Grade 4 Reading
Student At-Home Activity Packet

This At-Home Activity packet includes two parts, Section 1 and Section 2, each with approximately 10 lessons in it. We recommend that your student complete one lesson each day.

Most lessons can be completed independently. However, there are some lessons that would benefit from the support of an adult. If there is not an adult available to help, don't worry! Just skip those lessons.

Encourage your student to just do the best they can with this content—the most important thing is that they continue to work on their reading!

Flip to see the Grade 4 Reading activities included in this packet!
<table>
<thead>
<tr>
<th>Lesson</th>
<th>Resource</th>
<th>Instructions</th>
<th>Answer Key</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Grade 4, Ready Reading Word Learning Routine</td>
<td>• Read the Word Learning Routine together. Keep it handy—you'll need it later!</td>
<td>N/A</td>
<td>10</td>
</tr>
</tbody>
</table>
| 1      | Grade 4 Ready Language Handbook, Lesson 16 | • Read the Introduction.  
• Complete Guided Practice. | Guided Practice:  
**CONTEXT CLUES**  
1. Interested in learning everything about them  
2. After failing to get into the Academy  
3. Or kept trying  
**DEFINITIONS**  
1. fascinated—deeply interested in  
2. rejected—turned down, not accepted  
3. persisted—kept trying  
Independent Practice  
| 2      | Grade 4 Ready Language Handbook, Lesson 16 | • Read the Introduction.  
• Complete Think exercise. | Think: example answer  
**Helpful Context:**  
Their idea combined the lever, pulley and wheel–and–axle...  
**Clues:**  
Idea  
**Possible Meaning:**  
 Came up with the idea  
**The meaning of the phrase:**  
*Conceived of* means "thought of or came up with something," like an idea or invention | 13–14 |
### Section 1 Table of Contents

Grade 4 Reading Activities in Section 1 (Cont.)

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Resource</th>
<th>Instructions</th>
<th>Answer Key</th>
<th>Page(s)</th>
</tr>
</thead>
</table>
| 3      | Grade 4, Ready Reading Lesson 13 Part 2 | • Read the passage “Fire and Air.”  
• Complete Modeled and Guided activities. | Think: example answer  
Definition:  
Combust means “to burn”  
Helpful Context:  
“All three are needed for burning to begin.”  
Clues:  
Starting a fire  
Possible Meaning:  
Catch on fire  
Definition:  
Monitor means “to pay close attention or to watch closely”  
Helpful Context:  
“You will observe that”  
Clues:  
Watching  
Possible Meaning:  
Watch; keep an eye on | 15-16 |
| 4      | Grade 4 Ready Language Handbook, Lesson 17 | • Read the Introduction.  
• Complete Guided Practice. | Guided Practice:  
1. *act* means “do”  
2. *photo* means “light”; *graph* means “write”  
3. *graph* means “write”  
4. *phone* means “sound, voice”  
5. *vis* means “see”  
Independent Practice  
## Grade 4 Reading Activities in Section 1 (Cont.)

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Resource</th>
<th>Instructions</th>
<th>Answer Key</th>
<th>Page(s)</th>
</tr>
</thead>
</table>
| 5      | Grade 4, Ready Reading Lesson 13, Part 3 | • Read “Over Bridge, Under Tunnel.”  
• Complete Think, Talk | Think:  
1. B  
2. “Some are even famous”, “This celebrated structure”, “known for”, “is best known” | 19–20 |
| 6      | Grade 4, Ready Reading Lesson 13, Part 5 | • Reread the passage “Over Bridge, Under Tunnel.”  
• Complete the Writing activity. | Write:  
Example definition and detail:  
Subterranean is used to describe tunnels, which the text tells us are passageways “under the ground.” I used opposites to check my understanding. | 21 |
| 7      | Grade 4, Ready Reading Lesson 13, Part 6 | • Complete Independent Practice: “Seashells.” | Think:  
1: A, C  
2 Part A: C  
2 Part B: D  
3 Part A: B  
3 Part B: “two parts of its shell”, “find just one part of the shell”  
4: B, D | 22–26 |
| 8      | Grade 4, Ready Reading Lesson 13, Part 7 | • Reread the “Seashells.”  
• Do the Writing activity. | Write:  
Example detail:  
The author is telling the reader that pearls are not made on purpose by an oyster. In the sentence after “A pearl is an accident,” the author says that “a grain of sand or something else gets inside the oyster shell.” | 22–24, 27 |
## Section 1 Table of Contents

Grade 4 Reading Activities in Section 1 (Cont.)

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Resource</th>
<th>Instructions</th>
<th>Answer Key</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Tools for Instruction Use Context to Find Word Meaning</td>
<td><strong>Parent/Guardian:</strong> Read the instructions and guide the child through the exercise. When the activity requires a text, choose one of the texts the students read in previous lessons.</td>
<td>N/A</td>
<td>28–29</td>
</tr>
</tbody>
</table>

## Section 2 Table of Contents

Grade 4 Reading Activities in Section 2

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Resource</th>
<th>Instructions</th>
<th>Answer Key</th>
<th>Page(s)</th>
</tr>
</thead>
</table>
| 1      | Grade 4 Ready Language Handbook, Lesson 18 | • Read the Word Learning Routine together. Keep it handy—you'll need it later! | **Guided Practice:** Answers provided in Introduction section  
| 2      | Grade 4, Ready Reading Lesson 17, Part 1 | • Read the Introduction.  
• Complete Think exercise. | **Think:**  
**Unknown Word:** Locate  
**Context:** "...I'd failed to locate it,..."  
**Possible Meaning:** Find  
**Clues:** "...that is, until I sat down." | 32–33   |
<table>
<thead>
<tr>
<th>Lesson</th>
<th>Resource</th>
<th>Instructions</th>
<th>Answer Key</th>
<th>Page(s)</th>
</tr>
</thead>
</table>
| 3      | Grade 4, Ready Reading Lesson 17, Part 2 | • Read the passage “Out to Win.”
• Complete Think and Talk. | Think: example answer
Unknown word:
Dissatisfied
Context:
“Dissatisfied, I planned to win this year…”
Possible Meaning:
Displeased and frustrated
Clues:
“No longer would I be satisfied with second place, however.”
Writing: | 34–35 |
| 4      | Grade 4 Ready Language Handbook, Lesson 19 | • Read the Introduction.
• Complete Guided Practice. | Guided Practice:
1. mouth/trap; Ollie would not let go of the stick.
2. Ollie/ clumsy ballerina; Ollie was leaping, but not gracefully.
3. Ollie/strong wind; Ollie was fast and strong.
4. Ollie/freight train; Ollie was unstoppable.
Independent Practice
1. B, 2, D, 3, D, 4, C, 5, B | 36–37 |
| 5      | Grade 4, Ready Reading Lesson 17, Part 3 | • Reread the passage “Out to Win.”
• Complete the Writing activity. | Write:
Example and detail:
The word opportunity means “chance.” In paragraph 3, the narrator explains that competing against Anna Banks gave her the “opportunity to become a better sprinter.” | 34, 38 |
### Section 2 Table of Contents

**Grade 4 Reading Activities in Section 2 (Cont.)**

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Resource</th>
<th>Instructions</th>
<th>Answer Key</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lesson 17, Part 4</td>
<td>- Complete Think activity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Grade 4, Ready Reading</td>
<td>- Reread “The Catfish.”</td>
<td>Write: Because Tantalus was punished by having</td>
<td>39, 41</td>
</tr>
<tr>
<td></td>
<td>Lesson 17, Part 5</td>
<td>- Complete the Think and Write activities.</td>
<td>food and drink kept just out of his reach, a</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>feline Tantalus must mean a cat that can’t</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>reach its food. In the poem, the poet imagines</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>that a catfish. Has the head of a cat and the</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>tail of a fish.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lesson 17, Part 6</td>
<td>- Complete the Think activity.</td>
<td>lump”, “It was only cheap metal” 3 Part A: D</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 Part B: “imitated” 4: “transformed”</td>
<td></td>
</tr>
</tbody>
</table>
## Grade 4 Reading Activities in Section 2 (Cont.)

