# **GRADE 6** AT HOME LEARNING

# **MARCH 2020**

# **Phonics**

open syllables

# **Maggie's Story**

Ever since she could remember, Maggie had loved stories. When she was a baby, sitting in her cozy bed and listening to her dad read a story made her very happy. Before the story was over, she would ask her dad to read another. She loved to picture the faraway places in the stories.

In sixth grade, she decided to submit a story to a local literary magazine. She worked hard on the story, revising its focus many times to make it perfect before she sent it.

One sunny day, Maggie was outside in the garden. All of a sudden, her mom yelled, "Maggie! There's a letter for you!" She came running into the kitchen to find the letter she had been expecting. She opened the envelope. Her story was going to be published!

# **Midnight in the Attic**

Christie awoke at midnight. The house was silent. She felt lazy and rolled over to go back to sleep. The next moment, she was startled by strange noises in the attic. There was a thump, and then some muffled sounds.

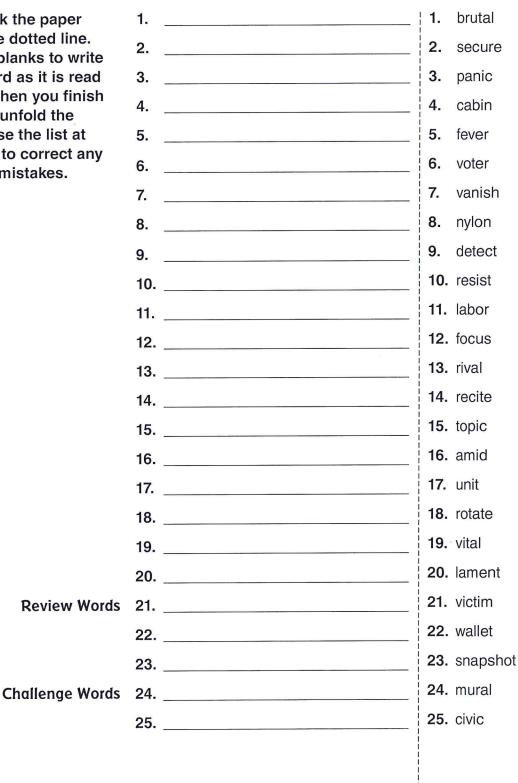
Christie wasn't scared a bit and decided to follow the sounds. This couldn't be a monster, she thought. She composed herself, took a flashlight from her drawer, and headed upstairs.

She opened the door and let her eyes adjust. What she saw made her giggle. Surrounded by a pile of her old winter clothes was her puppy, Miller! He must have followed her there earlier and gotten locked in. "What a silly puppy," she whispered as she picked Miller up and headed back to the comfort of her bed.

CASTANTY Write your own fictional story for a newspaper.

Name

Fold back the paper along the dotted line. Use the blanks to write each word as it is read aloud. When you finish the test, unfold the paper. Use the list at the right to correct any spelling mistakes.



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|       |        |       |       | Phonics: Oper | syllables |
|-------|--------|-------|-------|---------------|-----------|
| Name  |        |       |       |               |           |
| voter | brutal | favor | focus | vital         |           |

A. Read each word below. Choose a word from the box that rhymes with it and write the word on the line. Then underline the open syllable in both words.

| 1. | futile |  |
|----|--------|--|
|    |        |  |

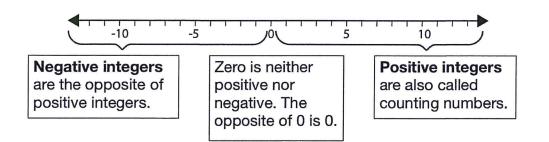
- 2. flavor \_\_\_\_\_
- 3. crocus \_\_\_\_\_
- 4. tidal \_\_\_\_\_
- 5. motor \_\_\_\_\_

B. Read each sentence. Circle the two-syllable word with an open syllable.

- 6. My soccer shorts are made of nylon.
- 7. How can you resist a picnic on a warm day?
- 8. The football team plays its rival on Saturday.
- 9. It is brave to stand on stage and recite poetry.
- 10. My dad could detect the smell of onions in the house.

| benefit        | deftly             | derision           | eaves    |       |
|----------------|--------------------|--------------------|----------|-------|
| expertise      | impudence          | legacy             | symmetry |       |
| a aaab pair a  |                    | in a cingla contan | -        | 20-00 |
| e each pair of | f vocabulary words | in a single senten | ce.      |       |
| benefit, exper | tise               |                    |          |       |
|                |                    |                    |          |       |
| doftly gympo   | +                  |                    |          |       |
| deftly, symme  | try                |                    |          |       |
|                |                    |                    |          |       |
| impudence, de  | erision            |                    |          |       |
|                |                    |                    |          |       |
|                |                    |                    |          |       |
|                |                    |                    |          |       |
| legacy, eaves  |                    | 1                  |          |       |
| legacy, eaves  |                    | ,<br>              |          |       |

# **Understanding Integers**

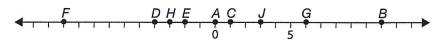


The **absolute value** of an integer is the distance from that integer to zero on the number line. Distance is always a positive measure, so the absolute value of any integer is positive.



The distance from 0 to 7 is 7 units, so |7| = 7.

The distance from 0 to -7 is 7 units, so |-7| = 7.



Use the number line above. Write the integer for each point. Then write its opposite and absolute value.



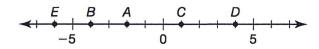
- 9. J
- Number Sense John borrowed \$6 from Adam.
   The next week John borrowed \$15 more from Adam.
   Write an integer that represents John's total debt to Adam.
- **11. Reasoning** What is the opposite of the opposite of negative nine?



Name\_\_\_\_\_

Practice **7-1** 

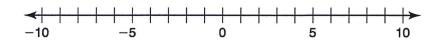
# **Understanding Integers**



Use the number line. Write the integer for each point. Then give its opposite and absolute value.

- **1.** *A* \_\_\_\_\_ **2.** *B* \_\_\_\_\_ **3.** *C* \_\_\_\_\_
- **4.** D \_\_\_\_\_ **5.** E \_\_\_\_

**6.** On the number line, graph the points -8, 3, -4, 2, and -1.



The table gives the highest and lowest temperatures for some states in the United States. Use integers to describe the two temperatures for each state.

- 7. Delaware
- 8. California
- 9. Colorado
- 10. Alabama
- 11. Which is an integer?
  - **A** −0.5
  - **B** -5
  - **C** 5.5
  - D 54

**12. Writing to Explain** In your own words, tell what is meant by "the absolute value of an integer."

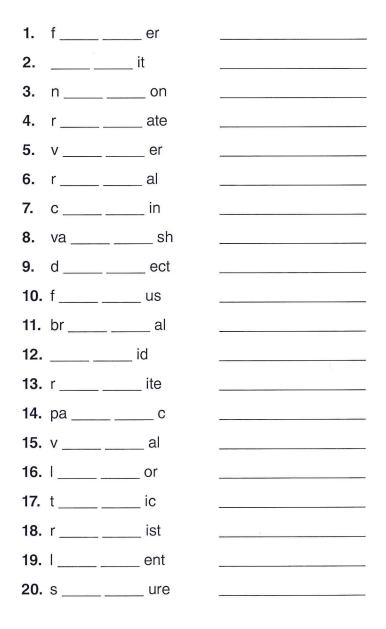
# Record Temperatures (in degrees, relative to zero)

| State      | Highest   | Lowest   |  |  |
|------------|-----------|----------|--|--|
| Alabama    | 112 above | 27 below |  |  |
| Delaware   | 110 above | 17 below |  |  |
| California | 134 above | 45 below |  |  |
| Colorado   | 118 above | 61 below |  |  |



| me     |        |        |        |        |
|--------|--------|--------|--------|--------|
| orutal | fever  | detect | rival  | unit   |
| secure | voter  | resist | recite | rotate |
| anic   | vanish | labor  | topic  | vital  |
| cabin  | nylon  | focus  | amid   | lament |

Fill in the missing letters of each word to form a spelling word. Then write the spelling word on the line.



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Name\_

Read the passage. Use the make predictions strategy to make logical guesses about what will happen next.

# **Approaching Zero**

Basu counted the steps, doing quick measurements as he walked along 11 the south bank of India's Ganges River, kicking up the hot, dusty ground. 24 He had arisen before daybreak, and the sun was now rising in the east. 38 By his calculations, he had walked 12,563 steps and covered about 49 one-quarter of the distance from his small village. By the time the sun was directly overhead, he should finally reach the university at Patna. There he 63 75 hoped to find Aryabhata. Perhaps the great mathematician could help him 86 with the questions he'd been pondering: How do you measure the passing 98 of time and days? How do you determine the circumference of Earth? How 111 far away is the moon?

116 From what Basu had heard, Aryabhata had all of the answers, but the 129 master did not like to be disturbed. Basu's parents had warned him not to 143 go. "Why would a wise scholar want to waste his time with a twelve-year-157 old boy?" his father had chided. Basu had a burning desire to study math 170 and to one day write a book like Aryabhatiya, Aryabhata's masterpiece. 181 According to the local scholars, the book described the earth as a 193 sphere that rotated around the sun, and it explained mathematics, time, 204 astronomy, and other mysteries of the universe.

Basu dragged a stick along the dirt, drawing a line. Was it a straight line between where he just was and where he was going? He posed question after question to himself to pass the time, keeping a running step count as he went—18,231. The sun was just where Basu expected, casting a long shadow from his stick.

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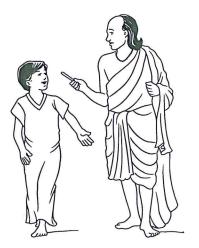
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Finally, just as the sun was overhead, Basu spotted a man crouched on a mat by a small, low table. He could see the man was furiously writing with a long iron spike that he dipped in ink, inscribing on the surface of hardened palm leaves. Basu held his breath and took quiet, short steps, cutting the remaining

distance in half, and then in half again. Finally, he was standing beside Aryabhata. Basu was so close, he could see the mysterious numbers and symbols.

Basu was invisible to Aryabhata, who was immersed in his thoughts, but just then a beetle flew off the spike and landed on Basu's arm. He brushed it off without thinking and jarred Aryabhata's hand, which skidded across the ink. Aryabhata looked up in a flash of anger and thundered, "Who are you?"

"I am just a merchant's son," confessed Basu, "but I've come here desperate to benefit from your knowledge and hoping to absorb a fraction of your wisdom."



Aryabhata fixed him with a hard stare and replied grudgingly, "All right. You may ask me one question."

Basu thought for a long moment. "I walked 50,348 steps to get here, and then crossed your courtyard, cutting it in half, in half again, and again. Now our arms have brushed, and I cannot get any closer, but I am lost because I have no number to tell me the distance between us. What is the number that tells how many steps I have to go?"

A broad smile lit Aryabhata's face. "You have just asked the very question I have been working on for many moons. The answer is *zero*. There are zero steps left. Zero is the number."

"There's one other thing I want to know-" Basu began.

Aryabhata interrupted. "You have zero questions left!" he admonished. Basu looked crushed with disappointment, but Aryabhata laughed. "Zero, plus one thousand! You may ask me as many questions as you wish, because I think we can learn a lot together."

Comprehension: Point of View and Fluency Name \_\_\_\_ A. Reread the passage and answer the questions. 1. What details from the first paragraph help you determine this story's point of view? 2. At the beginning of paragraph 5, what does the narrator say about Aryabhata's thoughts? 3. Is the person telling the story a character in the story? How do you know? 4. What is the point of view of this story? B. Work with a partner. Read the passage aloud. Pay attention to expression. Stop after one minute. Fill out the chart. Words Correct Number of Words Read = \_ Score Errors First Read -=

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Second Read

=

# Comparing and Ordering Integers

When comparing two integers on a number line, the integer that is farther to the right is greater. The integer that is farther to the left is less.

|                              |   | 3     4     5     6     7     8     9     10     |  |  |
|------------------------------|---|--|--|--|
| Compare -6 and -10.          | Compare -1 and 2.                                     | Order $-4$ , 0, and $-7$ from least to greatest. |  |  |
| Because -6 is farther to     | Because 2 is farther to                               | 2  |  |  |
| the right than $-10$ , it is | the right than $-1$ , it is                           | Because $-7$ is the farthest                     |  |  |
| greater. So, $-6 > -10$ .    | greater. So, $2 > -1$ . to the left, it is the least. |  |  |  |
|                              |   | is farther to the right than                     |  |  |
|                              |   | -4, so $-4$ is the next least.                   |  |  |
|                              |   | So, the numbers in order                         |  |  |
|                              |   | from least to greatest are                       |  |  |
|                              |   | -7, -4, and 0.                                   |  |  |

Use >, <, or = to compare.

| <b>1.</b> -5 3    | <b>2.</b> 15 — 4  | <b>3.</b> 0 27 |
|-------------------|-------------------|----------------|
| <b>4.</b> 52  -52 | <b>5.</b> -9  -9  | <b>6.</b> −6   |
| <b>7.</b> 13 12   | <b>8.</b> -17 -15 | 98 -8          |

Order the numbers from least to greatest.

**10.** 9, -1, -4, 2 **11.** 1, |-2|, -8, 6 **12.** 15, -7, -12, 0, |5|

**2** 15 -7 -12 0 4

**13.** Manuel dug holes to plant an oak tree, a rosebush, lantana, and prairie grass. The table shows the depths of the holes. You can think of ground level as 0, so the holes closest to ground level are not as deep as the holes farthest from ground level. Which plant hole is closest to ground level? Which is farthest? Compare the depths of their holes.

| Plant    | Hole<br>(inches) |
|----------|------------------|
| Lantana  | -8               |
| Prairie  | -6               |
| Grass    |                  |
| Oak Tree | -22              |
| Rosebush | -15              |

**14. Reasoning** Write 3 integers less than -27.

Practice Name 7-2 **Comparing and Ordering** Integers Use <, >, or = to compare. **2.** –12 🔵 –11 **3.** 2 ()|-2| 1.6()-8 5. 11 () -1 **4.** 12()-11 **6.** |-3|( Order from least to greatest. **7.** -6, 4, 7, 0, -9 8. -1, -5, 5, 7, -8 **9.** -7, -8, -2, 6, |-11|, -11, -9, 4, 5

10. Reasoning Can any negative integer be greater than a positive integer? Explain.

Kyle kept track of the number of points he scored each time he played a video game. Sometimes the score is less than zero.

- 11. Order the negative plays from least to greatest.
- **12.** Order the positive plays from greatest to least.

13. Which integer is greatest?

**A** 1 **B** -10

14. Writing to Explain Explain how to find the greatest integer plotted on a number line.

**C** 9

| Kyle's Scores |                  |  |  |  |
|---------------|------------------|--|--|--|
| Play 1:       | Gained 5 points  |  |  |  |
| Play 2        | Lost 15 points   |  |  |  |
| Play 3:       | Gained 32 points |  |  |  |
| Play 4:       | Gained 10 points |  |  |  |
| Play 5:       | Lost 12 points   |  |  |  |
| Play 6:       | Lost 8 points    |  |  |  |

**D** 3

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P 7-2

Name \_\_\_\_\_

|        |        | New york particular in the second | ning (no sui an an an ann an an an an an ann an an a |        |
|--------|--------|--|--|--------|
| brutal | fever  | detect   | rival  | unit   |
| secure | voter  | resist   | recite   | rotate |
| panic  | vanish | labor  | topic  | vital  |
| cabin  | nylon  | focus  | amid   | lament |

Write the spelling words that match the syllable patterns. Then draw a line between the syllables.

long a, as in baby, ba/by long *u*, as in *cubic*, *cu/bic* 1. \_\_\_\_\_ 12. \_\_\_\_\_ 13. \_\_\_\_\_ long e, as in retell, re/tell short vowel open syllables 2. 14. \_\_\_\_\_ 3. \_\_\_\_\_ 15. \_\_\_\_\_ 4. \_\_\_\_\_ 5. \_\_\_\_\_ 16. \_\_\_\_\_ long *i* sound, as in *pilot*, *pi/lot* short vowel closed syllables 6. 17. \_\_\_\_\_ 18. \_\_\_\_\_ 7. \_\_\_\_\_ 8. \_\_\_\_\_ 19. \_\_\_\_\_ 20. long o, as in cobra, co/bra 9. \_\_\_\_\_ 10. \_\_\_\_\_ 11. \_\_\_\_\_

# Urco: Craftsman in Training

"Father, I am meant to be a craftsman, an artist," pleaded Urco, a twelveyear-old Inca boy. The year was 1425.

"No, I absolutely refuse. You must work as a laborer like the rest of us, building roads, fortresses, and temples in our great city of Cuzco," replied Urco's father. As angry as he felt toward his father, Urco knew that most Inca men did exactly what his father described. They dedicated their lives to building the city, which was high in the mountains. Urco, however, was different. He wanted to create golden goblets and ornaments for the nobles and the emperor! Now, Urco had to convince his father to agree.

### Answer the questions about the text.

1. What is the time and place of this historical fiction?

2. What does the text tell you about life during the time of the Incas?

**3.** Give an example of dialogue from the text and explain how it helps you learn about the character.

Name\_

Read each excerpt from the passage and the meaning of the suffix of the word in bold. Then write a possible meaning for the word in bold.

- Basu counted the steps, doing quick measurements as he walked along the south bank of India's Ganges River, kicking up the hot, dusty ground. -ment means "act of" or "state of"
- According to the local scholars, the book described the earth as a sphere that rotated around the sun, and it explained mathematics, time, astronomy, and other mysteries of the universe. -nomy means "law"
- Basu dragged a stick along the dirt, drawing a line. Was it a straight line between where he just was and where he was going? He posed question after question to himself to pass the time. *-tion* means "state of"
- 4. Basu was so close, he could see the mysterious numbers and symbols.

-ous means "full of" or "having"

5. Basu looked crushed with disappointment, but Aryabhata laughed.

-ment means "act of" or "state of"

# Name

- A possessive noun names who or what owns something.
- A possessive noun is **singular** when it names one owner.
- A possessive noun can be common or proper.
- Add an apostrophe and *-s* to make a singular noun possessive, even when the noun ends in *s*.

# Rewrite the noun in parentheses () as a possessive noun.

- 1. The (zookeeper) job requires him to work on Saturdays.
- 2. The most popular attraction is the big (cat) area.
- 3. The (leopard) spots help to camouflage her in the wild.
- 4. The length of the (giraffe) neck allows him to reach his food.
- 5. The (hippopotamus) habitat has a pond.
- 6. We went to (Hallie) favorite place, the duck pond.
- 7. The (swan) wingspan was amazing to see.
- 8. The (pond) surface was covered with lily pads.
- 9. (James) laughter echoed through the reptile house.
- 10. The (walrus) tusks were about three feet long! \_\_\_\_\_



Parts of a coordinate plane:

x-axis: a horizontal number line y-axis: a vertical number line origin: the place where the two number lines meet quadrants: the four sections created by the two number lines

A point in a coordinate plane is represented by an ordered pair. (4, -3)x-coordinate y-coordinate

To locate point (4, -3), start at the origin. Move to 4 on the x-axis. Then move to -3 on the y-axis. Quadrant III

Graph and label these points on the coordinate plane.

