Create a Summary

Faces magazine: Machines, Can You Live Without Them?

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.
Create a Summary

*Faces magazine:* Machines, Can You Live Without Them?

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 a 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>
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<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>
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</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>
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Unit Objectives

<table>
<thead>
<tr>
<th>Reading</th>
<th>Develop an effective summary.</th>
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</thead>
<tbody>
<tr>
<td>Writing</td>
<td>Clearly introduce a point and support it with evidence from the text.</td>
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Unit Overview

The focus of this unit is developing an effective summary. Learning to develop an effective summary will help students understand the text by requiring them to select the main ideas of what they read. Summarizing will help students remember the most important information after reading. Students will use the summary rubrics that will be found in their student editions to guide them as they write summaries. They will make notes on key terms, main ideas, and supporting details as they read. These different aspects should all be used in an effective summary. Students will also focus on writing their summaries in a logical order that is easy to follow.

The writing objective is to clearly introduce a point and support it with evidence from the text. This will be practiced in the writing project of both cycles. Students will need to support their point, or claim, with evidence from the text.

Unit Topic/Content

The magazine used for both cycles of this unit is *Faces* magazine: Machines, Can You Live Without Them? As the title suggests, the focus of this issue is machines. Each article focuses on different machines. Some machines that students will read about include computers, mechanical reapers, X-ray machines, toilets, race cars, and wheelchairs.

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

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<thead>
<tr>
<th>Lesson</th>
<th>Text</th>
<th>Media</th>
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</thead>
<tbody>
<tr>
<td>Lesson 1</td>
<td>“What’s So Simple About Machines?”, pages 8 and 9, and “Faster Than a Speeding Bullet” and “EN-V: Futuristic Vehicle,” page 24</td>
<td></td>
</tr>
<tr>
<td>Lesson 2</td>
<td>“My Day Without Machines…Well, Kind Of,” pages 10–13</td>
<td></td>
</tr>
<tr>
<td>Lesson 4</td>
<td>“Planes Saving Cranes,” pages 6 and 7</td>
<td>(Embedded) “Team Talk Response”</td>
</tr>
<tr>
<td>Lesson 5</td>
<td>writing in response to reading</td>
<td></td>
</tr>
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<td>Lesson 6</td>
<td>“A Helping Hand,” pages 28 and 29</td>
<td></td>
</tr>
<tr>
<td>Lesson 7</td>
<td>self-selected reading</td>
<td></td>
</tr>
<tr>
<td>Lesson 8</td>
<td>Getting Along Together</td>
<td></td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Lesson</th>
<th>Text</th>
<th>Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson 1</td>
<td>“Kyrgyzstan Goes Wireless,” pages 16 and 17</td>
<td>(Optional) Background video: “Shaundra Bryant Daily” (3 min. 21 sec.): <a href="http://www.pbslearningmedia.org/resource/city07.sci.engineering.daily">www.pbslearningmedia.org/resource/city07.sci.engineering.daily</a></td>
</tr>
<tr>
<td>Lesson 2</td>
<td>“The Fast Cars of Formula One,” pages 22 and 23</td>
<td></td>
</tr>
<tr>
<td>Lesson 3</td>
<td>“One Small Flush for Mankind,” pages 32 and 33</td>
<td></td>
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<tr>
<td>Lesson 4</td>
<td>“A Double Edged Sword: The Automation of the Factory,” pages 38 and 39</td>
<td></td>
</tr>
<tr>
<td>Lesson 5</td>
<td>writing in response to reading</td>
<td></td>
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<tr>
<td>Lesson 6</td>
<td>“From Reapers to Robots,” pages 34 and 35</td>
<td></td>
</tr>
<tr>
<td>Lesson 7</td>
<td>self-selected reading</td>
<td></td>
</tr>
<tr>
<td>Lesson 8</td>
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</tr>
</tbody>
</table>

*Faces magazine: Machines, Can You Live Without Them?*
Lesson 1

Reading Objective: Develop an effective summary.

Teacher Background

Today you will read the article “What’s So Simple About Machines?” to students during the Interactive Read Aloud. This article will give students an introduction to the topic of machines discussed throughout the articles they will read this cycle. Some machines mentioned include computers, cell phones, wheels, and farm equipment such as combines.

For partner reading, students will read two brief articles. “Faster Than a Speeding Bullet” describes Japan’s high-speed train, the shinkansen, that was first used in 1964. Although it travels at very high speeds, it is still safe and reliable. “EN-V: Futuristic Vehicle” explains the features that this electric car has to offer.

This cycle’s Big Question asks what life would be like without machines. This will get students thinking about the different machines that exist and the machines that they use in their daily lives. The Big Question also connects to the topic of students’ reading this cycle—machines are used every day in a variety of ways. Life would undoubtedly be much different if we did not have machines.

During Set the Stage, you may wish to share some interesting facts about different types of machines. These facts will help generate interest in the topic of this unit.

In 1855, the popcorn machine was invented. The machine was originally a peanut roaster. The inventor, Charles Cretors, added a top part for popcorn production to the roaster.

In 1888, vending machines were first introduced in the United States. They were found in subways in New York City and just sold gum.

The doorknob was invented in 1878. Prior to this invention, people simply pushed doors to open them and used a string looped around the door’s bar to keep it closed. Many doorknobs today have a locking device so locking the door is much simpler than years ago.

Sources:

inventors.about.com/od/uvstartinventions/a/vending.htm

www.cinema-astoria.com/cinematography/popcorn/popcorn_en.html

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 life would be like without machines?

Set the Stage

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

   *What do you think life would be like without machines?*

   *(Answers may vary.) I think life would be really hard without machines. We would have to do a lot more work, and certain tasks would take a lot longer. If there were no computers or other machines for typing our work, we would have to write a lot by hand. This would take a lot of time, and it would probably not be as neat. If we didn’t have washing machines or dryers, we would have to wash our clothes by hand, and they would have to dry naturally. This would also take a lot of time. Machines make our work easier, and they make things that we do go faster.*

   *Is there a machine that doesn’t exist yet that you think would make something easier? If so, what would this machine be like?*

   *(Answers may vary.) I wish there was a machine that would do my chores for me. This machine would be sort of like a robot. It would give me more time to do my homework and to spend time with my family and my friends. If this machine existed, I wouldn’t have to clean my room myself.*

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 they earn team celebration points during the Lightning Round.

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

4. Distribute copies of *Faces* magazine: Machines, Can You Live Without Them? 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 pictures, captions, and article titles are evidence that the text is informational.*
5. Use **Think-Pair-Share** to have students predict the topic and identify clues. Randomly select a few students to share.

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

7. Point out that the next step in the TIGRRS process is to choose a graphic organizer for making notes. Choices include, but are not limited to:
   - Venn diagram
   - timeline/sequence chain
   - T-chart
   - web
   - outline

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

   **Which graphic organizer(s) will work best with this text? Why?**

   *A web would probably work best. It doesn’t look like things are being compared or there is a sequence of events. Based on the picture, it seems like the article will discuss machines such as video games, computers, and cell phones. A web is a way to organize details about each machine.*

   **T:** Machines. I see the names of different machines such as computers, cell phones, and tractors.
   **I:** To answer the question in the title: “What’s So Simple About Machines?”
   **G:** A web

8. To provide some background about the topic of this unit, you may wish to share the following definition of a machine: a tool or device that makes work easier. As students read, suggest that they keep this definition in mind. You may also wish to share the interesting facts about machines listed in the teacher background at this time.

**Interactive Read Aloud**

1. This cycle our reading objective is to develop an effective summary. Remind students that a summary is not a word-for-word retelling of what we’ve read. Rather, a summary states the most important information and the big ideas the author wants to get across.

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

   **Why is summarizing important?**

   *Summarizing is important because it helps you identify the most important information when you read. After you read something, you probably will not remember every word of what you read. Therefore, summarizing helps you remember the big ideas after you’re done reading.*
Is summarizing only done in reading class? If not, when else may it be used?

*Summarizing can be done in science and social studies too. Summarizing can also be used outside of school. If you want to tell a friend about a movie you saw, you can summarize. You don’t have to tell every single thing that happened in the movie if you summarize. You can just explain the important parts of the movie.*

2. Display the summary rubric, and have students locate the rubric in their team folders. Explain that effective summaries have all the criteria in the rubric.

<table>
<thead>
<tr>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Random Reporter:</strong></td>
</tr>
<tr>
<td><strong>100</strong></td>
</tr>
<tr>
<td><strong>90</strong></td>
</tr>
<tr>
<td><strong>80</strong></td>
</tr>
</tbody>
</table>

3. Tell students that as you read, you would like them to take notes on main ideas, important details, and key vocabulary.

4. Read the article “What’s So Simple About Machines?” on pages 8 and 9 aloud. A sample graphic organizer follows.
5. Explain that you have used main ideas and details from your notes to write a summary of the article. Explain that you have used the summary rubric to make sure you have included the elements of an effective summary. Display the summary, and read it aloud.

**Summary 1**

There are many types of modern machines we use today. These machines have changed the world a lot over the last 300 years, but people have used tools to help improve their lives for millions of years. Our early ancestors used simple tools, such as stones for cutting. When farming first began, people and animals had to do the work. Now, heavy equipment and technology make farming faster and smarter. The wheel was first used to make transportation speedier and later was used for power. The printing press helped people make copies of writing faster and with better quality. Machines have changed the way people live.

6. Review summary 1 to note the elements of an effective summary outlined in the summary rubric.

Notice that I have included the main idea and important details about the types of machines that have been used and how they have improved life. The ideas are in a logical order. I start by stating that we have lots of modern machines today and that while the world has changed a lot over the last 300 years, people have used tools for millions of years. The statements that follow are examples of these machines. Finally, I have a sentence that wraps up all the main ideas—that machines have changed the way people live.

Use Think-Pair-Share to ask:

**How can the summary rubric help you develop better notes?**

The summary rubric can help me know what I should be taking notes about. My notes should include the main ideas and important details. I also need to jot down key terms that might help strengthen my summary. Since I know the ideas in my summary need to be relevant and be in a logical order, I need to look at my notes to determine in what order my ideas should be presented.

7. Display summary 2, and have partners evaluate it.
Summary 2

There are a lot of machines today. At one time airplanes didn’t exist. Now there are cell phones. Simple tools were invented millions of years ago. Computers help farmers know when to grow their crops. Simple tools had an effect on machines used today. Now we have DVDs, texting, and voice mail. The wheel provided power to mills and became an important part of modern factories. Business can be done anywhere today. Machines have changed a lot over time.

Use Think-Pair-Share to ask:

According to the elements in the summary rubric, is this an effective summary? What qualities of a summary does this have? What qualities are missing that need to be added for it to be effective?

Qualities of an effective summary are including main ideas and details. However, the ideas are not in logical order. It is confusing to read because it talks about machines today and machines years ago. This summary is hard to follow.

How can this summary be improved?

Reordering the information would improve the summary. Either all the information about machines in the past can come first, or all the information about machines today can come first. This way, the summary will have a logical order that is easier for a reader to follow. It is easier to understand the history of machines when you either see how machines changed over time starting many years ago or starting today and going back in time.

Use Random Reporter to debrief.

8. Remind students to refer to the summary rubric to help them write an effective summary.

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: page 24 (“Faster Than a Speeding Bullet” and “EN-V: Futuristic Vehicle”) 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.

### Team Talk Questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Rubric Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Write a summary for the article “EN-V: Futuristic Vehicle.” <strong>(Write) [MI]</strong> (summary rubric)</td>
<td></td>
</tr>
<tr>
<td>100 = The EN-V is a futuristic car that resembles an egg. It is a small vehicle that weighs only 900 pounds. It is so small that five of these cars could fit into an average parking space. The EN-V includes electronic features such as GPS and sensors, and as a result, it can drive itself. Sensors indicate obstacles so the car can slow itself down when needed. Since the world's population is tremendous, this car would be a major advantage especially in crowded cities. The EN-V's features have a lot to offer drivers.</td>
<td></td>
</tr>
<tr>
<td>90  = The EN-V is a futuristic car that looks like an egg. It is a small car that weighs only 900 pounds. The EN-V includes electronic features such as sensors. It can drive itself. Sensors show obstacles so the car can slow itself down. Since the world's population is large, this car would be helpful in crowded cities.</td>
<td></td>
</tr>
<tr>
<td>80  = The EN-V is a futuristic car that looks like an egg. It is a small car. It has electronic features such as sensors. Sensors show obstacles. This car would be helpful in crowded cities.</td>
<td></td>
</tr>
<tr>
<td>2. What is unique, or special about the EN-V? <strong>[MI, RE]</strong> (Team Talk rubric)</td>
<td></td>
</tr>
<tr>
<td>100 = The EN-V is unique in <strong>several ways.</strong> First, it is a very small vehicle. Five EN-Vs could fit in an <strong>average</strong> parking space. Knowing the size of an average parking space helps me <strong>visualize</strong> how small it is. Second, the EN-V can drive itself. It has electronic features such as sensors that detect obstacles. Finally, the EN-V would be helpful for large cities where traffic jams <strong>occur frequently.</strong> The EN-V’s features make it a unique vehicle that has a lot to offer.</td>
<td></td>
</tr>
<tr>
<td>90  = The EN-V is unique in a lot of ways. It is a very small car. Five EN-Vs could fit in one parking space. The EN-V can drive itself. It has electronic things such as sensors. The EN-V would be helpful for large cities where traffic jams happen a lot.</td>
<td></td>
</tr>
<tr>
<td>80  = It is a small car, it can drive itself, and it would be helpful in cities.</td>
<td></td>
</tr>
</tbody>
</table>

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Cue students to use their student routines for strategy use and Team Talk discussion.
### Team Talk Questions continued

3. Why do you think the author of “EN-V: Futuristic Vehicle” wrote the word exactly as “eggsactly”? **[AP, DC]** (Team Talk rubric)

- **100** = I think the author wrote the word exactly as “eggsactly” because of the EN-V’s appearance. The EN-V, or Electric Networked-Vehicle, is shaped like a giant egg. At the beginning of the article, the author says it looked like an egg traveled down the streets of Shanghai, but then writes “Not eggsactly!” She is making a joke because the car resembles an egg, but isn’t actually an egg. Since the EN-V resembles an egg, she uses the word “eggsactly” to be funny.

