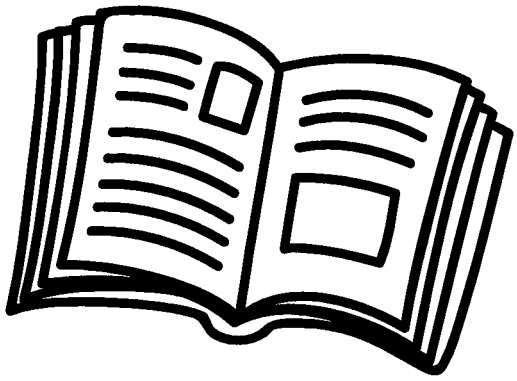
School #29

4th

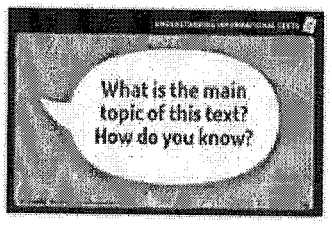
ELA + Math

Summer Learning Packet

Independent Reading!



See pages 49 and 50 of this packet.



Use the questions/ prompts on the Discourse Card resource to start a conversation about something the student has read. You may talk about a text the student read in one of the lessons above, or anything else the student is reading.

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

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

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

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

www.starfall.com

www.storyplace.org

www.uniteforliteracy.com

www.storynory.com

www.freekidsbooks.org

en.childrenslibrary.org

Word Learning Routine

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

1. **Say the Word or Phrase Aloud.**

   Circle the word or phrase that you find confusing. Read the sentence aloud.

2. **Look Inside the Word or Phrase.**

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

3. **Look Around the Word or Phrase.**

   Look for clues in the words or sentences around the word you don't know and the context of the paragraph or selection.

4. **Look Beyond the Word or Phrase.**

   Look for the meaning of the word or phrase in a dictionary, glossary, or thesaurus.

5. **Check the Meaning.**

   Ask yourself, "Does this meaning make sense in the sentence?"

Lesson 16

Using Context Clues

Introduction

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

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

Guided Practice

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

HINT Sometimes context clues can be found in a sentence before or after the word you're trying to figure out.

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

fascinated: _____

rejected: _____

persisted: _____

Independent Practice

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

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

1 What does the word command mean?

- **A** to study
- **B** to fly with others on
- **C** to be at the head of
- **D** to be part of

2 What words help you understand the meaning of command?

- **A** "in charge of"
- **B** "two men"
- **C** "space mission"
- **D** "chose Lovell"

3 What does the word explosion mean?

- **A** a leak
- **B** a bursting of something
- **C** a lack of oxygen
- **D** leaving outer space

4 What does the word capable suggest about Lovell as a leader?

- **A** He is a gentle and patient leader.
- **B** He is skillful at leading others.
- **C** He is harsh to those he leads.
- **D** He is weak when leading others.

Lesson 17

Greek and Latin Word Parts

Introduction

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

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

Root	Meaning	Root	Meaning
graph	"write"	*act*	"do"
vis, vid	"see"	*photo*	"light"
phon, phono	"sound, voice"	*port*	"carry"

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

Prefix	Meaning	Suffix	Meaning
auto-	"self"	*-ist, -er, -or*	"someone who"
tele-	"distance"	*-able, -ible*	"able or capable"

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

Guided Practice

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

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

1. My favorite actor is Jesse B.

   _____

2. I have five photographs of Jesse B. on my wall.

   _____

3. One even has an autograph on it.

   _____

4. I've asked my mom if I could telephone Jesse B.

   _____

5. She said I could just watch Jesse B. on television.

   _____

Independent Practice

For numbers 1–4, read each sentence. Then answer the question.

1 I decided to compose a letter to Jesse B.

The prefix *com-* means "with," and the root *poser* means "to put or set down." What is the meaning of compose as used in the sentence?

A to think

B to write

C to talk

D to mail

2 Dear Jesse B., I just read a biography about you.

The prefix *bio-* means "life," and the root *graph* means "write." What is the meaning of biography as used in the sentence?

A writing about the life of an actor

B writing about someone else's life

C writing about the beauty of life

D writing about how to live your life

3 Your life story inspires me and many other fans.

The prefix *in-* can mean "within," and the root *spir* means "breathe." What is the meaning of inspires as used in the sentence?

A causes people to become alive

B causes a heavy wind to blow

C causes people to faint

D causes strong lungs

4 I hear you are a very benevolent person, giving to many charities.

The prefix *bene-* means "well," and the root *velle* means "wish." What is the meaning of benevolent as used in the sentence?

A surrounded by good people

B showing good will to others

C liked by many good people

D hoping others are good

Genre: Science Article

Over Bridge, Under Tunnel

by Lloyd Frank

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

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

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

Close Reader Habits

How can context clues help you? **Circle** words that are unfamiliar. Reread the article. **Underline** clues that help you figure out the meaning of the words.

Think

Use what you learned from reading the science article to respond to the following questions.

Synonyms are context clues with meanings that are almost like the unfamiliar words. Antonyms are context clues with meanings that are opposite to the unfamiliar words.

