the steps for avoiding plagiarism.

   Display the steps for avoiding plagiarism.
   Blackline master provided.

   Discuss note-taking.

5. Refer students to Sample Notes in their student editions. Tell students that Sample Notes shows examples of how students could take notes on a paragraph about the geography of India. Point out that the source is listed at the bottom of the web.
Blackline master provided.
Optional: Discuss notecards.

6. If students will be using notecards, provide the following instruction:
   - Notes and facts go on one side of the card—in student’s own words or in quotations if writing source’s own words.
   - Source information goes on the reverse side of the card.
   - After initial research is done, students review the information, choose the bits they will use, and put those cards in order to help them organize the first draft.

7. Next have partners work together to identify a page in one of the provided sources that they think might be useful. Have them discuss what they might add to the web or notecard and how they would cite the source.

8. Use Random Reporter to share team practice answers, and then award team celebration points.

9. Present the target(s) for scoring from the scoring guides: ideas, organization, style, and mechanics.

Sample Think Aloud

For each research product, we will target a specific part of the scoring guide. This is something that we will want to make sure we include in our research and work on improving as we make changes to our product. For students who are using the writing to support a claim with reasons guide, the target is to clearly state a position (claim) and include good reasons that support that position. For students using the writing to inform or explain guide, the target is to clearly introduce the topic. Notice that both targets are related to ideas in the scoring guides.
Start Digging (10 minutes)

1. 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.

2. Ask students to write the research question in the center of the web or on the first notecard.

3. Circulate, check students’ progress, and record each completed step on the teacher cycle record form. Spot check the Read and Respond homework.

4. Commend students for their progress through the research process during the lesson as recorded in the Research Process section of their team score sheets.

5. Add up the team celebration points earned by each team during the lesson, and record them on the Team Celebration Points poster.
Citing Sources and Avoiding Plagiarism

Follow a few simple steps to avoid plagiarism.

1. Take detailed notes.
   - Keep track of your ideas and the ideas of others by labeling them in your notes.
   - In your notes, keep track of where you found information: write down the author, the title, the page number, and the publication date of the book, website, or periodical.

2. Give credit to other's work.
   - When you use someone else’s ideas or information, put them in your own words. Record the source (author and date) in parentheses at the end of the sentence or paragraph.
   - Use quotation marks when you use someone else’s exact words.

3. Make a bibliography.
   - This is an alphabetized list of all the sources used to find information for a report or research paper. It always comes at the end of the report or research paper. The bibliography entries include all the information that someone would need to find the original source.
   - Use the correct format for each type of source.

For a book, follow this format:

Author (last name, first name). Date of publication. Title of book or article. Publisher: Location of publisher.

Here is an example of a quote that a student used in a presentation about life in India:

“Mahatma Gandhi taught that it is right to hate what is unjust but wrong to hate people.” (Kalman, 2010)

This is how the student wrote the entry in his bibliography:


For an Internet site, follow this format:

Title of site or article on site. Name of organization that has the website. Date that you found the information. URL address.

Here is an example of how the same student used a website for information:

The official name of this country is the Republic of India. It covers 3.29 million square kilometers or about one-third the size of the United States. (U.S. Department of State Fact Sheet, 2012)

This is how he wrote the entry in his bibliography:

Background Note: India. U.S. Department of State. April 17, 2012. www.state.gov
Sample Notes

Geography of India

- 3.29 million sq. km
- 1/3 size of U.S.
- Himalayas—mountains
- Flat river valleys, deserts in west

(Source: Background Note: India. U.S. Department of State. April 17, 2012. www.state.gov)

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Sample Note Cards

<table>
<thead>
<tr>
<th>Country – Republic of India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital – New Delhi</td>
</tr>
<tr>
<td>Geography – 3.29 million sq. km., about 1/3 U.S.</td>
</tr>
</tbody>
</table>

Mountains (Himalayas), West – flat river valleys and deserts

Source:
Background Note: India. U.S. Department of State. April 17, 2012. www.state.gov
Lesson 2

Teamwork

Keep Digging: Search and Process (50 minutes)

1. Have students review their research purpose, team goal, and team cooperation goal as recorded on their team score sheets. Remind teams that they will earn super, great, or good team status based on how many team celebration points they earn.