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Resource</th>
<th>Instructions</th>
<th>Answer Key</th>
<th>Page(s)</th>
</tr>
</thead>
</table>
| 9      | Grade 4, Ready Reading Lesson 17 Part 7 | - Reread "A Golden Vase and Two Bright Monkeys."
- Complete the Write activity and the Learning Target. | Write: 
In the passage the phrase "freak accident" means an accident that is extremely strange and hard to explain. The story context tells that Sonam has just fooled Dorje into thinking that his children had to be turned into monkeys, which would be extraordinary. 
Learning target: 
Context clues help you figure out the meaning of unknown words and phrases. Learning about allusions to myths and other stories will help you better understand the author's meaning. | 42-44, 47 |
| 10     | Tools for Instruction Use Context to Find Word Meaning | Parent/Guardian: Read the instructions and guide the child through the exercise. When the activity requires a text, choose one of the texts the students read in previous lessons. | N/A | 48 |
Use the questions/prompts on the Discourse Card resource to start a conversation about something the student has read. You may talk about a text the student read in one of the lessons above, or anything else the student is reading.

**Encourage daily reading.** And remember, reading isn’t just about the books on the shelves—it’s about anything around you with letters! Turn on the closed captioning feature on your TV or read catalogs that come in the mail. The backs of cereal boxes work, too, as do directions to board games!

Running out of stuff to read? **Grab some sticky notes, and label household objects, or make up new, silly names for things!** Communicating with sticky notes, instead of talking, is fun, too—start with a half hour and see if you can go all afternoon. Reading is everywhere!

**Don’t worry about right/wrong answers** when you talk about text—the important thing is that you and your student share a reading experience and have fun!

**Here are some websites that offer fun, free, high-quality material for kids:**

- [www.starfall.com](http://www.starfall.com)
- [www.storyplace.org](http://www.storyplace.org)
- [www.uniteforliteracy.com](http://www.uniteforliteracy.com)
- [www.storynory.com](http://www.storynory.com)
- [www.freekidsbooks.org](http://www.freekidsbooks.org)
- [en.childrenslibrary.org](http://en.childrenslibrary.org)
Word Learning Routine

Use the following steps to figure out unfamiliar words. If you figure out what the word means, continue reading. If not, then try the next step.

1. **Say the Word or Phrase Aloud.**
   Circle the word or phrase that you find confusing. Read the sentence aloud.

2. **Look Inside the Word or Phrase.**
   Look for familiar word parts, such as prefixes, suffixes, and root words. Try breaking the word into smaller parts. Can you figure out a meaning from the word parts you know?

3. **Look Around the Word or Phrase.**
   Look for clues in the words or sentences around the word you don’t know and the context of the paragraph or selection.

4. **Look Beyond the Word or Phrase.**
   Look for the meaning of the word or phrase in a dictionary, glossary, or thesaurus.

5. **Check the Meaning.**
   Ask yourself, “Does this meaning make sense in the sentence?”
Lesson 16
Using Context Clues

Introduction Sometimes when you’re reading a story or an article, you’ll come across a word you don’t know. When you don’t know the meaning of a word, often you can figure it out by looking at the words and sentences around it. When you do this, you are using context clues.

<table>
<thead>
<tr>
<th>Kinds of Context Clues</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Look for a definition in the text.</td>
<td>In high school, Jim Lovell built his first rocket, a jet engine that could fly to great heights.</td>
</tr>
<tr>
<td>Find an example that will give you clues about the word’s meaning.</td>
<td>Lovell’s first attempt was a failure. His rocket flew into the air but then exploded and crashed.</td>
</tr>
<tr>
<td>Look for a restatement. A restatement happens when the word is discussed in a way that makes its meaning clear.</td>
<td>A rocket is pushed upward by materials that are combustible. These materials burn and release gases.</td>
</tr>
</tbody>
</table>

Guided Practice

Read the paragraph below with a partner. Circle the context clues that help you understand the meaning of the underlined word. Write the meanings of the underlined words on the space provided.

Jim Lovell had always been fascinated by rockets. He was interested in learning everything about them and even built his own rocket. Lovell applied to the United States Naval Academy but was rejected. After failing to get into the Academy, Lovell did not give up. He persisted, or kept trying, and finally succeeded. After the Academy, he joined the NASA space program.

fascinated: ________________________________

rejected: ________________________________

persisted: ________________________________

© 2020 Curriculum Associates, LLC. All rights reserved.
Independent Practice

For numbers 1–4, use context clues to figure out the meaning of each underlined word.

NASA chose Lovell to command the *Apollo 13* space mission. Lovell was in charge of two men and of making all final decisions. After they were in space for a little more than two days, Lovell and his crew ran into trouble. One of the oxygen tanks blew up. The explosion caused a leak in another tank, and now there wouldn’t be enough oxygen for a moon landing. Lovell and his crew had to return to Earth. Their safe return was due to Lovell’s capable leadership.

1. What does the word *command* mean?
   A. to study
   B. to fly with others on
   C. to be at the head of
   D. to be part of

2. What words help you understand the meaning of *command*?
   A. “in charge of”
   B. “two men”
   C. “space mission”
   D. “chose Lovell”

3. What does the word *explosion* mean?
   A. a leak
   B. a bursting of something
   C. a lack of oxygen
   D. leaving outer space

4. What does the word *capable* suggest about Lovell as a leader?
   A. He is a gentle and patient leader.
   B. He is skillful at leading others.
   C. He is harsh to those he leads.
   D. He is weak when leading others.
Lesson 13
Unfamiliar Words

Learning Target

Using context clues to figure out the meaning of unfamiliar words and phrases will deepen your understanding of the texts you read.

Read

Informational texts often have words people don’t use in everyday life.

- Some words usually appear only in texts in one subject area. For example, you’ll see the word fossil in science texts and the word geography in social studies texts.
- Other words, called academic words, are useful in many subject areas. For example, the academic word process often appears in both science and social studies texts.

As you read, you can use context clues to figure out the meanings of unfamiliar words and phrases. Clues might be synonyms, antonyms, examples, or definitions.

Read the passage below. Circle the phrase conceived of, and underline context clues that help you learn its meaning.

INVENTING THE CRANE

Ancient Greek engineers thought of ways to make new machines from older ones. For example, they conceived of and built a compound machine called the crane. Their idea combined the lever, pulley, and wheel-and-axle into one machine.

A modern crane is a compound machine, too.
Think  What have you learned about figuring out the meaning of unfamiliar words? Complete the chart below to figure out the meaning of the phrase **conceived of** as it is used in the passage. Then explain what the phrase most likely means.

<table>
<thead>
<tr>
<th>Helpful Context</th>
<th>Clues</th>
<th>Possible Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**The meaning of the phrase:** ____________________________

Talk  Share your chart and meaning with a partner.

- Did you agree about the helpful context?
- Did you agree about the meaning of the phrase?

Academic Talk

Use these phases to talk about the text.

- **subject area**
- **academic words**
- **context clues**
Starting a fire is a bit like following a recipe. Getting anything to combust takes three ingredients: fuel, heat, and oxygen. All three are needed for burning to begin, but where do these ingredients come from? Fuel is anything that burns easily, including wood, paper, or grass. Heat can come from many places, but most people use matches. And oxygen, of course, is a gas in the air around us.

If a fire doesn't have enough of any one of the three ingredients, it will be weak. To strengthen the fire, just add one or more of the ingredients. It is simple to add more fuel or heat, but how do you add more oxygen? From a safe distance, blow on the fire. You will see it strengthen because blowing adds oxygen to the fire, making it burn vigorously. Your fire will grow bigger, brighter, and stronger.