1 What is the meaning of obstacles as it is used in paragraph 1 of the text?

- **A** things made below or above ground
- **B** things that slow or stop movement
- **C** things that help people travel
- **D** things built through mountains or over water

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

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

Talk

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

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

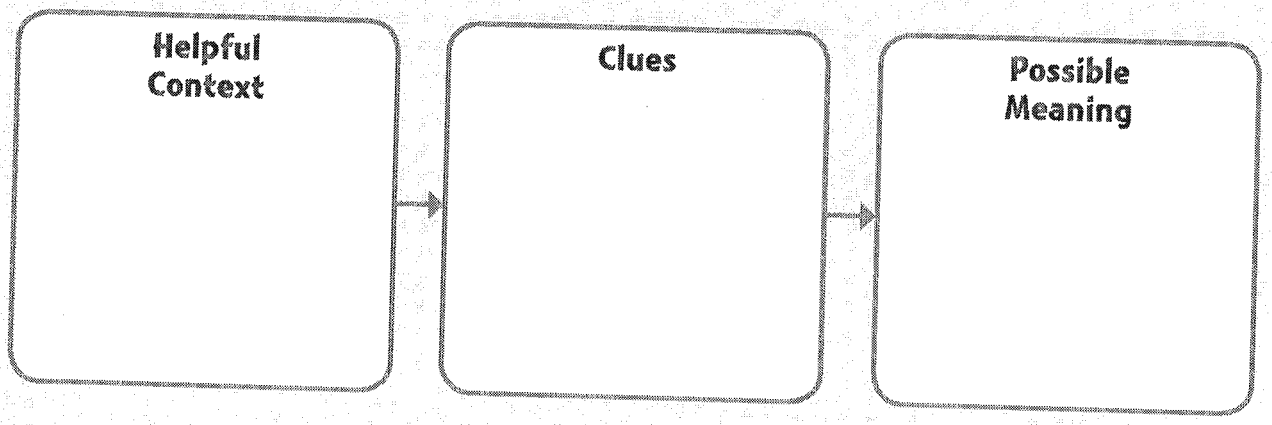
HINT Use a chart to organize your thoughts about context clues.

Write

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

Over Bridge, Under Tunnel

3 **Use the chart below to organize your ideas.**



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

4 **Short Response** Write a definition of the word subterranean. Identify the context clues you found. Describe the strategy you used to figure out the meaning of the word. Use details from the text to support your response.

WORDS TO KNOW
As you read, look inside, around, and beyond these words to figure out what they mean.