- **90** = I think the author wrote the word exactly as “eggsactly” because of how the EN-V looks. The EN-V is shaped like a big egg. The author says it looked like an egg traveled down the streets, but then writes “Not eggsactly!” She is being funny because the car isn’t really an egg.

- **80** = I think she wrote the word exactly as “eggsactly” because of how the EN-V looks. It is shaped like a big egg.

4. How has the invention of the shinkansen improved travel? Support your answer. **[DC, RE, SA]** (Team Talk rubric)

- **100** = The shinkansen has improved travel in several ways. The shinkansen is extremely fast and travels at 185 mph or more. Despite traveling so fast, it is still safe. The shinkansen is reliable and is hardly ever late. Not all forms of transportation may be this reliable. **For example**, buses are often late. It is comfortable because there is a lot of room to sit. **These features all show that the shinkansen has improved travel.**

- **90** = The shinkansen has made travel better in a lot of ways. The shinkansen is very fast, but it is still safe. The shinkansen is hardly ever late. Buses are often late. It is comfortable. There is a lot of room to sit.

- **80** = It is fast, safe, hardly ever late, and comfortable.

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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.
Class Discussion (18 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.

Randomly select team representatives who will share:
- strategy use
- oral and written Team Talk responses
- word power discussions
- fluency selection

Celebrate team successes!

The top team chooses a cheer.

Remind students of the Read and Respond homework assignment.
Summary 1

There are many types of modern machines we use today. These machines have changed the world a lot over the last 300 years, but people have used tools to help improve their lives for millions of years. Our early ancestors used simple tools, such as stones for cutting. When farming first began, people and animals had to do the work. Now, heavy equipment and technology make farming faster and smarter. The wheel was first used to make transportation speedier and later was used for power. The printing press helped people make copies of writing faster and with better quality. Machines have changed the way people live.

Summary 2

There are a lot of machines today. At one time airplanes didn’t exist. Now there are cell phones. Simple tools were invented millions of years ago. Computers help farmers know when to grow their crops. Simple tools had an effect on machines used today. Now we have DVDs, texting, and voice mail. The wheel provided power to mills and became an important part of modern factories. Business can be done anywhere today. Machines have changed a lot over time.
Lesson 2

**Reading Objective:** Develop an effective summary.

**Teacher Background**

Today students will read “My Day Without Machines…Well, Kind Of.” The author of this article describes how she tried to go a day without using machines. She found that this was impossible because nearly everything used in a typical day is a machine of some sort. Therefore, she was not successful. Some machines that she encountered during her challenge included an alarm clock, a doorknob, a hot-water heater, scissors, a coffee maker, a computer, a telephone, and even a pen. This article is a fun look at all the machines used on a daily basis, including some that students may not have even realized classify as a machine.

**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 modeling 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>dramatically</td>
<td>dra-mat-i-cal-ly</td>
<td>greatly</td>
<td>“Since your grade went from a D to an A, I can tell that your understanding of biology improved dramatically,” Mrs. Lewis told Trevor.</td>
</tr>
</tbody>
</table>

*continued*
<table>
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<th>Pronunciation</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>efficiency</td>
<td>ef-fi-cien-cy (ih-FISH-uhn-see)</td>
<td>ability to get a lot of work done</td>
<td>Larissa’s <strong>efficiency</strong> increased when her mom and sister began helping her frost the dozens of cupcakes she had baked.</td>
</tr>
<tr>
<td>versatile</td>
<td>ver-sa-tile (VUR-suh-tl)</td>
<td>having many uses</td>
<td>A computer is a <strong>versatile</strong> machine that can be used for looking up information, communicating with friends, and typing reports.</td>
</tr>
<tr>
<td>triumph</td>
<td>tri-umph (TRAHY-uhmf)</td>
<td>success</td>
<td>Mallory’s greatest <strong>triumph</strong> was making the honor roll every quarter even though her classes were hard.</td>
</tr>
<tr>
<td>stationary</td>
<td>sta-tion-ar-y (STY-shuh-ner-ee)</td>
<td>fixed; not able to move</td>
<td>A <strong>stationary</strong> bicycle is good for exercise, but you won’t have the fresh air you get from riding a bicycle outside.</td>
</tr>
<tr>
<td>administer</td>
<td>ad-min-is-ter (ad-MIN-uh-ster)</td>
<td>to give; to manage</td>
<td>“When I <strong>administer</strong> a test, I’m responsible for passing out pencils, collecting papers, and making sure the room is quiet,” Delicia explained.</td>
</tr>
<tr>
<td>serenaded</td>
<td>ser-e-nad-ed (ser-uh-NEYD-id)</td>
<td>entertained with a sound such as music</td>
<td>At Rosie’s party, the singer <strong>serenaded</strong> all the guests with many songs.</td>
</tr>
<tr>
<td>accessible</td>
<td>ac-ces-si-ble (ak-SES-uh-buhl)</td>
<td>easy to get to or use</td>
<td>Since the library is across the street from Malika’s house, she finds it very <strong>accessible</strong>.</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 texts, authors, and reading objective.
4. Have students preview today’s text. Use **Think-Pair-Share** to ask:
   - **Is this literature or informational text? How do you know?**
     
     *This text is informational. The pictures, captions, and definition at the top of page 10 are evidence that the text is informational.*
   
5. Refer students to the TIGRRS process. Use **Think-Pair-Share** to have students predict the topic and identify clues. Randomly select a few students to share.
6. Prompt students to identify the next step of TIGRRS. Use **Think-Pair-Share** to have them predict the author’s intent. Randomly select a few students to share.
7. Use **Think-Pair-Share** to ask:
   - **Which graphic organizer(s) will work best with this text? Why?**
     
     *I think a web would work best with this text. It seems like the article will describe someone’s day without machines, so a web can be used to keep track of details about her day. It doesn’t seem like anything will be compared or contrasted.*
     
     **T:** A day without machines  
     **I:** To explain what it is like not being able to use machines  
     **G:** A web
8. Use **Think-Pair-Share** to ask:
   - **Was there ever a time when you needed to use a machine but couldn’t? How did that feel?**

**Teacher’s Note:**

If students say they haven’t had an experience like this, ask them to imagine what it would feel like. You may want to suggest a possible scenario, such as a car or bus breaking down when they’re in a hurry to get somewhere.

*(Answers may vary.) One time I tried to microwave my dinner, but something was wrong with the microwave. I had to eat my dinner cold, and it didn’t taste as good. I was frustrated that the microwave didn’t work since I like my dinner hot.*
Interactive Read Aloud

1. Refer students to the reading objective. Remember that the objective is to develop an effective summary.

2. Read paragraphs 1–3, stopping before “The night before…” aloud. A sample Think Aloud follows.

<table>
<thead>
<tr>
<th>Sample Think Aloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>OK, I just read about the challenge the author of this article, Tiffany Pace, decided to do. She decided to go a day without using machines. It seems like challenge is a key term, so I’ll note this. I’ll also write that the challenge was going a day without machines. She looked up the definition of machine so she knew exactly what she couldn’t use during her challenge. The dictionary definition is a little confusing. Luckily, she clarified it by explaining that a machine is something with moving parts that does an activity. I understand that definition. I think I should write down the definition of a machine. If someone doesn’t know what a machine is, it will be hard to follow my summary, which will be about Tiffany’s challenge of not using machines. OK, let me make a note about that definition.</td>
</tr>
</tbody>
</table>

3. Use Think-Pair-Share to ask:

**As I read, how did I prepare myself to summarize later on?**

You prepared by making notes about key terms. These terms will be important for someone reading your summary. If they don’t understand these key terms, the summary might be confusing or not make much sense.

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 begin reading paragraph 4 on page 10, stopping at “As soon as I woke up….”

Use Think-Pair-Share to ask:

**What key terms did you note about the night before Tiffany’s challenge? Explain why you noted these as key terms.**

(Answers may vary.) Strike is a key term because it is how she refers to using a machine the night before her challenge. She uses this term a few times.

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.

A sample graphic organizer follows.
Sample Graphic Organizer

<table>
<thead>
<tr>
<th>preparing for a day without machines</th>
</tr>
</thead>
<tbody>
<tr>
<td>night before challenge</td>
</tr>
<tr>
<td>can't set alarm</td>
</tr>
<tr>
<td>not even sundial</td>
</tr>
<tr>
<td>had to set alarm → strike 1</td>
</tr>
<tr>
<td>moving parts → do activity</td>
</tr>
<tr>
<td>What is a machine?</td>
</tr>
</tbody>
</table>

6. Remind students to refer to the summary rubric to help them create an effective summary from their notes.

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 10 (starting at “As soon as I…”)—13 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.
Team Talk Questions

1. Write a summary of “My Day Without Machines…Well, Kind Of.” (Write) [MI]
   (summary rubric)
   100 = A woman created a challenge for herself to go a day without machines. However, this was easier said than done. A machine is something with moving or stationary parts that performs an activity. Machines are used for the majority of tasks done in a typical day. The night before the challenge, she began getting strikes. For example, she set an alarm so she would wake up on time. Then in the morning she used the bathroom and got more strikes. She tried to find alternatives to using machines, but this was impossible. An example was when she decided to make a to-do list instead of checking her e-mail. She couldn’t write the list because a pen is a machine. She left for work, but her car was another machine. She quickly realized that machines are used all the time and ended her challenge early. This challenge shows what a huge role machines have in our daily lives.

   90 = A woman made a challenge for herself to go a day without machines. A machine is something with moving or stationary parts that does an activity. Machines are used for many tasks done each day. The night before the challenge, she began getting strikes. She set an alarm so she would wake up on time. She tried to find alternatives to using machines, but this was impossible. She decided to make a to-do list instead of checking her e-mail. She couldn’t write the list because a pen is a machine. She saw that machines are used all the time and ended her challenge early.

   80 = A woman made a challenge for herself to go a day without machines. A machine is something with moving or stationary parts that does an activity. The night before the challenge, she began getting strikes. She tried to find different ways to do things, but this was impossible. She decided to make a to-do list. She couldn’t write it because a pen is a machine. She ended her challenge early.

2. The author tried to find alternatives, or different ways, to do her usual activities. Did the alternatives help? Why or why not? [DC, RE] (Team Talk rubric)
   100 = Although the author tried to find alternatives to do her usual activities, they did not help because so many machines are used in everyday life. For example, when she realized that she couldn’t iron her wrinkled clothes because the iron is a machine, she decided to wear a new outfit. However, cutting the tags off required scissors, which are a machine. Therefore, wearing a new outfit didn’t work. Despite trying to find alternatives to her usual activities, it was very difficult because so many machines are used daily.

   90 = The author tried to find alternatives to do her usual activities, but they did not help because so many machines are used in everyday life. When she saw that she couldn’t iron her wrinkled clothes, she decided to wear a new outfit. Cutting the tags off meant using scissors, which are a machine.

   80 = They did not help because so many machines are used in everyday life.

continued
3. Why do you think the author added “well, kind of” to the title? [AP, DC] (Team Talk rubric)

100 = I think the author added “well, kind of” to the title because the first part of the title says, “My Day Without Machines,” but that isn’t exactly what happened during her challenge. Although the author tried hard to not use machines, she got many strikes during her challenge. For example, when she left for work, she realized that the garage door and her car were machines and that the challenge wouldn’t work. As a result, she ended the challenge very early. Adding “well, kind of” to the title shows that the author didn’t exactly go a day without machines.

90 = I think the author added “well, kind of” to the title because the first part of the title says, “My Day Without Machines,” but that isn’t really what happened during her challenge. The author tried hard to not use machines, but she got many strikes. She saw that the garage door and her car were machines. She ended the challenge early.

80 = I think she added that because the title is “My Day Without Machines,” but that’s not really what happened.

4. If the author could have used one machine during her challenge, which do you think would have made her challenge easier? [DC, SA] (Team Talk rubric)

(Answers may vary.)

100 = I think that if the author could have used plumbing during her challenge, it would have been easier because then she would have been able to do several tasks without getting strikes. Flushing the toilet uses a machine that requires plumbing. Brushing your teeth requires a faucet, which is a machine, to get water. Also, taking a shower requires plumbing because of the water. On the other hand, certain tasks only required one machine. For example, putting on perfume requires the pump on the bottle. However, this doesn’t seem as necessary as brushing your teeth. Using the plumbing would have made the author’s challenge easier since she would have gotten fewer strikes.

90 = I think that if the author could have used plumbing during her challenge, it would have been easier because then she would have been able to do a lot without getting strikes. Flushing the toilet uses a machine that needs plumbing. Brushing your teeth uses a faucet to get water. Taking a shower uses plumbing because of the water. Some tasks only needed one machine and weren’t really necessary.

80 = If she could have used plumbing, it would have been easier because then she would have been able to do a lot without getting strikes.

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

At the concert, Briana was ________ with all her favorite songs.

Serenaded belongs in the blank because it means to be entertained with a sound such as music. When you go to a concert, you listen to music from a singer or a band.
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), 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.