To understand the role oxygen plays in keeping a fire burning, try this experiment:

**An Experiment with Fire**

**Materials You Will Need**

- **Most important:** A Teacher Helping You
- three small candles (tealights)
- three saucers
- two glass jars, one larger than the other

**Procedure to Follow**

Put each candle on a saucer, and have your teacher light each one. Place a jar over two of the candles. Pay attention to the candles to monitor what happens over time. You will observe that the candle with the least air available—the one covered by the smaller jar—is the first one extinguished. Keep watching to see which candle goes out next. Blow out the last candle.
How did context clues help you figure out the meaning of unfamiliar words in the science text?

**Think**

1. Complete the chart below. Write the helpful context and clues you used to figure out the meaning of each unfamiliar word.

<table>
<thead>
<tr>
<th><strong>Combust</strong> means:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Helpful Context</strong></td>
</tr>
<tr>
<td>1. “Starting a fire is a bit like following a recipe...”</td>
</tr>
<tr>
<td><strong>Clues</strong></td>
</tr>
<tr>
<td><strong>Possible Meaning</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Monitor</strong> means:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Helpful Context</strong></td>
</tr>
</tbody>
</table>
| 1. “Pay attention to the candles...”  
2. “...happens over time.” |
| **Clues** |
| 1. attention |
| **Possible Meaning** |

**Talk:**

2. Explain how figuring out the meaning of unfamiliar words helped you understand the text. Which context clues were the most helpful? Why?

**Write**

3. **Short Response** Briefly explain how you figured out the meaning of **combust** and **monitor**. Use text details to support your answer. Use the space on page 208 to write your answer.

**HINT** Replace an unfamiliar word with its possible meaning to see if it makes sense.
Lesson 17
Greek and Latin Word Parts

Introduction English words come from many languages, including Greek and Latin.

- A root is a word part that usually can’t stand alone as a word. Sometimes one root is added to another root to make a word, as in the word *photograph*.

<table>
<thead>
<tr>
<th>Root</th>
<th>Meaning</th>
<th>Root</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>graph</td>
<td>&quot;write&quot;</td>
<td>act</td>
<td>&quot;do&quot;</td>
</tr>
<tr>
<td>vis, vid</td>
<td>&quot;see&quot;</td>
<td>photo</td>
<td>&quot;light&quot;</td>
</tr>
<tr>
<td>phon, phono</td>
<td>&quot;sound, voice&quot;</td>
<td>port</td>
<td>&quot;carry&quot;</td>
</tr>
</tbody>
</table>

- Affixes are word parts, such as prefixes and suffixes, that are added to word roots to make words. You can add the root *vis* to *-ible* to make *visible*.

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Meaning</th>
<th>Suffix</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>auto-</td>
<td>&quot;self&quot;</td>
<td>-ist, -er, -or</td>
<td>&quot;someone who&quot;</td>
</tr>
<tr>
<td>tele-</td>
<td>&quot;distance&quot;</td>
<td>-able, -ible</td>
<td>&quot;able or capable&quot;</td>
</tr>
</tbody>
</table>

- As you learn Greek and Latin roots and affixes, your vocabulary will grow.

Guided Practice Circle the roots in the underlined words. Write the meaning of each root. Then tell a partner the meaning of each underlined word.

**HINT** Remember, words may have two roots or a root and an affix.

1. My favorite **actor** is Jesse B.
2. I have five **photographs** of Jesse B. on my wall.
3. One even has an **autograph** on it.
4. I’ve asked my mom if I could **telephone** Jesse B.
5. She said I could just watch Jesse B. on **television**.

© 2020 Curriculum Associates, LLC. All rights reserved.
1. I decided to compose a letter to Jesse B.  
   The prefix **com**- means “with,” and the root **poser** means “to put or set down.”  
   What is the meaning of **compose** as used in the sentence?  
   A  to think  
   B  to write  
   C  to talk  
   D  to mail  

2. Dear Jesse B., I just read a biography about you.  
   The prefix **bio**- means “life,” and the root **graph** means “write.”  
   What is the meaning of **biography** as used in the sentence?  
   A  writing about the life of an actor  
   B  writing about someone else’s life  
   C  writing about the beauty of life  
   D  writing about how to live your life  

3. Your life story inspires me and many other fans.  
   The prefix **in**- can mean “within,” and the root **spir** means “breathe.”  
   What is the meaning of **inspires** as used in the sentence?  
   A  causes people to become alive  
   B  causes a heavy wind to blow  
   C  causes people to faint  
   D  causes strong lungs  

4. I hear you are a very benevolent person, giving to many charities.  
   The prefix **bene**- means “well,” and the root **velle** means “wish.”  
   What is the meaning of **benevolent** as used in the sentence?  
   A  surrounded by good people  
   B  showing good will to others  
   C  liked by many good people  
   D  hoping others are good
over Bridge, Under Tunnel

by Lloyd Frank

1 Mountains, lakes, and rivers can get in the way of people traveling from one place to another. There are structures that help people pass such obstacles. Bridges and tunnels help people overcome such barriers.

2 Bridges and tunnels are different in design and placement. A bridge is built over a body of water, a highway, or a railroad track. A tunnel, in contrast, is a passageway under the ground, under a body of water, or through a mountain. Bridges vary in shape and are often placed above ground or water. Some are even famous. The Golden Gate Bridge is one of the most renowned bridges in the world. This celebrated structure crosses over the entrance to San Francisco Bay and connects San Francisco to northern California. The Golden Gate is known for its length and height. But it is best known for its beauty. People come from all over the world not just to cross the Golden Gate but simply to look at it.

3 Of course, not even the world’s most famous tunnel gets many visitors who just want to look. It’s hard to get a good view of a subterranean passage. But since the Channel Tunnel opened in 1994, it has transported millions of people. The Channel Tunnel, or “Chunnel,” runs beneath the English Channel and connects France and England. The Chunnel is a rail tunnel. The only automobiles that cross it are carried on special railway cars. The Chunnel is not the longest tunnel in the world, but it is one of the few tunnels that connects two countries.

Close Reader Habits

How can context clues help you? Circle words that are unfamiliar. Reread the article. Underline clues that help you figure out the meaning of the words.
Think  Use what you learned from reading the science article to respond to the following questions.

1. What is the meaning of obstacles as it is used in paragraph 1 of the text?
   A. things made below or above ground
   B. things that slow or stop movement
   C. things that help people travel
   D. things built through mountains or over water

2. Underline four context clues in paragraph 2 that best help you understand the meaning of the word renowned.

   A bridge is built over a body of water, a highway, or a railroad track. . . . Bridges vary in shape and are often placed above ground or water. Some are even famous. The Golden Gate Bridge is one of the most renowned bridges in the world. This celebrated structure crosses over the entrance to San Francisco Bay and connects San Francisco to northern California. The Golden Gate is known for its length and height. But it is best known for its beauty.

Talk

3. Discuss the meaning of the word subterranean as it is used in this sentence from paragraph 3:

   It is hard to get a good view of a subterranean passage.

Write

4. Short Response  Write a definition of the word subterranean. Identify the context clues you found. Describe the strategy you used to figure out the meaning of the word. Use details from the text to support your response. Use the space provided on page 209 to write your answer.
3 Use the chart below to organize your ideas.

Helpful Context  Clues  Possible Meaning

4 Write Use the space below to write your answer to the question on page 207.

4 Short Response Write a definition of the word subterranean. Identify the context clues you found. Describe the strategy you used to figure out the meaning of the word. Use details from the text to support your response.
WORDS TO KNOW
As you read, look inside, around, and beyond these words to figure out what they mean.