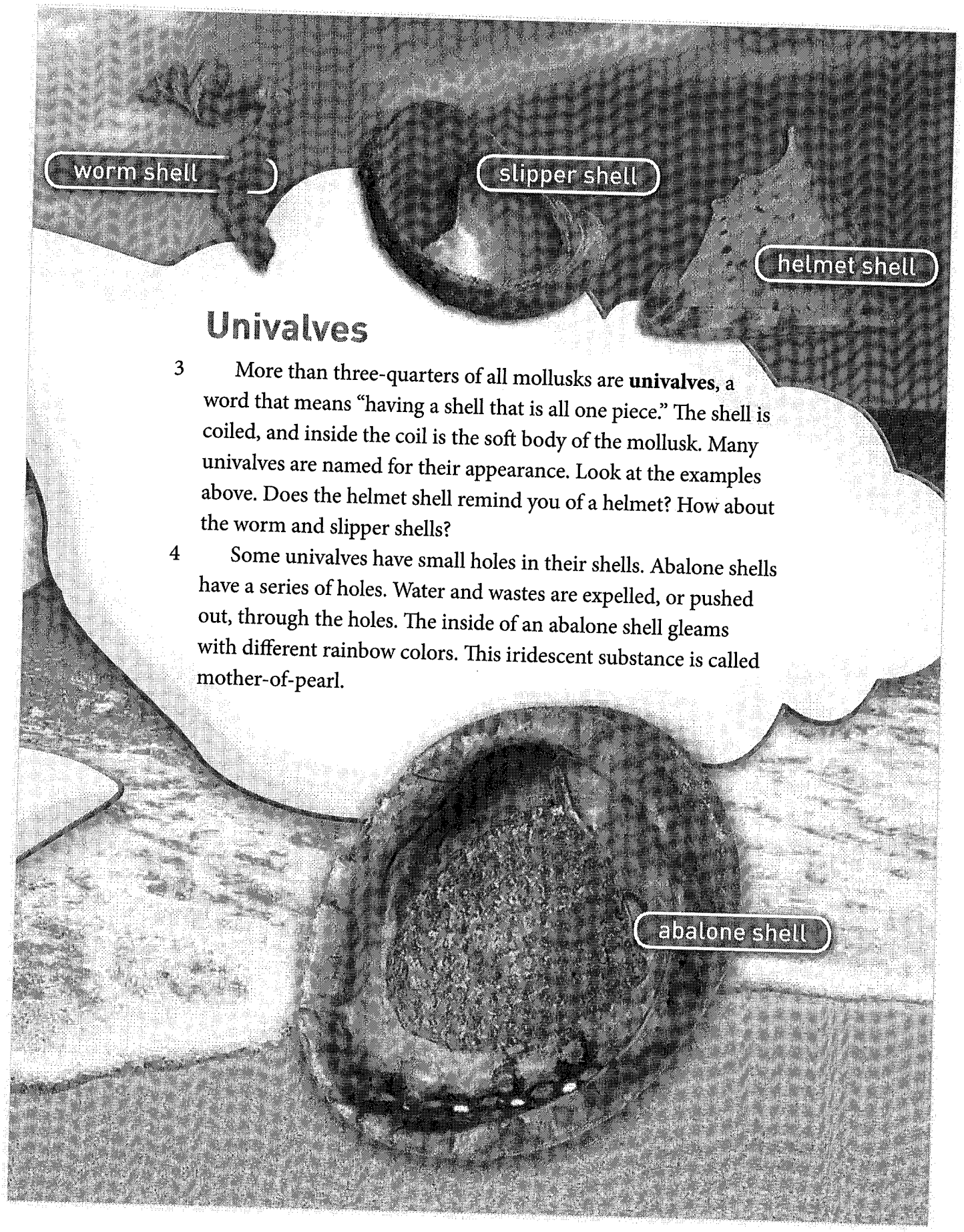
- **series**
- **hinged**
- **foreign**

Seashells

by Bela Moté

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

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



Univalves

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

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

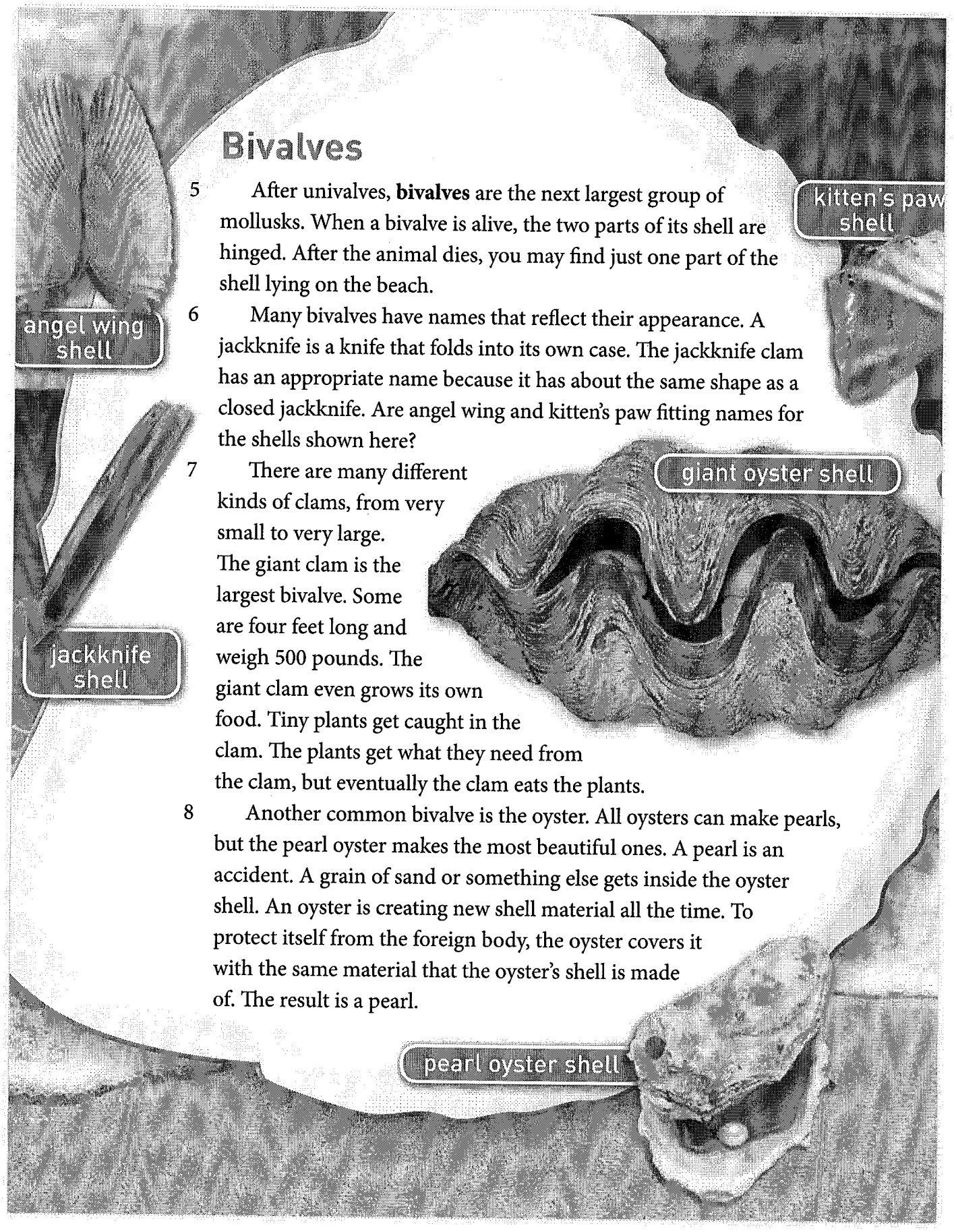
Bivalves

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

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

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

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



Think Use what you learned from reading the science text to respond to the following questions.

1 Read the sentence from paragraph 1 in the passage.

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

What does the author suggest to the reader by using the word predators? Pick **two** choices.

- **A** Predators can harm some animals.
- **B** Predators need to find shelter from storms.
- **C** An animal's shell helps protect it.
- **D** All predators have skeletons.
- **E** When the animal dies, the shell remains.

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

Part A

What is the meaning of the word iridescent as it is used in paragraph 4?

- **A** not letting light through
- **B** easy to notice or understand
- **C** shining with many varying colors
- **D** a small amount of something

Part B

Which phrase from the passage helps the reader understand the meaning of iridescent?

- **A** "next largest group of mollusks"
- **B** "have small holes in their shells"
- **C** "the inside of an abalone shell"
- **D** "gleams with different rainbow colors"

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

Part A

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

A having a hard outer shell

B having a shell with two pieces

C having a soft outer shell

D having a shell that is all one piece

Part B

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

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

4 Read the sentence from the passage.

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

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

A Bivalves are the largest group of mollusks.

B Jackknife describes the shape of the clam.

C An angel wing is a good name for the clam.

D Jackknife is a good name for the clam.

E The clam looks like an open jackknife.

F A jackknife folds into its own case.

Write

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

A pearl is an <u>accident</u>.

Learning Target

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

Lesson 19

Similes and Metaphors

Introduction Authors sometimes help readers imagine what one thing is like by comparing it to something else. Comparisons can help readers picture what is being described by showing how two things are alike in some way.

- A **simile** makes a comparison using the word *like* or *as*. Look at these similes. The dog's paws are compared to dinner plates. His bark is compared to thunder.

Simile	What It Means
Alicia's dog, Ollie, has *paws* as big as *dinner plates.*	Ollie has very big paws.
His *bark* sounds like *thunder.*	Ollie has a loud bark.

- A **metaphor** makes a comparison without using the word *like* or *as*. In this metaphor, the dog's size is compared to a mountain.

Metaphor	What It Means
Ollie is a *mountain* of a dog.	Ollie is a very large dog.

Guided Practice

Find the simile or metaphor in each sentence. Underline the two things being compared. Then write the meaning of the simile or metaphor.