Class Discussion

(15 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.
<table>
<thead>
<tr>
<th>Word</th>
<th>Pronunciation</th>
<th>Definition</th>
<th>Sample Sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>dramatically (adverb) page 8</td>
<td>dra-mat-i-cal-ly (druh-MAT-ik-uh-lee)</td>
<td>greatly</td>
<td>“Since your grade went from a D to an A, I can tell that your understanding of biology improved dramatically,” Mrs. Lewis told Trevor.</td>
</tr>
<tr>
<td>efficiency (noun) page 8</td>
<td>ef-fi-cien-cy (ih-FISH-uhn-see)</td>
<td>ability to get a lot of work done</td>
<td>Larissa’s efficiency increased when her mom and sister began helping her frost the dozens of cupcakes she had baked.</td>
</tr>
<tr>
<td>versatile (adjective) page 9</td>
<td>ver-sa-tile (VUR-suh-tl)</td>
<td>having many uses</td>
<td>A computer is a versatile machine that can be used for looking up information, communicating with friends, and typing reports.</td>
</tr>
<tr>
<td>triumph (noun) page 24</td>
<td>tri-umph (TRAHY-uhmf)</td>
<td>success</td>
<td>Mallory’s greatest triumph was making the honor roll every quarter even though her classes were hard.</td>
</tr>
<tr>
<td>stationary (adjective) page 10</td>
<td>sta-tion-ar-ye (STEY-shuh-ner-e)</td>
<td>fixed; not able to move</td>
<td>A stationary bicycle is good for exercise, but you won’t have the fresh air you get from riding a bicycle outside.</td>
</tr>
<tr>
<td>administer (verb) page 27</td>
<td>ad-min-is-ter (ad-MIN-uh-ster)</td>
<td>to give; to manage</td>
<td>“When I administer a test, I’m responsible for passing out pencils, collecting papers, and making sure the room is quiet,” Delicia explained.</td>
</tr>
<tr>
<td>serenaded (verb) page 6</td>
<td>ser-e-nad-ed (ser-uh-NEYD-id)</td>
<td>entertained with a sound such as music</td>
<td>At Rosie’s party, the singer serenaded all the guests with many songs.</td>
</tr>
<tr>
<td>accessible (adjective) page 29</td>
<td>ac-ces-si-ble (ak-SES-uh-buhl)</td>
<td>easy to get to or use</td>
<td>Since the library is across the street from Malika’s house, she finds it very accessible.</td>
</tr>
</tbody>
</table>
Lesson 3

Reading Objective: Develop an effective summary.

Teacher Background

Today students will read “Marvels of Modern Medicine.” This article focuses on the impact machines have had on medicine. For example, defibrillators are discussed. Not only is this machine found in operating rooms worldwide, it can also be found in public places. X-ray machines play an important role in diagnosing illnesses and injuries. Robotic devices are machines that allow doctors to see what is happening in internal organs such as the intestines. These machines are critical for doctors. However, machines used by doctors are very expensive and some can cost millions of dollars.

During Active Instruction, show the video “Robotic Life Scientist: Cynthia Breazeal” (3 min. 8 sec.): www.pbslearningmedia.org/resource/eng06.sci.engin.design.kismet/kismet. This video discusses robots and includes an interview with Cynthia Breazeal, a robotics engineer from MIT who explains that Kismet, a robotic head, was developed to communicate in ways that humans do. For instance, Kismet can express itself through tone of voice, facial expressions, and posture.

Active Instruction

(25 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.

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. 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

A word that I wasn’t sure about in the article we read in our last lesson is *surrendered*. At the end of the article on page 12, the author wrote, “I happily surrendered to technology as I jumped into my car, turned on the radio, and silently thanked the inventors who have made my life simpler.” I’ve heard the word *surrendered* before but it’s been in books about history. For example, I’ve heard of troops surrendering during a war. I just used a related word: *surrendering*. Other related words are *surrenders* and *surrender*. I’ve also heard of people who surrendered their land in the past. Hmmm. This article was about a woman who tried to not use machines for a day. So this article doesn’t have anything to do with war. I remember that when I saw *surrendered* used before, someone was giving up. Troops who surrendered gave up. They didn’t fight anymore. Let me look at this sentence again. (Read the sentence again.) The author let technology win. The machines won in her challenge.

Now that I have an idea about what *surrendered* means, I’ll look it up. (Look up *surrendered* in a dictionary.) It says that *surrender* means to give up or over to the power of something. An antonym for *surrendered* is *fought*. If you fight, you try to have the power, unlike when you surrender and let someone or something else win. I can make a sentence using *surrendered*: After driving the car all weekend, Jason surrendered the keys to his brother.

Sample Word Map

<table>
<thead>
<tr>
<th>def: gave up to the power of something</th>
</tr>
</thead>
<tbody>
<tr>
<td>possible meanings</td>
</tr>
<tr>
<td>gave up</td>
</tr>
<tr>
<td>someone else wins</td>
</tr>
<tr>
<td>surrendered</td>
</tr>
<tr>
<td>related words:</td>
</tr>
<tr>
<td>surrenders, surrender, surrendering</td>
</tr>
<tr>
<td>where I've seen it used</td>
</tr>
<tr>
<td>history — land, war, troops</td>
</tr>
</tbody>
</table>

Sentence: After driving the car all weekend, Jason surrendered the keys to his brother.

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 texts, authors, and reading objective.

4. Have students preview today’s text. Use **Think-Pair-Share** to ask:
   
   **Is this literature or informational text? How do you know?**
   
   *This text is informational. The captions and pictures of medical equipment, an X-ray, and people dressed in scrubs are evidence that the text is informational.*

5. Refer students to the TIGRRS process. Use **Think-Pair-Share** to have students predict the topic and identify clues. Randomly select a few students to share.

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

7. Use **Think-Pair-Share** to ask:
   
   **Which graphic organizer(s) will work best with this text? Why?**
   
   *I think a web because it doesn’t look like there’s a sequence of events, causes and effects, or things being compared. It looks like there’s information about different machines doctors use, so a web is a way to keep track of these machines.*

   **T:** Machines used by doctors  
   **I:** To describe different machines used by doctors  
   **G:** A web

8. Introduce the video “Robotic Life Scientist: Cynthia Breazeal.”

   **Today we will read about robots and their role in medicine. Let’s watch a brief video to learn more about robots. We have been developing summaries of articles that we read. After we watch this video, we will create a summary. Remember that summarizing isn’t just done after reading a text. It can also be done after watching a video. Keep in mind the elements of an effective summary and note main ideas, important details, and key terms as you watch.**

   Show the video.

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

   **What are some main ideas in this video?**

   *Some main ideas were that Cynthia Breazeal is a robot designer who has designed social robots like Kismet and Leonardo.*
What are supporting details for these ideas?

Supporting details are that these robots use facial expressions to interact with humans in a natural way.

What is a key term used in the video?

A key term is social robot. Another key term is facial expression.

Interactive Read Aloud

1. Read paragraph 1 on page 27 aloud. Use Think-Pair-Share to prompt use of the skill or strategy.

After reading this paragraph, are there key terms we should note to use in a summary?

Yes. Defibrillator is a key term.

Why is this a key term?

I think this is a key term because the text talks a lot about how defibrillators save lives and are found in operating rooms worldwide and in public places. It seems like it’s pretty important to understand a defibrillator and what it does.

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 paragraph 2 on page 27.

Use Think-Pair-Share to ask:

What key terms did you identify, and why?

I identified iron lung as a key term. It was a breathing machine that saved lives during a polio epidemic. It seemed to be an early version of respirators used today to help people breathe.

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.
4. Remind students to refer to the summary rubric to help them create a summary from their notes.
1. Write a summary of “Marvels of Modern Medicine.” (Write) [MI] (summary rubric)

100 = There are a variety of machines used in medicine that have different purposes. A defibrillator is used to save lives and can be found not just in operating rooms but in public places too. The X-ray machine is an imaging machine that allows doctors to see inside a patient’s body. This helps them diagnose what is wrong with a patient. Robotic devices are being developed to help doctors. For example, these devices can take pictures of internal systems after being inserted in a patient. The da Vinci robot, when controlled by a doctor, can actually perform surgeries, while a U.S. army robot allows doctors to check on patients far away through a computer monitor. However, these machines do come with a high price—they may cost millions of dollars. This results in doctors charging their patients more, but it is the cost that comes with using high-tech machines.

90 = There are a lot of machines used in medicine that have different purposes. A defibrillator is used to save lives and can be found in public places. The X-ray machine lets doctors see inside a patient’s body so they can figure out what is wrong. Robotic devices are being developed to help doctors. They can take pictures of internal systems. The da Vinci robot, when controlled by a doctor, can actually perform surgeries. These machines may cost millions of dollars. This results in doctors charging their patients more.

80 = There are a lot of machines used in medicine that have different purposes. A defibrillator is used to save lives. The X-ray machine lets doctors see inside a patient’s body. Robotic devices help doctors. They can take pictures of internal systems. The da Vinci robot, when controlled by a doctor, can actually perform surgeries. These machines may cost millions of dollars.

2. What is the purpose of robotic devices used in medicine? [MI, DC] (Team Talk rubric)

100 = Robotic devices used in medicine are created to give doctors a better look at what happens inside a patient's body. Once swallowed or inserted, the devices take pictures of internal organs. In the future they will also have other functions. For example, they might use small instruments to get a tissue sample. The da Vinci robot can perform surgery. Its arms are controlled by a doctor. One arm holds a camera so the doctor can see inside a patient's body. Robotic devices play an extremely important role in medicine today.

90 = Robotic devices used in medicine are made to give doctors a better look at what happens inside a patient's body. These devices can be inserted into the body through an incision. Once inserted, the devices take pictures. The da Vinci robot can perform surgery, when controlled by a doctor.

80 = They are made to give doctors a better look inside a patient's body.
3. Are there any disadvantages to machines used in medicine? Explain. [DC, RE] (Team Talk rubric)

100 = Although machines used in medicine are very important to doctors, a major disadvantage is cost. The da Vinci robot costs more than one million dollars. PET scanner machines cost twice as much as the da Vinci robot. These machines seem very expensive, but are inexpensive when compared to proton beam therapy, for example, which costs more than $100 million. Proton beam therapy hits tumors with radiation. The cost of these machines doesn’t just affect doctors and hospitals, it affects patients too. To afford these machines, doctors increase the amount they charge patients. A high cost is the price to pay for the important functions of these machines.

90 = Machines used in medicine are very important to doctors, but a problem is cost. The da Vinci robot costs more than one million dollars. PET scanner machines cost twice as much. These machines seem very expensive, but proton beam therapy costs more than $100 million. The cost of these machines doesn’t just affect doctors, it affects patients too. To afford these machines, doctors charge patients more.

80 = A problem is cost. The machines can cost millions of dollars. The cost affects patients.

4. Do you agree with the following statement? “A defibrillator is the most important machine used in medicine because it saves lives.” Why or why not? [AA, SA] (Team Talk rubric)

100 = No, I do not agree that a defibrillator is the most important machine used in medicine. Although a defibrillator saves lives, the X-ray machine is equally important because it allows doctors to diagnose injuries and illnesses. This is important so patients receive treatment. When the X-ray machine was invented, it changed medicine because it made it possible for doctors to see inside a patient’s body. Also, the invention of the X-ray machine led to other imaging machines commonly used today such as CT scans and PET scans. While the defibrillator has an important function, the X-ray machine helps doctors identify what is happening in a patient’s body.

90 = No, I do not agree that a defibrillator is the most important machine used in medicine. The X-ray machine is important too because it lets doctors diagnose injuries and illnesses. This is important so patients get treatment. When the X-ray machine was invented, it changed medicine because it let doctors see inside a patient’s body. The X-ray machine led to other imaging machines used today.

80 = No, I do not agree. The X-ray machine is important because it lets doctors diagnose injuries and illnesses.
Team Talk Questions continued

5. In which of the following examples is something accessible? Explain why. [CV]
   
   A. a sign hidden behind large trees
   B. a locked door you don’t have a key for
   C. an alarm clock next to your bed
   D. a box on a hard-to-reach shelf

   An alarm clock next to your bed is accessible because accessible means easy to get to. If something is right next to you, you can get to it easily. If something is hard to reach, hidden, or locked, it’s not easy to get to.

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.

Class Discussion

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 4

**Reading Objective:** Develop an effective summary.

**Teacher Background**
Today students will read “Planes Saving Cranes.” This article describes how Operation Migration uses aircraft to help whooping cranes, a nearly extinct bird, to migrate. When these birds are born, they listen to the sounds of aircraft engines and see the aircraft. They learn to follow the plane as it circles the ground. Eventually they are ready to migrate. Without these planes, whooping cranes would likely become extinct. Therefore, the planes play a crucial role in whooping cranes’ survival.

**Active Instruction [tp]**
(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.
4. Have students preview today’s text. Use Think-Pair-Share to ask:

Is this literature or informational text? How do you know?

This text is informational. The pictures, captions, and stats box with characteristics of whooping cranes are evidence that the text is informational.

5. 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.

6. Use Think-Pair-Share to ask:

Which graphic organizer(s) will work best with this text? Why?

A web because it looks like there will be a lot of information about planes and how they help whooping cranes. I didn’t see cause-and-effect signal words or words that showed things would be compared and contrasted.

T: Whooping cranes and how planes save them
I: To explain why planes save whooping cranes
G: A web

Interactive Read Aloud

1. Read paragraph 1 on page 6 (including the note following the asterisk at the bottom of the page) aloud. Use Think-Pair-Share to prompt use of the skill or strategy.

Are there any key terms we should note and use in a summary?

Whooping cranes, because they are the birds that migrate.

Teacher’s Note:
The word aircraft is followed by an asterisk in paragraph 1. Depending on your students’ familiarity with the purpose of an asterisk used in a text, you may want to briefly explain that it signals there’s more information about the starred word. This information is usually found at the bottom of a page or at the end of text.

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 paragraph 2 on page 27.

Use Think-Pair-Share to ask:

What key terms did you note as you read, and why?