- 1. (4, 1) **2.** (-3, 3)
- **4.** (4, -2) 3. (2, 0)
- 5. (-2, 4) 6. (-3, -4)

Write the ordered pair for each point.

- **8.** *B* 7. A
- **9.** D **10.** *E*

| A    |      |           |     | 57  | y | С    |   |     |
|------|------|-----------|-----|-----|---|------|---|-----|
|      |      | -         |     | -3- |   |      |   |     |
|      |      | B         |     | -2- |   |      |   |     |
|      | _    |           |     | -1- |   | <br> |   | V   |
| -    | F    |           |     | 0   |   | <br> |   | S.  |
| 5 -4 | 4 -: | 3 -:<br>E | 2 - | -1- |   | 2 3  | - | 4 5 |
|      |      | -         | -   | -2- |   | <br> | D | /   |
|      | _    |           |     | -3- | - | <br> |   |     |
|      |      |           |     | -4- |   | <br> |   |     |

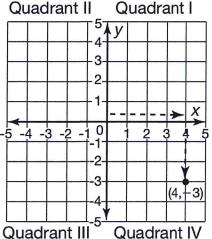
**11. Writing to Explain** How would you plot the point (-8, 10)on the coordinate plane?

12. Reasoning In what quadrant will a point with a negative x-coordinate and a positive y-coordinate (negative number, positive number) be located?





Reteaching



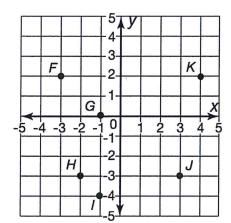
# Integers on the Coordinate Plane

Write the ordered pair for each point.

| 1. F               | <b>2.</b> G |
|--------------------|-------------|
| <b>3.</b> <i>H</i> | 4. /        |
| <b>5.</b> J        | 6. K        |

Plot and label each ordered pair on the coordinate grid.

- **7.** (2, 3) **8.** (4, -4)
- **9.** (0, -5) **10.** (-3, -3)
- **11.** (-4, 4) **12.** (-5, 0)



Practice

8-1

**13. Writing to Explain** A point is located in Quadrant IV. What do you know about the signs of the coordinates for the point? Explain.

- **14. Critical Thinking** Draw three lines that are parallel to the *x*-axis. Read the ordered pairs for points on each line. What generalization can you make about the ordered pairs for lines parallel to the *x*-axis?
- **15. Geometry** Which ordered pair is located in Quadrant III?
  - **A** (−1, −1)
  - **B** (-4, 0)
  - **C** (−2, 2)
  - **D** (0, 5)



57

3 2 1

0

1

2

3

-4 -3

-2

X

Ż

| Name  |  |                  |                  | pelling: <b>Open Syllab</b> |  |
|---|--|------------------|------------------|-----------------------------|--|
| brutal  | fever  | detect           | rival            | unit                        |  |
| secure  | voter  | resist           | recite           | rotate                      |  |
| panic   | vanish   | labor            | topic            | vital                       |  |
| cabin   | nylon  | focus            | amid             | lament                      |  |
| A. Write the sp   | pelling word that  | t belongs with e | each group of w  | vords.                      |  |
| 1. repeat, rete   | ell,   |                  |                  |                             |  |
| 2. idea, subje  | ct,  |                  |                  |                             |  |
| 3. notice, disc   | cover,   |                  |                  |                             |  |
| 4. grieve, regi   | ret,   |                  |                  |                             |  |
| 5. competitor,  | challenger,  |                  |                  |                             |  |
|   |  |                  |                  |                             |  |
| B. Write the sr   | pelling word that  | t matches each   | definition below | N.                          |  |
|   | _  | t matches each   | definition belov | ν.                          |  |
| 6. disappear  |  |                  | definition belov | Ν.                          |  |
| 6. disappear _<br>7. safe   |  |                  |                  | Ν.                          |  |
| <ol> <li>6. disappear _</li> <li>7. safe</li> <li>8. a kind of m</li> </ol>   | an-made fabric _   |                  |                  | Ν.                          |  |
| <ol> <li>6. disappear</li> <li>7. safe</li> <li>8. a kind of m</li> <li>9. absolutely</li> </ol>  | an-made fabric _<br>necessary  |                  |                  | N.                          |  |
| <ol> <li>disappear</li> <li>safe</li> <li>safe</li> <li>a kind of m</li> <li>absolutely n</li> <li>citizen who</li> </ol>   | an-made fabric _<br>necessary<br>casts a ballot  |                  |                  | Ν.                          |  |
| <ol> <li>disappear</li> <li>safe</li> <li>safe</li> <li>a kind of m</li> <li>absolutely n</li> <li>citizen who</li> <li>small house</li> </ol>  | an-made fabric _<br>necessary<br>casts a ballot<br>e made of logs  |                  |                  | Ν.                          |  |
| <ol> <li>disappear</li> <li>safe</li> <li>safe</li> <li>a kind of m</li> <li>absolutely n</li> <li>citizen who</li> <li>small house</li> <li>to stand up</li> </ol>   | an-made fabric _<br>necessary<br>casts a ballot<br>e made of logs<br>to or actively op   |                  |                  | N.                          |  |
| <ol> <li>disappear</li> <li>safe</li> <li>safe</li> <li>a kind of m</li> <li>absolutely n</li> <li>citizen who</li> <li>citizen who</li> <li>small house</li> <li>to stand up</li> <li>work</li> </ol>  | an-made fabric<br>necessary<br>casts a ballot<br>e made of logs<br>to or actively op   |                  |                  |                             |  |
| <ol> <li>disappear</li> <li>safe</li> <li>safe</li> <li>a kind of m</li> <li>absolutely n</li> <li>citizen who</li> <li>citizen who</li> <li>small house</li> <li>to stand up</li> <li>work</li> <li>to make an</li> </ol>  | an-made fabric<br>necessary<br>casts a ballot<br>e made of logs<br>to or actively op   |                  |                  |                             |  |
| <ol> <li>6. disappear</li> <li>7. safe</li> <li>8. a kind of m</li> <li>9. absolutely n</li> <li>10. citizen who</li> <li>11. small house</li> <li>12. to stand up</li> <li>13. work</li> <li>14. to make an</li> <li>15. fear</li> </ol>   | an-made fabric<br>necessary<br>casts a ballot<br>e made of logs<br>to or actively opp<br>image clear; to g                         |                  |                  |                             |  |
| 6. disappear         7. safe         7. safe         8. a kind of m         9. absolutely n         10. citizen who         11. small house         12. to stand up         13. work         14. to make an         15. fear         16. cruel  | an-made fabric<br>necessary<br>casts a ballot<br>e made of logs<br>to or actively opp<br>image clear; to g                         |                  |                  |                             |  |
| 6. disappear         7. safe         7. safe         8. a kind of m         9. absolutely n         10. citizen who         11. small house         12. to stand up         13. work         14. to make an         15. fear         16. cruel         17. standard ar                        | an-made fabric<br>necessary<br>casts a ballot<br>e made of logs<br>to or actively opp<br>image clear; to g<br><br>mount used for m | pose             |                  |                             |  |
| 6. disappear         7. safe         7. safe         8. a kind of m         9. absolutely n         10. citizen who         11. small house         12. to stand up         13. work         14. to make an         15. fear         16. cruel         17. standard ar         18. surrounded | an-made fabric<br>necessary<br>casts a ballot<br>e made of logs<br>to or actively opp<br>image clear; to g<br><br>mount used for m | pose             |                  |                             |  |

|   | Reread  |   |
|---|---|---|
| F | The Genius of   | Reread and use the prompts to take notes in the text.   |
| Ň | Roman Aqueducts   | Reread paragraph 1. Circle the ways children in ancient<br>Rome are like children today. Write them here: |
|   | Did you know that many children in ancient Rome did the same thing? In fact.  | Children in ancient Rome Children Today   |
|   | they played many of the same games you<br>do, jumping rope or playing catch, and<br>when thev were thirsty they came inside |   |
|   | for a drink or went to any number of public drinking fountains around the city.   |   |
| 2 |   | Talk with a partner about how the author invites you to   |
|   | was transported to their city. But did you<br>ever wonder where the water you drink   | keep reading. Reread paragraph 2 and make a mark in<br>the margin beside how she does that.               |
|   | comes from? Or how it got to your faucet?   |   |
| ß | The fact is, if you do not have a well in your own backyard, the water you use at   | then reread paragraph 3. Underline how the author<br>helps you understand what an aqueduct is.            |
|   | home may come from a long distance away.<br>However, it doesn't travel by truck or train.                                   |   |
|   | Water is transported to you via a complex   |   |
|   | system of connected pipes and tunnels.<br>These pipes and tunnels channel water   |   |
|   | from reservoirs and transport it to you.<br>We call the system that carries water   |   |
|   | an aqueduct. In Latin, this word means  |   |
|   | "a conductor of water."   |   |

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5 Unit 2 • Week 3 • Ancient Societies

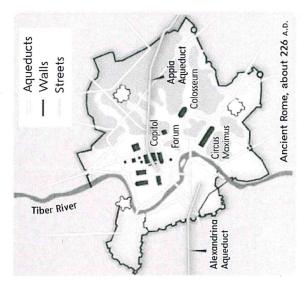
The city of Rome was not different. It also grew up alongside a river, the Tiber, one of the longest rivers in Italy. But as Rome grew and became the capital of a large empire, it needed more water than the Tiber could provide. So how did the ancient Romans obtain and transport this water?

# Aqueducts in Rome

Mesopotamia to supply water to crops some engines had been invented that could pump down the sides of mountains, across valleys water, the ancient Romans figured out how were far more complex than anything that had come before them. Long, long before to use natural forces to do the same thing. However, the aqueducts the Romans built gravity to move water hundreds of miles. They used the water pressure created by It would travel from mountaintop lakes, distance from the Tigris and Euphrates. Romans didn't invent the idea of aqueducts. They had been used in and into cities and towns. 2

In paragraph 1, circle the problem that occurred as Rome grew. How does the author transition into the next section? Underline the text evidence.

Reread paragraph 2 and look at the map. How does the author help you understand how the ancient Romans moved water? Make a mark in the margins where the author shows this. Write it here: Circle clues in the map that show how water is transported into the city.



| When I reread, I use text evidence to answer questions.                 |  |  |                    |   |  |   | Opens Fill in the blank Dialog |
|---|--|--|--------------------|---|--|---|--------------------------------|
| Why is "The Genius of Roman Aqueducts" a good title for this selection? | page 52. Talk with a partner about how                                     | Cite Text Evidence What clues help you see how the Roman aqueducts were "genius." Record text evidence in the chart. | Why It's Important | 1 |  | is a good title because                                       | Open:                          |
| Why is "The Genius of Roman Aque  | Talk About It Reread the excerpt on pay<br>the Romans built the aqueducts. | Cite Text Evidence What clues help you se<br>"genius." Record text evidence in the chart.                            | Text Evidence      |   |  | Write "The Genius of Roman Aqueducts" is a good title because |                                |

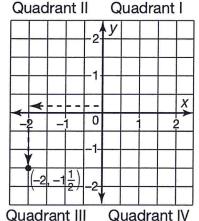
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# Rational Numbers on the Coordinate Plane

The coordinate grid has an *x*-axis, a *y*-axis, an origin (0, 0), and four quadrants.

Ordered pairs of rational numbers can be plotted just like ordered pairs of integers. Plot  $(-2, -1\frac{1}{2})$  on the grid.

To locate point  $(-2, -1\frac{1}{2})$ , start at the origin. Move 2 units to the left on the *x*-axis. Then move down  $1\frac{1}{2}$  units on the *y*-axis.



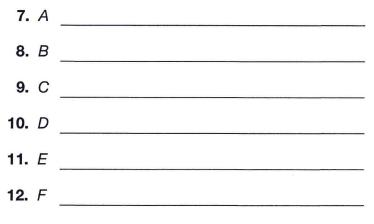
Reteaching

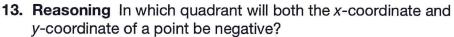
8-2

Graph and label these points on the coordinate plane.

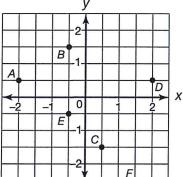
| <b>1.</b> (-1.5, 1.5)                     | <b>2.</b> (0, -1.5)                            |
|---|--|
| <b>3.</b> $(1\frac{1}{2}, -1\frac{1}{2})$ | <b>4.</b> (-2 <sup>1</sup> / <sub>2</sub> , 0) |
| <b>5.</b> (1.5, 2)                        | 6. $(-1\frac{1}{2}, -2\frac{1}{2})$            |

Write the ordered pair for each point, using fractions or decimals.





R 8.7



# $\frac{1}{(-2), -1} - 1$ $\frac{1}{(-2), -1} - 1$ $\frac{1}{(-2), -1} - 2$ $\frac{1}{(-2), -2} - 2$



C

В

F

# **Rational Numbers on the Coordinate Plane**

Write the ordered pair for each point.

| <b>1.</b> A | <b>2.</b> <i>B</i> |
|-------------|--------------------|
| 3. C        | <b>4.</b> D        |
| <b>5.</b> E | 6. <i>F</i>        |

For 7 through 9, plot the ordered pairs.

- **7.** G (-0.25, -1)
- **8.**  $H(\frac{3}{4}, 1\frac{1}{4})$
- **9.** *I* (-0.75, 0.75)
- **10. Writing to Explain** A point is located in Quadrant II. What do you know about the signs of the coordinates for the point? Explain.

D

A

0

E

**11. Critical Thinking** Draw three lines that are parallel to the *y*-axis. Read the ordered pairs for points on each line. What generalization can you make about the ordered pairs for lines parallel to the *y*-axis?

|                  |    | -2  | y |   |   |
|------------------|----|-----|---|---|---|
|                  |    | -1- | _ |   |   |
|                  |    |     |   |   | X |
| <b>≺</b>  <br>-2 | -1 | 0   |   | 1 | 2 |
|                  |    | 1-  |   |   |   |
|                  |    | -2  |   |   |   |

**12. Reason** In which quadrants do the *x*-coordinate and the *y*-coordinate of a point have the same sign? Explain.



Name \_\_\_\_\_

# A. There are three misspelled words in each paragraph below. Underline each misspelled word. Then write the words correctly on the lines.

Last year, before my brother went off to college, my family took a vacation to Maine. We stayed in a cabbin ammid the trees and tried to focis on just spending time together.

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

My family and I spent spring break at a cottage on Lake Michigan. When we returned from a hike one day, we could dettect that someone or something had been there. How could that happen? All the doors and windows were seccure. We started to pannic until my mother discovered that a raccoon had gotten in through the pet door!

4. \_\_\_\_\_ 5. \_\_\_\_ 6. \_\_\_\_

### Writing Activity

B. Write about a trip you and your family have taken. Use at least four words from the spelling list.

Name\_

A. Read the draft model. Use the questions that follow the draft to help you think about transitions to clarify shifts in time or setting.

# **Draft Model**

Uncle Max agreed to show me the magic trick. I tried to learn how to hold the coin the way he showed me. I got it, and I pulled the coin out of Uncle Max's ear.

- 1. When and why did Uncle Max agree to teach the narrator the trick?
- 2. What happened after Uncle Max agreed? How was the narrator able to learn to do the trick?
- 3. What transitional words and phrases could be added to help connect all the events?

B. Now revise the draft by adding transitions to clarify shifts in time or setting.

### Name\_

The student who wrote the paragraphs below used text evidence from two different sources to respond to the prompt: *Write a short narrative from Min's point of view as he decides to trust Tree-Ear and offers to teach him.* 

Over the next few days, I noticed that Tree-Ear worked hard and did not speak other than saying, "Good morning" at the beginning of the day and, "Thank you for this opportunity, honorable sir" at the end of the day. I was impressed. I remembered what the boy had said about watching me work. I also remembered that I would not be the great potter I was if it weren't for my grandfather, who taught me.

"What does your father do?" I asked the boy the next day. When I heard the boy's story about being an orphan and living with Crane-Man under the bridge, my heart softened. Again I watched the tattered boy finish another day of hard work. After Tree-Ear left, I sat in my workshop, thinking. I thought, "Everyone who has a desire to create pottery should be able to learn. Tree-Ear is honest and willing to work hard."

So the next morning, when Tree-Ear said, "Good morning," I smiled and greeted the boy with a slab of clay.

"Today you will not work," I said. "Today you will learn."

### Reread the passage. Follow the directions below.

- From whose point of view is this sample written? Circle a word or words that the show the point of view.
- 2. Underline descriptive details that help the reader picture what is being described.
- 3. Draw a box around a transition that tells when a scene takes place.
- 4. Write a possessive noun on the line.

| Grammar: <b>Plural P</b> | ossessive Nouns |
|--------------------------|-----------------|
|--------------------------|-----------------|

| N   | a | m | e |
|-----|---|---|---|
| 1 1 | u |   |   |

- A possessive noun is **plural** when it names more than one owner.
- If a plural noun is regular and ends in -s, add an apostrophe to make it possessive.
- If a plural noun is irregular and does not end in -*s*, add an apostrophe and -*s* to make it possessive.

# Write the plural possessive for each plural noun.

| 1.  | pandas    | <b>11.</b> mice     |
|-----|-----------|---------------------|
| 2.  | pythons   | 12. goats           |
| 3.  | donkeys   | 13. sharks          |
| 4.  | geese     | 14. oxen            |
| 5.  | boxes     | <b>15.</b> walruses |
| 6.  | elk       | 16. children        |
| 7.  | parrots   | 17. lions           |
| 8.  | horses    | 18. sheep           |
| 9.  | deer      | <b>19.</b> frogs    |
| 10. | ostriches | 20. men             |

**1.** The table shows low temperatures for 4 days. Which shows the days in order from lowest to highest temperature?

| Monday | Tuesday | Wednesday | Thursday |
|--------|---------|-----------|----------|
| 1° F   | −7° F   | -2° F     | −5° F    |

- A Tuesday, Thursday, Wednesday, Monday
- B Wednesday, Thursday, Tuesday, Monday
- C Monday, Tuesday, Thursday, Wednesday
- D Monday, Wednesday, Thursday, Tuesday
- 2. Which is the greatest integer?
  - A -33 C -28
  - B -31 D -17
- 3. Which is the least integer?

| Α | 1  | <b>C</b> -2 |
|---|----|-------------|
| В | -1 | <b>D</b> -8 |

4. Which shows the integers in order from least to greatest?

| <b>A</b> −13, −8, −2, 1 | <b>C</b> 1, −13, −8, −2 |
|-------------------------|-------------------------|
| <b>B</b> −2, −8, −13, 1 | <b>D</b> 1, -2, -8, -13 |

5. Writing to Explain Draw a number line and locate the following numbers on the number line. Then explain how you can use the number line to order the numbers from least to greatest. Compare two of the numbers on the number line.