HINT After you find the two things being compared, ask yourself, *How are they the same?* Use your answer to figure out what each simile or metaphor means.

1. Ollie's mouth was a trap that held a giant stick.

_____

2. Ollie leapt toward Alicia like a clumsy ballerina.

_____

3. Ollie raced past Alicia like a strong wind.

_____

4. Suddenly, Ollie was a freight train racing into the house.

_____

Independent Practice

For numbers 1–5, read each sentence. Then choose the correct meaning of the underlined simile or metaphor.

1 The stick in Ollie's mouth was a sword, knocking over one object after another.

A The stick was heavy.

B The stick was dangerous.

C Ollie was dangerous.

D The stick was made of metal.

2 The plates on the table became flying saucers that Alicia had to dodge.

A Flying saucers came from outer space.

B Alicia had to play dodge ball.

C Alicia had to fly across the kitchen.

D Plates flew through the air.

3 Salad covered the floor like a large blanket.

A The salad was warm.

B The salad tasted awful.

C There was a large blanket on the floor.

D A layer of salad covered the floor.

4 The floor was as sticky as glue.

A Glue covered the floor.

B The floor was a glue stick.

C The floor was very sticky.

D Glue made the floor sticky.

5 Alicia was a whirlwind as she cleaned up the mess.

A Alicia spun wildly.

B Alicia worked quickly.

C Alicia was getting tired.

D Alicia was breathing hard.

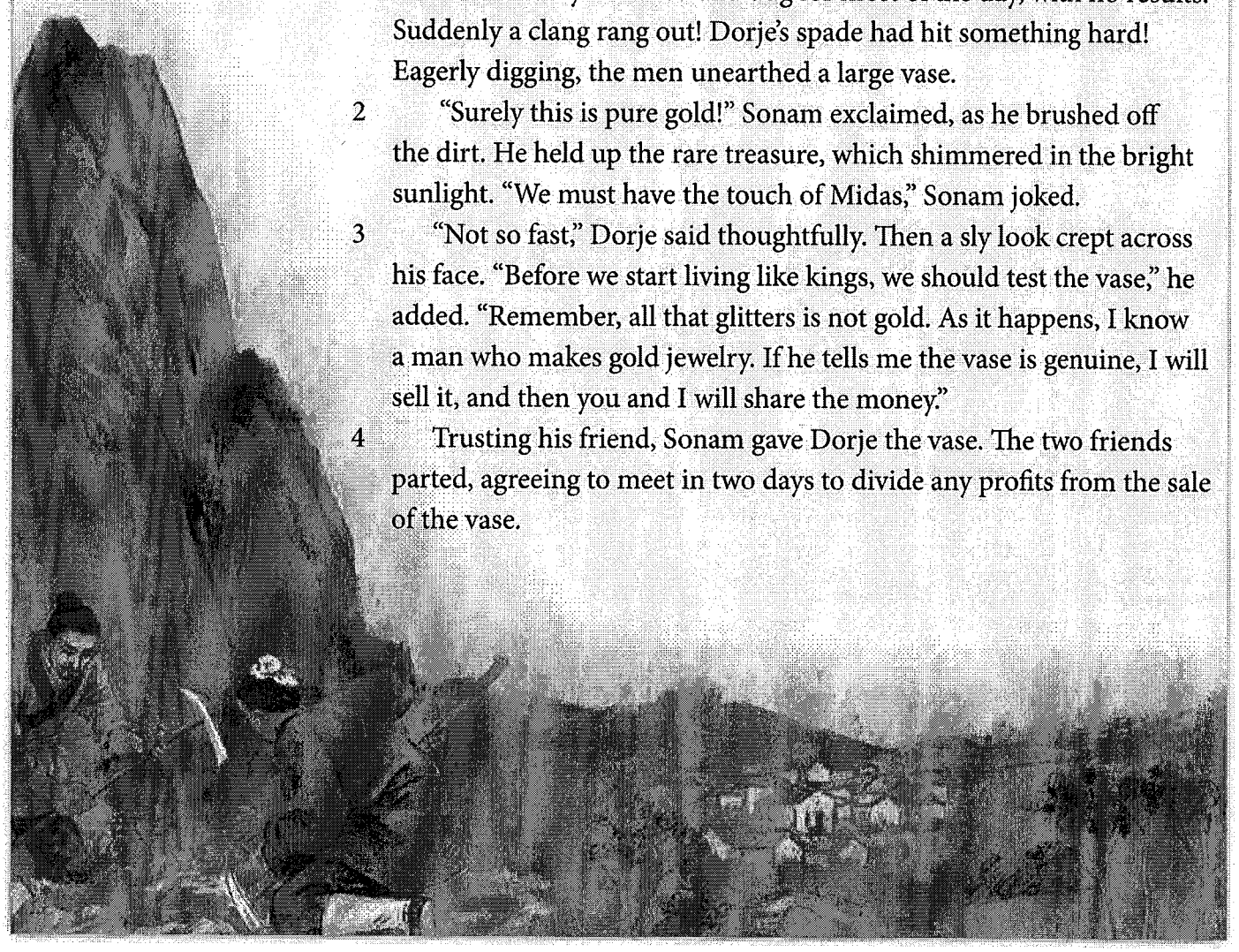
Genre: Folktale

WORDS TO KNOW
As you read, look inside, around, and beyond these words to figure out what they mean.

- **genuine**
- **recent**
- **pardon**

A Golden Vase and Two Bright Monkeys

adapted from a Tibetan folktale



1 Long ago in Tibet, two friends named Dorje and Sonam hiked through the mountains looking to find a rare plant root used in medicines. They searched and dug for most of the day, with no results. Suddenly a clang rang out! Dorje's spade had hit something hard! Eagerly digging, the men unearthed a large vase.

2 "Surely this is pure gold!" Sonam exclaimed, as he brushed off the dirt. He held up the rare treasure, which shimmered in the bright sunlight. "We must have the touch of Midas," Sonam joked.