- series
- hinged
- foreign

1 If you walk along the seashore, you will probably see many kinds of shells. Seashells were once the homes of live animals. The animals that live inside shells have soft bodies, so they need their shells to protect them from harm. Their shells save them from storms or predators such as starfish, birds, and otters. Shells also give the animals a shape. In that way, shells are like skeletons on the outside of the body. When the animals die, the shells remain.

2 Creatures with shells belong to a group of animals called mollusks. Not all mollusks have shells. Of the mollusks that do have shells, there are two main groups.
Univalves

3 More than three-quarters of all mollusks are univalves, a word that means "having a shell that is all one piece." The shell is coiled, and inside the coil is the soft body of the mollusk. Many univalves are named for their appearance. Look at the examples above. Does the helmet shell remind you of a helmet? How about the worm and slipper shells?

4 Some univalves have small holes in their shells. Abalone shells have a series of holes. Water and wastes are expelled, or pushed out, through the holes. The inside of an abalone shell gleams with different rainbow colors. This iridescent substance is called mother-of-pearl.
Bivalves

5 After univalves, bivalves are the next largest group of mollusks. When a bivalve is alive, the two parts of its shell are hinged. After the animal dies, you may find just one part of the shell lying on the beach.

6 Many bivalves have names that reflect their appearance. A jackknife is a knife that folds into its own case. The jackknife clam has an appropriate name because it has about the same shape as a closed jackknife. Are angel wing and kitten's paw fitting names for the shells shown here?

7 There are many different kinds of clams, from very small to very large. The giant clam is the largest bivalve. Some are four feet long and weigh 500 pounds. The giant clam even grows its own food. Tiny plants get caught in the clam. The plants get what they need from the clam, but eventually the clam eats the plants.

8 Another common bivalve is the oyster. All oysters can make pearls, but the pearl oyster makes the most beautiful ones. A pearl is an accident. A grain of sand or something else gets inside the oyster shell. An oyster is creating new shell material all the time. To protect itself from the foreign body, the oyster covers it with the same material that the oyster's shell is made of. The result is a pearl.
Think  Use what you learned from reading the science text to respond to the following questions.

1. Read the sentence from paragraph 1 in the passage.

   Their shells save them from storms or **predators** such as starfish, birds, and otters.

   What does the author suggest to the reader by using the word **predators**? Pick **two** choices.
   A  Predators can harm some animals.
   B  Predators need to find shelter from storms.
   C  An animal's shell helps protect it.
   D  All predators have skeletons.
   E  When the animal dies, the shell remains.

2. This question has two parts. First, answer Part A. Then answer Part B.

   **Part A**
   What is the meaning of the word **iridescent** as it is used in paragraph 4?
   A  not letting light through
   B  easy to notice or understand
   C  shining with many varying colors
   D  a small amount of something

   **Part B**
   Which phrase from the passage helps the reader understand the meaning of **iridescent**?
   A  “next largest group of mollusks”
   B  “have small holes in their shells”
   C  “the inside of an abalone shell”
   D  “gleams with different rainbow colors”
This question has two parts. First, answer Part A. Then answer Part B.

Part A
What is the meaning of the word *bivalve* as it is used in paragraph 5?

A. having a hard outer shell  
B. having a shell with two pieces  
C. having a soft outer shell  
D. having a shell that is all one piece

Part B
Underline the two phrases in paragraph 5 that best support your answer in Part A.

After univalves, *bivalves* are the next largest group of mollusks. When a bivalve is alive, the two parts of its shell are hinged. After the animal dies, you may find just one part of the shell lying on the beach.

Read the sentence from the passage.

The jackknife clam has an appropriate name because it has about the same shape as a closed jackknife.

What does the author tell the reader by using the word appropriate? Pick two choices.

A. Bivalves are the largest group of mollusks.  
B. Jackknife describes the shape of the clam.  
C. An angel wing is a good name for the clam.  
D. Jackknife is a good name for the clam.  
E. The clam looks like an open jackknife.  
F. A jackknife folds into its own case.
Write

**Short Response** What does the author tell the reader by using the underlined word in the sentence below from paragraph 8? How do the details in the paragraph further develop this idea? Include one or more context clues from the text to support your response.

A pearl is an accident.

---

**Learning Target**

In this lesson, you learned to use context clues to figure out the meaning of unfamiliar words or phrases. Explain how using context clues deepened your understanding of the text.
Tools for Instruction

Use Context to Find Word Meaning

Using context to determine a word’s intended meaning is an essential reading strategy. Although students are often told to “use the context” to figure out the meaning of an unfamiliar word, they may need more specific guidance. To help students use context effectively, introduce specific types of context clues that they can look for in sentences and paragraphs.

Three Ways to Teach

Identify Sentence-Based Context Clues 20–30 minutes

**Connect to Writing** Explicitly teach students about the different types of context clues that can be used to determine meanings of unknown words. Then have students develop their own sentences with clues that help classmates guess above-level missing words.

- Display the following chart. Name the first type of clue, and read aloud the example sentence. Help students figure out a meaning for the italicized word and identify the (highlighted) context clues in the sentence, which give a definition for the word. Then guide students to tell how they can recognize definition clues in other sentences. Record a simple explanation in the “What It Does” column.

- Repeat the process to introduce the remaining types of clues. Each time, note signal words that emphasize the clue, including *is, or, and other,* and *but.*

<table>
<thead>
<tr>
<th>Type of Clue</th>
<th>Example Sentence</th>
<th>What It Does</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition</td>
<td>An asteroid is a rocky body that orbits the Sun.</td>
<td>Tells the meaning of the unfamiliar word explicitly</td>
</tr>
<tr>
<td>Appositive</td>
<td>An animal that is a carnivore, or meat eater, may hunt for its food.</td>
<td>Tells the meaning of the unfamiliar word beside it, marked off by commas or dashes</td>
</tr>
<tr>
<td>Examples</td>
<td>The streets were filled with buses, taxis, and other vehicles.</td>
<td>Describes the unfamiliar word by naming types of it</td>
</tr>
<tr>
<td>Contrast</td>
<td>Lush, green forests receive steady rains, but deserts are bare and arid.</td>
<td>Tells the meaning of an unfamiliar word by describing its opposite</td>
</tr>
</tbody>
</table>

- For independent practice, give each student two words likely to have known meanings, such as *skyscraper,* *meal,* *author,* and *study.*
- Tell students to write a sentence with their word, leaving a blank in its place. Challenge them to write a sentence with such strong context that listeners will easily guess the word.
- As students read aloud their sentences (saying “blank” for the word), talk about the context clues that helped listeners figure out the missing word. Repeat the activity, challenging students to write a sentence that uses a different type of context clue for their second word.
Identify Paragraph or Text-Based Context Clues 10-15 minutes

Explain that sometimes readers have to read the sentences before and after an unfamiliar word to determine its meaning. Choose a passage with a challenging, above-level word that is not defined in the same sentence but can be understood by rereading the paragraph. Display the paragraph with the word underlined, and model asking and answering questions such as these to determine the word’s meaning:

- What is this paragraph about?
- Do the sentences around the unfamiliar word describe it in a different way, by giving a synonym or example or by showing a contrast?
- Can I make an educated guess about what the word could mean?
- If I replace the word with what I think it might mean, does the sentence make sense with the topic or purpose of the paragraph?

For independent practice, have partners choose another paragraph that includes one or two unfamiliar words. Have them use the questions above to search for context clues that will help them figure out the meaning of the unfamiliar words.