A key term was crane puppet because that is what newborn whooping cranes follow. Another key term was aircraft engine. Whooping cranes hear the sounds of this before they even hatch.

Use Random Reporter to debrief.
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 6 (paragraph 3) and 7 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...
Create a Summary

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. Write a summary of “Planes Saving Cranes.” (Write) [MI] (summary rubric)</td>
</tr>
<tr>
<td>100 = Whooping cranes are in trouble because of hunting and habitat loss. There are not very many of these birds left, and their survival is not guaranteed. However, with the help of planes used by Operation Migration, they are taught to migrate so they are safe. Before the birds are even born, the eggs are exposed to the sounds of plane engines. When the birds are just a few days old, they are shown a plane. Since they have already heard the engine’s sound, they are not bothered. They are taught to follow the plane, which has many special features such as a GPS system. Eventually the whooping cranes can migrate without guidance from a plane. Without Operation Migration, these birds would be in great danger of dying out.</td>
</tr>
<tr>
<td>90 = Whooping cranes are in trouble because of hunting and habitat loss. The birds might not survive. With the help of planes used by Operation Migration, they are taught to migrate. Before the birds are even born, the eggs hear the sounds of plane engines. When the birds are just a few days old, they are shown a plane. Since they have already heard the engine’s sound, they are not bothered. They are taught to follow the plane, which has many special features. Later on, the whooping cranes can migrate without help.</td>
</tr>
<tr>
<td>80 = Whooping cranes are in trouble because of hunting. With the help of planes used by Operation Migration, they are taught to migrate. Before the birds are even born, the eggs hear the sounds of plane engines. When the birds are born, they are shown a plane. They have already heard the engine’s sound, so they are not bothered. They are taught to follow the plane.</td>
</tr>
</tbody>
</table>

continued
### Team Talk Questions continued

2. Why does Operation Migration exist, and what have been the effects? [MI, DC]  
   (Team Talk rubric)
   
   **100** = Operation Migration exists because the whooping crane is in danger of becoming **extinct**. In 1941, there were only fifteen of these birds. More than fifty years later, the population has **increased** to 214. With only one flock of birds, though, it was not **guaranteed** that this bird would survive. By teaching whooping cranes to migrate, it helps increase their population. Although Operation Migration has had a lot of success, whooping cranes are still in danger. For example, they are losing their winter habitat. **Operation Migration plays an important role in the survival of the whooping cranes.**

   **90** = Operation Migration exists because the whooping crane is in danger of **dying out**. In 1941, there were only fifteen of these birds. More than fifty years later, the population is up to 214. It was unclear if this bird would survive. By teaching whooping cranes to migrate, it helps their population get bigger. Whooping cranes are still in danger. They are losing their winter habitat.

   **80** = It exists because the whooping crane could **die out**. It helps their population get bigger.

3. Why do you think the author includes the “Whooping Crane Stats” box on page 7? [AP, DC] (Team Talk rubric)
   
   **100** = I think the author includes the “Whooping Crane Stats” box because it **provides more information** about the birds **discussed** in the article. In the article, the author does not **describe** the **characteristics** of a whooping crane. The stats box tells a reader about a whooping crane’s **appearance** and their habitat. **Also**, the stats box has the **exact** whooping crane population, which is very small. **Without the “Whooping Crane Stats” box, a reader would not know as much about this bird.**

   **90** = I think the author includes the “Whooping Crane Stats” box because it **tells more about the birds talked about in the article**. In the article, the author does not tell much about a whooping crane. The stats box tells a reader how a whooping crane looks.

   **80** = I think the author includes it because it **tells more about the birds talked about in the article.**

   continued
4. After young whooping cranes are shown the aircraft, how are they led to safety? [DC] (Team Talk rubric)

100 = After the young whooping cranes are shown the aircraft, there are several steps that happen to lead them to safety. First, small groups are taught to follow the plane as it circles around on the ground. Second, the crane puppet drops treats for them from the plane. Then, the whooping cranes are shipped in crates to a wildlife refuge. Next, they are taught to follow the aircraft as it travels on a runway. Finally, they are ready for training and a small group of birds follows a few planes. Two months later, the migration begins. All these steps prepare the endangered whooping cranes to migrate.

90 = After the young whooping cranes are shown the aircraft, there are a lot of steps that happen to lead them to safety. Small groups are taught to follow the plane as it goes around on the ground. The crane puppet drops treats for them. The whooping cranes go in crates to a wildlife refuge. They are taught to follow the aircraft. A small group of birds follows a few planes. The migration begins.

80 = Small groups learn to follow the plane. The crane puppet drops treats. The cranes go to a wildlife refuge.

5. What is a synonym for dramatically? What is an antonym for dramatically? Remember, antonym means the opposite. [CV]

(Accept reasonable responses.) A synonym for dramatically is greatly. An antonym is hardly.

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.
Class Discussion

(15 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.

3. Show the video “Team Talk Response.”

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
- word power discussions
- fluency selection

Show the video.

Celebrate team successes!

The top team chooses a cheer.

Remind students of the Read and Respond homework assignment.
Lesson 5

Writing Objective: Clearly introduce a point and support it with evidence from the text.

Teacher Background

Today’s writing prompt asks students to read two quotes from the article on pages 8 and 9, “What’s So Simple About Machines?” You may want to reread these quotes and jot down some ideas ahead of time.

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 texts, authors, and writing objective.
4. Introduce the writing project.

Today you will reread two quotes from the article we read in this cycle’s first lesson. Sometimes a quote in a text can reflect a lot of the content that we read. Remember that the writing objective is to introduce a
point and support it with evidence from the text. If you don’t include evidence, it will be difficult for a reader to understand your point.

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 one of the following two statements from page 9. Which do you agree with? Use evidence from your reading this cycle to support your point.</td>
</tr>
<tr>
<td>1. “It’s an old story that necessity is the mother of invention…”</td>
</tr>
<tr>
<td>2. “But sometimes things go the other way, and invention becomes the mother of necessity.”</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 support a claim with reasons. I know because it says to support my point and to use evidence. Reasons are evidence.*

6. Refer students to the following writer’s guide in their student editions. Point out that this guide for writing to support a claim with reasons 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 Support a Claim with Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ideas</strong></td>
</tr>
<tr>
<td><strong>Organization</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Style</strong></td>
</tr>
<tr>
<td><strong>Mechanics</strong></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 guidelines relate to our writing objective: clearly introduce a point and support it with evidence from the text?**

*Ideas because it says to clearly state a position and include good reasons, and organization because it says to state a position and tell supporting reasons.*
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**

One of the guidelines in the writer’s guide is ideas. A criterion for ideas is to clearly state a position. I want to share my first sentence with you. I need your help because I’m not sure if my point could be stated more clearly. Remember that stating your point clearly is important because it helps a reader understand what they will read about. Write the following sentence, and read it aloud.

| There are a lot of inventions that help people do different tasks. |

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

**Do you think my point is stated clearly? Why or why not?**

*I don’t think your point is stated clearly. It is a true statement that inventions help people do different tasks, but the question asks which statement you are responding to. Therefore, the statement should be incorporated into that sentence.*

**How could I state my point more clearly?**

*(Answers may vary.) You could say something like, “There are a lot of inventions that help people do different tasks, so it seems that the statement ‘it’s an old story that necessity is the mother of invention’ is true.” You could also say, “It’s an old story that necessity is the mother of invention, and this is obvious because there are a lot of inventions that help people do different tasks.”*

**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 support a claim with reasons and the writing objective—clearly introduce a point and support it with evidence from the text.

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

For example, ask:

- Does the writer introduce the point clearly?
- Does the writer include supporting reasons for his or her point?
- 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 determine your point? Explain.
  
  *Answers will vary.*
Celebrate team successes!

The top team chooses a cheer.

Remind students of the Read and Respond 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?**

   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 one of the following two statements from page 9. Which do you agree with? Use evidence from your reading this cycle to support your point.

1. “It’s an old story that necessity is the mother of invention...”
2. “But sometimes things go the other way, and invention becomes the mother of necessity.”

### Writing to Support a Claim with Reasons

<table>
<thead>
<tr>
<th>Ideas</th>
<th>• Clearly state a position (claim) and include good reasons that support that position.</th>
</tr>
</thead>
</table>
| Organization | • Begin by stating a position (claim).  
|            | • In the middle, tell supporting reasons.  
|            | • End with a closing statement. |
| Style | • Use words and phrases that help the audience see how the reasons are related to the claim. |
| Mechanics | • Use correct punctuation, capitalization, spelling, and grammar. |
Lesson 6

**Reading Objective:** Develop an effective summary.

**Writing Objective:** Clearly introduce a point and support it with evidence from the text.

**Teacher Background**

Today’s cycle test challenges students to continue distinguishing between main ideas and supporting details as they read to help them write an effective summary.

The assessment reading is “A Helping Hand.” This article focuses on how machines can help people with disabilities. For example, wheelchairs have improved over time not just in appearance but in function. Wheelchairs used to be wicker chairs with wheels, but today they are motorized, which makes it easier for people to get around. There is a text telephone that helps hearing-impaired people communicate. An eye-tracker communication system allows people who are unable to use their hands to use a computer. Due to these modern machines, people with disabilities are not limited in what they can do.

**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 developing an effective summary and clearly introducing a point and supporting it with evidence from the text. Refer students to the summary rubric.

   Use Think-Pair-Share to ask:

   **What are the parts of an effective summary?**

   Parts of an effective summary are main ideas, supporting details, key terms, and logical order.

   **How would a summary be affected if one part is missing?**

   (Answers may vary.) If a summary does not have logical order, it will be hard for a reader to follow the summary. The summary will not make sense. It is important to write a summary in order.

   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 developing an effective summary.

4. Ask students to identify key words or phrases in question #1, part 3.

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 machines that help people with disabilities.**
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.

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
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 1 Test

Create a Summary

**Directions:** Read “A Helping Hand,” pages 28 and 29. 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 machines that help people who have disabilities.

What is the author’s intent?

   5 points = The author’s intent is to explain that machines have made a lot possible for people with disabilities.

Write a short summary of the text. Include the graphic organizer or notes that you used to organize the information and your thoughts. [MI, AP]

   10 points = Although there used to be a lot of things that people with disabilities could not do, this has changed over time. Today there are a lot of machines and modern technology that make it possible for people with disabilities to do all kinds of things. For example, people in wheelchairs can get around more easily due to wider doorways. Hearing-impaired people can communicate using a special type of telephone. They know when there is danger due to visual alarms. People who cannot use their hands can still use computers as a result of a special communication system. Disabilities do not mean that people cannot do certain things; it just means they may do them in a different way.

2. Why do you think “A Helping Hand” comes right after “Marvels of Modern Medicine”? [AP, DC]

   20 points = I think “A Helping Hand” comes right after “Marvels of Modern Medicine” because both explain how certain machines have improved human health and well-being. A large section in “Marvels of Modern Medicine” focuses on robotic devices in medicine. Devices may be swallowed so doctors can see internal organs. “A Helping Hand” discusses what certain machines make possible for people with disabilities. For instance, an eye-tracker communication system controls a computer mouse for someone who can’t use his or her hands. Since connections can be made between these two articles, this is why they are next to each other.

   15 points = I think “A Helping Hand” comes right after “Marvels of Modern Medicine” because both explain how some machines have made human health and well-being better. A large part of “Marvels of Modern Medicine” is about robotic devices in medicine. “A Helping Hand” talks about what some machines help people with disabilities do. An eye-tracker communication system controls a computer mouse.
10 points = Both explain how some machines have made human health and well-being better.

3. In paragraph 2 on page 29, the author put quotes around the word talk. Why do you think this word is in quotes? [AP, DC, SA]

20 points = I think the author put the word talk in quotes because it is not referring to talking in the way that most people think. TDDs, or Telecommunications Devices for the Deaf, make it possible for people who are deaf or speech impaired to communicate. The text telephone is a common TDD that allows a deaf or speech-impaired person to type their conversation to the person dialed. The letters GA stand for go ahead and indicate that the person dialed can “talk” or type. By talk, the author means type, not speak, and this is why talk is in quotes.

15 points = I think the author put the word talk in quotes because it does not mean talking in the way that most people think. TDDs let people who are deaf or speech impaired communicate. The text telephone lets a deaf or speech-impaired person type their conversation to the person dialed. The letters GA let the person dialed know it’s his or her turn to “talk” or type.

10 points = It does not mean talking in the way that most people think.

4. As used on page 29 in the sentence “…a visual fire alarm, which works in conjunction with most audio alarms,” the phrase in conjunction nearly means—

A. separately.
B. easily.
C. together.
D. barely.

Explain what this phrase helps you understand. [CV, SA]

20 points = The phrase in conjunction helps me understand that a visual fire alarm, used for hearing-impaired people, works together with audio alarms. An audio alarm is very loud and alerts people of an emergency. However, an audio alarm is not helpful for hearing-impaired people. Therefore, the visual alarm flashes light at the same time the audio alarm goes off. In conjunction shows me that hearing-impaired people do not have to worry about not hearing a fire alarm because they will see the flashing light and know there is an emergency.

15 points = The phrase in conjunction helps me understand that a visual fire alarm, used for hearing-impaired people, works together with audio alarms. An audio alarm is very loud and lets people know there’s an emergency. An audio alarm is not helpful for hearing-impaired people. The visual alarm flashes light.

10 points = It helps me understand that a visual fire alarm, used for hearing-impaired people, works together with audio alarms.
5. Explain the importance of an eye-tracker communication system to someone who doesn’t have use of his or her hands. [MI, DC, SA]

20 points = An eye-tracker communication system allows a person who doesn’t have use of his or her hands to do things that hands are typically needed for. For example, an eye-tracker makes it possible to type on a computer and read books online without having to worry because he or she can’t use a mouse. The way it works is that a camera on top of the computer focuses on the user’s eyes. Depending on which way the user’s eyes move, the cursor will move in that direction. Without the eye-tracker, a person who can’t use his or her hands wouldn’t be able to participate in everyday activities.