-1, 5, -6, 0, 2, -3



Name \_\_\_\_\_



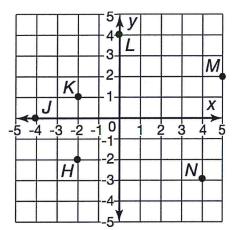
Use this coordinate plane for 1 through 3.

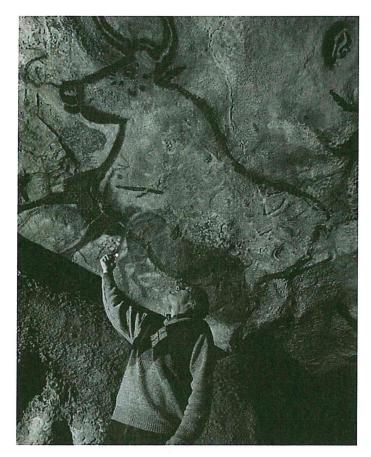
- 1. Which point is located at (0, 4)?
  - AJ
  - BK
  - CL
  - DN
- 2. What are the coordinates of point M?
  - A (2, 5)
  - **B** (5, 2)
  - **C** (0, 5)
  - **D** (-2, 5)
- 3. Which point is in Quadrant III?
  - A K
  - BM
  - CN
  - DH
- Writing to Explain Graph the ordered pairs below. Describe how you do it. Connect the points in order. Identify the geometric figure you draw and tell how you know. (-2, 2), (3, 4), (3, -4), (-2, -2)

08-1

|   |      |     |     |     | 5   | y |       |          |                    |
|---|------|-----|-----|-----|-----|---|-------|----------|--------------------|
|   |      |     |     |     | -4- |   |       |          |                    |
|   |      |     |     | -   | -3- |   |       |          |                    |
|   |      |     | -   | 1   | -2- |   | <br>  |          | $\left  - \right $ |
|   |      |     |     |     | -1- |   | <br>  |          |                    |
|   | *    |     |     |     |     |   | <br>- |          |                    |
| - | 5 -4 | 4 - | 3 - | 2 - | 0   |   | 2 ;   | <u>;</u> | 4 5                |
|   |      |     |     |     | -1  |   | <br>_ | _        |                    |
|   |      |     |     |     | -2- |   |       |          |                    |
|   |      |     |     |     | -3- |   | <br>  |          |                    |
|   |      |     |     |     | -4- |   | <br>  |          |                    |
|   |      |     |     |     | -5  |   |       |          |                    |

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# Social Studies Vocabulary

archaeologist

artifact

geographer

historian

prehistoric

ritual

## 1 Natartives Who Study the Past

Level: A

2019 Teachers' Curriculum Institute

Scholars who study human society are called social scientists. Many social scientists can help us study the past. Among these "history detectives" are **archaeologists**, **historians**, and **geographers**.

# Archaeologists: Digging Up the Past

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Archaeologists study the past by examining objects, or *artifacts*, that people have left behind. These **artifacts** are anything made or used by humans, such as clothing, tools, weapons, and coins. When archaeologists discover a place that has artifacts, they ask questions like these: Who lived in this place? When did they live here? What were they like? Then archaeologists study the artifacts for clues.

### **Historians: Recording the Past**

Historians are the recorders of the past. Human beings have been around for such a long time that historians tend to focus mostly on the last few thousand years, when people began leaving written records. Historians want to answer this question: What happened in the past? To find out, they study all kinds of artifacts and **documents**. They read diaries and letters. Besides asking what happened in the past, historians try to understand why events happened the way they did.

# **Geographers: Mapping the Past**

Geographers study the natural **features** of Earth, such as water, landforms, plants, and animals. They also look at human-made features, such as towns, roads, bridges, and dams. These scientists help us answer such questions as: Where did people live? How did they use their **environment** to survive? Geographers often create maps to show what they have learned.

Social scientists who study **prehistoric** history face a unique challenge —a lack of evidence from this period. In fact, huge gaps of time have no evidence at all. Therefore, scientists may come up with different answers or theories about how humans came to be.

# PROCESSING

Social scientists learn about the past by asking questions and conducting inquiries. You can be a "history detective" too!

What is something that you wonder about the past? You might wonder why an event happened or how something got to be the way it is today. Write your question below.

My compelling question:

Now plan an inquiry to answer your question.

- Think of one specific question each of the social scientists below might ask. These questions should help answer your bigger, compelling question.
- Brainstorm sources where you could find information to answer these supporting questions.

|               | Supporting Questions | Sources of Information |
|---------------|----------------------|------------------------|
|               |                      |                        |
| Archaeologist |                      |                        |
|               |                      |                        |
|               |                      |                        |
| Historian     |                      |                        |
|               |                      |                        |
|               |                      |                        |
| Geographer    |                      |                        |
|               |                      |                        |

# Grade 6 Twig Science Week 1

# Module 1: BioTech Systems Worldwide

This week you will read an exciting text and respond to some questions.

| Directions                                |   |  |  |  |  |  |
|---|---|--|--|--|--|--|
| Read the<br>Prior-Knowledge<br>Read-Aloud | "Animal Senses"   |  |  |  |  |  |
| Answer these questions<br>after reading:  | <ol> <li>What are the main ideas?</li> <li>What is something interesting that you learned?</li> <li>What is something you are wondering about?</li> </ol> |  |  |  |  |  |

# Animal Senses

### Touch

Some animals have a great sense of touch. The manatee, sometimes called the sea cow, is one of those animals. These giant aquatic mammals have tiny hairs all over their bodies, which help them sense tiny changes in the movement of water over their skin. This means they can sense other animals moving nearby, even if they can't see or hear them. Manatees can also sense changes in water flow around fixed objects, allowing them to avoid obstacles when swimming in murky water. Our skin is also sensitive to touch. Different parts are more sensitive than others, due to the number of sensory receptors in each area of skin. We have different types of touch receptors in our skin, including some that sense pressure, some that sense temperature and others that sense pain. Places with more receptors close together are more sensitive. Our fingertips have a lot more receptors than the bottom of our feet. This means we can respond quicker to a stimulus—for example, by moving our hand away from something hot in response to pain.

### Smell

When it comes to the sense of smell, bears are among the best. With their large noses, black bears can smell things from miles away. According to the National Park Service, this means that anytime someone sets foot in Yosemite National Park, one of the park's population of black bears is likely to smell them arrive and decide to stay away.

Smell is also closely linked with how we detect flavors. When we say something tastes good, it's actually about more than just what we taste. It's about smell too! Notice next time you have a stuffy nose. The food you eat will likely taste duller than usual.





#### Taste

Of course, our tongue plays a big role in taste too. It's estimated that humans have between 2,000 and 4,000 taste buds. These aren't all on the tongue, though. They are also in the back of our throat and nose. These receptors work by picking up flavors in food and communicating them to the brain. This happens very fast. Imagine biting into a lemon, and think how quickly your face would scrunch up!

#### Hearing

Some animals can hear amazingly well. Bats are nocturnal, meaning they are active at night, and they rely on their hearing to get around in the dark. To do this, bats put out a series of sounds as they fly around. Then they listen to how quickly the sound bounces back off objects—the faster it bounces back, the closer the object. This is called echolocation. Bats use echolocation to work out how to move to avoid obstacles.



(3)



#### Sight

In terms of sight, there is a lot of variation in the animal world, too. Some animals, like the earthworm, can sense the difference between light and darkness, and not much else. Eagles, on the other hand, can see four to five times further than we can. The structure of their eyes is very different. They are suited to the animals' needs. For example, an earthworm only needs to know if it is under the soil or above ground. Its sensory receptors detect whether there is light above them, and its brain processes this information so it knows if needs to burrow back down into the soil. Eagles, however, need a lot more visual information. They must be able to spot prey from high in the sky, so they need to be able to see better than many other animals. (5)

### Learning with Games

#### **Root Word Find**

#### Materials

Puzzle Pieces, three pieces (p. 84) pencils

Skill: word parts

**Prepare:** Give players several copies of the three-part puzzle pieces. Have students write each of their vocabulary words onto the puzzle pieces, dividing the words into the appropriate word parts.

**Play:** Players name the root words, prefixes, suffixes, and/or endings of each word. Call on them or have them quiz each other in small groups.

If there is time, have players exchange their puzzle pieces with a partner. Have the partner sort the puzzle pieces and put them together to re-create the vocabulary words.

.....

#### Long Vowel Slip Strips

#### Materials

Slip Strips or Word Wheel (p. 83, p. 78) pencils

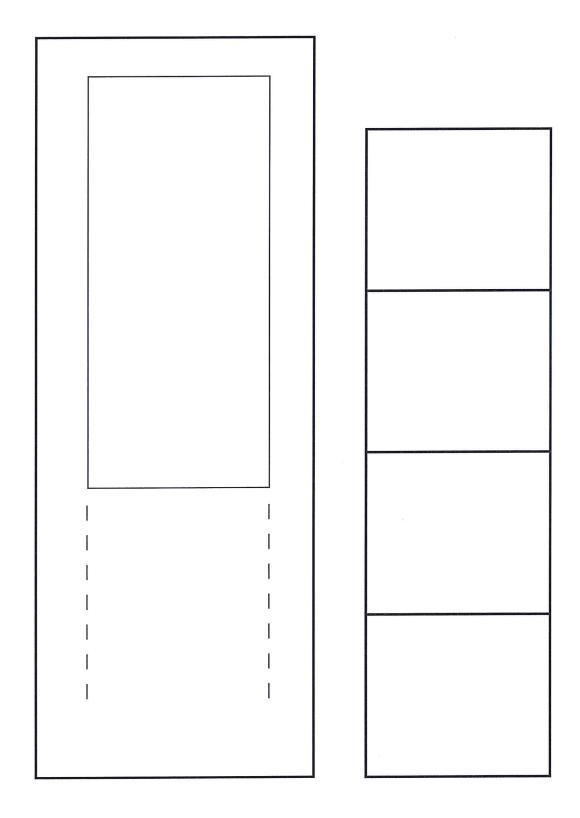
Skill: build words with long vowel sounds

**Prepare:** Give each player a copy of the slip strips. Have students write *ay* on the rectangular box to the right of the opening.

**Play:** Invite players to come up with a variety of words that use the long vowel sound of *ay*. On the slip with four squares, have players write consonants and consonant blends that complete a word. (Players could also use the Word Wheel with *ay* on the outside wheel and consonants and consonant blends on the inside wheel.)

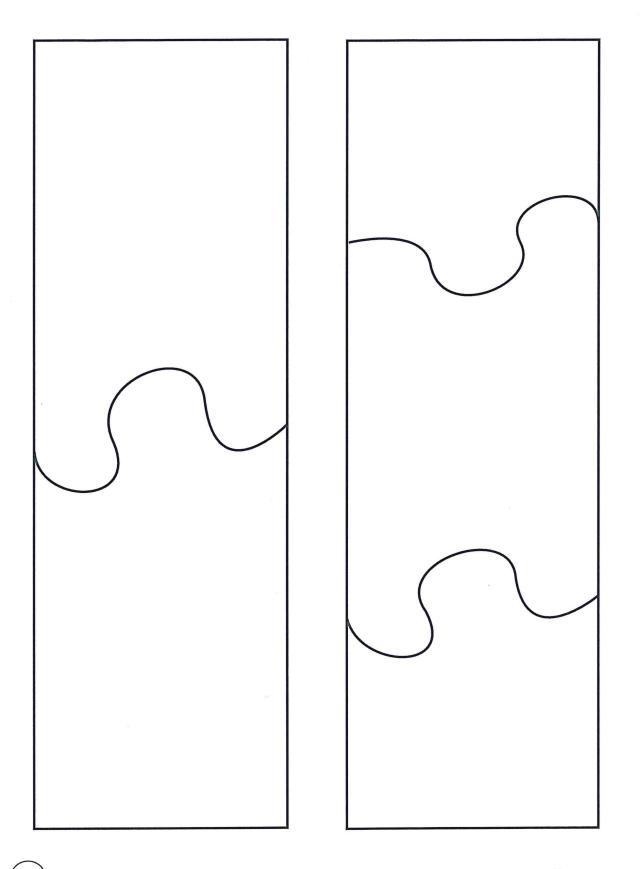
#### Games

# **Slip Strips**



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**Puzzle Pieces** 



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84

| table  | secret | tiny  |
|--------|--------|---|
| total  | ruler  | brutal  |
| secure | panic  | cabin   |
| fever  | voter  | vanish  |
| nylon  | detect | resist  |
| labor  | focus  | rival   |
| recite | topic  | amid  |
| unit   | rotate | vital   |
| lament |        | 2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2 |

Unit 2 • Week 4 50

Spelling Word Cards

| beagle    | noodle    | dimple   |
|-----------|-----------|----------|
| simple    | royal     | national |
| valuable  | survival  | muscle   |
| whistle   | squabble  | durable  |
| incurable | scramble  | scruple  |
| quadruple | noodle    | squiggle |
| throttle  | securable | beagle   |
| dimple    | bicycle   |          |
|           |           |          |



| wealthy   | healthy     | shoulder   |
|-----------|-------------|------------|
| toughest  | exploit     | pedigree   |
| volunteer | impeach     | spoilage   |
| poisonous | appointment | moisten    |
| equality  | streamline  | guaranteed |
| creatures | treasures   | straighten |
| ceiling   | earthbound  |            |
|           |             |            |
|           |             |            |

Unit 3 • Week 1

52







Get 10 squares in one color and 10 in another color. Get two number cubes. Take turns with another player or team. Talk about math as you play!

At Your Turn Toss two number cubes. Add the dots. Find your toss below. Follow the directions. Explain your thinking. Cover the answer. If the answer is taken, lose your turn. Have fun!

| Toss | Read the description. Say an integer that can be used to represent the situation. | 7  | An integer that is two less than ⁻3. |
|------|---|----|--------------------------------------|
| 2    | A loss of 7 dollars   | 8  | 20 seconds before blastoff           |
| 3    | A gain of 3 pounds  | 9  | 9 feet below sea level               |
| 4    | A deposit of 50 dollars   | 10 | A loss of 3 inches                   |
| 5    | 9 feet above sea level  | 11 | A gain of 7 dollars                  |
| 6    | 20 units to the right of 0 on a number line                                       | 12 | A withdrawal of 50 dollars           |

| +20 | +7 | -20 | +3  |
|-----|----|-----|-----|
| +50 | -5 | -9  | +9  |
| -20 | -9 | +20 | -3  |
| +9  | -5 | -7  | -50 |

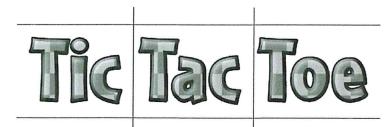


You win if you are the first to get four connected rectangles, like:

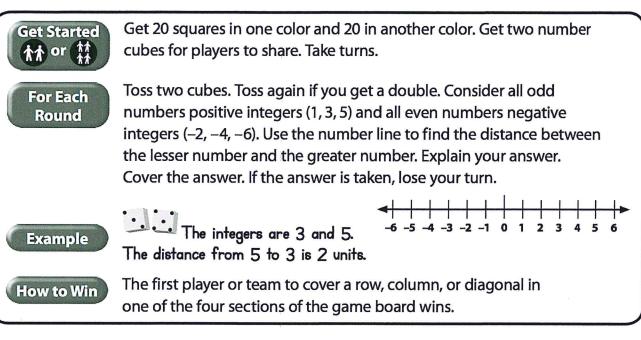
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7-3









| 4  | 5 | 7 | 9 | 7  | 5 |
|----|---|---|---|----|---|
| 7  | 7 | 2 | 2 | 2  | 4 |
| 2  | 9 | 3 | 7 | 11 | 2 |
| 7  | 9 | 4 | 2 | ч  | 9 |
| 5  | 2 | 7 | 3 | 7  | 2 |
| 11 | 4 | 2 | 3 | 5  | 7 |

If you have more time

Center Activity ★

Play again!



#### Phonics

consonant + le syllables

#### **One Heroic Dog**

In January of 1925, doctors discovered that a deadly outbreak of diphtheria was about to cripple the city of Nome. To make things worse, only one valuable serum could prevent an epidemic, and it was nearly a thousand miles away in Anchorage. It couldn't be shipped by airplane because the Alaskan winter was so cold. City officials were desperate to stop this terrible event, so the serum had to come by sled dog.

The teams had to prepare quickly. It took twenty teams to reach Nome. The dogs worked hard and had to be tough to resist the freezing temperatures.

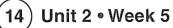
On February 2, a sled dog team arrived in Nome, led by a heroic dog named Balto. A year later, a statue honoring Balto was erected in New York's Central Park, where it remains to this day.

#### The Iditarod

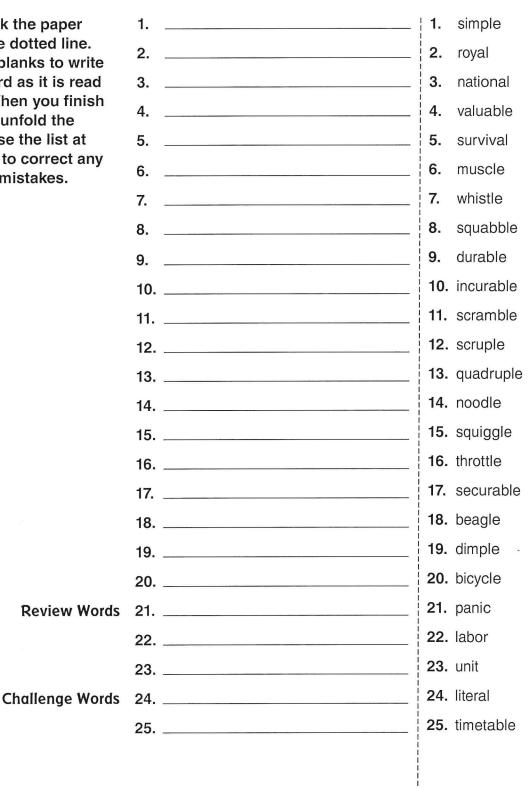
Travis was afraid that the sun would never come up. He drove his team of dogs down the trail amidst what seemed like thousands of trees. He was competing in the Iditarod, the world's largest dogsled race, and he was determined to finish. His trusty sled dogs could easily handle this and kept on running. They had become like a machine. It seemed that when the cold weather became unbearable, the dogs pushed even more.

Just when it seemed like they would never finish, a noise sounded in the distance. Travis wasn't sure what it was, but when he came around a turn and focused his eyes, he could see a crowd of people beyond the trees. The sound he had heard was that of several people cheering him on. The cheers were getting louder. Travis and his dogs were about to reach the finish line!

公公会元代行Y Draw a picture of what you might see in an Iditarod race. Then write a paragraph to describe it. 公



Fold back the paper along the dotted line. Use the blanks to write each word as it is read aloud. When you finish the test, unfold the paper. Use the list at the right to correct any spelling mistakes.