3 "Not so fast," Dorje said thoughtfully. Then a sly look crept across his face. "Before we start living like kings, we should test the vase," he added. "Remember, all that glitters is not gold. As it happens, I know a man who makes gold jewelry. If he tells me the vase is genuine, I will sell it, and then you and I will share the money."

4 Trusting his friend, Sonam gave Dorje the vase. The two friends parted, agreeing to meet in two days to divide any profits from the sale of the vase.

5 The goldsmith informed Dorje that the vase was indeed gold. But two days later, when the friends again met, Dorje greeted Sonam with sorrow in his eyes and a mournful face.

6 "What is wrong, Dorje?" asked Sonam.

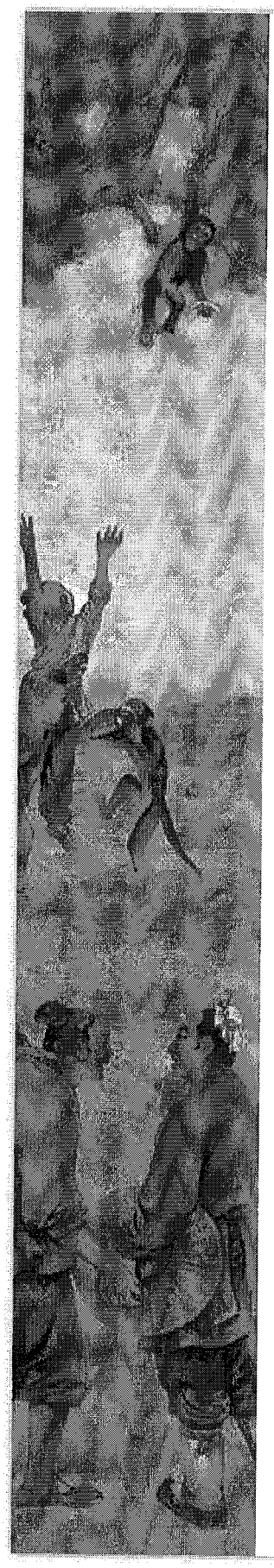
7 "Alas!" sighed Dorje dramatically. "Our hopes have been bitterly crushed. By accident I set the vase too close to the fire, and it melted into a worthless lump of pewter. It was only cheap metal after all."

8 Sonam was not taken in by Dorje's tale, but he hid his suspicions. He just sighed and then softly replied, "Never mind. Since the vase was worth nothing, nothing has been lost."

9 Relieved that Sonam had taken the bad news so well, Dorje invited him to stay overnight with his family.

10 The next morning Sonam said, "Friend Dorje, I want to thank you for your efforts with the vase and repay you as you deserve. May I invite your two dear children to visit my home in the country? They can play with my pet rabbits, swim in my lake, and breathe fresh air. Let them come home with me for a nice vacation!"

11 As soon as the children heard of the plan, they pestered and pestered until their parents agreed.



12 Soon Sonam set off for home with the children for company. Eventually they came to a place called Monkey Hill, the home of many wild monkeys. Sonam captured two young creatures and put them in a small cage. "We will take these little fellows home as pets. You can play with them if you treat them kindly," he explained. "I will name a monkey after each of you, we'll teach them tricks, and they will be your twins!"

13 Quick learners, the young monkeys soon imitated the way the children tilted their heads or moved in a certain way. Sonam and the children spent many hours together, laughing at the way the monkeys mimicked whatever the children did.

14 Then came the last day of vacation. Sonam gave each child a basket and shooed them outside. "Walk up the mountain to gather berries and fruits," he said. "We will surprise your father with a tasty treat before you return home."

15 Then Sonam waited. Hearing Dorje approach, he sat down with the monkeys. Holding each one gently, he put on a tragic face.

16 "What is wrong, my friend?" asked Dorje.

17 "Alas!" sighed Sonam. "These are now your lovely children. You see, I took them to Monkey Hill. But I accidentally allowed them too near the beasts. Your children were transformed into these monkeys, right before my eyes!"

18 Sonam called the monkeys by name, and they began their tricks. They imitated the way Dorje's children jumped, walked, and even smiled, just as they had been taught. At first, Dorje was speechless. "H-h-how can this be?" he sputtered. "Is such a thing even possible?"

19 "It was a freak accident," Sonam replied. "After all, strange things do happen from time to time. Why, I know of a recent case in which a gold vase was turned into cheap metal." Then a twinkle crept into his eyes.

20 "Oh!" was all Dorje could say at first. Then a look of shame and relief spread over his face. "Now I understand, my friend," he said. "Keeping the money for the vase was dishonest. I will gladly hand over what I owe you, if you will pardon my foolish greed."

21 Just then, Dorje's children ran in and hugged their father. All was gradually forgiven, and Sonam and Dorje remained friends for life.

22 Dorje would often retell the tale of the bright monkeys. And he would always end by saying, "I learned a valuable lesson that day. As you know, a true friend is a treasure greater than gold."

Think Use what you learned from reading the folktale to respond to the following questions.

1. In Greek mythology, King Midas was granted the power to turn any object into gold simply by touching it. Why did the author use the phrase "the touch of Midas" in paragraph 2?

   A to show that Dorje and Sonam have Midas-like powers because they turned the vase they found into gold

   B to compare Dorje and Sonam's good fortune in finding the vase to Midas's ability to make gold

   C to show that Sonam is well educated, while Dorje is unfamiliar with the story of King Midas

   D to compare Dorje and Sonam's rare golden treasure to similar treasures owned by rich kings like Midas

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

   Part A

   What is the **best** meaning of the word pewter in paragraph 7?

   A a metal that shines like gold

   B a metal that is soft and melts easily

   C a metal that is not costly

   D a metal that is not useful

   Part B

   Underline **two** story details that support the answer to Part A.