Use Multiple-Meaning Words to Highlight Context 10-15 minutes

- Explain to students that context clues can help readers clarify the intended meaning of a multiple-meaning word. Say, Although looking up a word in a dictionary can be helpful, it can sometimes be hard to know which meaning was used in the text when a word has several definitions.
- Display a list of multiple-meaning words. Then provide sentences using varied meanings for the words.

| fan | The fan cheered for her team. | There was only a fan to keep us cool. |
| fry | The fry swim downstream right after hatching. | My dad will fry potatoes for dinner. |
| lap | I held the plate in my lap. | We ran one lap around the track. |
| strike | Watch the hammer strike the nail. | That pitch looks like a strike. |

- Discuss how the context clues in each sentence clarify the intended meaning of the word. Provide independent practice by suggesting other multiple-meaning words and asking students to give oral sentences that make each of the word meanings clear. Then ask students to choose one word and draw each of its meanings.

Check for Understanding

| If you observe... | The sentences before and after an unfamiliar word to determine its meaning. |
| Then try... | Confirming that students have sufficient background knowledge to understand the context. Ask students to briefly summarize the paragraph in their own words. Correct any misunderstandings, and proceed to model using the context to define the unfamiliar word. |
| errors in determining word meanings based on context | Substituting students’ definitions for the unfamiliar word, and verifying whether the inserted meaning makes sense. |
Lesson 18
Using a Dictionary or Glossary

Introduction There are many places you can look to find information about words. A dictionary and a glossary are two kinds of references you can use.

- A dictionary lists words in alphabetical order. Each entry has an entry word, the pronunciation, the part of speech, and the meanings of the word.

  **break** (bræk) v. 1. to smash 2. to disobey 3. to do better than: Ina broke the record for the high jump. n. 4. time off 5. luck break into 1. to disturb 2. to start to do suddenly 3. to start a new job: He broke into acting.

- A glossary is a kind of dictionary often found at the back of a book. It lists important words from the book in alphabetical order. It gives the meaning of each word as it is used in that book.

  **carry** (kār’ē) 1. to move 2. to hold carry on 1. to continue 2. to act excitedly

Guided Practice Read the paragraph. Use the entries above to find the meanings of the underlined words and phrases. Write the number of the correct meaning above each word or phrase.

HINT To find the right meaning of a word or phrase, read all the definitions first. Decide which meaning makes the most sense in the sentence.

Hank Aaron **broke into** major league baseball in the 1950s.

A big **break** came for him in 1954 when he replaced an injured player. Aaron’s talent helped him **break** Babe Ruth’s record of 714 home runs. When Aaron hit his 715th home run, his fans **broke into** cheers. Aaron **carried on** hitting home runs until he retired in 1976.
Grade 4 Mathematics
Student At-Home Activity Packet

This At-Home Activity Packet includes 23 sets of practice problems that align to important math concepts your student has worked with so far this year.

We recommend that your student completes one page of practice problems each day.

Encourage your student to do the best they can with this content—the most important thing is that they continue developing their mathematical fluency and skills.

See the Grade 4 Math concepts covered in this packet!
# Grade 4 Math concepts covered in this packet

<table>
<thead>
<tr>
<th>Concept</th>
<th>Practice</th>
<th>Fluency and Skills Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding Place Value</td>
<td>1</td>
<td>Understanding of Place Value   3</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Comparing Multi-Digit Numbers   5</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Rounding Whole Numbers         6</td>
</tr>
<tr>
<td>Adding and Subtracting Whole Numbers</td>
<td>4</td>
<td>Using Strategies to Add        7</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Using the Standard Algorithm to Add Greater Numbers 8</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Using Strategies to Subtract   10</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Using the Standard Algorithm to Subtract Greater Numbers 11</td>
</tr>
<tr>
<td>Multiplying Whole Numbers</td>
<td>8</td>
<td>Multiplication in Word Problems 12</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>Modeling Multi-Step Problems  13</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Solving Multi-Step Problems   14</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Multiplying a Three-Digit Number by a One-Digit Number 15</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>Multiplying a Four-Digit Number by a One-Digit Number 16</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>Multiplying by Two-Digit Numbers 17</td>
</tr>
<tr>
<td>Dividing Whole Numbers</td>
<td>14</td>
<td>Division in Word Problems      19</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>Dividing with Arrays and Area Models 20</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>Dividing with Estimation and Area Models 21</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>Dividing Four-Digit Numbers    23</td>
</tr>
<tr>
<td>Understanding Fractions</td>
<td>18</td>
<td>Understanding of Equivalent Fractions 24</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>Using Common Numerators and Denominators 25</td>
</tr>
<tr>
<td>Adding and Subtracting Fractions</td>
<td>20</td>
<td>Understanding of Fraction Addition and Subtraction 26</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>Adding Fractions               28</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>Subtracting Fractions          29</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>Decomposing Fractions          31</td>
</tr>
</tbody>
</table>
Understanding of Place Value

Set A

1. Write the number 78,215 in the place-value chart.

<table>
<thead>
<tr>
<th>Hundred Thousands</th>
<th>Ten Thousands</th>
<th>Thousands</th>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
</table>

Write 78,215 in expanded form and word form.

2. Write the number 540,632 in the place-value chart.

<table>
<thead>
<tr>
<th>Hundred Thousands</th>
<th>Ten Thousands</th>
<th>Thousands</th>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
</table>

Write 540,632 in expanded form and word form.

Set B

3. Show different ways to make 25,302.

   _______ thousands + _______ hundreds + _______ ones

   _______ hundreds + _______ ones

   _______ ones

4. Show different ways to make 708,496.

   _______ hundred thousands + _______ thousands + _______ hundreds + _______ tens + _______ ones

   _______ thousands + _______ hundreds + _______ tens + _______ ones

   _______ hundreds + _______ tens + _______ ones
Set B continued

5 Show different ways to make 492,623.

_______ ten thousands + _______ thousands + _______ hundreds + _______ tens + _______ ones

_______ thousands + _______ tens + _______ ones

_______ hundreds + _______ ones

6 Write 841,620 in three different ways.

7 Why do both of these show 27,974?

20,000 + 7,000 + 900 + 70 + 4

27 thousands + 97 tens + 4 ones
Comparing Multi-Digit Numbers

Set A

Write the symbol that makes each statement true. Use >, <, or =.

1. $23,230 \quad \underline{\quad} \quad 2,323$
2. $33,003 \quad \underline{\quad} \quad 33,030$
3. $9,999 \quad \underline{\quad} \quad 10,000$

4. $40,404 \quad \underline{\quad} \quad 40,040$
5. $52,177 \quad \underline{\quad} \quad 52,771$
6. $421,073 \quad \underline{\quad} \quad 412,730$

Set B

7. Circle all the numbers that are less than 78,265.
   - 78,000
   - 79,000
   - 70,000
   - 80,000
   - 78,200
   - 78,300

8. Circle all the numbers that are less than 45,763.
   - 46,000
   - 40,000
   - 50,000
   - 45,700
   - 45,800
   - 45,000

9. Circle all the numbers that are greater than 108,427.
   - 108,000
   - 108,400
   - 108,500
   - 109,000
   - 108,430
   - 108,420

10. How did you solve problem 7?
Rounding Whole Numbers

Round each number to the nearest ten.

1. 72
2. 172
3. 2,572
4. 101,372

Round each number to the nearest hundred.

5. 180
6. 1,180
7. 56,180

8. 980
9. 1,980
10. 56,980

Round each number to the nearest thousand.

11. 7,750
12. 17,750
13. 25,750
14. 70,750

Round each number to the nearest ten thousand.

15. 65,321
16. 165,321
17. 185,321
18. 205,321

19. Round 307,451 to each place value given below.
   to the nearest thousand: __________
   to the nearest hundred: __________
   to the nearest ten: __________
Using Strategies to Add

Add using different strategies.

1. 4,000
   + 6,215

2. 4,010
   + 6,215

3. 4,121
   + 6,215

4. 3,000
   + 6,871

5. 2,999
   + 6,871

6. 2,990
   + 6,871

7. 5,020
   + 1,491

8. 4,990
   + 1,491

9. 4,950
   + 1,491

10. What strategies did you use to solve the problems? Explain.

11. Check your answer to problem 6 by solving it with a different strategy. Show your work.
Using the Standard Algorithm to Add Greater Numbers

Estimate the sum of each addition problem to check if the student’s answer is reasonable. If not, cross out the answer and write the correct answer.