15 points = An eye-tracker communication system lets a person who doesn’t have use of his or her hands to do things that hands are needed for. An eye-tracker lets a person type and read books online without using a mouse. A camera on top of the computer focuses on the user’s eyes. The cursor will move in the direction a user’s eyes move.

10 points = It lets a person who doesn’t have use of his or her hands do things that hands are needed for.

Part II. Writing (100 points)
Write at least one paragraph to answer the following question:
Our lives would be very different without machines.
Support this statement with evidence from the text.

I think life would be a lot different without machines because they make various activities much easier. Cell phones are an example of a machine that makes life different. Business can be done even walking down a street. Nearly everything we use on a daily basis is a machine. Examples are alarm clocks and refrigerators. Not only are machines used in our everyday lives, they are also used to help people and animals in danger. A defibrillator gives electrical shocks. This machine can be used to save a person whose heart has stopped beating. There are certain machines made especially for people with disabilities so they are not limited in what they can do. An example is a text telephone that allows speech-impaired people to communicate by typing their conversations. Special planes help whooping cranes, birds in danger of becoming extinct, to migrate. These examples all show that if we tried to go a day without using machines, life would be extremely difficult.

The following guide is used to score part II of the cycle test.
Writing to Support a Claim with Reasons

<table>
<thead>
<tr>
<th>Ideas</th>
<th>Clearly states a position (claim) and includes good reasons that support that position</th>
<th>0–25 pts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization</td>
<td>Begins by stating a position (claim)</td>
<td>0–25 pts.</td>
</tr>
<tr>
<td></td>
<td>In the middle, tells supporting reasons</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ends with a closing statement</td>
<td></td>
</tr>
<tr>
<td>Style</td>
<td>Uses words and phrases that help the audience see how the reasons are related to the claim</td>
<td>0–25 pts.</td>
</tr>
<tr>
<td>Mechanics</td>
<td>Uses correct punctuation, capitalization, spelling, and grammar</td>
<td>0–10 pts.</td>
</tr>
<tr>
<td>Writing Objective</td>
<td>Clearly introduce a point and support it with evidence from the text.</td>
<td>0–15 pts.</td>
</tr>
</tbody>
</table>

Part III. Vocabulary (100 points)

1. In which of the following examples would a person be considered versatile? [CV]
   A. an athlete who only plays tennis
   B. an actress who always plays a princess
   C. a person who knows many languages
   D. a piano player who knows one song

2. What is a synonym for stationary? What is an antonym for stationary? [CV]
   (Accept reasonable responses.) A synonym for stationary is still. An antonym for stationary is moving.

3. In which of the following sentences is accessible used incorrectly? [CV]
   A. The printer was in the middle of the office so it was easily accessible to all employees.
   B. Mrs. Filosa made the art supplies accessible to her students by storing them in a locked cabinet.
   C. To make the phone more accessible, Antoine moved it closer to where he sat.
   D. My mom made the counter accessible to my little sister by giving her a stool to stand on.

4. Daryl had changed ______ from when she was a child because she used to be afraid of dogs and now she is a veterinarian.
   Choose the word that belongs in the blank. [CV]
   A. serenaded
   B. administer
   C. triumph
   D. dramatically
5. Courtney was excited to win the contest because it meant she would be _______ by her favorite singer.

Choose the word that belongs in the blank. [CV]
A. triumph  
B. administer  
C. serenaded  
D. efficiency

6. Which of the following examples shows efficiency? [CV]
A. going to the mall instead of doing homework  
B. daydreaming during a test  
C. creating a list of projects due each month  
D. doing unimportant tasks first

7. One of the nurse’s responsibilities is to _______ an IV to a patient before surgery.

Choose the word that belongs in the blank. [CV]
A. administer  
B. triumph  
C. efficiency  
D. dramatically

8. What is a synonym for triumph? What is an antonym for triumph? [CV]
(Accept reasonable responses.) A synonym for triumph is success. An antonym for triumph is failure.

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 we explored was precise. This word means exact or specific. A sentence using precise is “You have to throw the basketball in a precise way to make a basket.”

10. As used on page 6 in the sentence “‘They are sometimes reluctant to leave,’” reluctant most nearly means— [CV]
A. willing.  
B. cautious.  
C. happy.  
D. angry.

Explain how you figured out the meaning of reluctant.

Students will explain their thinking. For example, I used the context. The first flights for the whooping cranes to follow are slow to help the birds along as they migrate. If they were willing to leave, they probably wouldn’t need help. Also, the text doesn’t say anything about them being happy or angry.
Create a Summary

<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>[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:** Develop an effective summary.

**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.

Teams review their cycle goal.

Connect the cycle objective to students’ homework reading selections.
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 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 that every student has a Read and Respond form for next cycle.

Read and Respond Questions

<table>
<thead>
<tr>
<th></th>
<th>Question</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>
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.

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.
Lesson 8

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

**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**

**Two-Minute Edit**
(2 minutes)

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.

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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?**
**Lesson 1**

**Reading Objective:** Develop an effective summary.

**Teacher Background**

“Kyrgyzstan Goes Wireless” is about how technology is being used in this small country in the mountains of central Asia. Due to the location, there may be a misconception that technology is not used there. However, this is not the case. Even in the small village of Pokrovka, some students have e-mail accounts and cell phones. There are families in that village that do not even have landline phones. In rural areas such as Pokrovka, there are many issues affecting Web connection. These issues include cost, electricity, and lack of knowledge about computers. Luckily, there is WiLDNet, a long-distance network that tries to make Web connection possible even over large distances.

(Optional) During Active Instruction, you can share the following clip (3 min. 21 sec.) about Shaundra Bryant Daily, an electrical engineer who designed a software program for girls: www.pbslearningmedia.org/resource/city07.sci.engin.design.daily.

**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:** How have computers and the Web impacted our society and societies around the world?

**Set the Stage**

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

   **How have computers and the Web impacted our society and societies around the world?**

   *(Answers may vary.)* I think computers and the Web have impacted the way people communicate and their access to immense amounts of information. People can now communicate with others around the world and find the answers to questions quickly that help them make decisions. It also means we find out what is going on around the world almost immediately. Students may also cite the impact this communication has had on political events as people have been able to communicate, organize protests, and pressure for change.
Teams review their cycle goal.

Post and present the reading objective.
Refer students to page 16 in the text.
Begin the TIGRRS process; review the steps as needed.

Students predict the topic and author's intent and choose a graphic organizer.

(Optional) Build background by showing the video, “Shaundra Bryant Daily.”

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 objectives.

4. Have students preview today’s text. Use Think-Pair-Share to ask:

   Is this literature or informational text? How do you know?

   This text is informational. The article titles, pictures, and captions are evidence that the text is informational.

5. 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.

6. Use Think-Pair-Share to ask:

   Which graphic organizer(s) will work best with this text? Why?

   A web will probably work best with this text. It looks like the article is about Kyrgyzstan going wireless. A web is a good way to keep track of details about how this country has gone wireless.

   T: Machines in Kyrgyzstan such as cell phones
   I: To explain how Kyrgyzstan has gone wireless
   G: A web

7. (Optional) Introduce the video.

   Today we will learn about machines used in Kyrgyzstan, which include computers. Let’s watch a brief video about an electrical engineer who created a special software program. Remember that we can summarize after watching a video. Jot down main ideas, details, and key terms as you watch. You will summarize after watching the video.

   Show the video. After viewing it, use Think-Pair-Share to ask:

   How could you summarize this video for someone who hasn’t seen it?

   Shaundra Bryant Daily is an electrical engineer at MIT. She created computer software called G.I.R.L.S. Talk that teen girls can use to create versions of their stories similar to comic books. They can create pictures and captions using this software. Shaundra also discovered that there is a relationship between science and dance, which helped her when she created G.I.R.L.S. Talk. She created several small programs that eventually were joined to create one large program. This is similar to dance because you learn one step at a time before eventually doing the whole dance.
Interactive Read Aloud

1. Refer to the reading objective, and review the skill if necessary.

2. Read paragraphs 1 and 2 on page 16 aloud. Use Think-Pair-Share to prompt use of the skill or strategy.
   
   **What are some notes that we could make after reading these two paragraphs?**
   
   Albina’s family does a lot of work by hand. Albina received a cell phone.
   
   Are these notes about key terms, main ideas, or details? Explain.
   
   These notes are about possible main ideas. They are main ideas because there were details that supported these ideas in the first two paragraphs.

   **What details supported these main ideas?**
   
   Details showing that the family does a lot of work by hand are that Albina makes bread from scratch, sorts beans by hand, and washes clothes by hand. Details that support Albina getting a cell phone are that she got it as a gift and was very excited.

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 paragraphs 3 and 4 on page 16.
   
   Use Think-Pair-Share to ask:
   
   **What is the main idea of paragraphs 3 and 4?**
   
   The main idea is that technology such as cell phones makes communication easier.

   **What details support the main idea?**
   
   Albina’s father and older brothers live far away from home a lot of the time. They have cell phones too so they can communicate with Albina. They can either talk on the phone or text each other. Albina can also keep in touch with her friends nearby. She can contact them to ask a question or to wish them a happy birthday.

   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.
**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 16 (paragraph 5) and 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, 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.
Team Talk Questions

1. Write a summary of “Kyrgyzstan Goes Wireless.” (Write) [MI] (summary rubric)

100 = Although Kyrgyzstan is a small country where people do a lot of tasks by hand, this country is making progress toward using more technology. A girl named Albina got a cell phone, which allows her to communicate more easily with her family and friends. Not only are cell phones used in this country, but the government in one village is trying to improve Web connection. However, poor electricity makes this difficult. In other places in the world, people are trying to improve wireless connection. WiLDNet was developed for just that reason. It helps people use the Internet over large distances. It is inexpensive and doesn’t use much electricity. Although using modern technology is more difficult to access in some places, WiLDNet may change that. In other places, people are trying to make wireless connection better. The author writes, “I watched technology change the lives of those around me.”

90 = Kyrgyzstan is a small country where people do a lot of tasks by hand, but this country is using more technology. A girl named Albina got a cell phone, which allows her to talk more easily with her family and friends. Not only are cell phones used in this country, but the government in one village is trying to make Web connection better. Poor electricity makes this hard. In other places in the world, people are trying to make wireless connection better. WiLDNet helps people use the Internet over large distances. It doesn’t use much electricity.

80 = Kyrgyzstan is a small country where people do a lot of tasks by hand, but this country is using more technology. A girl named Albina got a cell phone. Not only are cell phones used there, but the government in one village is trying to make Web connection better. Poor electricity makes this hard. WiLDNet helps people use the Internet over large distances.

2. What issues affect Web connection in Kyrgyzstan? [MI, DC, SA] (Team Talk rubric)

100 = There are various issues that affect Web connection in Kyrgyzstan such as unreliable electricity, high-speed connections being difficult to get, and lack of knowledge. Although the government in Pokrovka has tried to set up a good connection to the Internet, this is difficult because the electricity is not good. When a connection did work, it could take fifteen minutes just for a page to load. Also, it is not common to have a computer at home. A combination of issues makes Web connection difficult in Kyrgyzstan.

90 = There are a lot of issues that affect Web connection in Kyrgyzstan such as electricity, high-speed connections being hard to get, and not knowing about computers. The government in Pokrovka has tried to set up a good connection to the Internet, but this is hard because the electricity is not good. When a connection did work, it could take fifteen minutes for a page to load.

80 = There are a lot of issues such as electricity, high-speed connections being hard to get, and not knowing about computers.
3. What is WiLDNet, and how has it affected Pokrovka? [MI, DC, SA]
(Team Talk rubric)

100 = WiLDNet, or Wi-Fi-based Long Distance Network, makes it possible for people to use the Web without issues of cost or electricity. WiLDNet was developed at the University of California at Berkeley to improve wireless connection. Although its purpose is to allow for a good Web connection with low electricity over large distances, this is difficult in Pokrovka because of the huge distance separating villages. A typical wireless connection works at a range of 200 feet. The goal of WiLDNet is to improve communication, but this can be a difficult task in places like Pokrovka.

90 = WiLDNet lets people use the Web without issues of cost or electricity. WiLDNet was developed to make wireless connection better. It helps with a good Web connection over large distances, but this is hard in Pokrovka because of all the space between villages. A wireless connection works at a range of 200 feet.

80 = It lets people use the Web without issues of cost or electricity. It is hard in Pokrovka because of all the space between villages.

4. In what way did technology change lives in Pokrovka? Explain. [MI, DC, SA]
(Team Talk rubric)

100 = Technology changed lives in Pokrovka by improving communication. The author of the article lived in this village while she was a Peace Corps volunteer. The citizens in Pokrovka learned to use a computer and set up e-mail accounts. Students also had cell phones. However, there were some families who didn’t have landline phones. Where the author lived, she had to travel to use the Internet. Since technology was not accessible to everyone, it had a major impact on citizens who used it.

90 = Technology changed lives in Pokrovka by making communication better. The author of the article lived in this village while she was a Peace Corps volunteer. People in Pokrovka learned to set up e-mail accounts. Students also had cell phones. Some families didn’t even have landline phones.

80 = It changed lives there by making communication better.

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**

(18 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 2

**Reading Objective:** Develop an effective summary.

**Teacher Background**

Today students will read “The Fast Cars of Formula One.” This article focuses on the race cars used in the Grand Prix. These cars are raced in a competition called Formula One. Although being a good driver is important to success, it is equally important that the race cars built by Formula One teams are built well. Formula One is growing in popularity around the world, and races will take place in other countries such as Mexico and India in the future.