   "Alas!" sighed Dorje dramatically. "Our hopes have been bitterly crushed. By accident I set the vase too close to the fire, and it melted into a worthless lump of pewter. It was only cheap metal after all."

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

Part A

What is the meaning of the word mimicked as it is used in paragraph 13 of "A Golden Vase and Two Bright Monkeys"?

A tried

B watched

C found

D copied

Part B

Circle **one** word in the paragraph below that helps the reader understand the meaning of mimicked.

Quick learners, the young monkeys soon imitated the way the children tilted their heads or moved in a certain way. Sonam and the children spent many hours together, laughing . . . .

4 In the paragraphs 17 and 18 shown below from the story, one word has the following definition: "to change completely in appearance or structure." Underline the word that **best** fits the definition.

"Alas!" sighed Sonam. "These are now your lovely children. You see, I took them to Monkey Hill. But I accidentally allowed them too near the beasts. Your children were transformed into these monkeys, right before my eyes!"

Sonam called the monkeys by name, and they began their tricks. They imitated the way Dorje's children jumped, walked, and even smiled, just as they had been taught.

Write

5 **Short Response** Paragraph 19 of the passage uses the phrase "freak accident." Explain what the phrase means as it is used in the passage. Support your possible meaning with context clues and details from the text.

Learning Target

In this lesson, you learned how to use context clues to figure out the meanings of unknown words and phrases. Explain how this will help you better understand a story or poem.

Understanding of Place Value

Name: _____

Set A

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

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

Write 78,215 in expanded form and word form.

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

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

Write 540,632 in expanded form and word form.

Set B

3 Show different ways to make 25,302.

_____ thousands + _____ hundreds + _____ ones

_____ hundreds + _____ ones

_____ ones

4 Show different ways to make 708,496.

_____ hundred thousands + _____ thousands + _____ hundreds + _____ tens + _____ ones

_____ thousands + _____ hundreds + _____ tens + _____ ones

_____ hundreds + _____ tens + _____ ones

Name: _____

Set B *continued*

5 Show different ways to make 492,623.

_____ ten thousands + _____ thousands + _____ hundreds + _____ tens + _____ ones

_____ thousands + _____ tens + _____ ones

_____ hundreds + _____ ones

6 Write 841,620 in three different ways.

7 Why do both of these show 27,974?

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

27 thousands + 97 tens + 4 ones

Comparing Multi-Digit Numbers

Name: _____

Set A

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

1. 23,230 _____ 2,323
2. 33,003 _____ 33,030
3. 9,999 _____ 10,000
4. 40,404 _____ 40,040
5. 52,177 _____ 52,771
6. 421,073 _____ 412,730

Set B

7. Circle all the numbers that are less than 78,265.

78,000 79,000 70,000 80,000 78,200 78,300

8. Circle all the numbers that are less than 45,763.

46,000 40,000 50,000 45,700 45,800 45,000

9. Circle all the numbers that are greater than 108,427.

108,000 108,400 108,500 109,000 108,430 108,420

10. How did you solve problem 7?

Rounding Whole Numbers

Name: _____

Round each number to the nearest ten.

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

Round each number to the nearest hundred.

5. 180 _____
6. 1,180 _____
7. 56,180 _____
8. 980 _____
9. 1,980 _____
10. 56,980 _____

Round each number to the nearest thousand.

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

Round each number to the nearest ten thousand.

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

19. Round 307,451 to each place value given below.

to the nearest thousand: _____

to the nearest hundred: _____

to the nearest ten: _____

Using Strategies to Add

Name: _____

Add using different strategies.

1 4,000
+ 6,215

2 4,010
+ 6,215

3 4,121
+ 6,215

4 3,000
+ 6,871

5 2,999
+ 6,871

6 2,990
+ 6,871

7 5,020
+ 1,491

8 4,990
+ 1,491

9 4,950
+ 1,491

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

11 Check your answer to problem 6 by solving it with a different strategy. Show your work.

Using the Standard Algorithm to Add Greater Numbers

Name: _____

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

Addition Problems	Student Answers
8,997 + 2,301	~~31,998~~ 11,298 Estimate: 9,000 + 2,000 11,000
23,411 + 35,507	*12,918*
72,418 + 41,291	*113,709*
67,802 + 3,443	*10,225*
5,188 + 9,024	*6,112*

Using the Standard Algorithm to Add Greater Numbers *continued*

Name: _____

Addition Problems	Student Answers
21,822 + 75,333	*97,155*
60,125 + 69,205	*75,330*
4,899 5,224 + 9,296	*108,209*

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

2 Can an answer be incorrect even if it looks reasonable? Explain.

Using Strategies to Subtract

Name: _____

Subtract.

1 4,003 − 3	**2** 2,000 − 1,999	**3** 3,007 − 7
4,003 − 13	2,000 − 1,990	3,007 − 27
4,003 − 103	2,000 − 1,985	3,007 − 307
4,003 − 1,103	2,000 − 1,500	3,007 − 1,307
4,003 − 2,103	2,000 − 1,490	3,007 − 2,307

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

5 How could you check your answer to one of the problems using another strategy?

Using the Standard Algorithm to Subtract Greater Numbers

Name: _____

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

1 95,217 − 39,871	2 62,554 − 31,618	3 92,023 − 71,578
4 84,724 − 43,951	5 56,417 − 24,009	6 71,677 − 13,197
7 99,902 − 33,227	8 87,591 − 46,280	9 90,434 − 51,533
10 78,282 − 40,983	11 71,731 − 61,320	12 50,118 − 18,306
13 86,496 − 54,101	14 59,176 − 17,222	15 89,971 − 11,499

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

17 How does checking with addition compare with checking using estimation?

Multiplication in Word Problems

Name: _____

Use a strategy of your choice to solve each problem.

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

   There are _____ fiction books on the shelf.

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

   Carrie runs _____ laps.

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

   Violet has _____ colored pencils.