<table>
<thead>
<tr>
<th>Addition Problems</th>
<th>Student Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>8,997 + 2,301</td>
<td>[31,998] Estimate: 9,000</td>
</tr>
<tr>
<td></td>
<td>11,298 + 2,000 11,000</td>
</tr>
<tr>
<td>23,411 + 35,507</td>
<td>12,918</td>
</tr>
<tr>
<td>72,418 + 41,291</td>
<td>113,709</td>
</tr>
<tr>
<td>67,802 + 3,443</td>
<td>10,225</td>
</tr>
<tr>
<td>5,188 + 9,024</td>
<td>6,112</td>
</tr>
</tbody>
</table>
Using the Standard Algorithm to Add Greater Numbers continued

<table>
<thead>
<tr>
<th>Addition Problems</th>
<th>Student Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>21,822 + 75,333</td>
<td>97,155</td>
</tr>
<tr>
<td>60,125 + 69,205</td>
<td>75,330</td>
</tr>
<tr>
<td>4,899 + 5,224     + 9,296</td>
<td>108,209</td>
</tr>
</tbody>
</table>

1. How does estimating an addition problem help you know if an answer is reasonable?

2. Can an answer be incorrect even if it looks reasonable? Explain.
Using Strategies to Subtract

Subtract.

1. 4,003
   \[\begin{array}{c}
   - 3 \\
   \hline
   \end{array}\]

2. 2,000
   \[\begin{array}{c}
   - 1,999 \\
   \hline
   \end{array}\]

3. 3,007
   \[\begin{array}{c}
   - 7 \\
   \hline
   \end{array}\]

4. 4,003
   \[\begin{array}{c}
   - 13 \\
   \hline
   \end{array}\]

5. 2,000
   \[\begin{array}{c}
   - 1,990 \\
   \hline
   \end{array}\]

6. 3,007
   \[\begin{array}{c}
   - 27 \\
   \hline
   \end{array}\]

7. 4,003
   \[\begin{array}{c}
   - 103 \\
   \hline
   \end{array}\]

8. 2,000
   \[\begin{array}{c}
   - 1,985 \\
   \hline
   \end{array}\]

9. 3,007
   \[\begin{array}{c}
   - 307 \\
   \hline
   \end{array}\]

10. 4,003
    \[\begin{array}{c}
    - 1,103 \\
    \hline
    \end{array}\]

11. 2,000
    \[\begin{array}{c}
    - 1,500 \\
    \hline
    \end{array}\]

12. 3,007
    \[\begin{array}{c}
    - 1,307 \\
    \hline
    \end{array}\]

13. 4,003
    \[\begin{array}{c}
    - 2,103 \\
    \hline
    \end{array}\]

14. 2,000
    \[\begin{array}{c}
    - 1,490 \\
    \hline
    \end{array}\]

15. 3,007
    \[\begin{array}{c}
    - 2,307 \\
    \hline
    \end{array}\]

4. What strategy did you use to find the differences for problem 2? Explain.

5. How could you check your answer to one of the problems using another strategy?
Using the Standard Algorithm to Subtract Greater Numbers

Estimate. Circle all the problems with differences between 30,000 and 60,000. Then find the differences of only the circled problems.

1. 95,217 2. 62,554 3. 92,023
   − 39,871 − 31,618 − 71,578

4. 84,724 5. 56,417 6. 71,677
   − 43,951 − 24,009 − 13,197

7. 99,902 8. 87,591 9. 90,434
   − 33,227 − 46,280 − 51,533

10. 78,282 11. 71,731 12. 50,118
    − 40,983 − 61,320 − 18,306

13. 86,496 14. 59,176 15. 89,971
    − 54,101 − 17,222 − 11,499

16. Use estimation and addition to check one of your answers. Show your work.

17. How does checking with addition compare with checking using estimation?
Use a strategy of your choice to solve each problem.

1. The library has 5 mystery books on a shelf. It has 4 times as many fiction books on another shelf. How many fiction books are on the shelf?
   
   There are _______ fiction books on the shelf.

2. Paul runs 2 laps around the gym. Carrie runs 6 times as many laps as Paul. How many laps does Carrie run?
   
   Carrie runs _______ laps.

3. Violet has 3 markers. She has 6 times as many colored pencils as markers. How many colored pencils does she have?
   
   Violet has _______ colored pencils.

4. Owen draws 7 comics in April. He draws 3 times as many comics in May. How many comics does Owen draw in May?
   
   Owen draws _______ comics in May.

5. Tasha used 8 tomatoes to make salsa. She used 4 times as many tomatoes to make sauce. How many tomatoes did Tasha use to make sauce?
   
   Tasha used _______ tomatoes to make sauce.

6. There are 7 pear trees on a farm. There are 7 times as many apple trees as pear trees. How many apple trees are on the farm?
   
   There are _______ apple trees.

7. There are 9 school buses in the parking lot. There are 6 times as many cars as school buses in the parking lot. How many cars are in the parking lot?
   
   There are _______ cars in the parking lot.

8. There are 8 vases at an art show. There are 9 times as many paintings as vases at the art show. How many paintings are at the art show?
   
   There are _______ paintings at the art show.

9. Write and solve a word problem for this equation: $5 \times 6 = ?$
Write an equation to represent each problem. Show your work.

1. The Lopez family goes to the movies. They buy 2 adult tickets for $6 each and 3 child tickets for $4 each. Write an equation to represent how much money the family spends on movie tickets, \( t \).

2. Grace earns $5 each time she walks her neighbor’s dog. She walks the dog 5 times in one week. Then she spends $7 on a book and $9 on a building set. Write an equation to represent how much money Grace has left, \( m \).

3. During the basketball game, Mika makes 3 baskets worth 2 points each, 2 baskets worth 3 points each, and 2 free throws worth 1 point each. Write an equation to represent how many points Mika scores, \( p \).

4. Will has 20 pounds of apples. He makes 2 batches of applesauce that use 4 pounds each, one batch of apple butter that uses 6 pounds, and he uses 3 pounds to make juice. Write an equation to represent how many pounds of apples Will has left, \( p \).

5. What strategies did you use to write an equation?

6. Is there another way you could write one of your equations? Could you write it as two equations? Explain.
Write and solve an equation for each problem. Show your work.

1 Tasha spends 25 minutes reading on Wednesday night. She spends 17 more minutes reading on Thursday than she did on Wednesday. Write and solve an equation to find how many minutes Tasha spent reading on Wednesday and Thursday nights.

Tasha spent _______ minutes reading.

2 Erik has 2 bags of bird seed. One bag has 10 pounds of seed, and the other bag has 8 pounds of seed. He fills 7 bird feeders with 2 pounds each. Write and solve an equation to find how many pounds of bird seed are left.

There are _______ pounds left.

3 There are 15 boys and 19 girls in math club. The tables in Mrs. Miller’s classroom seat 4 students each. Write and solve an equation to find how many tables Mrs. Miller will need.

Mrs. Miller will need _______ tables.

4 Frankie earns $5 each time he babysits his little sister. He has saved $30. Frankie wants to save $52 to buy a new skateboard. Write and solve an equation to find how many more times Frankie will need to babysit.

Frankie will need to babysit _______ more times.

5 How can you estimate to check one of your answers? Show your work.
Multiplying a Three-Digit Number by a One-Digit Number

Find the product.