During Set the Stage, you may wish to share the following facts about Formula One:

- The first motor race ever took place in France in 1894. It was interesting to onlookers, but nowhere near as popular as it is today.
- Formula One race cars can move at speeds of more than 225 miles per hour.
- The term *Grand Prix* (races linked through Formula One) means grand prize in French.
- During a Formula One race, computers keep track of different parts of the race car such as the brakes and engine.
- The name *Formula One* refers to the formula, or set of rules, that determine how the race cars are designed.
- Formula One teams may spend as much as $350 million per year.


**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>
</tr>
</thead>
<tbody>
<tr>
<td>occupied</td>
<td>oc-cu-pied (OK-yuh-pahyd)</td>
<td>used</td>
<td>“Since the face-painting station is occupied right now, why don’t we go get a snack?” Mrs. Glazer asked her son at the carnival.</td>
</tr>
<tr>
<td>crucial</td>
<td>cru-cial (KROO-shuhl)</td>
<td>very important</td>
<td>Marvin’s mom always tells him it is crucial to carry his house key so he doesn’t get locked out if no one is home.</td>
</tr>
<tr>
<td>renowned</td>
<td>re-nowned (ri-NOUND)</td>
<td>honored; well respected</td>
<td>The renowned surgeon was known for his surgeries that saved lives.</td>
</tr>
<tr>
<td>compelling</td>
<td>com-pel-ling (kuhm-PEL-ing)</td>
<td>having a powerful effect; strong</td>
<td>After listening to the speaker’s compelling speech at graduation about following your dreams, Jared decided to go to medical school.</td>
</tr>
<tr>
<td>mundane</td>
<td>mun-dane (muhn-DEYN)</td>
<td>usual; ordinary</td>
<td>Caroline’s day seemed mundane until she won concert tickets to see her favorite band for the first time.</td>
</tr>
<tr>
<td>complexity</td>
<td>com-plex-i-ty (kuhm-PLEK-si-tee)</td>
<td>state of being complicated or difficult</td>
<td>Robert had a hard time understanding the novel because of the complexity of the language used.</td>
</tr>
<tr>
<td>innovative</td>
<td>in-no-va-tive (IN-uh-vey-tiv)</td>
<td>new or different</td>
<td>Lexi found that an innovative use for an empty paper towel roll was storing her bracelets on it.</td>
</tr>
</tbody>
</table>

continued
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 texts, authors, and reading objective.
4. Have students preview today’s text. Use **Think-Pair-Share** to ask:
   
   **Is this literature or informational text? How do you know?**
   
   *This text is informational. The pictures, captions, and years mentioned in the article are evidence that the text is informational.*

5. Prompt students to identify 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.

6. Use **Think-Pair-Share** to ask:
   
   **Which graphic organizer(s) will work best with this text? Why?**
   
   *A web will work best with this text. It seems like the article will talk about something called Formula One and the cars used in Formula One. A web is a way to keep track of details about this.*
   
   **T:** Formula One and its fast cars
   
   **I:** To explain what Formula One is and who is involved
   
   **G:** A web

7. You may share the facts about Formula One listed in the teacher background at this time.

---

<table>
<thead>
<tr>
<th>Word</th>
<th>Pronunciation</th>
<th>Definition</th>
<th>Sample Sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>fueled (verb)page 35</td>
<td>FYOO-uhld</td>
<td>affected</td>
<td>Lamar’s desire to make the winning basket was <em>fueled</em> by his friends and family cheering for him in the crowd.</td>
</tr>
</tbody>
</table>
**Interactive Read Aloud**

1. Read paragraph 1 on page 22 aloud. Use **Think-Pair-Share** to prompt use of the skill or strategy.

   **After reading the first paragraph, did you identify any key terms?**

   A key term is *race car*.

   **How did you identify this as a key term?**

   The text says that race cars are very important to Italians. The text also talks about how these race cars have been designed by Italians for more than a century. It seems like this is an important term when talking about the text.

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 paragraph 2 on page 22.

   **Did you find more key terms as you read?**

   Yes. Grand Prix is a key term. The second paragraph explains what the Grand Prix is and tells when different Grand Prix races were held.

   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**

---

*designed for < a century*

---

*race cars*

---

*important to Italians*

---

*single-seat cars & closed tracks*  
---

*Grand Prix*  
---

1st Italian G.P. → 1908

---

*races linked thru Formula 1*  
---

1st race → France 1906

---

*Formula One and fast cars*
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 22 (paragraph 3) and 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, 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.
Team Talk Questions

1. Write a summary of “The Fast Cars of Formula One.” (Write) [MI]
   (summary rubric)
   100 = Italians have been designing race cars for more than a century, and they have had a lot of success in the Grand Prix races. Grand Prix tracks have several twists and turns. Grand Prix races are linked through a competition called Formula One. Not only do drivers need to be skilled, engineers designing the cars must be equally skilled. To fans, though, drivers are the most interesting. In the 1950s, many Italians were champions in these races. For example, Giuseppe Farina was the first Formula One champion. Today races are being planned in countries such as Mexico and China. Formula One is not just associated with Italians anymore; rather, it is popular globally.

   90 = Italians have been designing race cars for more than a century, and they have had a lot of success in the Grand Prix races. Grand Prix tracks have a lot of twists and turns. Grand Prix races are linked through a competition called Formula One. People designing the cars must be skilled. Drivers are the most interesting to fans. In the 1950s, many Italians, such as Giuseppe Farina, were champions in these races. Today races are being planned in a lot of countries.

   80 = Italians have done well in the Grand Prix races. People making the cars must be skilled. Drivers are the most interesting to fans. In the 1950s, many Italians were champions in these races. Today races are being planned in a lot of countries.

2. In paragraph 4 on page 22, the author writes that “The golden age of Italian driving, however, may have been the 1950s.” What does he mean by this? [AP, DC, SA] (Team Talk rubric)
   100 = By saying that the golden age was in the 1950s, the author is referring to how successful Italian drivers were in races during the 1950s. Something being called golden is usually good. In 1950, an Italian driver named Giuseppe Farina was the first Formula One champion. Juan Manuel Fangio was born in Argentina, but his parents were Italian. He was popular with Italian race fans and won many championships between 1951 and 1957. Since Italians had so much success racing in the 1950s, it is accurate for the author to call it the golden age.

   90 = By saying that the golden age was in the 1950s, the author means that Italian drivers were successful in races during the 1950s. In 1950, Giuseppe Farina was the first Formula One champion. Juan Manuel Fangio was popular with Italian race fans. He won many championships in the 1950s.

   80 = By saying that the golden age was in the 1950s, the author means that Italian drivers were successful in races during the 1950s.

continued
3. Which of the following statements is true about the years following the golden age of Italian driving? [DC, RE, SA] (Team Talk rubric)

A. Formula One has become less popular.
B. Formula One only takes place in Italy.
C. Formula One does not take place anymore.
D. Formula One has become more popular.

Explain why this statement is true.

100 = Formula One has become more popular in the years following the golden age of Italian driving because new races are being planned. The Grand Prix race was originally held in France, and a few years later, races were held in Italy. Now new races are being planned in even more countries such as Mexico, India, and China. There will probably be even more competition because of all the new talent. Although Formula One was something especially popular in Italy for a long time, it has become popular worldwide.

90 = Formula One has become more popular in the years following the golden age of Italian driving because new races are being planned. The Grand Prix race was first held in France, and later, in Italy. Now new races are being planned in countries such as Mexico. There will probably be even more competition.

80 = It has become more popular because more races are being planned.

4. Which of the following best states the main point of paragraph 3 on page 22? [MI, SA] (Team Talk rubric)

A. Monza is near the northern city of Milan.
B. Engineering is important to Formula One.
C. Ferrari is an Italian automaker.
D. Formula One gives awards.

Explain how you identified the main point.

100 = I identified the main point by thinking about what the author probably wants me to remember from this paragraph. Choices a, c, and d are all true statements but they are details, not the main point. The author explains that although driver skill is important for success in the Grand Prix, engineering is equally important. Teams design their own cars. Engineering is so important that not only does the most successful driver receive an award, so does the most successful design team. Knowing that engineering is as important as driver skill is important to remember.

90 = I identified the main point by thinking about what the author probably wants me to remember from this paragraph. Choices a, c, and d are details. The author explains that engineering is just as important as driver skill for success. Teams design their own cars. Engineering is so important that the most successful design team gets an award.

80 = I thought about what the author probably wants me to remember from this paragraph.
Team Talk Questions continued

5. Choose a word from the vocabulary list, and write a meaningful sentence using the word correctly. [CV]

Accept a sentence that shows the student knows the meaning of the word and can use it correctly. For example, It is crucial to wash your hands frequently during flu season.

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.

Class Discussion

(15 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.
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<th>Definition</th>
<th>Sample Sentence</th>
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</thead>
<tbody>
<tr>
<td>occupied</td>
<td>oc-cu-pied</td>
<td>used</td>
<td>“Since the face-painting station is occupied right now, why don’t we go get a snack?” Mrs. Glazer asked her son at the carnival.</td>
</tr>
<tr>
<td>crucial</td>
<td>cru-cial</td>
<td>very important</td>
<td>Marvin’s mom always tells him it is crucial to carry his house key so he doesn’t get locked out if no one is home.</td>
</tr>
<tr>
<td>renowned</td>
<td>re-nowned</td>
<td>honored; well respected</td>
<td>The renowned surgeon was known for his surgeries that saved lives.</td>
</tr>
<tr>
<td>compelling</td>
<td>com-pel-ling</td>
<td>having a powerful effect; strong</td>
<td>After listening to the speaker’s compelling speech at graduation about following your dreams, Jared decided to go to medical school.</td>
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<td>Lamar’s desire to make the winning basket was fueled by his friends and family cheering for him in the crowd.</td>
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Lesson 3

Reading Objective: Develop an effective summary.

Teacher Background

Today’s article “One Small Flush for Mankind” focuses on the history of the toilet. The toilet was developed centuries ago and transformed over time from a rudimentary structure to the modern structure we are familiar with today. In early Rome, toilets were just rows of wooden seats running on either side of a stream. Over time, people began using chamber pots and outhouses. In the early 1900s, bathrooms with running water became more commonplace. Today there are even futuristic toilets that have features such as seat warming and air deodorizing.

Teacher’s Note:

Use the Interactive Read Aloud if your students need additional support. Otherwise, build background, and then go directly to teamwork. Adjust partner reading page numbers accordingly.

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. 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

A word that I wasn’t sure about in the first article we read is foggiest. It was used in the sentence “Also, none of the adults I worked with in Kyrgyzstan had a computer at home, and only a few had even the foggiest idea of how to use one” on page 17. This word seems important because it’s saying something about people’s knowledge of computers. I know what fog is, but that’s a weather word. Fog is when it’s really hard to see what’s ahead of you. I’m not sure what fog has to do with computers, though. This word must have another meaning. Let me look at the context again. Hardly anyone had the foggiest idea how to use a computer. Okay, I’m starting to get an idea. Computers don’t seem to be common in Kyrgyzstan. If a lot of people don’t have them at home, they probably don’t know how to use them. Maybe this relates to fog after all. Foggiest might mean cloudiest. Only a few had even the cloudiest idea of how to use one. Or maybe it means slightest. I could substitute slightest for foggiest.

Now that I have an idea, let me look up the meaning. (Look up foggiest in a dictionary.) Foggy can mean blurred. Foggiest would mean most blurred, then. Let me see if I can make a sentence using this word. “Since the only other language I know is French, I didn’t have the foggiest idea what my friends were saying when they spoke in Spanish.” Using context and what I knew about fog helped me clarify this word.

Sample Word Map

<table>
<thead>
<tr>
<th>related words</th>
<th>fog</th>
<th>foggy</th>
</tr>
</thead>
<tbody>
<tr>
<td>what it reminds me of</td>
<td>bad weather, clouds, hard to see</td>
<td></td>
</tr>
<tr>
<td>possible meanings</td>
<td>slightest</td>
<td>cloudiest</td>
</tr>
</tbody>
</table>

Sentence: Since the only other language I know is French, I didn’t have the foggiest idea what my friends were saying when they spoke in Spanish.

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 texts, authors, and reading objective.
4. Have teams discuss and report on their preview of the text and explain their thinking. Use Random Reporter to share team responses.
   - **T**: Toilets. There is a picture of a toilet, the title has the word flush, and the word toilet is repeated many times in the article.
   - **I**: To describe different kinds of toilets. The names of many cities are in the article.
   - **G**: A web to record details about toilets
5. Use Think-Pair-Share to ask the following:
   - **Do you think toilets are the same around the world? Why or why not?**
     
     *(Answers may vary.)* No, I don’t think toilets are the same around the world. In different countries, shelter is built differently, so it seems like toilets would also be built differently. Also, some countries are more modern and this might be reflected in the type of toilet they build.