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

   Owen draws _____ comics in May.

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

   Tasha used _____ tomatoes to make sauce.

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

   There are _____ apple trees.

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

   There are _____ cars in the parking lot.

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

   There are _____ paintings at the art show.

9. Write and solve a word problem for this equation: $5 \times 6 = ?$

Modeling Multi-Step Problems

Name: _____

Write an equation to represent each problem. Show your work.

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

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

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

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

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

6. Is there another way you could write one of your equations? Could you write it as two equations? Explain.

Solving Multi-Step Problems

Name: _____

Write and solve an equation for each problem. Show your work.

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

Tasha spent _____ minutes reading.

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

There are _____ pounds left.

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

Mrs. Miller will need _____ tables.

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

Frankie will need to babysit _____ more times.

5 How can you estimate to check one of your answers? Show your work.

Multiplying a Three-Digit Number by a One-Digit Number

Name: _____

Find the product.

1 $500 \times 4 =$ _____ $501 \times 4 =$ _____ $506 \times 4 =$ _____

2 $300 \times 2 =$ _____ $299 \times 2 =$ _____ $298 \times 2 =$ _____

3 $400 \times 3 =$ _____ $405 \times 3 =$ _____ $410 \times 3 =$ _____

4 $499 \times 6 =$ _____ 5 $706 \times 3 =$ _____ 6 $195 \times 5 =$ _____

7 What pattern do you notice in problem 2? How could it help you solve a problem such as 297×2?

8 Choose problem 4, 5, or 6. Explain how you could check your answer.

Multiplying a Four-Digit Number by a One-Digit Number

Name: _____

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

1. $8{,}491 \times 2 =$ _____
2. $6{,}148 \times 4 =$ _____
3. $7{,}062 \times 5 =$ _____
4. $4{,}362 \times 5 =$ _____
5. $1{,}789 \times 8 =$ _____
6. $2{,}206 \times 9 =$ _____
7. $7{,}218 \times 4 =$ _____
8. $9{,}821 \times 3 =$ _____
9. $4{,}762 \times 6 =$ _____
10. $6{,}739 \times 6 =$ _____
11. $7{,}964 \times 4 =$ _____
12. $3{,}618 \times 7 =$ _____

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

Multiplying by Two-Digit Numbers

Name: _____

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

Multiplication Problems	Student Answers
14×17	~~2,380~~ 238 Estimate: 14 × 20 = 280
15×19	*285*
21×18	*3,078*
16×13	*28*

 Name: _____

Multiplication Problems	Student Answers
13×31	*403*
18×17	*3,056*
21×15	*3,015*
12×22	*2,604*

1 How does estimating a multiplication problem help you know if an answer is reasonable?

Division in Word Problems

Name: _____

Use a strategy of your choice to solve each problem.

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

   There are _____ rose bushes in the garden.

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

   Kelly has _____ dimes.

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

   There are _____ strawberries in the bowl.

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

   Julio swims _____ minutes.

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

   There are _____ gray tiles in the pattern.

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

   Leah has _____ pop songs.

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

   Erik sees _____ stars on Monday night.

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

   It takes Lucas _____ minutes to wash the dishes.

9. Write and solve a word problem for this equation: $6 \times n = 54$

Dividing with Arrays and Area Models

Name: _____

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

1. $606 \div 2 =$ _____
2. $606 \div 3 =$ _____
3. $903 \div 3 =$ _____
4. $408 \div 8 =$ _____
5. $243 \div 3 =$ _____
6. $721 \div 7 =$ _____
7. $545 \div 5 =$ _____
8. $488 \div 8 =$ _____
9. $816 \div 4 =$ _____
10. $728 \div 8 =$ _____
11. $459 \div 9 =$ _____
12. $366 \div 6 =$ _____

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

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

Answers

91	303	61	202	204	109
81	51	301	103	51	61

Dividing with Estimation and Area Models

Name: _____

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

Division Problems	Student Answers	
637 ÷ 4	~~149 R 1~~ 159 R 1	Check: $149 \times 4 = 596$ $596 + 1 = 597$
139 ÷ 2	*69 R 1*	
188 ÷ 5	*38 R 2*	
344 ÷ 6	*57 R 3*	
458 ÷ 9	*58 R 8*	
222 ÷ 7	*31 R 5*	
692 ÷ 8	*85 R 4*	
479 ÷ 3	*169 R 2*	

Dividing with Estimation and Area Models *continued*

Name: _____

1 Write a word problem that could be solved by one of the problems.

2 Can an answer be incorrect even if it looks reasonable? Explain.

Dividing Four-Digit Numbers

Name: _____

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

1. 2,508 ÷ 4 = _____
2. 7,058 ÷ 9 = _____
3. 2,726 ÷ 9 = _____
4. 7,429 ÷ 5 = _____
5. 3,506 ÷ 9 = _____
6. 8,318 ÷ 8 = _____
7. 7,645 ÷ 2 = _____
8. 4,113 ÷ 4 = _____
9. 3,196 ÷ 5 = _____
10. 5,018 ÷ 7 = _____
11. 8,127 ÷ 6 = _____
12. 6,155 ÷ 3 = _____