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| Name       |            |          | Phonics: C | onsonant + <i>le</i> Syllable |
|------------|------------|----------|------------|-------------------------------|
| throttling | squiggle   | befuddle | scramble   | simplicity                    |
| noodle     | scrambling | simple   | throttle   | squiggly                      |

A. Read the first syllables below. Then write the word from the box that begins with the first syllable and ends with a consonant + *le* syllable.

| 1. throt-                 |  |
|---------------------------|--|
| 2. scram-                 |  |
| 3. squig-                 |  |
| <b>4.</b> noo-            |  |
| 5. sim-                   |  |
|                           | ircle the word that has a consonant + <i>le</i><br>the consonant + <i>le</i> syllable on the line. |
| 6. Their squabble did not | interrupt the dinner   |
| 7. Our beagle has been t  | rained to fetch a ball.  |
|                           |  |

8. We enjoyed hearing the sound of the train whistle.

9. I ride my bicycle to school every day.

10. The ice skater performed a quadruple jump.

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| Name            |                      |               |                          | Vocabulary |
|-----------------|----------------------|---------------|--------------------------|------------|
| commemora       |                      | forlorn       | contemplate              |            |
| Finish each se  | ntence usin          | g the vocabu  | lary word provided.      |            |
|                 |                      |               |                          |            |
| 2. (forlorn) Th | e lost dog ha        | ad            | 7                        |            |
| 3. (commemo     | r <b>ate)</b> On the | Fourth of Jul | У                        |            |
|                 |                      |               | an important question, _ |            |

## Name\_\_\_\_\_ Multiplying Decimals



Use the same strategy to multiply a decimal by a whole number or to multiply a decimal by a decimal.

| Multiply 0.72 $\times$ 23.   |                                | 0.72 <del>&lt;</del> 2 decimal                                      |
|--|--------------------------------|---|
| Ignore the decimal points. Myou would with two whole nu                                      |                                | $\times 23$ places  |
| Count the number of decima<br>in both factors. Use that nun<br>decimal places to write the a | nber of                        | <u>144</u><br>1656<br>16.56   |
| Multiply $0.45 \times 0.8$ .   |                                |   |
| Ignore the decimal points. M<br>you would with two whole nu                                  |                                | $0.45 \leftarrow 2 + 1 = 3$<br>$\times 0.8 \not=$ decimal<br>places |
| Count the number of decima<br>in both factors. Use that nun<br>decimal places to write the a | nber of                        | 0.360   |
| Place the decimal point in eac   | ch product.                    |   |
| <b>1.</b> 1.2 × 3.6 = 432  | <b>2.</b> 5.5 × 3.77 = 20735   | <b>3.</b> 4.4 × 2.333 = 102652                                      |
| Find the product.  |                                |   |
| <b>4.</b> 7 × 0.5  | <b>5.</b> 12 × 0.08            | <b>6.</b> 24 × 0.17   |
| <b>7.</b> 0.4 × 0.17   | <b>8.</b> 1.9 × 0.46           | <b>9.</b> 3.42 × 5.15   |
| <b>10. Writing to Explain</b> If you you predict whether the peither of the factors? Exp     | product will be less than or g |   |
|  |                                |   |

**11.** Number Sense Two factors are multiplied and their product is 34.44. One factor is a whole number. How many decimal places are in the other factor?

R4.5

| No   | ame  |  | Practice                         |
|------|--|--|----------------------------------|
| M    | ultiplying Decimals  |  | 4-5                              |
| Plac | ce the decimal point in each product.  |  |                                  |
| 1.   | 3 × 6.892 = 20676  | <b>2.</b> $0.3 \times 4.57 = 137$          | 71                               |
| 3.   | d each product.<br>$14.3 \times 2.1 \times 8.9 =$  |  |                                  |
| 7.   | Reasoning Show how to find the produ   | ct of 16.2 $	imes$ 4 using a               | ddition.                         |
| 8.   | Which activity is 6 times as fast as the fastest rowing speed?   | Fastest S <sub>1</sub><br>110<br>100<br>90 | porting Speeds<br>100.9<br>85.38 |
| 9.   | The fastest speed a table tennis<br>ball has been hit is 21.12 times<br>as fast as the speed for the<br>fastest swimmer. What is the<br>speed for the table tennis ball? | 40<br>30<br>20<br>10<br>5                  |                                  |
| 10.  | How fast would 1.5 times the fastest rowing speed be?  | 53   | an Activity                      |
| 11.  | Which is the product of 110.1 $\times$ 2.5?  |  |                                  |
|      | <b>A</b> 770.7 <b>B</b> 275.25   | <b>C</b> 77.07                             | <b>D</b> 27.525                  |
| 12.  | Writing to Explain Explain why multiply product that is less than 37.4.  | ing 37.4 $	imes$ 0.01 gives                | a                                |



| me       |          |           |           |           |
|----------|----------|-----------|-----------|-----------|
| simple   | survival | durable   | quadruple | securable |
| oyal     | muscle   | incurable | noodle    | beagle    |
| national | whistle  | scramble  | squiggle  | dimple    |
| aluable  | squabble | scruple   | throttle  | bicycle   |

Spelling: Consonant + le Syllables

Fill in the missing letters of each word to form a spelling word. Then write the spelling word on the line.



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Read the passage. Check your understanding by asking yourself what the message of the poem is.

| E.            | At Grandmother's Pueblo  |
|---------------|--|
| 6<br>12<br>20 | When I visit my grandmother's pueblo,<br>I hear songs I can't understand.<br>I see folks who are happy and smiling<br>Saying welcome to family land. |
| 25            | New Mexico, so dry and vast,   |
| 31            | Holds a painted canvas before me,  |
| 37            | With deserts and valleys and mountains   |
| 43            | As far as the eye can see.   |
| 50            | Nature proudly displays  |
| 53            | Her work for us to savor.  |
| 59            | When the sun bows low, I see   |
| 66            | A rainbow like a party favor.  |
| 72            | Grandmother weaves her blankets  |
| 76            | And tells us stories of tricksters.  |
| 82            | I listen as if in a trance   |
| 89            | While the campfire dances and flickers.  |
| 95            | When Grandma comes to my room  |
| 101           | Later on, she holds to the light   |
| 108           | A blanket she made just for me   |
| 115           | That holds me in its arms all night.   |

| Comprehension: | Theme | and | Fluency |
|----------------|-------|-----|---------|
| comprehension. | meme  | anu | ruency  |

- A. Reread the passage and answer the questions.
- 1. What do the words in line 2—"I hear songs I can't understand"—tell you about the speaker's experience at the grandmother's pueblo?
- **2.** Based on the speaker's descriptions in stanzas 2, 3, and 4, how do you think the speaker feels about being at the pueblo?
- **3.** How does the speaker describe the blanket from Grandma? How does the blanket make the speaker feel?
- **4.** Based on the details and descriptions, what do you think is the theme of this poem?

B. Work with a partner. Read the passage aloud. Pay attention to expression and phrasing. Stop after one minute. Fill out the chart.

|             | Words Read | _ | Number of<br>Errors | = | Words Correct<br>Score |
|-------------|------------|---|---------------------|---|------------------------|
| First Read  |            | - |                     | = |                        |
| Second Read |            | - |                     | = |                        |

#### Name

# **More Dividing Whole Numbers**

#### Find 8,037 ÷ 77.

You can use estimation to check that a quotient is reasonable.

| Step 1: Estimate. Round the divisor and the dividend.<br>$8,037 \div 77 \longrightarrow$<br>$8,000 \div 80 = 100$<br>The quotient should be close to 100. | Step 2: Now, find the quotient.<br>$8,037 \div 77$<br>104  R29<br>77)8,037<br>-77  <br>33<br>-0 <br>337<br>-308<br>29 | Step 3: 104 R29 is close to the original estimate, 100, so the answer is reasonable. |
|---|---|--|
| Estimate first. Then find the   | quotient.   | En  |
| <b>1.</b> 78)3,796  | <b>2.</b> 51)2,588  | <b>3.</b> 38)3,914   |
|   |   |  |
|   |   |  |
| <b>4.</b> 37)7,492  | <b>5.</b> 46)6,725  | <b>6.</b> 62)9,911   |

7. Is  $5,309 \div 26$  less than 20, greater than 20 but less than 200, or greater than 200?



Name

# **More Dividing Whole Numbers**

Estimate first. Then find the quotient.

| <b>1.</b> 53)6,324  | <b>2.</b> 52)6,348  | <b>3.</b> 86)31,309 | <b>4.</b> 33)3,455 |
|---------------------|---------------------|---------------------|--------------------|
|                     |                     |                     |                    |
|                     |                     |                     |                    |
| <b>5.</b> 91)17,496 | <b>6.</b> 47)25,214 | <b>7.</b> 26)2,312  | <b>8.</b> 83)4,895 |

The Humphrey family decided to fly from San Francisco to New York City, and from there to Rome, New Delhi, and finally Tokyo.

**9.** It took the Humphrey family 6 hours to travel from San Francisco to New York. How many kilometers did they travel per hour?

| <b>Distances by Plane</b> |          |  |  |  |
|---------------------------|----------|--|--|--|
| San Francisco to New York | 4,140 km |  |  |  |
| New York to Rome          | 6,907 km |  |  |  |
| Rome to New Delhi         | 5,929 km |  |  |  |
| New Delhi to Tokyo        | 5,857 km |  |  |  |

- **10.** During the flight from New Delhi to Tokyo, flight attendants came through with snacks every 600 km. How many times did they come through?
- **11.** When the family arrived in New Delhi from Rome, the youngest son asked the pilot how fast he was flying the plane. The pilot told him about 847 km per hour. How many hours did it take the family to fly from Rome to New Delhi?

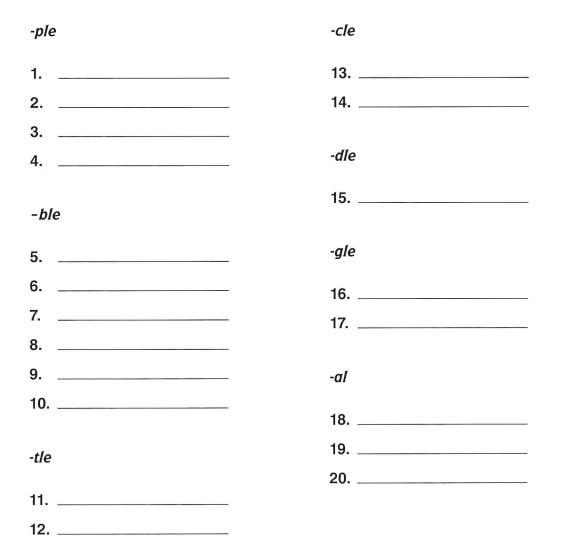
**A** 5h **B** 6h **C** 7h **D** 8h

**12.** Write a word problem that would require you to use  $5,621 \div 23$ .



| simple   | survival | durable   | quadruple | securable | and the second second   |
|----------|----------|-----------|-----------|-----------|---|
| royal    | muscle   | incurable | noodle    | beagle    |   |
| national | whistle  | scramble  | squiggle  | dimple    | Second |
| valuable | squabble | scruple   | throttle  | bicycle   |   |

Write the spelling words that contain the matching pattern. Then draw a line between the syllables.



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#### **Museum Trip**

While walking through the gallery, it seemed That I was on a journey through the years. Ancient statues stared ahead and dreamed. Waiting, watching, beckoning each appeared. Look at these and this and those things, they said, As I saw the cases of golden things That were useful to people so long dead, Golden crowns and cups, masks and bowls and rings. But then the afternoon grew late, and we Had to leave this place of treasures and things rare. And though we left there's so much more to see. I want to come back here again to share. It makes me wonder what on Earth they'd say If those people were here to tell us today.

#### Answer the questions about the text.

1. How do you know this is a lyric poem? How do you know it is a sonnet?

- 2. Copy one line of the poem. Then place an accent mark above each stressed syllable.
- **3.** Write an example from the poem of four words that create a rhyme scheme.

#### Literary Elements: Rhyme Scheme and Meter

Name \_\_\_\_\_

Rhyme scheme is a pattern of rhyming words at the ends of lines.

Meter is a pattern of stressed and unstressed syllables.

Rhyme scheme and meter give poetry a lyrical, musical quality.

Read the stanza from a lyric poem below. Then answer the questions.

#### At Grandmother's Pueblo

Nature proudly displays Her work for us to savor. When the sun bows low, I see A rainbow like a party favor.

- Going from top to bottom, assign a letter—a, b, c, d—to each new sound at the end of a line. If a sound rhymes with an earlier one, give it the same letter as the rhyming word. If not, give it a new letter. Write the rhyme scheme of the stanza.
- 2. Which syllables in each line need to be stressed? Write the last line of the stanza on the line below. Underline each syllable that needs to be stressed.
- 3. How do you think rhyme and meter affect this poem?
- **4.** Write a short poem about one of your favorite places. Write one four-line stanza. Use an *abcb* rhyme scheme and a meter of your choice.

# Read each passage. Then answer the questions about personification.

1. New Mexico, so dry and vast, holds a painted canvas before me What is personified? What is its human action? 2. Nature proudly displays Her work for us to savor. What is personified? What is its human action? \_\_\_\_\_ **3.** When the sun bows low, I see A rainbow like a party favor. What is personified? What is its human action? **4.** I listen as if in a trance While the campfire dances and flickers. What is personified? \_\_\_\_\_ What is its human action? \_\_\_\_\_ 5. A blanket she made just for me That holds me in its arms all night. What is personified? \_\_\_\_\_ What is its human action?

|     | Grammar: Appositives  |
|-----|---|
| N   | ame   |
|     | <ul> <li>An appositive is a noun or pronoun placed next to a noun or pronoun to identify it.</li> <li>An appositive phrase includes the appositive and the words that modify</li> </ul>         |
| J   | the appositive.   |
| an  | ead each sentence. If the sentence contains an appositive, write <i>A</i> on the line d underline the appositive word or phrase. If the sentence does not contain an positive, write <i>N</i> . |
| 1.  | Herpetology, the study of snakes and other reptiles, is my favorite subject.  |
| 2.  | Some sources claim that an Australian snake, the Inland taipan, is the most venomous land snake.  |
| 3.  | The snake I like best, the king cobra, is another dangerous snake.  |
| 4.  | The mamba, a venomous snake of Africa, is a relative of the cobra.  |
| 5.  | Cottonmouths, or water moccasins, live in the southeastern United States.   |
| 6.  | Cottonmouths are often confused with copperheads.   |
| 7.  | The copperhead, a type of pit viper, is less venomous than the cottonmouth.   |
| 8.  | New World coral snakes, North American snakes, have very potent venom.  |
| 9.  | The coral snake is not aggressive, but its bite is deadly.  |
| 10. | Rattlesnakes are venomous, but their bites are rarely fatal to humans.  |

# Dividing Decimals by a Whole Number

Find 196.8 ÷ 32.

| Step 1  | Step 2  | Step 3  |
|---|---|---|
| Put the decimal in the quotient right above the decimal in the dividend.<br>Divide. Subtract.<br>$\frac{6.}{32 } \frac{6.}{196.8} \frac{-192}{4}$ | Bring down the 8. Divide.<br>Subtract.<br>$32 ) 196.8 \\ -192 \downarrow \\ 48 \\ -32 \\ 16 \\$ | Annex a zero to the end of<br>the dividend. Bring down<br>the zero. Divide. Subtract.<br>$ \begin{array}{r} 6.15\\32 \overline{\smash{\big)}196.80}\\-\underline{192} \\ 48\\\underline{-32}\\160\\\underline{-160}\\0\end{array} $ |

Remember, you can use estimation to see if your answer is reasonable:  $180 \div 30 = 6$ . You can check your answer using multiplication:  $32 \times 6.15 = 196.8$ 

Find the quotient.

| 1. | 9)20.7<br>-18<br>2 | 2. | 3.<br>7)22.61<br><u>-21</u> | 3. | $ \begin{array}{r}                                     $ |
|----|--------------------|----|-----------------------------|----|--|
| 4. | 11)93.5            | 5. | 30)1.56                     | 6. | 8)412.0  |

**7. Writing to Explain** Destiny said that  $0.6 \div 2 = 0.3$ . Is she correct? Explain why or why not.

# Dividing Decimals by a Whole Number

Find the quotient.

| 1. | \$42.78 ÷ 3 | <b>2.</b> 85.5 ÷ 6 | <b>3.</b> 3.4 ÷ 10   |
|----|-------------|--------------------|----------------------|
| 4. | 9 ÷ 900     | <b>5.</b> 59.6 ÷ 8 | <b>6.</b> 188.4 ÷ 60 |
| 7. | \$1.24 ÷ 4  | <b>8.</b> 231 ÷ 42 | <b>9.</b> 11.2 ÷ 25  |

- **10.** Yolanda bought 8 tickets to a concert for \$214. What was the cost of each ticket?
- **11. Algebra** Tony bought a 72-ounce box of dog biscuits. How many pounds of dog biscuits did he buy? (Remember: 1 pound = 16 ounces.)
  - A 4 pounds
  - B 4.5 pounds
  - C 90 pounds
  - D 4,320 pounds
- **12.** Number Sense Vicky uses 42 beads for each necklace she makes. She bought a bag of 500 beads. How many necklaces can she make?
- **13. Writing to Explain** In what place is the first digit of the quotient for 12.88 ÷ 4? Tell how you know.



Practice

5-4

| simple   | survival | durable   | quadruple | securable |
|----------|----------|-----------|-----------|-----------|
| royal    | muscle   | incurable | noodle    | beagle    |
| national | whistle  | scramble  | squiggle  | dimple    |
| valuable | squabble | scruple   | throttle  | bicycle   |
|          |          |           |           |           |

#### A. Write the spelling word that goes with each word history.

- 1. simplus: Latin; "single" \_\_\_\_\_
- 2. skvabbel: Scandinavian; "quarrel" \_\_\_\_\_
- 3. throte: Middle English; "throat" \_\_\_\_\_
- 4. hwistle: Old English; "tubular musical instrument" \_\_\_\_\_
- 5. nudel: German; "narrow strip of dried dough" \_\_\_\_\_

#### B. Write the spelling word that best completes each sentence.

- 6. The British \_\_\_\_\_ palace is in London.
- 7. The family adopted a \_\_\_\_\_\_ from the animal shelter.
- 8. The gate is \_\_\_\_\_\_ if you close it tightly.
- 9. Gold jewelry is considered \_\_\_\_\_.
- **10.** The \_\_\_\_\_\_ on his paper sort of looked like the letter *s*.
- **11.** The value of this painting will probably \_\_\_\_\_\_ over time!
- **12.** An \_\_\_\_\_\_ disease is one from which people cannot recover.
- 13. Our \_\_\_\_\_\_ anthem is "The Star-Spangled Banner."
- 14. Her main \_\_\_\_\_\_ was about not texting while driving.
- 15. Our conservation efforts help in the \_\_\_\_\_\_ of endangered species.
- **16.** The \_\_\_\_\_\_ race was televised worldwide on Saturday.
- **17.** His leg \_\_\_\_\_\_ was tight before he exercised.
- 18. The baby has the cutest \_\_\_\_\_\_ when she smiles.
- 19. The raincoat is made of \_\_\_\_\_\_ cloth that will last for years.
- 20. I will have to \_\_\_\_\_\_ to be ready by 5 o'clock.

| 3 | • =                                     | -   |
|---|---|-----|
|   | Ę                                       |     |
|   | E J J J J J J J J J J J J J J J J J J J | 0   |
| , | 4+<br>0<br>4+                           | UTT |
|   | .¢                                      | LLL |
|   | Scholor<br>10tr                         |     |
|   |   | 5   |

Reread

The history of China is filled with the struggles of leaders who tried to unite the people of this enormous country. Since the Sui Dynasty (581-618), it had been possible to become a government official by passing a series of written exams. It was only during the Song Dynasty (960-1279), however, that the examination system came to be considered the ladder to success.