1. $500 \times 4 = \underline{\hspace{2cm}}$
   $501 \times 4 = \underline{\hspace{2cm}}$
   $506 \times 4 = \underline{\hspace{2cm}}$

2. $300 \times 2 = \underline{\hspace{2cm}}$
   $299 \times 2 = \underline{\hspace{2cm}}$
   $298 \times 2 = \underline{\hspace{2cm}}$

3. $400 \times 3 = \underline{\hspace{2cm}}$
   $405 \times 3 = \underline{\hspace{2cm}}$
   $410 \times 3 = \underline{\hspace{2cm}}$

4. $499 \times 6 = \underline{\hspace{2cm}}$
5. $706 \times 3 = \underline{\hspace{2cm}}$
6. $195 \times 5 = \underline{\hspace{2cm}}$

7. What pattern do you notice in problem 2? How could it help you solve a problem such as $297 \times 2$?

8. Choose problem 4, 5, or 6. Explain how you could check your answer.
Multiplying a Four-Digit Number by a One-Digit Number

Estimate. Circle all the problems that will have products between 18,000 and 32,000. Then find the exact products of only the problems you circled. Show your work.

1. $8,491 \times 2 = \underline{_______}$  
2. $6,148 \times 4 = \underline{_______}$  
3. $7,062 \times 5 = \underline{_______}$

4. $4,362 \times 5 = \underline{_______}$  
5. $1,789 \times 8 = \underline{_______}$  
6. $2,206 \times 9 = \underline{_______}$

7. $7,218 \times 4 = \underline{_______}$  
8. $9,821 \times 3 = \underline{_______}$  
9. $4,762 \times 6 = \underline{_______}$

10. $6,739 \times 6 = \underline{_______}$  
11. $7,964 \times 4 = \underline{_______}$  
12. $3,618 \times 7 = \underline{_______}$

13. What strategies did you use to solve the problems? Explain.
**Multiplying by Two-Digit Numbers**

Estimate each multiplication problem to check if the student’s answer is reasonable. If not, cross out the answer and write the correct answer.

<table>
<thead>
<tr>
<th>Multiplication Problems</th>
<th>Student Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 × 17</td>
<td>2,380</td>
</tr>
<tr>
<td></td>
<td>238</td>
</tr>
<tr>
<td></td>
<td>Estimate: 14 × 20 = 280</td>
</tr>
<tr>
<td>15 × 19</td>
<td>285</td>
</tr>
<tr>
<td>21 × 18</td>
<td>3,078</td>
</tr>
<tr>
<td>16 × 13</td>
<td>28</td>
</tr>
<tr>
<td>Multiplication Problems</td>
<td>Student Answers</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>$13 \times 31$</td>
<td>403</td>
</tr>
<tr>
<td>$18 \times 17$</td>
<td>3,056</td>
</tr>
<tr>
<td>$21 \times 15$</td>
<td>3,015</td>
</tr>
<tr>
<td>$12 \times 22$</td>
<td>2,604</td>
</tr>
</tbody>
</table>

1. How does estimating a multiplication problem help you know if an answer is reasonable?
Division in Word Problems

Use a strategy of your choice to solve each problem.

1. There are 5 times as many tulips as rose bushes in a garden. There are 15 tulips. How many rose bushes are in the garden?

   There are ______ rose bushes in the garden.

2. Kelly has 2 times as many quarters as dimes. She has 18 quarters. How many dimes does she have?

   Kelly has ______ dimes.

3. There are 18 blueberries in a bowl. There are 3 times as many blueberries as strawberries in the bowl. How many strawberries are in the bowl?

   There are ______ strawberries in the bowl.

4. Amanda swims for 16 minutes. This is 4 times as many minutes as Julio swims. How many minutes does Julio swim?

   Julio swims ______ minutes.

5. A tile pattern has 6 times as many white squares as gray squares. There are 48 white tiles in the pattern. How many gray tiles are there?

   There are ______ gray tiles in the pattern.

6. Leah has 3 times as many country songs as she has pop songs on her MP3 player. She has 27 country songs. How many pop songs does Leah have?

   Leah has ______ pop songs.

7. Erik sees 42 stars in the sky on Tuesday night. This is 7 times as many stars as he sees on Monday night. How many stars does Erik see on Monday night?

   Erik sees ______ stars on Monday night.

8. Lucas spends 72 minutes cleaning his room. This is 8 times as long as it takes him to wash the dishes. How long does it take Lucas to wash the dishes?

   It takes Lucas ______ minutes to wash the dishes.

9. Write and solve a word problem for this equation: \(6 \times n = 54\)
Dividing with Arrays and Area Models

The answers to problems 1–12 are mixed up at the bottom of the page. Cross out the answers as you complete the problems.

1. \(606 \div 2 = _____\)
2. \(606 \div 3 = _____\)
3. \(903 \div 3 = _____\)

4. \(408 \div 8 = _____\)
5. \(243 \div 3 = _____\)
6. \(721 \div 7 = _____\)

7. \(545 \div 5 = _____\)
8. \(488 \div 8 = _____\)
9. \(816 \div 4 = _____\)

10. \(728 \div 8 = _____\)
11. \(459 \div 9 = _____\)
12. \(366 \div 6 = _____\)

13. What strategies did you use to solve the problems?

14. Explain how to use multiplication to check your answer to problem 10.

Answers

<table>
<thead>
<tr>
<th>(91)</th>
<th>(303)</th>
<th>(61)</th>
<th>(202)</th>
<th>(204)</th>
<th>(109)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(81)</td>
<td>(51)</td>
<td>(301)</td>
<td>(103)</td>
<td>(51)</td>
<td>(61)</td>
</tr>
</tbody>
</table>
Dividing with Estimation and Area Models

Check the student’s answer by multiplying the quotient by the divisor and adding the remainder. If an answer is incorrect, cross out the answer and write the correct quotient, including the remainder.

<table>
<thead>
<tr>
<th>Division Problems</th>
<th>Student Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>637 ÷ 4</td>
<td>149 R 1</td>
</tr>
<tr>
<td></td>
<td>Check: 149 × 4 = 596</td>
</tr>
<tr>
<td></td>
<td>159 R 1</td>
</tr>
<tr>
<td></td>
<td>596 + 1 = 597</td>
</tr>
<tr>
<td>139 ÷ 2</td>
<td>69 R 1</td>
</tr>
<tr>
<td>188 ÷ 5</td>
<td>38 R 2</td>
</tr>
<tr>
<td>344 ÷ 6</td>
<td>57 R 3</td>
</tr>
<tr>
<td>458 ÷ 9</td>
<td>58 R 8</td>
</tr>
<tr>
<td>222 ÷ 7</td>
<td>31 R 5</td>
</tr>
<tr>
<td>692 ÷ 8</td>
<td>85 R 4</td>
</tr>
<tr>
<td>479 ÷ 3</td>
<td>169 R 2</td>
</tr>
</tbody>
</table>
1. Write a word problem that could be solved by one of the problems.

2. Can an answer be incorrect even if it looks reasonable? Explain.
Dividing Four-Digit Numbers

Estimate. Circle all the problems with quotients between 500 and 1,500. Then find the exact quotients of only the problems you circled.

1. $2,508 \div 4 = \underline{\hspace{2cm}}$
2. $7,058 \div 9 = \underline{\hspace{2cm}}$
3. $2,726 \div 9 = \underline{\hspace{2cm}}$

4. $7,429 \div 5 = \underline{\hspace{2cm}}$
5. $3,506 \div 9 = \underline{\hspace{2cm}}$
6. $8,318 \div 8 = \underline{\hspace{2cm}}$

7. $7,645 \div 2 = \underline{\hspace{2cm}}$
8. $4,113 \div 4 = \underline{\hspace{2cm}}$
9. $3,196 \div 5 = \underline{\hspace{2cm}}$

10. $5,018 \div 7 = \underline{\hspace{2cm}}$
11. $8,127 \div 6 = \underline{\hspace{2cm}}$
12. $6,155 \div 3 = \underline{\hspace{2cm}}$


14. Check one of your answers by solving it with a different strategy. Show your work.
Understanding of Equivalent Fractions

Write the missing numbers in the boxes to make each equation true.