Interactive Read Aloud

1. Read paragraphs 1 and 2 on page 33 aloud. Use Think-Pair-Share to prompt use of the skill or strategy.
   - **After reading the first two paragraphs, what do you think a main idea might be?**
     - *I think a main idea might be that toilets have changed over time.*
   - **Did you identify any details that support this main idea?**
     - *Yes. It says that toilets were ignored for a long time, and there was disease and filth. Now, though, living situations are clean because of toilets.*
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 paragraphs 3 and 4 on page 33.
   - Use Think-Pair-Share to ask:
     - **After reading, did you identify any details that support the main idea that toilets have changed over time?**
     - *Yes. Some details are that in a city in Pakistan, toilets were holes in bricks. A sewer system carried waste away from homes.*
   - 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>Babylon</th>
<th>wooden “toilets”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toilets have changed over time.</td>
<td></td>
</tr>
<tr>
<td>living situation</td>
<td>diff. places = diff. types</td>
</tr>
<tr>
<td>past</td>
<td>now</td>
</tr>
<tr>
<td>disease, dirty</td>
<td>clean</td>
</tr>
<tr>
<td>toilet = hole in bricks</td>
<td>sewer system</td>
</tr>
<tr>
<td>Mohenjo-daro</td>
<td></td>
</tr>
</tbody>
</table>

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: page 33 (starting at paragraph 5) aloud with partners. (if skipping Interactive Read Aloud, page 33)

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. Write a summary of “One Small Flush for Mankind.” <em>(Write) [MI]</em> (summary rubric)</td>
</tr>
</tbody>
</table>

100 = Toilets are a common machine that everyone uses, yet this machine has come a long way over time. Early toilets had a much different structure than today’s toilets. For example, some toilets were just holes made in bricks or rows of wooden seats on either side of a stream. Sanitation was not always an important priority like it is today. People threw waste from chamber pots into the street. Toilets took a long time to be accepted, but it took even longer for sewers to be accepted. After millions of people died from cholera, laws were made requiring flush toilets. In the early 1800s, bathrooms were included inside American homes. In the next century, bathrooms had running water. Today there are even futuristic toilets that have unique features such as seat warming. Toilets have come a long way both in appearance and function.

90 = Toilets are a common machine that everyone uses, yet this machine has come a long way. Early toilets were a lot different than today’s toilets. Some toilets were just holes made in bricks. Sanitation was not always as important as it is today. People threw waste from chamber pots into the street. Toilets took a long time to be accepted. After millions of people died from cholera, laws were made requiring flush toilets. In the early 1800s, bathrooms were included inside American homes. In the next century, bathrooms had running water. Today there are even futuristic toilets that do special things.

80 = Toilets have come a long way. Early toilets were a lot different. Some toilets were just holes made in bricks. Sanitation was not always important. People threw waste from chamber pots into the street. After millions of people died from cholera, laws were made requiring flush toilets. In the early 1800s, bathrooms were included inside American homes. Today there are even toilets that do special things.

*continued*
### Team Talk Questions continued

2. Which of the following statements best describes the history of sanitation, or cleanliness? [MI, DC, SA] (Team Talk rubric)

   A. Sanitation was always important to people.
   
   B. Sanitation was only important to people in America.
   
   C. Sanitation was not always as important as it is today.
   
   D. Sanitation was not important in castles.

   Explain why you chose this statement.

   **100** = Sanitation changed a lot over time because it was not always a major priority the way it is today, which was shown in the lack of sewers. In ancient Rome, there were underground wooden sewers that toilets led to. However, Rome was conquered by people who did not value sanitation. Most people used chamber pots and threw the waste into the streets. In the late 1500s, toilets became more common, but sewers still weren’t used. Millions died from cholera. As a result, flush toilets were required by law. Although sanitation is very important today, this was not the case for a long time.

   **90** = Sanitation changed a lot over time because it was not always as important as it is today since there weren’t always sewers. Rome was conquered by people who did not care about sanitation. Most people threw waste into the streets. In the late 1500s, sewers still weren’t used. Millions died from cholera.

   **80** = Sanitation changed a lot over time because it was not always as important as it is today.

3. Does there seem to be a relationship between wealth and toilets? [DC, SA] (Team Talk rubric)

   **100** = Yes, there seems to be a relationship between wealth and toilets. Wealthy people seemed to have toilets with a fancier appearance. For example, Queen Elizabeth I’s toilet was a box covered in velvet and lace. Velvet and lace are fancy materials. On the other hand, immigrants to America used outhouses and chamber pots. These are not fancy structures. When houses were eventually built with bathrooms inside, this was done by wealthy Americans. It seems that the more wealth a person had, the fancier their toilet and bathroom was.

   **90** = Yes, there seems to be a relationship between wealth and toilets. Rich people seemed to have toilets that looked fancier. Queen Elizabeth I’s toilet was a box covered in velvet and lace. Immigrants to America used outhouses. When houses were built with bathrooms, this was done by rich Americans.

   **80** = Yes, because rich people seemed to have toilets that looked fancier.

---

*The Reading Edge Middle Grades • Teacher Edition • Level 7*
4. The author writes that “Bathrooms were big business in Rome.” What do you think she means by this? Explain. [AP, DC, SA] (Team Talk rubric)

100 = By saying, “Bathrooms were big business in Rome,” I think the author means that bathrooms were very important. In ancient times in Rome, there were 3,000-person bathhouses. There were also various kinds of toilets. For instance, some were rows of wooden seats on either side of a stream that led to a larger body of water such as the Tiber River. Other toilets were fancy and had stone seats with carvings of dolphins. Since there were so many kinds of toilets, it seems that bathrooms were important to Romans.

90 = By saying, “Bathrooms were big business in Rome,” I think the author means that bathrooms were very important. In ancient times in Rome, there were 3,000-person bathhouses. There were many kinds of toilets. Some were rows of wooden seats on either side of a stream. Others were fancy and had stone seats.

80 = I think the author means that bathrooms were very important.

5. What is a synonym for mundane? What is an antonym for mundane? [CV]
   (Accept reasonable responses.) A synonym for mundane is typical. An antonym for mundane is unusual.

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.
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 4

**Reading Objective:** Develop an effective summary.

**Teacher Background**

Today’s article “A Double Edged Sword: The Automation of the Factory” focuses on the advantages and disadvantages created by machines. In early 1800s England, people known as Luddites destroyed weaving looms because they felt the looms were eliminating their jobs. Eventually this same concern occurred in America. Many workers believed that machines allow skilled workers to be replaced with unskilled workers. A counterargument is that machines actually create jobs because people are needed to both manufacture and maintain machinery. There are opposing beliefs regarding whether mechanization does more harm or good.

**Teacher’s Note:**

Use the Interactive Read Aloud if your students need additional support. Otherwise, build background, and then go directly to teamwork. Adjust partner reading page numbers accordingly.

---

**Active Instruction**

15–25 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.

**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.
4. Have teams discuss and report on their preview of the text and explain their thinking. Use **Random Reporter** to share team responses.

   **T:** Machines in factories
   **I:** To explain the advantages and disadvantages of machines being used in factories
   **G:** A web

Interactive Read Aloud
1. Read paragraph 1 on page 38 aloud. Use **Think-Pair-Share** to prompt use of the skill or strategy.

   Are there any main ideas you identified from this first paragraph?
   
   Yes. A main idea is the mechanization of factories.

   What details support this main idea?
   
   Mechanized weaving looms eliminated the Luddites’ jobs and allowed unskilled people to produce textiles.

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 page 38 (paragraphs 2 and 3).

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

   Did you identify more details to support the main idea?

   Mechanized textile factories were in the United States and in England; Francis Cabot Lowell introduced mechanical looms in the United States. People have been worried about the effect of machines on their jobs since the Industrial Revolution.

   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.
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 38 (paragraph 4) and 39 aloud with partners.
   - (if skipping Interactive Read Aloud, pages 38 and 39)
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.
Team Talk Questions

1. Write a summary of “A Double Edged Sword: The Automation of the Factory.” *(Write) [MI]* (summary rubric)

100 = The mechanization of factories has advantages and disadvantages. Since the early 1800s when the mechanized weaving loom was introduced, workers have been concerned that they would be replaced by machines. On one hand, machines are able to do dirty or dangerous work, which is helpful. However, work can be broken down into small steps completed by unskilled workers. This results in skilled workers losing their jobs. Industrial robots can do various tasks typically done by humans, such as painting. Robots are reliable, fast, and less likely to make mistakes in their work. However, jobs may also be created because of all the machines used in factories. Machines such as computers need to be programmed by people. Technology will improve even more in the future, and people will probably continue to worry about the impact on their jobs.

90 = The mechanization of factories is good and bad. Since the early 1800s, workers have been concerned that they would be replaced by machines. Machines can do dangerous work, which is helpful. The bad part is that work can be broken down into small steps done by unskilled workers so skilled workers lose their jobs. Industrial robots can do many jobs done by humans. Robots are reliable and fast. Jobs may also be made because of all the machines used in factories. Machines need to be programmed by people.

80 = Machines in factories is good and bad. Machines can do dangerous work, which is helpful. The bad part is that work can be broken down into small steps done by unskilled workers so skilled workers lose their jobs. Industrial robots can do many jobs done by humans. Jobs may also be made because of all the machines. Machines need to be programmed by people.

2. Is mechanization of factories always negative? Why or why not? *(DC, RE, SA)* (Team Talk rubric)

100 = Although the mechanization of factories can have a negative impact, this is not always true. In some cases, the mechanization of factories can create new jobs and keep factories in business. Since machines play such a huge role in factories, new jobs may be created in some instances. For example, people are hired to repair and maintain computers and robots. Also, modernizing prevented car companies from completely shutting down. Mechanization may have positive effects despite seeming to be a negative process.

90 = The mechanization of factories can have a negative impact, but this is not always true. The mechanization of factories can make new jobs and keep factories in business. Machines play such a big part in factories that new jobs are made sometimes because of the machines. People are hired to maintain computers. Modernizing kept car companies from completely shutting down.

80 = This is not always true. The mechanization of factories can make new jobs and keep factories in business.
### Team Talk Questions continued

3. Do you think “A Double Edged Sword” is a good title for this article? Why or why not? [AP, DC, SA] (Team Talk rubric)

<table>
<thead>
<tr>
<th>Score</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>I think “A Double Edged Sword” is a good title for this article because there are advantages and disadvantages to the mechanization of factories. Some advantages of machines are that they improve the finished product because they don’t make as many errors as people. They also improve efficiency, which means that products cost less to produce. As a result, more people can afford products. However, machines have resulted in workers losing their jobs, whether they are skilled or unskilled. This is because of processes being mechanized. Since not all changes caused by machines have been positive, “A Double Edged Sword” is a good title.</td>
</tr>
<tr>
<td>90</td>
<td>I think “A Double Edged Sword” is a good title for this article because there are good and bad things about the mechanization of factories. Machines make things better because they don’t make as many errors as people. They also help more work get done so things cost less to make. Machines have caused workers to lose their jobs. This is because of work being mechanized.</td>
</tr>
<tr>
<td>80</td>
<td>It is a good title for this article because there are good and bad things about the mechanization of factories.</td>
</tr>
</tbody>
</table>

4. What impact has technology used in factories had on workers? [MI, DC, SA] (Team Talk rubric)

<table>
<thead>
<tr>
<th>Score</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>Technology used in factories has had a major impact on both skilled and unskilled workers because machines can do the work of people. An example is the shoe-making machine. Once this machine was created, there was no need for handmade shoes created by shoemakers. Shoe manufacturing was divided into various steps that even workers who had no shoe-making skills could do. Eventually, industrial robots were introduced, which also put unskilled workers at risk. These robots can do tasks such as painting and assembly. Technology used in factories affects all workers, regardless of their skills.</td>
</tr>
<tr>
<td>90</td>
<td>Technology used in factories has had a big impact on both skilled and unskilled workers because machines can do the work of people. Industrial robots were introduced, which also put unskilled workers at risk. These robots can do a lot.</td>
</tr>
<tr>
<td>80</td>
<td>It has had a big impact on both skilled and unskilled workers because machines can do the work of people. Industrial robots were introduced, which also put unskilled workers at risk.</td>
</tr>
</tbody>
</table>

5. Which word from the vocabulary list belongs in the blank? Explain. [CV]

Charlie hoped the computer in his classroom wasn’t _______ since he needed to look something up before turning in his project.

Occupied belongs in the blank because it means that something is being used. Since Charlie needed to look something up, he hoped that the computer wasn’t being used so he could look up the information he needed.
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.

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:** Clearly introduce a point and support it with evidence from the text.

**Teacher Background**

The writing prompt for today’s writing project asks students whether machines have developed in the same way throughout the world and throughout history.

**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 texts, authors, and writing objective.
4. Introduce the writing project.

_Remember that our Big Question this cycle is how computers and the Web have impacted our society and societies around the world. Our prompt relates back to that. Our writing objective is to clearly introduce a point and support it with evidence from the text. We read a lot this_
cycle about machines around the world—everything from computers to race cars to toilets.

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 a machine that you think has had a large impact and support your point with evidence from your reading so far this cycle.</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 support a claim with reasons because it says, “support your point.” A point is like a claim. Also it says to use evidence to support the point. The evidence would be the reasons.*

6. Refer students to the following writer’s guide in their student editions. Point out that this guide for writing to support a claim with reasons 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 Support a Claim with Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ideas</strong></td>
</tr>
<tr>
<td>• Clearly state a position (claim) and include good reasons that support that position.</td>
</tr>
<tr>
<td><strong>Organization</strong></td>
</tr>
<tr>
<td>• Begin by stating a position (claim).</td>
</tr>
<tr>
<td>• In the middle, tell supporting reasons.</td>
</tr>
<tr>
<td>• End with a closing statement.</td>
</tr>
<tr>
<td><strong>Style</strong></td>
</tr>
<tr>
<td>• Use words and phrases that help the audience see how the reasons are related to the claim.</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 guidelines relate to our writing objective: clearly introduce a point and support it with evidence from the text?**

*Ideas because it says to clearly state a position and organization because it says to state a position and tell supporting reasons.*

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. Point out that it is important when we share a point in our writing to support it with evidence, or reasons, from the text. Display the following paragraph, and read it aloud.

   Access to modern technology is not equal around the world. Computers aren't used in some places. Web connection has developed differently. There are things that keep people from using the Web. This is a disadvantage.

Use Think-Pair-Share to ask:

**Did I use good reasons to support my point? Explain.**

No, you didn't use good reasons. You just said there are “things” that keep people from using the Web, but you didn’t explain what these things are. You also didn’t say where computers aren’t used.