- <sup>2</sup> Beginning around 1000, for the first time, Chinese commoners were permitted to have jobs within the government. These jobs were called civil service jobs. In order to qualify for a civil service job, men had to take a very grueling civil service exam.
- 3 Narrator (Stands alone in front of curtain): Permit me to introduce you to Cheng. (Cheng walks onto stage and bows.) Cheng is a young scholar. He has studied very hard in order to take the civil service exam. He is far from home, taking this very difficult test right now.

58 Unit 2 · Week 4 · Influences

Reread and use the prompts to take notes in the text.

Read paragraphs 1 and 2. Underline three facts about the development of the Chinese government. Make a mark in the margin beside the sentence that foreshadows something a character in the play will do.

# C C

Reread the stage directions in paragraph 3. Talk about how the author uses these stage directions to help you understand the action in the play.

How does the author help you visualize Cheng's character? Circle text evidence to support your response. Write it here.

| <ol> <li>Grandfather: Years ago, only men born<br/>to noble families could take the civil service<br/>examination. Commoners could not move<br/>up in the world. Today, any scholar may try<br/>his luck. Now, government jobs will come<br/>to those who have proven skill, and not<br/>because they were born into a noble house.</li> <li>Mother: Only one scholar in 100 passes<br/>the test! But Cheng has worked so hard. His<br/>eyes would grow so tired, learning how to<br/>print thousands of Chinese characters. And<br/>he has spent years studying the teachings of<br/>Confucius, the great educator.</li> <li>Mei: I know. "I helped him study by doing<br/>his chores sometimes, remember?" (<i>She<br/>smiles brightly.</i>)</li> <li>Mei: I may day if the earth trembled<br/>and our homes collapsed or if the great<br/>river overflowed, swollen with too much<br/>rain, and swept our fields away we peasants<br/>lost everything. We had no other work<br/>we could do - no way to earn money and<br/>rebuild our lives.</li> </ol> | Read section 1. Underline the sentence that shows what<br>taking the civil service examination means to commoners. |  | Read the rest of the excerpt. Talk with a partner about<br>how the family feels about Cheng taking the test. Circle<br>evidence in the dialogue to support vour discussion. |  |  |  |
|---|--|--|---|--|--|--|
|   | 1.   |  |   |  |  |  |

+

How does the author help you understand how important the test is to Cheng's family and future?

Contextoriant

Talk About It Reread the excerpts on pages 58-59. With a partner, talk about how you know the civil service examination is important.

Cite Text Evidence What words and phrases does the author use to show how important the test is? Write text evidence in the chart.

| Introduction | Family's Dialogue |
|--------------|-------------------|
|              |                   |
|              |                   |
|              |                   |

Write The author helps me understand how important the test is by

60 Unit 2 · Week 4 · Influences

# O QUICK TIP

+

When I reread, I think about how the setting affects the lives of the characters. This helps me understand the decisions they make.

# **Dividing Decimals**

When you divide by a decimal, you need to rewrite the dividend and the divisor so that you are dividing by a whole number.

Find 2.48 ÷ 0.8.

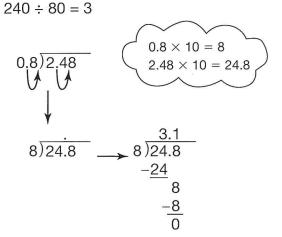
Step 1: Estimate. Use compatible numbers.

**Step 2:** Make the divisor a whole number. Multiply the divisor AND the dividend by the same power of 10.

Place the decimal in the quotient.

**Step 3:** Divide as you would with whole numbers. Remember that sometimes you may need to annex zeros to complete your division.

**Step 4:** Compare the quotient with your estimate.



Since 3.1 is close to 3, the answer checks.

Find each quotient.

- **2.** 0.6)0.36

**3.** 0.4)9.6

- 4. 0.75)0.3
- 5. Draw a Picture Fernando used tenths grids to draw this picture showing  $1.6 \div 0.4 = 4$ . Draw a picture to show  $1.8 \div 0.6$ . Write the quotient.





# **Dividing Decimals**

Find each quotient.

| <b>1.</b> 8.4 ÷ 0.3 =  | <br><b>2.</b> 66.15 ÷ 0.63 = |  |
|------------------------|------------------------------|--|
| <b>3.</b> 10.5 ÷ 1.5 = | <br><b>4.</b> 86 ÷ 0.4 =     |  |
|                        | <br><b>6.</b> 14.36 ÷ 0.4 =  |  |
|                        |                              |  |
| 7. 2.07 ÷ 0.01 =       | <br><b>8.</b> 78.32 ÷ 0.22 = |  |

**9. Reasoning** Why would multiplying both the dividend and the divisor by 10 sometimes make a problem easier to solve?

| For each item, find    |   | Item                   | 1960 Cost          | 2002 Cost    |
|------------------------|---|------------------------|--------------------|--------------|
| how many times greater |   | Movie admission        | \$0.75             | \$8.50       |
|                        | 2 cost is than<br>0 cost. Round                                     | Regular popcorn        | \$0.25             | \$3.25       |
|                        | swer to the   | Regular drink          | \$0.35             | \$2.75       |
|                        | hundredth.  |                        |                    |              |
| <b>10.</b> mo          | ovie admission  | <b>11.</b> regular pop | corn <b>12.</b> re | egular drink |
|                        | nich item has increas<br>times from its origina                     | •                      | ount               |              |
| <b>14.</b> Div         | ide. Round to the ne  | earest hundredth. 2    | 50.6 ÷ 1.6         |              |
| Α                      | 156   |                        |                    |              |
| В                      | 156.6   |                        |                    |              |
| С                      | 156.61  |                        |                    |              |
| D                      | 156.63  |                        |                    |              |
| quo                    | iting to Explain Lyr<br>otients when they di<br>ose work is correct | vided 3.60 by 0.12.    | Lyn                | 30 30.0      |

.

## A. There are six misspelled words in the paragraphs below. Underline each misspelled word. Then write the words correctly on the lines.

Long ago, each animal in the village had only one kind of food to eat. It was enough for their survivle, but the animals grew tired of eating the same thing. "I can't eat another noodel," Spider declared. "I don't mind if we have to scrambel for food. I just want something different to eat." Fox agreed. Rabbit was tired of eating carrots, so the three friends went to see Owl.

Owl had a simple plan. "If all four of us combine our food into a stew, we'll have quadrupal the food." The animals did as Owl suggested and had a feast fit for a royale family.

| 1 | 2 | 3 |
|---|---|---|
| 4 | 5 | 6 |

#### Writing Activity

B. Write about something you and your friends would like to do. Use at least four words from the spelling list.

Name\_

A. Read the draft model. Use the questions that follow the draft to help you think of precise, vivid words you can add.

#### **Draft Model**

Wherever I go, I bring my sketchpad and special pencil. They are two of my favorite possessions. The pages are blank until I draw a picture on them. This is why I love my sketchbook so much.

- 1. What does the sketchbook look like? Why is the pencil special?
- 2. What descriptive words can show how the narrator feels about the blank pages?
- 3. What precise, vivid words can describe the drawings the narrator creates on the sketchbook pages?

B. Now revise the draft by adding precise, vivid words to help readers understand more about the writer and the sketchbook.

#### Name\_

The student who wrote the poem below used two different sources to respond to the prompt: Write a lyric poem about a family tradition.

If Grandma's kitchen table could talk, It would have many stories to tell. Because unlike other kitchen tables, It's had generations to dwell On the laughter, tears, and secrets Shared around its oval, wooden top. From Happy Birthdays to new siblings— It's the only unchanged prop In the photos I see now. There it is in black and white. My mom, the birthday girl, turned one. It held Grandma's "Celebration Cake." Wow, Grandma sure looked young! It's held all our Celebration Cakes And heard all our birthday wishes. And it's always waited patiently While we helped clear all the dishes. I love Grandma's kitchen table. It's where my family comes together. And there's one thing I know for sure— It will save our stories forever.

Reread the passage. Follow the directions below.

- 1. From whose point of view is this poem written? **Circle** words that reveal the narrator.
- 2. Underline precise language that helps the reader picture what is being described.
- 3. Draw a box around a transition that tells when a scene takes place.
- 4. Write an appositive on the line.

| Grammar: Essential and N | Vonessential | Appositives |
|--------------------------|--------------|-------------|
|--------------------------|--------------|-------------|

| No | ame  |
|----|--|
|    | • An <b>essential</b> or <b>restrictive appositive</b> defines a noun so the sentence is easier to understand.   |
|    | <ul> <li>A nonessential or nonrestrictive appositive is not necessary to<br/>understand the sentence.</li> </ul> |

Underline the appositive in each sentence. Write E if the appositive is essential. Write N if the appositive is nonessential.

- 1. The spelling bee, a yearly event at our school, is exciting to watch.
- 2. Our local television station, KJBR-TV, broadcasts the spelling bee each year.
- 3. About fifty students, all sixth graders, compete in the spelling bee each year.
- 4. Mrs. Bates, our school principal, is one of the judges.
- 5. My friend Katie won the top prize this year.
- 6. Katie was the only student who could spell the word spaghetti.
- 7. David Bedner, a boy in my class, won second place.
- 8. Last year's winner, Victor Martinez, presented the awards.
- 9. My brother Antone plans to enter the spelling bee when he is old enough.

10. Antone is only seven and he can already spell the word recommend.

- 1. A 642.5 acre piece of land is being divided into 5-acre parcels. How many parcels will there be?
  - **A** 12.85
  - **B** 128.5
  - **C** 1,285
  - **D** 12,850

**2.** In what place will the first digit of the quotient be for  $8.64 \div 16$ ?

Quick Check

5-4

- A tens place
- B ones place
- C tenths place
- D hundredths place
- 3. Which division problem will have a quotient less than 1?
  - **A** 19.8 ÷ 9
  - **B** 4.5 ÷ 5
  - $\boldsymbol{C} \hspace{0.1cm} 952 \hspace{0.1cm} \div \hspace{0.1cm} 17$
  - **D** 84 ÷ 10
- **4. Writing to Explain** A 16-ounce can of cashews costs \$6.72. A 10-ounce can costs \$4.50. Which can is the better buy? How do you know?



Quick Check **5-5** 

- **1.** Find 1.5 ÷ 0.03.
  - **A** 5
  - **B** 50
  - **C** 500
  - **D** 5,000

- 2. Which does **NOT** have the same quotient as  $6.4 \div 0.08$ ?
  - $\textbf{A} \quad 0.64 \,\div\, 0.008$
  - $\textbf{B}~64\div0.8$
  - $\textbf{C} \ 640 \div 8$
  - **D**  $64,000 \div 8,000$

- **3.** Find 73.15 ÷ 0.05.
  - **A** 1,463
  - **B** 146.3
  - **C** 14.63
  - **D** 1.463
- 4. Writing to Explain Find  $1.47 \div 3.5$ . Does the answer change if you use a different power of 10 to multiply the dividend and the divisor before you start to divide? If not, is one choice better than another choice? Explain your reasoning.

humans are in.



## **Piecing Together the Story of Early Hominins**

Have you ever put together a jigsaw puzzle? You start with a picture that shows what the completed puzzle will look like. Then you fit the pieces together until they make up that picture.

Suppose, though, that you didn't have a picture to work with, but only the pieces? Even worse, what if most of the pieces were missing? How hard would the puzzle be then?

That's the situation facing scientists who study early hominins. These scientists are trying to understand how and when early hominins developed. The puzzle pieces they work with are bits of bone that are millions of years old. Scientists know that they have only some of the pieces. Each new find gives them another clue to work with.

Gradually, the overall shape of the picture becomes a bit clearer. For instance, scientists today agree that hominins first appeared in Africa. But only 60 years ago, even this much of the picture was unclear. It took many finds to convince scientists that Africa was the birthplace of early hominins.

Each of these finds was the result of hard, patient work. Here you will learn about some other important pieces of the hominin puzzle—and the people who found them.



# The Taung Child

In 1924, an anthropologist named Raymond Dart examined an ancient skull that had been found in a quarry in Taung, South Africa. The skull belonged to a young, apelike creature. It became known as the Taung Child. Dart gave the fossil a more scientific name: *Australopithecus africanus*. This name is Latin for "southern ape from Africa."

The Taung Child was the first *Australopithecus* fossil ever found. It is 2 to 3 million years old. Dart was thrilled by the discovery. He thought it showed that the earliest hominins appeared in Africa. Other scientists disagreed. At that time, many of them believed that hominins first appeared in Asia. Over the next 20 years, a Scottish anthropologist, Robert Broom, collected more and more *Australopithecus* fossils in Africa. By the 1940s, most scientists had to agree that Dart was right.

# **Nutcracker Man**

Far to the north, Mary Leakey found more puzzle pieces at Olduvai

Gorge in modern-day Tanzania. Mary and her husband, Louis, had spent 30 years searching the gorge for hominin remains. In 1959, Mary found hundreds of bits of bone. When she pieced them together, they made up the skull of a previously unknown type of hominin. The fossil was nicknamed Nutcracker Man for its large jaw. Today it is called *Australopithecus boisei*. It is more than 1.7 million years old.

More evidence was found by Mary and Louis's son, Richard Leakey. Richard found his first fossil when he was just six years old—a part of an extinct pig. As a young man, he began leading expeditions in East Africa.

Richard made many important finds, including skulls and other bones of *Homo habilis* and *Homo erectus*. In 1970, he found another Nutcracker Man fossil.

Richard's most famous discovery came in 1984, near Lake Turkana in Kenya. Most hominin fossils are small parts of the body. The new find was a nearly complete *Homo erectus* skeleton. Known as the Turkana Boy, it is about 1.6 million years old.

Richard's wife, Meave, has also hunted fossils in Africa. Among her finds are still more species of early hominins. Richard and Meave's daughter, Louise, has worked with Meave on field expeditions, continuing the proud Leakey tradition.

# Footprints at Laetoli

Mary Leakey made many finds during her long career. The one that excited her the most was a truly fantastic discovery: hominin footprints that were more than 3.5 million years old!

Mary's team spotted the footprints in 1976 at Laetoli in Tanzania. This site is about 30 miles south of Olduvai Gorge. The footprints were found in a layer of volcanic ash. Apparently, a volcano erupted shortly after the footprints were made. When the ash hardened, it preserved the footprints.

Besides being amazingly old, the footprints were important for another reason. The creatures that made them had walked upright on two feet. The footprints were even older than the famous fossil nicknamed Lucy. They showed that hominins were walking upright at a very early date.

# **A Truly Ancient Hominin**

#### EARLY HOMININS

Tim White, an American anthropologist, helped excavate the Laetoli footprints. He also worked with Donald Johanson, who found Lucy. White's own teams have made a number of other finds. One of them pushed hominin history even farther back in time.

In 1994, White was working in Ethiopia. An African member of his team discovered hominin fossils that proved to be 4.4 million years old. The fossils had a very ancient combination of apelike and humanlike features.

White and his co-workers called the new species *Ardipithecus ramidus*. The word *ramid* means "root" in the Afar language of Ethiopia. The researchers thought that the fossil was very close to the root of the hominin family tree.

These discoveries, and many more like them, are helping scientists to piece together the story of early hominins. Scientists often argue about exactly how the pieces fit together and what the big picture looks like. Meanwhile, they keep on looking. They know that there are many more pieces of the puzzle scattered around Africa, waiting to be found.

# Piecing Together the Story of Early Hominins

1. Explain the role that chance played in the creation and discovery of the Laetoli footprints.

- 2. Create a cover for an issue of *Dig It!* magazine that highlights the discoveries of scientists studying early hominins. Your cover must include
  - an imaginative subtitle.
  - attractive visuals of three discoveries made by scientists studying early hominins.
  - brief captions that describe each discovery and explain why it is important to the study of early hominins.
  - writing that is free of grammar and spelling mistakes.
  - other colorful and creative touches.

# Grade 6 Twig Science Week 2

# Module 1: BioTech Systems Worldwide

This week you will read an exciting text and respond to some questions. It's only available online.

|        | To access science reading online:  |  |  |  |  |  |
|--------|--|--|--|--|--|--|
| Step 1 | Type this in your Internet browser:  |  |  |  |  |  |
|        | bit.ly/g6m1science   |  |  |  |  |  |
| Step 2 | Scroll to the bottom   |  |  |  |  |  |
| Step 3 | <u>Choose your reading level:</u><br>Diamond:✦On Level<br>Triangle: ▲ Advanced Level<br>Circle: ● Below Level<br>Square: ■ English Learner |  |  |  |  |  |
| Step 4 | Click on the word "Read"   |  |  |  |  |  |

| Book Title: "It's Alive!"             |  |  |  |  |  |  |
|---------------------------------------|--|--|--|--|--|--|
| Read Chapter 1 and Chapter 2          |  |  |  |  |  |  |
| Answer these questions after reading: | What are the main ideas?<br>What was something interesting that you learned?<br>What is something you are wondering about? |  |  |  |  |  |





Get 20 squares in one color and 20 in another color. Get paper and a pencil. Get two number cubes for players to share. Take turns.



**Get Started** 

(於於) or ( ##

Toss two cubes. Form a decimal by writing the two numbers with a decimal point between them. Form a second decimal by reversing the digits on either side of the decimal point. Explain how to multiply those decimals. If you toss a double, for example, 3 and 3, multiply  $3.3 \times 3.3$ . Cover the product. If the answer is taken, lose your turn.



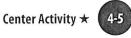
The decimals are 3.5 and 5.3. Explain how to multiply  $3.5 \times 5.3$ .