13. What strategies did you use to estimate the quotients? Explain.

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

Understanding of Equivalent Fractions

Name: _____

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

1 $\frac{2}{4} \times \frac{\square}{\square} = \frac{8}{16}$

2 $\frac{2}{3} \times \frac{\square}{\square} = \frac{12}{18}$

3 $\frac{5}{6} \times \frac{\square}{\square} = \frac{25}{30}$

4 $\frac{2}{3} \times \frac{\square}{3} = \frac{6}{\square}$

5 $\frac{3}{8} \times \frac{5}{\square} = \frac{15}{\square}$

6 $\frac{5}{6} \times \frac{\square}{\square} = \frac{\square}{12}$

7 $\frac{5}{\square} \times \frac{\square}{\square} = \frac{15}{24}$

8 $\frac{2}{\square} \times \frac{4}{\square} = \frac{\square}{12}$

9 $\frac{\square}{8} \times \frac{2}{\square} = \frac{\square}{16}$

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

Using Common Numerators and Denominators

Name: _____

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

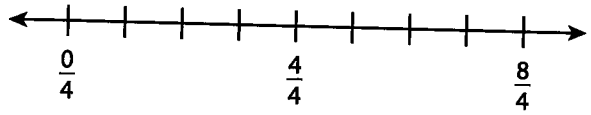
1. $\frac{3}{4}$ ◯ $\frac{3}{8}$
2. $\frac{2}{3}$ ◯ $\frac{4}{5}$
3. $\frac{1}{5}$ ◯ $\frac{2}{10}$
4. $\frac{2}{10}$ ◯ $\frac{23}{100}$
5. $\frac{7}{8}$ ◯ $\frac{3}{4}$
6. $\frac{7}{12}$ ◯ $\frac{5}{6}$
7. $\frac{10}{12}$ ◯ $\frac{5}{6}$
8. $\frac{53}{100}$ ◯ $\frac{1}{2}$
9. $\frac{2}{8}$ ◯ $\frac{9}{12}$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

16. Show a model you can use to check your answer to problem 12.

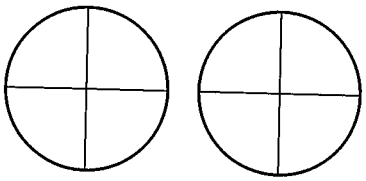
Understanding of Fraction Addition and Subtraction

Name: _____

1 Label the number line and use it to show $\frac{3}{4} + \frac{3}{4}$.

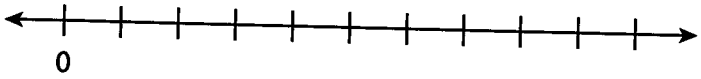


Shade the area model to show $\frac{3}{4} + \frac{3}{4}$.

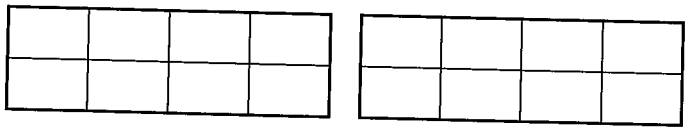


Write the sum. $\frac{3}{4} + \frac{3}{4} =$

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



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



Write the difference. $\frac{10}{8} - \frac{4}{8} =$

Name: _____

3 What type of model do you like best for showing fraction addition and subtraction? Explain why.

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

Adding Fractions

Name: _____

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

1. $\frac{1}{6} + \frac{4}{6} = \frac{\square}{6}$

2. $\frac{1}{8} + \frac{4}{8} = \frac{\square}{\square}$

3. $\frac{1}{10} + \frac{4}{10} = \frac{\square}{\square}$

4. $\frac{4}{12} + \frac{\square}{\square} = \frac{7}{12}$

5. $\frac{4}{6} + \frac{\square}{\square} = \frac{7}{6}$

6. $\frac{4}{3} + \frac{\square}{\square} = \frac{7}{3}$

7. $\frac{\square}{\square} + \frac{2}{4} = \frac{5}{4}$

8. $\frac{\square}{\square} + \frac{2}{10} = \frac{5}{10}$

9. $\frac{\square}{\square} + \frac{2}{8} = \frac{5}{8}$

10. $\frac{\square}{6} + \frac{2}{6} = \frac{\square}{6}$

11. $\frac{\square}{5} + \frac{1}{5} = \frac{\square}{5}$

12. $\frac{4}{10} + \frac{\square}{10} = \frac{\square}{10}$

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

$$\frac{\square}{12} + \frac{5}{\square} = \frac{\square}{12}$$

Subtracting Fractions

Name: _____

Solve each problem.

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

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

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

4 Alex and Brady are helping to pack books into a box. Together they pack $\frac{7}{12}$ of the books. Alex packs $\frac{4}{12}$ of the books. What fraction of the books does Brady pack?

Name: _____

5 On Monday, Adam walks $\frac{3}{10}$ of a mile to the store and then $\frac{4}{10}$ of a mile to the park. How far does he walk in all?

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

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

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

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

Decomposing Fractions

Name: _____

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

1 $\frac{3}{4} = \frac{1}{4} + \frac{1}{4} + \_\_\_\_\_$

$\frac{3}{4} = \frac{2}{4} + \_\_\_\_\_$

$\frac{3}{4} = \frac{1}{4} + \_\_\_\_\_$

2 $\frac{7}{8} = \frac{6}{8} + \_\_\_\_\_$

$\frac{7}{8} = \frac{5}{8} + \_\_\_\_\_$

$\frac{7}{8} = \frac{4}{8} + \_\_\_\_\_$

3 $\frac{6}{5} = \_\_\_\_\_ + \frac{3}{5}$

$\frac{6}{5} = \frac{2}{5} + \_\_\_\_\_ + \_\_\_\_\_$

$\frac{6}{5} = \frac{2}{5} + \frac{2}{5} + \_\_\_\_\_ + \_\_\_\_\_$

4 $\frac{5}{6} = \_\_\_\_\_ + \frac{3}{6}$

$\frac{5}{6} = \frac{1}{6} + \_\_\_\_\_ + \_\_\_\_\_$

$\frac{5}{6} = \frac{1}{6} + \frac{1}{6} + \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_$

5 $\frac{9}{12} = \_\_\_\_\_ + \frac{5}{12}$

$\frac{9}{12} = \frac{3}{12} + \frac{3}{12} + \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_$

$\frac{9}{12} = \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_$

6 $\frac{8}{10} = \_\_\_\_\_ + \frac{4}{10}$

$\frac{8}{10} = \frac{2}{10} + \frac{3}{10} + \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_$

$\frac{8}{10} = \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_$

7 Describe your strategy for finding the missing numbers.