**How could I improve my reasons?**

(Answers may vary.) You could say that computers aren’t used in poor, rural areas of small countries such as Kyrgyzstan. You could say why some people have trouble connecting to the Web. For example, Web connection is expensive, electricity doesn’t always work, and there is a great distance between villages in some countries.

**Why is it important to support a point with reasons?**

It is important because otherwise a reader won’t understand your point. When you give reasons, a reader can see why you have a certain point.

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 support a claim with reasons and the writing objective—clearly introduce a point and support it with evidence from the text.

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

For example, ask:

- Does the writer clearly introduce the topic?
- Does the writer include supporting reasons for his or her point?
- 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 find reasons that support your point?

*Answers will vary.*
Celebrate team successes!

The top team chooses a cheer.

Remind students of the Read and Respond 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?**

   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 a machine that you think has had a large impact and support your point with evidence from your reading so far this cycle.

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<td><strong>Mechanics</strong></td>
</tr>
<tr>
<td>• Use correct punctuation, capitalization, spelling, and grammar.</td>
</tr>
</tbody>
</table>
Access to modern technology is not equal around the world. Computers aren’t used in some places. Web connection has developed differently. There are things that keep people from using the Web. This is a disadvantage.
Lesson 6

Reading Objective: Develop an effective summary.

Writing Objective: Clearly introduce a point and support it with evidence from the text.

Teacher Background

Today’s cycle test challenges students to continue summarizing information they have read by distinguishing main ideas from supporting details.

“From Reapers to Robots” describes the development of farm equipment starting in the 1700s. From McCormick’s mechanical reaper to agricultural robots being created, farm equipment has come a long way. Not only did farm equipment save farmers time because there was less work to do by hand, it also meant that farmers could buy more land. Farmers depend on machines for numerous tasks that include harvesting, milking, pest control, and fertilizing. Undoubtedly farming would be much different without modern machines.

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 developing an effective summary and supporting a point with evidence from the text.

   Use Think-Pair-Share to ask:

   **What should you take notes about as you read to help you write an effective summary?**

   You should take notes about key terms, main ideas, and details. Then you can organize your notes and put them in a logical order when you write your summary.

   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 developing an effective summary.

4. Ask students to identify key words or phrases in question #1, part 3.

   1. Write a short summary of the text. Include the graphic organizer or notes that you used to organize the information and your thoughts. [MI, 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 how farm equipment has improved over time and affected farmers.**
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**

**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**

**Lightning Round**

1. Use Random Reporter to have teams share team discussions of the test questions and explain their thinking.

   **What are some main ideas in the article “From Reapers to Robots”?**

   Some main ideas are that machines used on farms have improved over the years and that these machines help farmers complete various tasks.

   **What are supporting details for these main ideas?**

   Details that show machines used on farms have improved over the years are that farmers once used a mechanical reaper, but now there are auto-steer tractors and computers to help farmers. Details that show machines help farmers complete tasks are that machines are used for planting, harvesting, milking, loading, and pest control, just to name a few tasks.

2. Award team celebration points.
3. Collect test answers. Score original answers, and add extra points for improved answers.
Celebrate team successes!

The top team chooses a cheer.

Remind students of the Read and Respond 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?**

   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.
Create a Summary

**Directions:** Read “From Reapers to Robots,” pages 34 and 35. 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 machines on farms. I know because the word reaper is in the article’s title, and I know this is equipment used on a farm. There is also a picture of a farmer holding a computer and a picture of a tractor.

   **What is the author’s intent?**
   
   5 points = The author's intent is to explain the different types of machines used on a farm.

   Write a short summary of the text. Include the graphic organizer or notes that you used to organize the information and your thoughts. [MI, AP]
   
   10 points = Farm equipment has changed a great deal over time. In the 1800s, Cyrus McCormick introduced the mechanical reaper, a horse-drawn machine that had sharp blades for harvesting wheat. This saved farmers time since they didn’t have to harvest wheat by hand. Eli Whitney invented the cotton gin, which also saved farmers time. In the 1900s, it was common for machines to be used on farms. Farmers bought more land, although there was less demand for products after WWI. When the economy improved, farmers were interested in buying equipment again. Tractors became popular in the 1950s. Today there are machines farmers rely on for completing a variety of farm-related tasks. Farm machinery will be improved even more in the future.

2. **The author says that farmers were skeptical, or unsure, of McCormick’s reaper. Why do you think they felt this way?** [DC, SA]
   
   (Answers may vary.)
   
   20 points = I think farmers were skeptical of McCormick’s reaper for several reasons. **First,** it may have seemed too good to be true. Farmers had been doing their work by hand and were probably used to that. It may have seemed impossible that a machine could do what they were used to doing by hand. **Second,** farmers may have worried that the reaper would be expensive since it did so much work. **Finally,** farmers may have thought it was impossible for the reaper to do so many tasks and that it would break easily. Although the reaper had many benefits, there are reasons farmers may have been skeptical of it.

   15 points = I think farmers were skeptical of McCormick’s reaper for a lot of reasons. It may have seemed too good to be true. Farmers had
been doing their work by hand and were probably used to that. Farmers may have thought that the reaper would cost a lot. Farmers may have thought it would break easily.

10 points = It may have seemed too good to be true and they might have thought it would cost a lot.

3. How did the mechanical reaper affect farmers? [MI, DC, SA]

20 points = The mechanical reaper affected farmers in several ways. For example, the reaper saved farmers time. Since the reaper cut grain using a sharp tool, farmers no longer had to do this task by hand, which saved them a few hours. Similarly, the reaper could not only cut grain, it could also cut, thresh, and bundle the wheat. These were other tasks necessary for farming wheat. Not only did the reaper save farmers time, it saved them money because they didn’t need as many employees. The mechanical reaper affected the work done on a farm.

15 points = The mechanical reaper affected farmers in many ways. The reaper saved farmers time. The reaper cut grain using a sharp tool, so farmers no longer had to do this by hand. The reaper could cut, thresh, and bundle the wheat. It saved them money because they didn’t need as many employees.

10 points = It affected farmers in many ways. It saved farmers time. It could cut, thresh, and bundle wheat. It saved money.

4. Why do you think the author wrote the caption on page 34 the way she did? [AP, DC, SA]

20 points = I think the author wrote the caption the way she did to show how much farmers rely on modern technology and machines. In the song “Old MacDonald Had a Farm,” there is a lyric that says, “e-i-e-i-o.” The author wrote this lyric as “g-p-s-i-o.” I think she wanted to show how GPS is even used on farms. She also wrote, “he had a combine.” This is another type of machine farmers rely on. In the original song, the lyrics name animals a farmer has. Finally, she wrote, “With a tap, tap, here…” to show computer keys being tapped. The author uses humor to show the role of machines on a farm by changing the lyrics of a well-known song.

15 points = I think the author wrote the caption the way she did to show how important modern technology and machines are to farmers. In the song “Old MacDonald Had a Farm,” there is a part that says, “e-i-e-i-o.” The author wrote this part as “g-p-s-i-o.” She also wrote, “he had a combine.” She wrote, “With a tap, tap, here…” to show computer keys being tapped.

10 points = To show how important modern technology and machines are to farmers.
5. Although machines used for farming have come a long way, can farm machinery still be improved? Explain. [DC, RE, SA]

20 points = Although machines used for farming have come a long way, farm machinery can still be improved in several ways. For example, farm machinery will use a GPS, computer monitoring systems, and electronic sensors. This will help farmers conserve fuel, seed, and fertilizer. Also, at many universities throughout the country, agricultural robots are being created. The purpose of these robots is to complete tasks such as picking fruit. 3D laser beams will allow robots to see if fruit is ripe and if there are signs of disease. As a result of the technology being developed, farm machinery will continue to improve.

15 points = Although machines used for farming have come a long way, farm machinery can still be improved in many ways. Farm machinery will use a GPS, computer monitoring systems, and electronic sensors. This will help farmers conserve fuel. Agricultural robots are being made to do jobs such as picking fruit. 3D laser beams will let robots see if fruit is ripe.

10 points = It can be improved in a lot of ways. These ways are GPS, computer monitoring systems, electronic sensors, and agricultural robots.

Part II. Writing (100 points)
Write at least one paragraph to answer the following question:
Do you agree or disagree with the statement “People have always been accepting of new technology”? Use evidence from your reading this cycle to support your point.

Although machines are created to help people and make their work easier, I don’t think people have always been accepting of machines. For example, in 1831, Cyrus McCormick invented the mechanical reaper to help farmers harvest grain more easily. However, farmers felt unsure about this invention. It wasn’t until the late 1850s when 4,000 reapers were sold in one year that the reaper became more popular. Toilets and sewer systems were not always what they are today. In ancient Rome, there were different kinds of toilets. When Rome was conquered, it was conquered by people who did not agree with their sanitation system. Everyone used chamber pots except for people who lived in castles. Waste was thrown into the streets below. This was a contrast to the sewer systems. In the early 1800s, people called the Luddites destroyed mechanized weaving looms in factories because they felt the looms meant they would be replaced. Since the looms could do a lot of work that people did, the Luddites felt that they would no longer have jobs. Eventually Americans had the same fear. Despite the fact that the purpose of machines is to improve efficiency, there are several examples that show people have not been accepting of machines both throughout the world and over time.
The following guide is used to score part II of the cycle test.

<table>
<thead>
<tr>
<th>Writing to Support a Claim with Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ideas</strong></td>
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<tr>
<td><strong>Organization</strong></td>
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<tr>
<td><strong>Style</strong></td>
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<tr>
<td><strong>Mechanics</strong></td>
</tr>
<tr>
<td><strong>Writing Objective</strong></td>
</tr>
</tbody>
</table>

**Part III. Vocabulary** (100 points)
1. What is a synonym for crucial? What is an antonym for crucial? [CV]
   
   (Accept reasonable responses.) A synonym for crucial is critical. An antonym for crucial is unimportant.

2. Write a meaningful sentence using the word occupied. [CV]
   
   Accept responses that show students know the meaning of the word and can use it correctly. For example, Montana was frustrated when she couldn’t make a call because her cell phone didn’t work and the only pay phone was occupied.

3. Which of the following examples would NOT be thought of as mundane? [CV]
   
   A. visiting the library
   B. meeting the president
   C. going to school
   D. eating a sandwich

4. Brielle’s hard work ______ her success at her first job and impressed her boss.
   
   Choose the word that belongs in the blank. [CV]
   
   A. renowned
   B. complexity
   C. compelling
   D. fueled

5. What is a synonym for compelling? What is an antonym for compelling? [CV]
   
   (Accept reasonable responses.) A synonym for compelling is powerful. An antonym for compelling is weak.
6. The college Kylie’s sister attends is ________ for its challenging science programs.

Choose the word that belongs in the blank. [CV]
   A. renowned
   B. compelling
   C. innovative
   D. complexity

7. Write a meaningful sentence using the word complexity. [CV]

   Accept responses that show students know the meaning of the word and can use it correctly. For example, there was so much complexity in the article about math theories that I underlined almost every word as I read.

8. Maura is always coming up with ________ ways to use household objects that no one else has thought of.

Choose the word that belongs in the blank. [CV]
   A. compelling
   B. renowned
   C. complexity
   D. innovative

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 we explored was victorious. It means successful. A sentence using victorious is “The victorious team celebrated winning by going out for pizza.”

10. As used on page 33 in the sentence “Others were elaborate, with a line of 25 stone seats alternating with carvings of dolphins,” elaborate most nearly means— [CV]

   A. plain.
   B. fancy.
   C. ugly.
   D. sloppy.

   Explain how you figured out the meaning of elaborate.

   Students will explain their thinking. For example, I used the context. The paragraph where this sentence occurs talks about early toilets that were very simple, but then says, “Others were…” This shows a contrast, so I eliminated A. The sentence doesn’t say if the carvings were ugly or sloppy, but since it talked about simple structures earlier, fancy made the most sense.
Create a Summary

<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>[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:** Develop an effective summary.

**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 (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 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 that every student has a Read and Respond form for next cycle.

<table>
<thead>
<tr>
<th>Read and Respond Questions</th>
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</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>
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</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>
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</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). 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

Objective: Celebrate successes, and set new goals. Hold a Class Council.

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

(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.

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.

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?
**Sample Word Map**  
**Cycle 1**

**def:** gave up to the power of something  
**related words:** surrendered, surrenders, surrendering  
**possible meanings:** gave up, someone else wins  
**where I’ve seen it used:** history ——— land, war, troops

**Sentence:** After the car all weekend, Jason surrendered the keys to his brother.

---

**Sample Word Map**  
**Cycle 2**

**what it reminds me of:** bad weather, clouds, hard to see  
**related words:** fog, foggy  
**weather words:** possible meanings  
**possible meanings:** slightest, cloudiest

**Sentence:** Since the only other language I know is French, I didn’t have the foggiest idea what my friends were saying when they spoke in Spanish.
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</th>
<th>Create a Summary</th>
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<tbody>
<tr>
<td><strong>English Language Arts Standards: Reading: Informational Text</strong></td>
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<tr>
<td><strong>Key Ideas and Details</strong></td>
<td></td>
</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>
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<tr>
<td>Ri.7.2. Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text</td>
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<tr>
<td><strong>Craft and Structure</strong></td>
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<tr>
<td>Ri.7.5. Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to the development of the ideas</td>
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<tr>
<td><strong>English Language Arts Standards: History/Social Studies</strong></td>
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<tr>
<td>RH.6-8.7. Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.</td>
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<tr>
<td><strong>English Language Arts Standards: Writing in History/Social Studies/Science</strong></td>
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<tr>
<td><strong>Text Types and Purposes</strong></td>
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<tr>
<td>WHST.6-8.1a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.</td>
<td></td>
</tr>
</tbody>
</table>
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