How to Win

The first player or team to cover a row, column, or diagonal in one of the four sections of the game board wins.

| 18.55 | 5.74  | 2.52  | 29.44 | 9.76  | 36.4  |
|-------|-------|-------|-------|-------|-------|
| 30.25 | 1.21  | 10.08 | 24.3  | 19.36 | 14.62 |
| 4.03  | 13    | 7.36  | 16.12 | 7.65  | 22.68 |
| 22.68 | 14.62 | 36.4  | 5.74  | 13    | 7.36  |
| 7.65  | 10.89 | 9.76  | 18.55 | 43.56 | 4.84  |
| 29.44 | 16.12 | 24.3  | 4.03  | 10.08 | 2.52  |

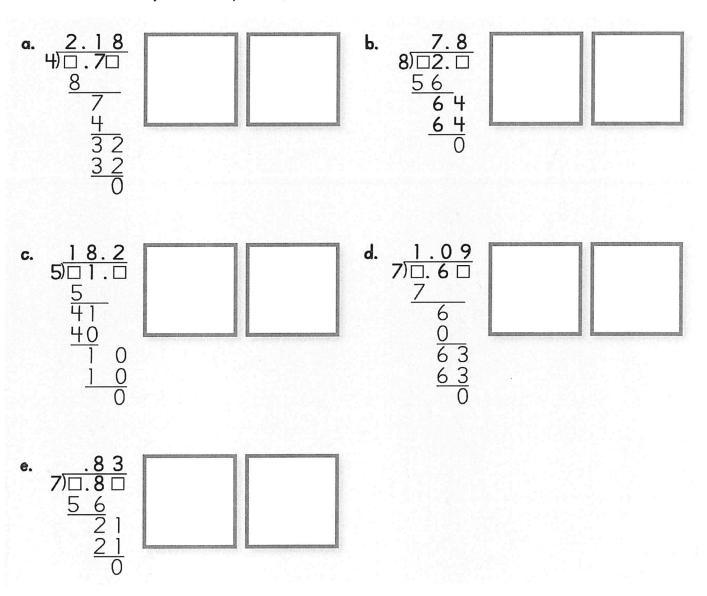








Show the missing digits in the dividend. Display each 0 - 9 tile exactly once. If you have a partner, take turns.



If you have more time

Make up other division puzzles like these. Ask your partner to display the answers with 0 – 9 tiles.

Center Activity ★ 5-4

#### Name

# **Phonics**

vowel team syllables

# José and the Market

José's family members were rancheros. They had settled in New Mexico some time ago to be farmers in a new land with new opportunities. Today, he began the morning in the usual way. He awoke early to the rooster's crow and the wonderful smell of breakfast cooking downstairs.

When José came downstairs, his sister, Maria, met him. He got his oatmeal and sat down beside her. She looked at him.

"José, have you forgotten? It's your turn to accompany Papa to the market!" José suddenly remembered. The market was his favorite place. It was very exciting to help Papa sell the family's goods. As he joyfully ran to meet Papa, he imagined that he would be responsible for a farm of his own when he was grown up.

# The Hopi

The Hopi are Native Americans who have lived on the mesas of northern Arizona for over a thousand years. Two of their villages, Walpi and Old Oraibi, are considered by historians to be two of the oldest continuously inhabited villages in North America.

Hopi culture is unique. For one thing, their family identity is traced through the mother's side of the family. Hopi society is organized by groups of families called clans.

The Hopi have passed their history down through generations by telling stories. These stories teach about morals and good behavior. The Hopi try to live in harmony with the land, as they believe that their deity, Massawu, gave it to them and that they must fulfill their duty to keep it healthy and protect its treasures.

公公守水州が Describe a kind of business you would like to own someday. 公

earthbound

guaranteed

creatures

3. poisonous

4. appointment

exploit

wealthy
 healthy

Spelling: Vowel Team Syllables

2.

5.

6.

1. \_\_\_\_\_ | 1.

2. \_\_\_\_\_

3. \_\_\_\_\_

4.

5. \_\_\_\_\_

6.

8. \_\_\_\_\_

9.

10.

11. \_\_\_\_\_

12.

13. \_\_\_\_\_

14.

15. \_\_\_\_\_

16. \_\_\_\_\_

17. \_\_\_\_\_

18. \_\_\_\_\_

19. \_\_\_\_\_

20. \_\_\_\_\_

21.

22. \_\_\_\_\_

23.

24. \_\_\_\_\_

25.

10. shoulder

11. straighten

moisten
 pedigree

14. volunteer

15. impeach

16. spoilage

17. treasures

18. toughest

19. ceiling

20. equality

21. valuable

22. survival

23. bicycle

24. maintained

25. weightlessness

Name \_\_\_\_\_

Fold back the paper along the dotted line. Use the blanks to write each word as it is read aloud. When you finish the test, unfold the paper. Use the list at the right to correct any spelling mistakes.

**Review Words** 

**Challenge Words** 

Name \_\_\_\_

A. Read each word below and listen for the sound of the vowel team. Sort the words by writing them in the correct column below. Underline the vowel team in each word.

| moisten | guarantee | household  | impeach | exploit   |
|---------|-----------|------------|---------|-----------|
| painful | agreed    | straighten | about   | creatures |
|         |           |            |         |           |

| <i>ai</i> as in <i>main</i> | ea as in reader | ee as in breezy | ou as in mouth | <i>oi</i> as in <i>coil</i> |
|-----------------------------|-----------------|-----------------|----------------|-----------------------------|
|                             |                 |                 |                |                             |
|                             |                 |                 |                |                             |

B. Find the word in each row that has a vowel team used in the chart above. Write the word on the line, divide the word into syllables, and circle the vowel team.

| 1. streamline | shimmer    | solution   |  |
|---------------|------------|------------|--|
| 2. calming    | earthbound | coward     |  |
| 3. equality   | pedigree   | understood |  |
| 4. spoilage   | paper      | lurking    |  |
| 5. education  | boyhood    | gaining    |  |

Name\_\_\_\_\_

| resemblance | unseemly | enthralled | regulation |  |
|-------------|----------|------------|------------|--|
| capacity    | fallow   | negotiate  | insight    |  |
|             |          |            |            |  |

Use each pair of vocabulary words in a single sentence.

- 1. enthralled, resemblance
- 2. unseemly, negotiate
- 3. capacity, regulation

4. fallow, insight

# **Greatest Common Factor**



The greatest number that divides into two numbers is the greatest common factor (GCF) of the two numbers. Here are two ways to find the GCF of 12 and 40.

**Use Prime Factorization** 

numbers have in common.

/×\2/× 2 × 5

each number.

12:  $2 \times 2 \times 3$ 

 $12:(2)\times(2)\times 3$ 

40:\2

 $2 \times 2 = 4$ 

40: 2 × 2 × 2 × 5

Step 1: Write the prime factorization of

Step 2: Circle the prime factors that the

Step 3: Multiply the common factors.

The GCF is 4.

## List the Factors

Step 1: List the factors of each number.

12: 1, 2, 3, 4, 6, 12

40: 1, 2, 4, 5, 8, 10, 20, 40

**Step 2:** Circle the factors that are common to both numbers.

12: 1,2 3,4 6, 12

40: 1,2,4,5,8,10,20,40

**Step 3:** Choose the greatest factor that is common to both numbers. Both 2 and 4 are common factors, but 4 is greater.

The GCF is 4.

Find the GCF for each set of numbers.

| 1. | 10, 70 | <b>2.</b> 4, 20  | <b>3.</b> 18, 24 |
|----|--------|------------------|------------------|
| 4. | 18, 63 | <b>5.</b> 17, 31 | <b>6.</b> 14, 28 |

7. Number Sense Name two numbers that have a greatest common factor of 8.

8. Geometry Al's garden is 18 feet long and 30 feet wide. He wants to put fence posts the same distance apart along both the length and width of the fence. What is the greatest distance apart he can put the fence posts?



| Nc   | Im                   | 1e   | 5   |   |  |      |        | Prac  |    |
|------|----------------------|--|---|---|--|------|--------|---|----|
| G    | re                   | eatest C   | omn   | non Fa  | actor                                    |      |        | 6.  | -1 |
| Find | t th                 | ne GCF for each  | set of nur  | nbers.  |  |      |        |   |    |
| 1.   | 12                   | 2, 48  | 2.  | 20, 24  |  | 3.   | 19, 2  | 2   |    |
| 4.   | 24                   | ł, 100   | 5.  | 18, 130   |  | 6.   | 200,   | 205   |    |
| 7.   | tha                  | umber Sense Na<br>at have 5 as thei<br>se each number  | r greatest  | common fa                                       | ctor.                                    |      |        | •   |    |
| 8.   | ev<br>on<br>sa<br>ma | ne bake-sale com<br>renly onto plates,<br>aly one type of ite<br>me number of ite<br>aximum number<br>aced on each pla | so that even and even and even and even of the second second second second second second second second second s<br>second second s<br>second second s<br>second second secon | every plate c<br>very plate ha<br>no leftovers. | ontained<br>d exactly the<br>What is the |      |        | Bake Sa<br>Donation<br>Muffins<br>Bread sticks<br>Rolls |    |
| 9.   |                      | sing this system,<br>ike-sale committ  |   |   | olls could the                           |      |        |   |    |
| 10.  |                      | sing this system,<br>e bake-sale com   |   |   | nuffins could                            |      |        |   |    |
| 11.  |                      | hich of the follow<br>eatest common f  |   | of numbers                                      | is correctly lis                         | stec | d with | its   |    |
|      | Α                    | 20, 24; GCF: 4   |   |   |  |      |        |   |    |
|      | В                    | 50, 100; GCF: 2  | 25  |   |  |      |        |   |    |
|      | С                    | 4, 6; GCF: 24  |   |   |  |      |        |   |    |
|      | D                    | 15, 20; GCF: 10  | )   |   |  |      |        |   |    |
| 12.  |                      | riting to Explain<br>mmon factor of 4  |   |   | of finding the                           | gre  | eatest |   |    |
|      |                      |  |   |   |  | 1    |        |   |    |

P 6•1

| for the second s | n men di kenanyan kenanyan kenanya ken |            | and the state of the second state of the secon |           |
|--|--|------------|--|-----------|
| guaranteed   | exploit  | healthy    | pedigree   | treasures |
| creatures  | earthbound   | shoulder   | volunteer  | toughest  |
| poisonous  | streamline   | straighten | impeach  | ceiling   |
| appointment  | wealthy  | moisten    | spoilage   | equality  |
|  | -  |            |  |           |

Name \_\_\_\_\_

Fill in the missing letters of each word to form a spelling word. Write the spelling word on the line. Then circle the vowel team or teams in each word.

Spelling: Vowel Team Syllables

| 1.  | p       | _ sonous |  |
|-----|---------|----------|--|
| 2.  | volunt  |          |  |
| 3.  | sp      | lage     |  |
| 4.  | imp     | ch       |  |
| 5.  | guarant | d        |  |
| 6.  | cr      | _ tures  |  |
| 7.  | m       | sten     |  |
| 8.  | tr      | _ sures  |  |
| 9.  | арр     | ntment   |  |
| 10. | eq      | lity     |  |
| 11. | str     | mline    |  |
| 12. | c       | _ ling   |  |
| 13. | w       | _ Ithy   |  |
| 14. | earthb  | nd       |  |
| 15. | sh      | lder     |  |
| 16. | pedigr  |          |  |
| 17. | t       | ghest    |  |
| 18. | expl    | t        |  |
| 19. | str     | ghten    |  |
| 20. | h       | _ lthy   |  |
|     |         |          |  |

#### Name.

Read the passage. Use the make, confirm, and revise predictions strategy to help you understand the theme.

# **Stuck Together**

Rosa entered her apartment building just as a woman with red hair was coming out. The woman nodded at Rosa but didn't say anything. Rosa 13 remembered seeing the woman when she was getting mail, but other than 25 that, Rosa had no idea who she was. Then again, Rosa didn't know anyone 37 in the building. She and her mother had just moved in a month ago, and 51 while people weren't rude, they weren't exactly friendly, either. Everyone 66 kept to himself or herself. Rosa missed the people in her old building 76 where tenants knew one another and chatted in the lobby, knocked on 89 101 doors to borrow milk, and had a big holiday party annually.

112 Rosa pushed the "up" button on the elevator and allowed her backpack
124 to drop to the floor as she waited for the elevator to arrive. And waited.
139 And then she waited some more. "Oh no," she muttered quietly to herself,
152 "not again."

Rosa lived on the seventh floor. Sighing, she slung the strap of her
heavy backpack over her shoulder and trudged slowly up the stairs. By the
time she got to her floor, there were beads of sweat rolling down her face.
Rosa's mother was inside the apartment, painting the walls. "Que pasa,
mija?" asked her mother.

"I had to walk up the stairs, again. Somebody should do something about that elevator," Rosa answered.

"I called the landlord several times, but I haven't heard anything back," her mother told her.

The next morning, Rosa and her mother walked to the elevator and
hoped for the best. Luckily, the elevator actually arrived. There were a
few people already on it, including the red-haired lady. Rosa and her
mother entered, and the doors closed behind them. People smiled, but
no one spoke. That is, nobody spoke until they realized that the elevator
wasn't moving.

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210

222

227 239

305

"Great," the woman with the red hair said sarcastically.

#### Name\_

"I've written to the landlord about how frequently this broken elevator malfunctions," said a man with a black briefcase. He pulled the red alarm button, and it began to clang outside the door. "Now we just have to wait until someone hears the signal and pushes a button for the elevator."

Rosa looked at her mom, who smiled and said, "It doesn't seem like the landlord is listening to our complaints. Maybe if we all got together and pressured him, he would fix the elevator."

"I don't know," said a man in jogging shorts. "I don't really like to get involved in problems."

Rosa smiled at him. "You're stuck in an elevator. You're already involved." She put out her hand. "I'm Rosa, in 7L, and this is my mom, Maria."

The man shook Rosa's hand. "Okay, you have a point. I'm Saul, 8R."

One by one, everyone in the elevator introduced himself or herself, and as they waited, they talked about the difficulties they'd been having with the elevator and ways to get the landlord to fix it.

"Perhaps if we could write a letter and have everyone in the building sign it, the landlord would listen," someone suggested.

"We could say that we are going to contact the city's housing department," Saul put in. "Or if we all say that we won't pay our rent, I bet we get the elevator fixed."

"I can write the letter," offered Rosa's mother.

The other people in the elevator agreed to review the letter and help get signatures from all the building's tenants.

Just then the elevator started descending again. As it made its way down to the first floor, Rosa felt proud of her mother for getting everyone to agree to work together. Maybe this building would turn out to be as friendly as the old one. At the very least, it would have a working elevator.



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| Name   |   |         | Comprehens          | sion: Ir            | neme and Fluency       |
|--|---|---------|---------------------|---------------------|------------------------|
|  | bassage and answe                           |         | uestions.           |                     |                        |
| <ol> <li>At the beginn<br/>new building</li> </ol> | ning of the story, ho<br>?                  | w does  | Rosa feel about l   | iving ir            | ı her                  |
|  |   |         |                     |                     |                        |
| 2. What had ha<br>the broken el                    | ppened when Rosa<br>evator?                 | 's moth | er called the land  | lord al             | oout                   |
| •  | eople in the elevate<br>uld get together an |         |                     |                     | -                      |
|  |   |         |                     |                     |                        |
| <b>4.</b> Based on the this story is?              | events of the story,                        | what o  | do you think the tl | heme c              | of                     |
|  |   |         |                     |                     |                        |
|  | partner. Read the<br>p after one minute     |         |                     | ention <sup>-</sup> | to                     |
|  | Words Read                                  | -       | Number of<br>Errors | =                   | Words Correct<br>Score |
| First Read   |   | _       |                     | =                   |                        |

\_

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Second Read

=

# Least Common Multiple

There are different ways to find the least common multiple (LCM) of two numbers. Here are two ways of finding the LCM of 4 and 5:

| List Multiples  | Use Prime Factors   |
|---|---|
| <ul> <li>Step 1: List multiples of each number.</li> <li>4: 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48</li> <li>5: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50</li> <li>Step 2: Check the multiples the numbers have in common.</li> <li>4: 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48</li> <li>5: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50</li> <li>Step 3: Determine which of the common multiples is the</li> </ul> | Step 1: List the prime factors of<br>each number.<br>4: $2 \times 2$<br>5: 5<br>Step 2: Circle the greatest number<br>of times each different<br>factor appears.<br>4: $(2 \times 2)$ |
| least.<br>20 and 40 are both common multiples, but 20 is<br>the least.<br>The LCM of 4 and 5 is 20.   | 5:5<br><b>Step 3:</b> Find the product of the factors you circled.<br>$2 \times 2 \times 5 = 20$<br>The LCM of 4 and 5 is 20.   |

Find the LCM of each set of numbers.

| <b>1.</b> 6, 7  | <br><b>2.</b> 4, 5  | <br><b>3.</b> 10, 11 |
|-----------------|---------------------|----------------------|
| <b>4.</b> 2, 5  | <br><b>5.</b> 6, 11 | <br><b>6.</b> 8, 10  |
| <b>7.</b> 3, 10 | <br><b>8.</b> 5, 10 | <br><b>9.</b> 7, 8   |

**10.** Number Sense If you know the LCM of 4 and 5, how could you find the LCM of 40 and 50?

**11. Writing to Explain** Peter says the least common multiple of 4 and 6 is 24. Do you agree or disagree? Explain.



# Least Common Multiple

Find the LCM of each set of numbers.

| <b>1.</b> 5, 9  | <b>2.</b> 4, 10 |
|-----------------|-----------------|
| <b>4.</b> 7, 12 | <b>5.</b> 4, 11 |
| <b>7.</b> 7, 8  | <b>8.</b> 6, 9  |

**10.** At what times of the day between 10:00 A.M. and 5:00 P.M. do the chemistry presentation and the recycling presentation start at the same time?

**3.** 8, 12 \_\_\_\_\_ **6.** 3, 7

Practice

6-2

**9.** 3, 12

| Science Museum                                   |  |  |  |
|--|--|--|--|
| <ul> <li>Show Schedule –</li> </ul>              |  |  |  |
| Chemistry — Every 10 minutes                     |  |  |  |
| Electricity — Every 20 minutes                   |  |  |  |
| Recycling - Every 6 minutes                      |  |  |  |
| Fossils – Every 45 minutes                       |  |  |  |
| The first showing for all shows is at 10:00 A.M. |  |  |  |

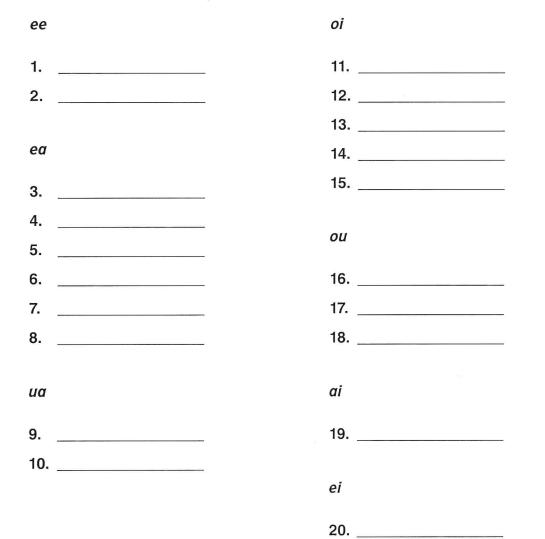
- 11. The museum does shows in schools every Monday and shows in public libraries every fifth day (on both weekdays and weekends). If the museum did both a school show and a library show on Monday, how many days will it be until it does both shows on the same day again?
- **12.** Which of the following pairs of numbers is correctly listed with its LCM?
  - A 5, 10; LCM: 50
  - **B** 2, 3; LCM: 6
  - C 2, 6; LCM: 12
  - D 7, 9; LCM: 21
- **13. Writing to Explain** What method would you use to find the LCM of a group of four numbers? Explain and give an example.