2. Remind students that their product should include a text feature. Explain that it should support the content of their research. Tell them that they can create one or use one that they find during their research.

   **Sample Think Aloud**
   
   Remember that the product includes a text feature. The text feature can be anything that supports the information you are writing about, such as a photograph, picture, graph, or audio recording. You might find one you can use as you do your research, or you might decide to create your own. If I wanted a text feature about how an electric light works, I might look for a diagram that shows the parts of a light bulb and the flow of electricity, or I might create one.

3. Have students continue to use the research materials to search for information, and have them use their graphic organizer or notecards to record relevant information.

4. Circulate, check students’ progress, and record each completed step on the teacher cycle record form.

5. Spot check the Read and Respond homework.

6. 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 prior to class discussion.

**Class Discussion** (10 minutes)

1. Use Random Reporter to have students share an important piece of information, the source, and why they think the information is important with the class. Award team celebration points.

2. Award extra team celebration points to volunteers who answer the following question: “Did your research change your question or your thinking about what you thought you would find?”

3. Commend students for their progress through the research process during the lesson as recorded in the Research Process section of their team score sheets.

4. Add up the team celebration points earned by each team during the lesson, and record them on the Team Celebration Points poster.
Lesson 3

Teamwork

Teacher Background
During this class period, students review their notes, make a plan, and begin their written product. They then share their product with a teammate for feedback and make changes as needed.

Put It All Together: Draw Conclusions, Write, and Practice (30 minutes)
1. Explain that an important part in preparing to answer their research question is to make a plan for organizing their information.

2. Have students refer to the scoring guide they selected. Explain that the criteria for ideas, organization, style, and mechanics explains what their written product needs to include.

3. Explain that their research products need a beginning, middle, and end. Point out that the information they write needs to be organized in a way that makes sense to the audience.

4. Ask students to review their notes, and identify a plan for including the information in their paragraph. Suggest that they number the notes on their webs or rearrange their notecards to put their ideas in order. Have students review their plan with a teammate.

5. Ask each student to draft his or her research product.

Team Feedback (20 minutes)
1. Refer students to the evaluation form in their student routines. Explain that students will receive feedback from a team member and then make improvements to their research product. Review each part of the evaluation form.

Sample Think Aloud
You will use the evaluation form to guide you in giving feedback to your teammate. The first thing you should do is identify the purpose for writing—to inform or explain OR to support a claim with reasons. As your teammate shares his or her product, decide which part of the writing is the strongest—ideas, organization, style, or mechanics. Tell your partner which part is the strongest and explain why. Then, identify something for your teammate to improve. Maybe the position (claim) isn’t clear enough, or maybe he or she needs to end with a closing sentence.

Next, identify one or two strengths for research skills and presentation skills. This information will be helpful as each of you make improvements and prepare to present your research.
2. Have each team member share his or her presentation with another member of the team.

3. Ask team members to use the evaluation form to give feedback.

4. Tell students to make improvements and prepare for their presentations.

5. Circulate, check students’ progress, and record each completed step on the teacher cycle record form.

6. Spot check the Read and Respond homework.

**Class Discussion** (10 minutes)

1. Award team celebration points to Random Reporters who can report a strength that teammates shared with them about their presentations.

2. Award extra team celebration points to volunteers who share what they have learned about the research, writing, and presentation process.

4. Commend students for their progress through the research process during the lesson as recorded in the Research Process section of their team score sheets.

5. Add up the team celebration points earned by each team during the lesson, and record them on the Team Celebration Points poster.
Lesson 4

Present and Evaluate

In this lesson, students will present their research to groups other than their own teams, and students will use the evaluation form to provide a written evaluation of each presentation that they hear. There will be four rounds of presentations, during which each student will have three minutes to present.

Choose group assignments in advance, or use the following process:

- Count the number of teams.
- Have students count off from 1 to the number of teams. There will be four or five students with each number.
- Have the students who counted off as 1s go to table 1, 2s go to table 2, and so on.

Allow a volunteer to give the first presentation, or designate an individual within each group. Presentations then proceed to the right until everyone has presented. As each presentation concludes, the evaluators complete the evaluation sheets and give them to the presenter.

Present (30 minutes)

1. Have students review their research goal, team goal, and team cooperation goal as recorded on their team score sheets. Remind teams that they will earn super, great, or good team status based on how many team celebration points they earn.