1. \( \frac{2}{4} \times \Box = \frac{8}{16} \)
2. \( \frac{2}{3} \times \Box = \frac{12}{18} \)
3. \( \frac{5}{6} \times \Box = \frac{25}{30} \)

4. \( \frac{2}{3} \times \frac{\Box}{3} = \frac{6}{\Box} \)
5. \( \frac{3}{8} \times \frac{\Box}{5} = \frac{15}{\Box} \)
6. \( \frac{5}{6} \times \Box = \frac{\Box}{12} \)

7. \( \frac{5}{\Box} \times \Box = \frac{15}{24} \)
8. \( \frac{\Box}{2} \times \frac{\Box}{4} = \frac{\Box}{12} \)
9. \( \frac{\Box}{8} \times \frac{\Box}{2} = \frac{\Box}{16} \)

10. Which strategies did you use to solve the problems? Explain why.
Using Common Numerators and Denominators

Compare the fractions. Write <, >, or =.

1. \( \frac{3}{4} \) \( \bigcirc \) \( \frac{3}{8} \)
2. \( \frac{2}{3} \) \( \bigcirc \) \( \frac{4}{5} \)
3. \( \frac{1}{5} \) \( \bigcirc \) \( \frac{2}{10} \)
4. \( \frac{2}{10} \) \( \bigcirc \) \( \frac{23}{100} \)
5. \( \frac{7}{8} \) \( \bigcirc \) \( \frac{3}{4} \)
6. \( \frac{7}{12} \) \( \bigcirc \) \( \frac{5}{6} \)
7. \( \frac{10}{12} \) \( \bigcirc \) \( \frac{5}{6} \)
8. \( \frac{53}{100} \) \( \bigcirc \) \( \frac{1}{2} \)
9. \( \frac{2}{8} \) \( \bigcirc \) \( \frac{9}{12} \)
10. \( \frac{1}{6} \) \( \bigcirc \) \( \frac{3}{12} \)
11. \( \frac{4}{5} \) \( \bigcirc \) \( \frac{77}{100} \)
12. \( \frac{1}{3} \) \( \bigcirc \) \( \frac{5}{12} \)
13. \( \frac{1}{4} \) \( \bigcirc \) \( \frac{2}{12} \)
14. \( \frac{9}{10} \) \( \bigcirc \) \( \frac{90}{100} \)
15. \( \frac{2}{3} \) \( \bigcirc \) \( \frac{3}{6} \)

16. Show a model you can use to check your answer to problem 12.
1. Label the number line and use it to show \( \frac{3}{4} + \frac{3}{4} \).

\[
\begin{array}{cccc}
0 & \frac{4}{4} & \frac{8}{4} \\
\end{array}
\]

Shade the area model to show \( \frac{3}{4} + \frac{3}{4} \).

Write the sum. \( \frac{3}{4} + \frac{3}{4} = \)

2. Label the number line and use it to show \( \frac{10}{8} - \frac{4}{8} \).

Show \( \frac{10}{8} - \frac{4}{8} \) on the area model.

Write the difference. \( \frac{10}{8} - \frac{4}{8} = \)
3. What type of model do you like best for showing fraction addition and subtraction? Explain why.

4. Compare subtracting $\frac{10}{8} - \frac{4}{8}$ to subtracting $10 - 4$. How are they alike? How are they different?
Adding Fractions

Write the missing numbers in the boxes to make each addition problem true.

1. $\frac{1}{6} + \frac{4}{6} = \Box$
2. $\frac{1}{8} + \frac{4}{8} = \Box$
3. $\frac{1}{10} + \frac{4}{10} = \Box$
4. $\frac{4}{12} + \Box = \frac{7}{12}$
5. $\frac{4}{6} + \Box = \frac{7}{6}$
6. $\frac{4}{3} + \Box = \frac{7}{3}$
7. $\Box + \frac{2}{4} = \frac{5}{4}$
8. $\Box + \frac{2}{10} = \frac{5}{10}$
9. $\Box + \frac{2}{8} = \frac{5}{8}$
10. $\Box + \frac{2}{6} = \frac{6}{6}$
11. $\Box + \frac{1}{5} = \frac{6}{5}$
12. $\frac{4}{10} + \Box = \Box$

13. Write a number from 1–12 in each box so that the addition problem is true.

$\Box + \frac{5}{12} = \Box$
Subtracting Fractions

Solve each problem.

1. Sammy has \(\frac{4}{5}\) of his art project left to paint. He paints \(\frac{2}{5}\) of the project. What fraction of the project is left to paint?

2. Marianne has \(\frac{6}{8}\) of a yard of green ribbon. She uses \(\frac{3}{8}\) of a yard for a craft project. How much green ribbon is left?

3. Yuna plans to run 1 mile. She has run \(\frac{7}{10}\) of a mile so far. What fraction of a mile does she have left to run?

4. Alex and Brady are helping to pack books into a box. Together they pack \(\frac{7}{12}\) of the books. Alex packs \(\frac{4}{12}\) of the books. What fraction of the books does Brady pack?
5. On Monday, Adam walks $\frac{3}{10}$ of a mile to the store and then $\frac{4}{10}$ of a mile to the park. How far does he walk in all?

6. Javier has $\frac{7}{8}$ of a cup of flour. He uses $\frac{3}{8}$ of a cup in a recipe. How much flour does Javier have left?

7. Shawna practices piano for $\frac{4}{6}$ of an hour and takes a break. Shawna then practices for $\frac{2}{6}$ of an hour more. How long does Shawna practice in all?

8. Kailee has finished $\frac{4}{5}$ of her math homework so far. What fraction of her math homework does she have left to finish?

9. Explain one way to check your work to problem 2.
Decomposing Fractions

Find three ways to decompose each fraction into a sum of other fractions with the same denominator.

1. \( \frac{3}{4} = \frac{1}{4} + \frac{1}{4} + \underline{\quad} \)
   
   \( \frac{3}{4} = \frac{2}{4} + \underline{\quad} \)
   
   \( \frac{3}{4} = \frac{1}{4} + \underline{\quad} \)

2. \( \frac{7}{8} = \frac{6}{8} + \underline{\quad} \)
   
   \( \frac{7}{8} = \frac{5}{8} + \underline{\quad} \)
   
   \( \frac{7}{8} = \frac{4}{8} + \underline{\quad} \)

3. \( \frac{6}{5} = \underline{\quad} + \frac{3}{5} \)
   
   \( \frac{6}{5} = \frac{2}{5} + \underline{\quad} + \underline{\quad} \)
   
   \( \frac{6}{5} = \frac{2}{5} + \frac{2}{5} + \underline{\quad} + \underline{\quad} \)

4. \( \frac{5}{6} = \underline{\quad} + \frac{3}{6} \)
   
   \( \frac{5}{6} = \frac{1}{6} + \underline{\quad} + \underline{\quad} \)
   
   \( \frac{5}{6} = \frac{1}{6} + \frac{1}{6} + \underline{\quad} + \underline{\quad} + \underline{\quad} \)

5. \( \frac{9}{12} = \underline{\quad} + \frac{5}{12} \)
   
   \( \frac{9}{12} = \frac{3}{12} + \underline{\quad} + \underline{\quad} + \underline{\quad} \)
   
   \( \frac{9}{12} = \underline{\quad} + \underline{\quad} + \underline{\quad} \)

6. \( \frac{8}{10} = \underline{\quad} + \frac{4}{10} \)
   
   \( \frac{8}{10} = \frac{2}{10} + \frac{3}{10} + \underline{\quad} + \underline{\quad} + \underline{\quad} \)
   
   \( \frac{8}{10} = \underline{\quad} + \underline{\quad} + \underline{\quad} \)

7. Describe your strategy for finding the missing numbers.