Spelling: Vowel Team Syllables

Name \_\_\_\_\_

| guaranteed  | exploit    | healthy    | pedigree  | treasures |
|-------------|------------|------------|-----------|-----------|
| creatures   | earthbound | shoulder   | volunteer | toughest  |
| poisonous   | streamline | straighten | impeach   | ceiling   |
| appointment | wealthy    | moisten    | spoilage  | equality  |

Write the spelling words that contain the matching vowel team. If a word has more than one vowel team, choose one way to sort it.



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#### Name \_\_\_

# **Practice Makes Perfect**

"Rosa, it's a great way to practice your Italian," my mother had told me. She had asked me to babysit for Christina, my four-year-old cousin from Italy.

"La palla!" Christina screams from the backyard.

"What are you saying?" I mumble. Crying, she points up at a red ball caught in the tree.

My neighbors, the Chens, rush over. "Why is Christina screaming?" they ask. "Her ball's up there," I reply.

"Get some other balls from the bin, Rosa," Mrs. Chen suggests. "We'll toss them up and try to free hers."

Agreeing, we throw balls into the tree, knocking the red one down. "La palla," I say, handing Christina her ball.

Mr. Chen says, "Rosa, you speak Italian!"

#### Answer the questions about the text.

1. List three text features that let you know this is realistic fiction.

2. From what point of view is the story told? How do you know?

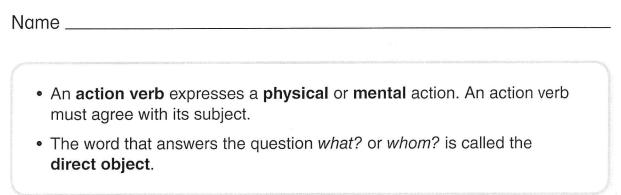
3. How is foreign language dialogue used to portray Christina?

4. How does the first sentence of the text foreshadow future events?

Name\_

In each item below, underline the context clues that help define the word in bold. Then write the word's meaning on the line.

- 1. Rosa missed the people in her old building where **tenants** knew one another and chatted in the lobby, knocked on doors to borrow milk, and had a big holiday party annually.
- 2. "Oh no," she muttered quietly to herself, "not again."
- **3.** Sighing, she **slung** the strap of her heavy backpack over her shoulder and trudged slowly up the stairs.
- 4. Sighing, she slung the strap of her backpack over her shoulder and **trudged** slowly up the stairs. By the time she got to her floor, there were beads of sweat rolling down her face.
- 5. "I've written to the landlord about how frequently this broken elevator malfunctions," said a man with a black briefcase.
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  - 6. Just then the elevator started descending again. As it made its way down to the first floor, Rosa felt proud of her mother for getting everyone to agree to work together.



Underline the action verb in each sentence. Put brackets [] around the direct object.

- 1. The students displayed their talents in the variety show.
- 2. The school principal introduced each act.
- 3. Wilson played the drums.
- 4. Two girls sang a beautiful ballad.
- 5. Adam performed a solo.
- 6. Adam's sister recited a poem.
- 7. Matthew wrote an original song for the show.
- 8. Isabelle told jokes in a comedy act.
- 9. Mrs. Hernandez and Mr. Underwood judged the contest.
- **10.** Matthew won the top prize.

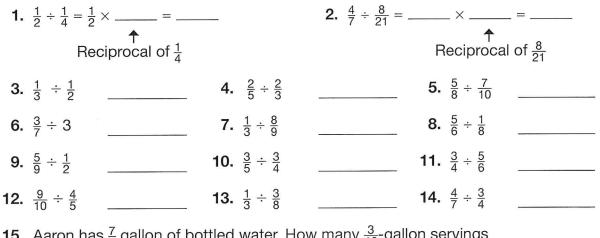
# Name\_\_\_\_\_ Dividing Fractions

To divide by a fraction, you can multiply by its reciprocal. The reciprocal of a number has the numerator and the denominator reversed.

Find  $\frac{4}{5} \div \frac{3}{10}$ .

| Step 1  | Step 2  | Step 3   |
|---|---|--|
| Rewrite the division as multiplication using the reciprocal of the divisor. | Divide out common factors if possible. Then multiply. | If your answer is an<br>improper fraction, change it<br>to a mixed number. |
| The reciprocal of $\frac{3}{10}$ is $\frac{10}{3}$ .                        | $\frac{4}{5} \times \frac{10}{3} = \frac{8}{3}$       | $\frac{8}{3} = 2\frac{2}{3}$   |
| $\frac{4}{5} \div \frac{3}{10} = \frac{4}{5} \times \frac{10}{3}$           |   |  |

Find each quotient. Simplify if possible.



R 6•6

- **15.** Aaron has  $\frac{7}{8}$  gallon of bottled water. How many  $\frac{3}{16}$ -gallon servings can he pour?
- **16. Draw a Picture** Show how Rebecca can divide  $\frac{3}{4}$  of a cake into 9 pieces. What fraction of the whole cake will each piece be?

Reteaching

6-6

# Name Practice Dividing Fractions 6-6 Find each quotient. Simplify if possible. 3. $\frac{7}{8} \div \frac{7}{12} =$ 1. $\frac{1}{3} \div \frac{5}{6} =$ 2. $\frac{3}{8} \div \frac{1}{2} =$ 3. $\frac{7}{8} \div \frac{7}{12} =$ 4. $\frac{5}{9} \div 5 =$ 5. $\frac{6}{7} \div \frac{3}{4} =$ 6. $\frac{2}{3} \div \frac{3}{4} =$

- 7.  $\frac{1}{2} \div \frac{3}{10} =$  8.  $\frac{5}{12} \div \frac{2}{3} =$  9.  $\frac{14}{15} \div \frac{2}{5} =$  

   10.  $\frac{1}{3} \div \frac{3}{4} =$  11.  $\frac{3}{8} \div 4 =$  12.  $\frac{9}{10} \div \frac{3}{5} =$
- **13. Writing to Explain** Serena said that by looking for common factors and simplifying the expression, she found that  $\frac{4}{10} \div \frac{5}{8} = 1\frac{9}{16}$ . Do you agree with Serena? Why or why not?

$$\frac{5}{\frac{10}{4}} \times \frac{5}{\frac{8}{4}} = \frac{25}{16} = 1\frac{9}{16}$$

- **14.** A  $\frac{5}{6}$ -yard piece of fencing is made of boards that are  $\frac{1}{12}$  yard wide. How many boards make up the fence?
- **15.** Nathan has  $\frac{7}{8}$  lb of hummus. How many  $\frac{3}{10}$ -lb servings does he have?
- **16.** Algebra Which equation can you use to find the number of  $\frac{1}{4}$ -inch pieces that can be cut from a piece of metal  $\frac{5}{8}$  of an inch long?
  - **A**  $\frac{5}{8} \div \frac{1}{4} = n$  **B**  $\frac{1}{4} \div \frac{5}{8} = n$  **C**  $\frac{5}{8} \times \frac{1}{4} = n$ **D**  $\frac{1}{4} \times \frac{8}{5} = n$

#### Name \_\_\_\_\_

| eu la vanta a d | oveloit    | haalthu    | nodiaroo  | tropouroo |  |
|-----------------|------------|------------|-----------|-----------|--|
| guaranteed      | exploit    | healthy    | pedigree  | treasures |  |
| creatures       | earthbound | shoulder   | volunteer | toughest  |  |
| poisonous       | streamline | straighten | impeach   | ceiling   |  |
| appointment     | wealthy    | moisten    | spoilage  | equality  |  |

#### A. Write the spelling word that is a synonym for each word below.

| 1. | use    | 6.  | most difficult |
|----|--------|-----|----------------|
|    | rich   | 7.  | dampen         |
| 3. | unbend | 8.  | robust         |
| 4. | accuse | 9.  | toxic          |
| 5. | riches | 10. | pure-bred      |

#### B. Write the spelling word that best completes each sentence.

**11.** There are many sea \_\_\_\_\_\_ living in the ocean, including sea otters, sharks, and whales.

**12.** They installed an overhead fan in the living room \_\_\_\_\_\_.

- 13. She is the best \_\_\_\_\_\_ at the animal shelter.
- 14. Jake rested the tray of dishes on his left \_\_\_\_\_\_ and carried it into the kitchen.
- **15.** Many products advertised on TV are \_\_\_\_\_\_ to last at least a year.
- 16. I have a doctor's \_\_\_\_\_ on Friday afternoon.
- 17. The spacecraft will be \_\_\_\_\_ in a few days.
- 18. The toy company needs to \_\_\_\_\_\_ its production facility.
- 19. \_\_\_\_\_ was the most important issue during the Civil Rights movement.
- 20. \_\_\_\_\_ can happen when food is not refrigerated.

Reread

# The Music of Many

- One summer morning, a king sat by an open window in his castle. Outside a chorus of birds chirped and warbled together. Each bird had a unique song, but the beautiful sounds blended together in exquisite harmony, delighting the king.
   Listening to the beautiful birdsong soon became
- Listening to the beautiful birdsong soon became the king's greatest pleasure, and he looked forward to the birds' melodies. Yet in autumn, as the days began to shorten, the birds flew away one by one, leaving silence where their music had once graced the air.
- The king was saddened by the loss of music. Upon seeing the king's glum face, his most loyal and humble servant said, "Your Majesty, perhaps in winter, a musician could play to while away the quiet." The king agreed, and he ordered his servant to find the most talented musicians in the world.

3

Soon a harpsichordist arrived from England. A sitar player brought his stringed instrument from India. A Peruvian pipe player arrived in a brightly woven shirt, bursting with color. In a short time, musicians from many lands had gathered in the courtyard of the king's castle to audition.

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Reread and use the prompts to take notes in the text.

Reread paragraphs 1 and 2. Underline phrases that describe how the king feels about the birds' songs.

Circle the words that tell how the king's feelings change in paragraph 3.

# 

Talk with a partner about how the author foreshadows what happens at the end of the allegory. Draw a box around the text evidence that supports your ideas. Write it here:



+ -

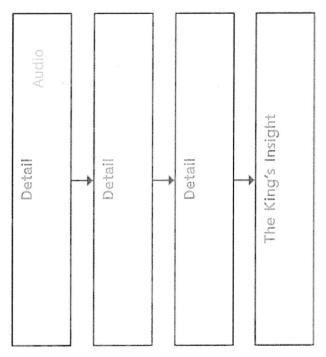
| As the sun began to ebb in the late afternoon,<br>the musicians needed to keep warm, so the flutist<br>decided to limber up and began to play a few notes<br>The drummer beat a slow tap to keep time with the<br>flutist, and then the guitarist from Spain strummec<br>a few chords and the Peruvian pipe player took<br>up the tune and harmonized soulfully. The other<br>musicians joined in.<br>Inside the throne room, the final musician<br>finished her audition, but the king stared into<br>space, dreaming of the birds that had sung so<br>beautifully outside his window.<br>As the king sat, his ears strained to pick up<br>a few notes that wafted through the thick castle<br>walls. A grin slowly crept across the king's face.<br>"At last!" he exclaimed. "That is the sound I have<br>been seeking!" He looked at the members of the<br>court and exclaimed. "Allow me to share an insight<br>I have gained. It is not one sound but the music of<br>many blended together that is truly beautiful."<br>With that, he commanded his servants to invite<br>all of the musicians to enter and form a royal<br>orchestra. Of course, they would have summers<br>off, once the birds returned. | Reread paragraph 2. Circle how you know how the king<br>feels about the musicians who were auditioning. Write<br>what the king does here:<br>1.   | 2.<br>Talk with a partner about what the king hears. How does<br>the author help you visualize what the king is feeling?<br>Underline text evidence in paragraph 3 to support your<br>discussion. |  |
|--|---|---|--|
| L 0 0 4  | As the sun began to ebb in the late afternoon,<br>the musicians needed to keep warm, so the flutist<br>decided to limber up and began to play a few notes.<br>The drummer beat a slow tap to keep time with the |   | a fe<br>wa<br>"At<br>bee<br>cou<br>nha<br>nha<br>all<br>orc<br>off |

How does the author help you visualize how the king gains insight about the value of working together?

# Contraction

Talk About It Reread paragraphs 1 and 2 on page 70. Then, reread paragraph 3 on page 71. Talk with a partner about what the king does.

Cite Text Evidence What clues help you understand how the king realizes the lesson about working together? Record your answers in the chart below.



Write I visualize how the king gains his insight because the author

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# O QUICK TIP

When I reread, I can compare and connect the author's ideas throughout the text.



# **Dividing Mixed Numbers**

You can follow these steps to find  $5\frac{1}{3} \div 1\frac{1}{3}$  and  $21 \div 2\frac{1}{3}$ .

| Step 1  | Step 2  | Step 3  |
|---|---|---|
| First estimate.<br>Then write each number<br>as an improper fraction.   | Find the reciprocal of<br>the divisor. Rewrite as<br>a multiplication<br>problem. | Look for common factors. Simplify, then multiply.   |
| Find $5\frac{1}{3} \div 1\frac{1}{3}$ .<br>Estimate $5 \div 1 = 5$ .<br>$5\frac{1}{3} \div 1\frac{1}{3} =$<br>$\downarrow \qquad \downarrow$<br>$\frac{16}{3} \div \frac{4}{3}$ | $\frac{16}{3} \div \frac{4}{3} = \frac{16}{3} \times \frac{3}{4}$                 | $\frac{\frac{16}{3} \times \frac{3}{4}}{\frac{16}{3} \times \frac{3}{4}} = \frac{4}{1} = 4$ $\frac{\frac{16}{3} \times \frac{3}{4}}{\frac{3}{1}} = \frac{4}{1} = 4$ 4 is close to 5, so the answer is reasonable. |
| Find $21 \div 2\frac{1}{3}$ .<br>Estimate $21 \div 2 = 10\frac{1}{2}$ .<br>$21 \div 2\frac{1}{3}$<br>$\downarrow \qquad \downarrow$<br>$\frac{21}{1} \div \frac{7}{3}$          | $\frac{\frac{21}{1} \div \frac{7}{3}}{\frac{21}{1} \times \frac{3}{7}} =$         | $\frac{21}{1} \times \frac{3}{7} =$ $\frac{3}{27} \times \frac{3}{7} = \frac{9}{1} = 9$ 9 is close to $10\frac{1}{2}$ , so the answer is reasonable.  |

Find each quotient. Simplify if possible.

| <b>1.</b> $2\frac{2}{3} \div 3\frac{1}{4} =$ | <b>2.</b> $1\frac{3}{4} \div 4\frac{1}{8} =$ |
|--|--|
| <b>3.</b> $2\frac{1}{5} \div 2\frac{1}{3} =$ | <b>4.</b> $5\frac{1}{4} \div 3 =$            |
| <b>5.</b> $10 \div 3\frac{1}{4} =$           | <b>6.</b> $7\frac{1}{4} \div 2\frac{1}{8} =$ |

7. Writing to Explain Paper needs to be cut for voting ballots. Each piece of paper is  $10\frac{1}{2}$  in. long. Each ballot should be  $1\frac{3}{4}$  in. long. How many ballots can be cut from one piece of paper?



# **Dividing Mixed Numbers**

Find each quotient. Simplify if possible.

| <b>1.</b> $1\frac{1}{2} \div 2\frac{1}{3} =$ | <b>2.</b> $4\frac{1}{4} \div 3\frac{1}{8} =$ | <b>3.</b> $2\frac{1}{4} \div 5\frac{1}{2} =$ |
|--|--|--|
| <b>4.</b> $3\frac{1}{2} \div 2\frac{1}{4} =$ | <b>5.</b> $3\frac{3}{4} \div 2 =$            | <b>6.</b> $1\frac{1}{2} \div 2\frac{1}{4} =$ |
| <b>7.</b> $8 \div 2\frac{3}{4} =$            | <b>8.</b> $2\frac{1}{2} \div 1\frac{3}{8} =$ | <b>9.</b> $4\frac{2}{3} \div 1\frac{3}{4} =$ |

**10. Reasoning** Is it possible to divide 15 by a mixed number and get a quotient that is greater than 15? Explain.

| Room        | Gallons of Paint |
|-------------|------------------|
| Kitchen     | 2 <u>1</u> 2     |
| Bedroom     | 3 <u>3</u>       |
| Living room | 4 <u>1</u> 3     |

Max is painting the inside of an apartment complex. The table shows how many gallons of paint are needed to paint each type of room.

11. How many kitchens can Max paint with 20 gal?

12. How many living rooms can Max paint with 26 gal?

- 13. How many bedrooms can Max paint with 60 gal?
- **14.** Find  $4\frac{1}{2} \div 2\frac{1}{4}$ .
  - **A** 1
  - **B** 2
  - **C** 3
  - **D** 4

**15. Writing to Explain** Explain how you would find  $4\frac{1}{5} \div 2\frac{1}{3}$ .



Name \_

## A. There are six misspelled words in the paragraphs below. Underline each misspelled word. Then write the words correctly on the lines.

Once there was a young man who was in love with the daughter of a welthy farmer. The farmer didn't think anyone was good enough for his daughter. The young man said, "I may not have a fancy pedigrea, but I am a hard worker. I am helthy, and I love your daughter."

To prove himself, the young man became a voluntear on the farm and performed difficult jobs. He worked in the fields until he could hardly strayghten himself up. The farmer finally said, "Men who are willing to *say* they love someone are common. Men who are willing to *show* they love someone are like tresures. Welcome to the family."

| 1 | 2 | 3 |
|---|---|---|
| 4 | 5 | 6 |

## Writing Activity

B. Write a story about a time when you or someone you know showed honesty. Use at least four words from the spelling list.

Name\_

A. Read the draft model. Use the questions that follow the draft to help you think about transitional words and phrases that will make it easier for readers to keep track of where and when events take place.

## **Draft Model**

It had snowed hard during the night. The snow was very deep. Sally and her sisters built a snow fort. They saw that their elderly neighbors needed help shoveling their sidewalk. Sally and her sisters discussed together the idea of helping them.

- 1. What transitional words and phrases would show when Sally and her sisters built the fort? What words and phrases would show when other events happened?
- 2. What transitional words and phrases would show where different events took place?
- 3. What other words and phrases would help guide the reader smoothly from one event to the next?

B. Now revise the draft by adding transitions to help readers keep track of when events take place and where the sisters are when events occur.