2. Review the criteria for evaluating a presentation, and demonstrate how to complete the evaluation form. Explain that students will provide feedback by writing on the form. Remind students that you will collect the evaluation forms.

3. Designate group assignments, and pass out evaluation forms.

4. Have students move to their designated groups. Begin the presentations.

5. Make sure that each student presents and receives evaluations after the presentation.
Team Discussion (20 minutes)

1. When all presentations are finished, have students return to their teams to review the feedback that they received.

2. Ask team members to share their strengths and suggestions in each category.

Class Discussion (10 minutes)

1. Review each target, and ask for a show of hands indicating areas of strength and areas that need improvement.

2. Use Random Reporter to hold a discussion during which students reflect on the research process and the products that they produced and draw conclusions about successes and areas in need of improvement. Award team celebration points.

3. Collect the written materials, including the plans, drafts, and evaluations. Plan to score and return the research products by the end of the next unit. Award up to 100 points for evidence that the chosen targets were met.

4. Review the total number of team celebration points earned by each team. Use the poster overlay to determine team status (super, great, or good) for this unit.

5. Enter the writing, Read and Respond, and team celebration points scores into the Member Center.

6. Generate the teacher cycle record results report to review team and class averages for the unit.

Remind students of the Read and Respond homework assignment.
# Research Evaluation

**Presenter __________________________  Evaluator __________________________ Date ______________**

**Writing Purpose** (circle one): To inform or explain  To support a claim with reasons

**Writing Quality:** Note one area of strength, and give evidence to support your choice.

<table>
<thead>
<tr>
<th>Ideas</th>
<th>Organization</th>
<th>Style</th>
<th>Mechanics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

Make a suggestion for improvement and a reason for your suggestion.

**Research Skills** (Note one or two strengths.)

<table>
<thead>
<tr>
<th>Answers a focused question</th>
<th>Uses multiple sources</th>
<th>Quotes and paraphrases sources</th>
<th>Cites trustworthy sources</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

**Presentation Skills** (Note one or two strengths.)

<table>
<thead>
<tr>
<th>Good eye contact</th>
<th>Good volume</th>
<th>Clear pronunciation</th>
<th>Enthusiastic presentation</th>
</tr>
</thead>
<tbody>
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<td></td>
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</tbody>
</table>

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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 on the Reading Edge online resources. Contact your SFA coach for more information.

<table>
<thead>
<tr>
<th>Level 7 Recognize Text Patterns</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English Language Arts Standards: Reading: Informational Text</strong></td>
</tr>
<tr>
<td><strong>Key Ideas and Details</strong></td>
</tr>
<tr>
<td>Ri.7.3. Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).</td>
</tr>
<tr>
<td><strong>English Language Arts Standards: Science and Technical Subjects</strong></td>
</tr>
<tr>
<td>RST.6-8.2. Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.</td>
</tr>
<tr>
<td><strong>Craft and Structure</strong></td>
</tr>
<tr>
<td>RST.6-8.5. Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic.</td>
</tr>
<tr>
<td><strong>English Language Arts Standards: Writing</strong></td>
</tr>
<tr>
<td><strong>Text Types and Purposes</strong></td>
</tr>
<tr>
<td>W.7.2c. Use appropriate transitions to create cohesion and clarify the relationships among ideas and concepts.</td>
</tr>
<tr>
<td><strong>Research to Build and Present Knowledge</strong></td>
</tr>
<tr>
<td>W.7.7. Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.</td>
</tr>
<tr>
<td>W.7.8. Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.</td>
</tr>
<tr>
<td>W.7.9. Draw evidence from literary or informational texts to support analysis, reflection, and research.</td>
</tr>
<tr>
<td><strong>English Language Arts Standards: Speaking and Listening</strong></td>
</tr>
<tr>
<td><strong>Presentation of Knowledge and Ideas</strong></td>
</tr>
<tr>
<td>SL.7.4. Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.</td>
</tr>
<tr>
<td>SL.7.5. Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.</td>
</tr>
<tr>
<td>SL.7.6. Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.</td>
</tr>
</tbody>
</table>
Media Acknowledgements

We wish to acknowledge the following organizations and individuals for allowing their background videos to be included in the Reading Edge:

- Twin Cities Public Television (DragonflyTV)
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