Name \_

The student who wrote the paragraphs below used relevant details from two different sources to respond to the prompt: *Imagine that Tia Lola visited the castle and solved the king's problem. Write a scene in which Tia Lola talks to the musicians and solves the king's problem.* 

When Tía Lola entered the courtyard, she saw that the musicians were just as disappointed as the king. They slumped in their chairs, like a defeated sports team. Tía Lola decided to give the musicians a pep talk. "Hola!" she said. "I heard each of you play for the king. You are all very talented!" Most of the musicians sat up a little straighter, but the violinist crossed his arms.

"Then why isn't the king satisfied?" he asked.

"Well," explained Tía Lola, "The king's servant told me that the king missed the chorus of birds that sing together in the summer. Each bird sang a different song, but hearing their combined songs made the king happy."

The musicians listened, so Tía Lola continued. "You have brought music from all over the world, and while each of your songs is impressive, just think how beautiful it would sound if you all shared your music and played together!"

All of the musicians—including the violinist—agreed, and began to play together. The king heard the music and smiled.

## Reread the passage. Follow the directions below.

- 1. Where does Tía Lola talk to the musicians? **Circle** the transitional phrase that shows where this scene takes place.
- 2. Draw a box around the relevant details that show why the king was disappointed.
- 3. Underline the dialogue that shows how Tía Lola solved the king's problem.
- 4. Write one of the action verbs on the line.

| Grammar: Direct Ob | jects and | Indirect | Objects |
|--------------------|-----------|----------|---------|
|--------------------|-----------|----------|---------|

| N   | a  | m | e |
|-----|----|---|---|
| 1 1 | u. |   |   |

- A direct object receives the action of the verb in a sentence and tells whom or what is affected by the verb's action.
- An **indirect object** always appears before the direct object and tells to whom or for whom the action is done.

## Draw one line under the action verb. Draw two lines under the indirect object. Put brackets [] around each direct object.

- 1. Grace handed her mother the notebook.
- 2. Jackie tossed me the basketball.
- 3. Ben played the class a recording.
- 4. The teacher taught the group the song.
- 5. Mr. Yamada bought his daughter a winter coat.
- 6. Zane's grandmother knitted him a red scarf.
- 7. The waiter gave each person a menu.
- 8. The chef prepared the customers a special meal.
- 9. The host showed his guests a good time.
- **10.** The guests thanked him for the invitation.



- **1.** Mr. Brady has a  $\frac{3}{4}$ -acre land site. He plans to divide the site into smaller parcels. Which size parcel should he choose to evenly divide his land?
  - A  $\frac{1}{5}$  acre
  - **B**  $\frac{1}{6}$  acre
  - C  $\frac{1}{8}$  acre
  - **D**  $\frac{1}{10}$  acre
- **2.** Which is the quotient for  $\frac{6}{7} \div 6$ ?
  - **A**  $\frac{1}{7}$  **B**  $\frac{7}{36}$ **C**  $5\frac{1}{6}$
  - **D** 7
- **3.** Beth makes her own liquid cleanser. The recipe makes  $\frac{2}{3}$  gallons. Beth prefers to carry smaller bottles, so she puts the cleaner in  $\frac{1}{8}$ -gallon bottles. How many bottles does she fill for each batch?
  - A 12 bottles
  - B 5 bottles
  - C  $\frac{3}{16}$  bottle
  - **D**  $\frac{1}{12}$  bottle
- 4. Writing to Explain Find the quotient and simplify if possible. Explain how you do it.

 $\frac{5}{8} \div \frac{3}{4}$ 





**1.** Find  $3\frac{1}{2} \div 1\frac{1}{4}$ .

**A**  $\frac{8}{35}$  **B**  $\frac{5}{14}$  **C**  $2\frac{4}{5}$ **D**  $4\frac{3}{8}$ 

- **2.** Find  $15 \div 3\frac{1}{3}$ .
  - **A** 50
  - **B**  $4\frac{1}{2}$ **C**  $\frac{2}{9}$
  - 9
  - **D**  $\frac{1}{50}$
- **3.** Students at Lincoln High School spend  $7\frac{1}{2}$  hours at school. Classes are scheduled in  $1\frac{3}{4}$  hour blocks with 30 minutes for lunch. Solve  $(7\frac{1}{2} - \frac{1}{2}) \div 1\frac{3}{4}$  to find how many classes students attend each day.
  - A 3 classes
  - B 4 classes
  - C 5 classes
  - D 7 classes
- **4. Writing to Explain** An algebraic expression is one way to state a rule. State the rule in the table below in another way. Then complete the table.

| t                     | $\frac{3}{4}$ | $1\frac{1}{3}$ | $2\frac{1}{2}$ | 4 <u>7</u> 8 |
|-----------------------|---------------|----------------|----------------|--------------|
| $t \div 2\frac{1}{2}$ |               |                |                |              |

Make your own rule. Write an algebraic division expression that has a mixed number as the divisor. Complete the table using your expression as its rule. Then state the rule in another way.

| x | $\frac{1}{2}$ | 1 <u>3</u> | 2 <u>5</u> | 5 |
|---|---------------|------------|------------|---|
|   |               |            |            |   |









Get 10 squares in one color and 10 in another color. Get two number cubes. Take turns with another player or team. Talk about math as you play!



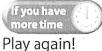
Toss two number cubes. Add the dots. Find your toss below. Follow the directions. Explain your thinking. Cover the answer. If the answer is taken, lose your turn. Have fun!

| Toss   | Identify the division expression below whose<br>quotient matches your toss. Explain your answer.   |                      | 7                    |                                  | $\frac{1}{7}$        |
|--|--|----------------------|----------------------|----------------------------------|----------------------|
| 2  |  | 4                    | 8                    |                                  | $9\frac{3}{5}$       |
| 3  |  | <u>1</u><br>14       | 9                    |                                  | 2                    |
| 4  | 3  |                      | 10                   |                                  | $12\frac{1}{2}$      |
| 5  | $\frac{3}{16}$   |                      | 11                   | 6                                |                      |
| 6  | $\frac{4}{15}$   |                      | 12                   | 13 <u>1</u>                      |                      |
|  | $5 \div \frac{3}{8}$   | $3 \div \frac{3}{4}$ | 2                    | <sup>27</sup> / <sub>3</sub> ÷ 3 | $2 \div \frac{2}{3}$ |
|  | $\frac{1}{2} \div 7 \qquad \qquad$ |                      | -                    | <u>3</u><br>+ + +                | $\frac{4}{5} \div 3$ |
| $2 \div \frac{1}{2} \qquad 5 \div \frac{2}{5}$ |  |                      | $6 \div \frac{3}{2}$ | 9 ÷ <del>6</del>                 |                      |
| $1 \div \frac{1}{2} \qquad 1 \div \frac{1}{4}$ |  | Ę                    | $8\div \frac{5}{6}$  | $\frac{8}{7} \div 8$             |                      |



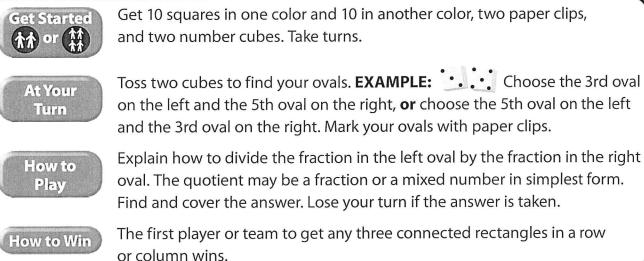
You win if you are the first to get four connected rectangles, like:

┨┉┠╒╽╖╖┷┺╼┺┲╝┓╝

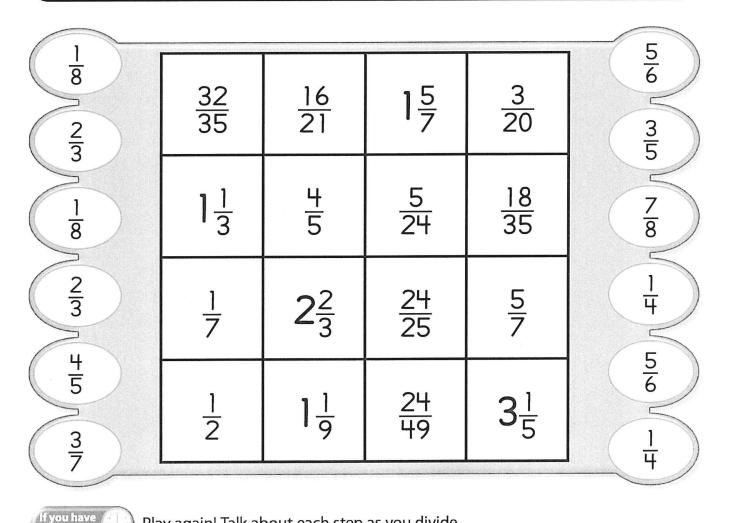








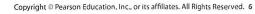
The first player or team to get any three connected rectangles in a row



Play again! Talk about each step as you divide.

nore time

Center Activity ★ 6-5



## **History Social-Science**

Surplus, Population Growth, and Inequality: Three Results of Neolithic Technology and Domestication

The shift away from a foraging lifestyle was a major change in the way people lived in Neolithic times. Some people settled in one spot and created a routine of planting and harvesting. Others raised herds. Some did both. Switching from food gathering to herding or to settled agriculture, or to a combination of both, often led to surpluses, population growth, and inequality. In this reading we'll look at how these elements are related.

## Domestication

Both herding and settled agriculture depended on domestication. Domesticated crops had two new features not present in wild crops. They did not release their seeds upon ripening, making them easier to harvest. And they ripened at the same time, making it possible to harvest them in large masses. Long ago edible grasses, the genetic ancestors of wheat and other grains, were domesticated in the Middle East and probably Egypt. Ancient peoples settled near these grasses and began to sow the plants that had favorable qualities such as a larger size, a better taste, and an easier time to cook.

Domesticating animals had several results. First, they were used for food, mainly their meat and milk. In addition, other animal products came to be seen as valuable. Uses were found and/or products made from wool and hides; horn, bone, and sinew; and dung. In addition, technological uses of animals were invented. For example, cattle were used to pull tools that tilled the fields.

## Surpluses

Foraging is a subsistence lifestyle, one that provides support at a minimum level. It provided just enough food to keep people alive. But it didn't allow them to produce any extra. Under the right conditions, such as favorable climate, planting and harvesting crops allowed for food increases. Domesticated animal herds, new technologies, and workers' labor also led to food surpluses.

Surpluses could be used in several ways. They could be stored for a year with a small yield. This provided security for a community. Surpluses could also make population growth possible. A larger population also added security to a community. Surpluses could be turned into more labor: with more to eat, people could invest more work to improve their crops or herds or could make some other products to use or trade. Surpluses could support migration. Or, surpluses could be used directly in trade.

## **Population Growth**

Adding just 10 percent reliance on agriculture could result in a food surplus that would support a population increase of 50 percent. With the overall growth of settled agriculture and herding over the period from 9000 to 6500 B.C.E., the birth rate more than doubled, from 4.5 per woman to 10 per woman. Population growth was linked with the spread of Neolithic cultures from the Fertile Crescent into Europe, through South Asia, and from the Southeast China mainland through the South China Sea.

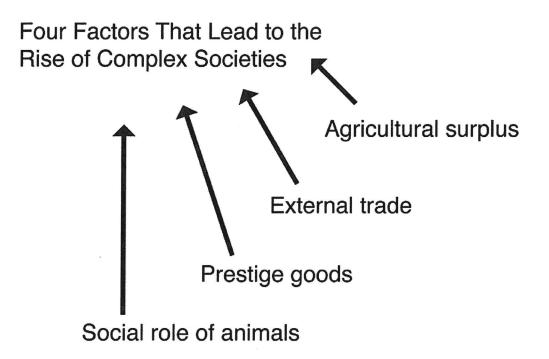
## Inequality

Foragers tended to have more **egalitarian societies**, communities in which everyone is more-or-less equal. But as soon as fields were cultivated and herds were tended, inequality arose. As a result of the development of social differences, society became very different.

Subsistence means everyone is equally poor. Once there is surplus, it usually means that someone has more. For one thing, cultivation and herding result in a division of labor so that people are no longer all performing the same work. In addition, someone's sow will have nine piglets, while someone else's only has seven, or someone's sheep will yield more wool than someone else's. Someone's cattle will be stronger and finish the job of tilling more quickly.

Once production and trade are introduced, the quality of products will not be identical. Someone's horses will be faster and be in greater demand. Someone's obsidian knives will be more finely made and be considered more desirable. Even before written records of inequalities in trade records, for example, evidence of inequality could be found in architecture, graves, and artifacts. For example, people of higher rank, might be buried with ornaments of metal or strings of shell beads, whereas others did not have these goods buried with them.

## **The Rise of Complex Societies**



Traditionally, many scholars have pointed to three factors in the rise of complex societies. One of these is agricultural surplus, having more food than is needed for the community to survive. A second is involvement in external trade, exchanging products with other communities. A third is having prestige goods, those that are considered to set their owners apart as having a higher status. But current scholars are pointing to a fourth factor. This fourth factor is the social role of animals in the development of complex societies. Animals were used for social gain, acquiring wealth, and creating products.

Connected to these four factors are increasing specialization, exchange of services, as well as products, and the human desire to protect any form of wealth. Out of this desire, walled cities arose.

Scholars suggest that complex societies are unequal by definition. That is, state-supported forms of inequality are the main characteristic feature of complex societies. The inequality may be based on material goods, on prestige or power, on status, or on some combination of these. With complex societies also came economic systems, political systems, and complex social relationships.

## Surplus, Population Growth, and Inequality: Three Results of Neolithic Technology and Domestication

1. What could a community do when they managed to create a food surplus?

2. How did inequality arise?

3. What was the relationship between inequality and the rise of complex societies?

## Grade 6 Twig Science Week 3

## Module 1: BioTech Systems Worldwide

This week you will read an exciting text and respond to some questions. It's only available online.

|        | To access science reading online:   |  |  |
|--------|---|--|--|
| Step 1 | Type this in your Internet browser:   |  |  |
|        | bit.ly/g6m1science  |  |  |
| Step 2 | Scroll to the bottom  |  |  |
| Step 3 | Choose your reading level:         Diamond:       On Level         Triangle:       ▲ Advanced Level         Circle:       ● Below Level         Square:       ■ English Learner |  |  |
| Step 4 | Click on the word "Read"  |  |  |

| Book Title: "It's Alive!"             |   |  |  |  |  |
|---------------------------------------|---|--|--|--|--|
| F                                     | Read Chapter 3                                  |  |  |  |  |
| Answer these questions after reading: | What are the main ideas?                        |  |  |  |  |
|                                       | What is something interesting that you learned? |  |  |  |  |
|                                       | What is something you are wondering about?      |  |  |  |  |
| Optional:                             | What's Next on page 32                          |  |  |  |  |
|                                       | (only if materials are available at home)       |  |  |  |  |

## At Home Learning - Digital Resources

Note: some of these free resources require a login. If you see a login button for Google, your child should be able to use their Google login.

## ClassLink

Access GGUSD curriculum textbooks and resources Online. See attached instructions on how to log-in at home. portal.ggusd.us

## **Orange County Department of Education**

These webpages have been curated by the Orange County Department of Education to help families transition from a learning in a classroom setting to an online learning environment.

https://ocde.instructure.com/courses/224/pages/start-here

## **Learning Heroes**

Resources from trusted organizations to help your child succeed in school. https://bealearninghero.org/learning-tools/students/

## Khan Academy

Offers practice exercises and instructional videos in math, science, computer programming, history, art history, economics, and more that empower learners to study at their own pace.

https://www.khanacademy.org/

## Splash Learn

Personalized learning path for catching up, enrichment or practice of grade level standards. https://www.splashlearn.com/

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## Prodigy

Curriculum-aligned math content designed by trained, certified educators. <u>https://www.prodigygame.com/</u>

## **Design Squad Global**

Teaches kids about science and engineering through fun games and activities. https://pbskids.org/designsquad

## **PBS KIDS**

An educational site with games, videos, and quests featuring PBS television show characters that provide information on animals, math, habitats and other topics. <u>https://pbskids.org/</u>

# ClassLink Quick Guide

## 1. Sign In

Sign in by using your school login.



## 3. Update Password

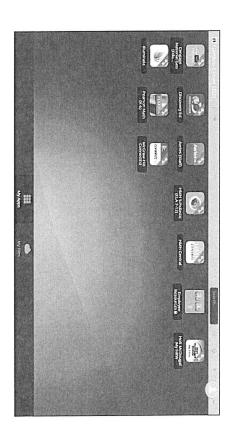
Right click an app and choose 'Update Password' to update or change your stored username and passwords for your applications. This is if you have entered your username or password incorrectly or if something has changed/updated.



## 2. My Apps

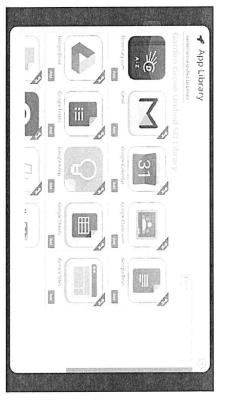
portal.ggusd.us

The My Apps screen is where all of your online resources will be located. Enter your username and password once (if prompted) and ClassLink will remember it for you!



## 4. App Library

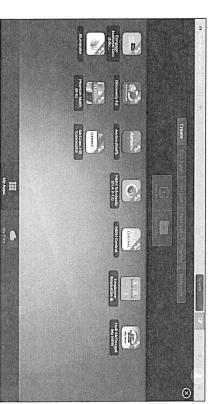
The library contains many educational resources to choose from. Click the Plus (+) on the top left of the My Apps screen. Click Add on any app to place it on your My Apps screen.



# ClassLink Quick Guide

## 5. Edit Mode

To go into Edit Mode, click the paper and pencil symbol on the top right of your screen. While in Edit Mode, you can create folders and customize your My Apps screen.



## 7. My Files

My Files > School Network allows you to access your school network drives from any device, any where, any time.



## 6. My Profile

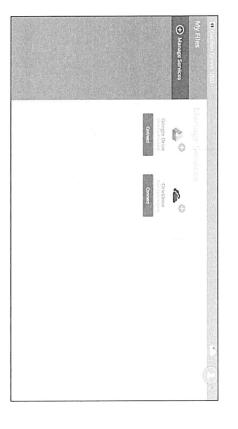
portal.ggusd.us

Here is where you change your profile picture, themes & colors and access your password locker.



## 8. Cloud Services

My Files > Manage Services > Connect allows you to connect other Cloud Drives in ClassLink to access all of your files in one location!



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|             | Garden Grove USD         |  |
|-------------|--------------------------|--|
|             | Username<br>Password     |  |
|             | Sign In                  |  |
| 🚱 ClassLink | Hegi Broader Check Housy |  |

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| App Li         |               |                       |                  | _            | 8 |
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| Dictionary.com | Grail         | 31<br>Google Calendar | Google Classroom | Google Docs  |   |
|                |               | °,                    |                  |              |   |
| Google Drive   | Google Forms  | Google Keep           | Google Sheets    | Google Sites |   |
|                |               |                       |                  |              |   |