Fourth Grade

(4)

English Language Arts

Math

Social Studies

Science

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 13
Unfamiliar Words

Learning Target

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

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

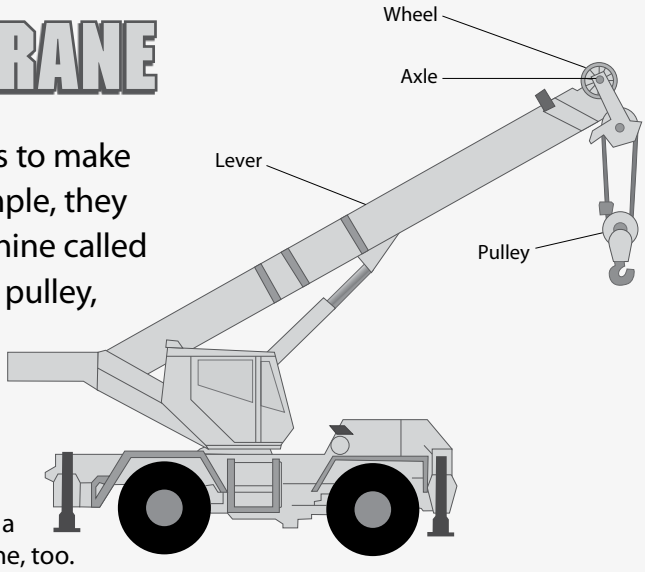
- Some words usually appear only in texts in one **subject area**. For example, you'll see the word *fossil* in science texts and the word *geography* in social studies texts.
- Other words, called **academic words**, are useful in many subject areas. For example, the academic word *process* often appears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

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

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

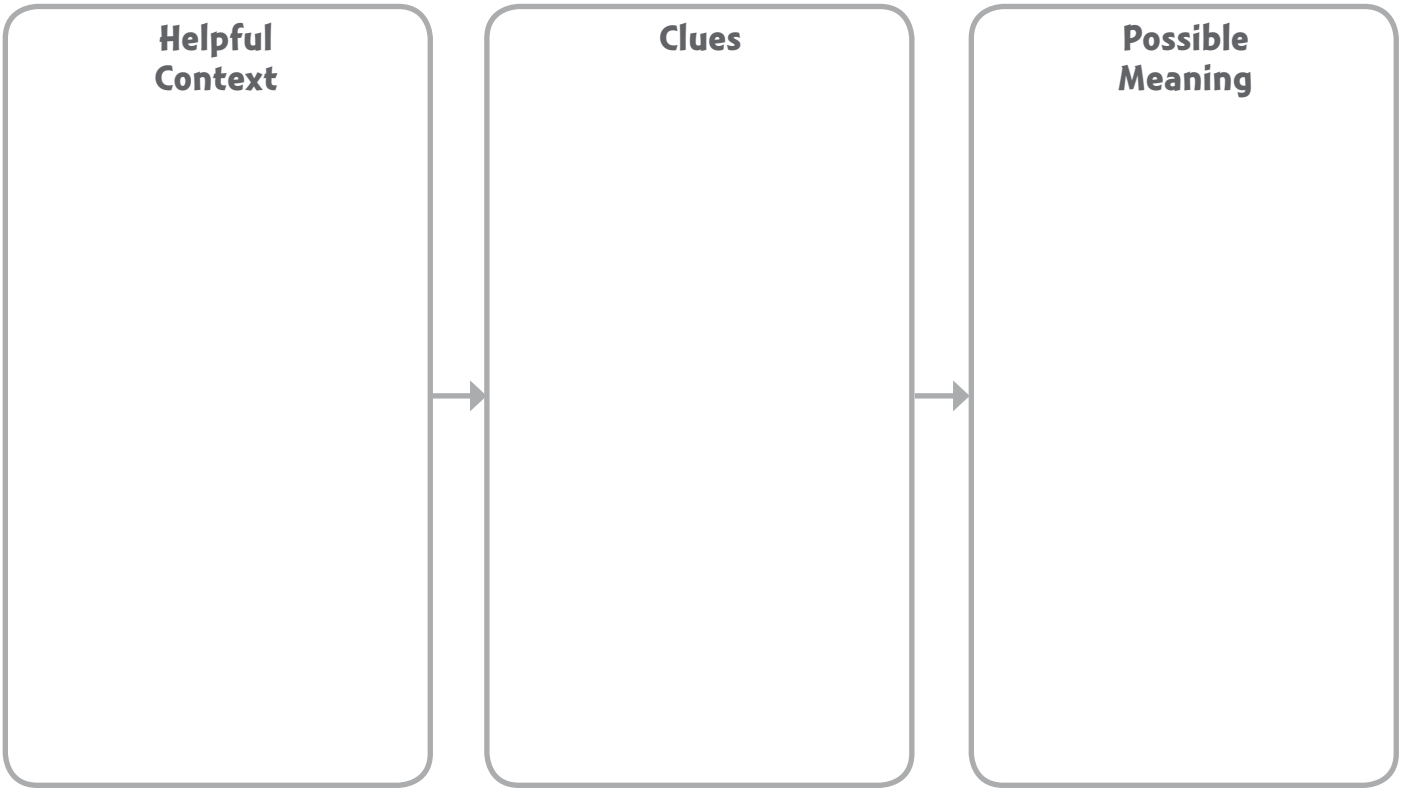
INVENTING THE CRANE

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



A modern crane is a compound machine, too.

Think What have you learned about figuring out the meaning of unfamiliar words? Complete the chart below to figure out the meaning of the phrase conceived of as it is used in the passage. Then explain what the phrase most likely means.



The meaning of the phrase: _____

_____

Talk Share your chart and meaning with a partner.

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

Academic Talk

Use these phases to talk about the text.

- **subject area**
- **academic words**
- **context clues**

Fire and Air

by Johanna Joyner

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

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

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

An Experiment with Fire

4 Materials You Will Need

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

5 Procedure to Follow

Put each candle on a saucer, and have your teacher light each one. Place a jar over two of the candles. Pay attention to the candles to monitor what happens over time. You will observe that the candle with the least air available—the one covered by the smaller jar—is the first one extinguished. Keep watching to see which candle goes out next. Blow out the last candle.

Close Reader Habits

As you read, **circle** unfamiliar words or phrases. Then **underline** words or phrases that give you clues about their meanings.

Explore **How did context clues help you figure out the meaning of unfamiliar words in the science text?**

A chart will help you identify the parts of the text that provide context clues.

Think

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

***Combust* means:**

Helpful Context	Clues	Possible Meaning
1. "Starting a fire is a bit like following a recipe. . ."		

***Monitor* means:**

Helpful Context	Clues	Possible Meaning
1. "Pay attention to the candles. . ." 2. ". . . happens over time."	1. attention	

Talk

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

Write

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

HINT Replace an unfamiliar word with its possible meaning to see if it makes sense.

Lesson 17

Greek and Latin Word Parts

Introduction

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

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

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.**

Helpful Context	Clues	Possible Meaning

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.

Genre: Science Text

WORDS TO KNOW

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

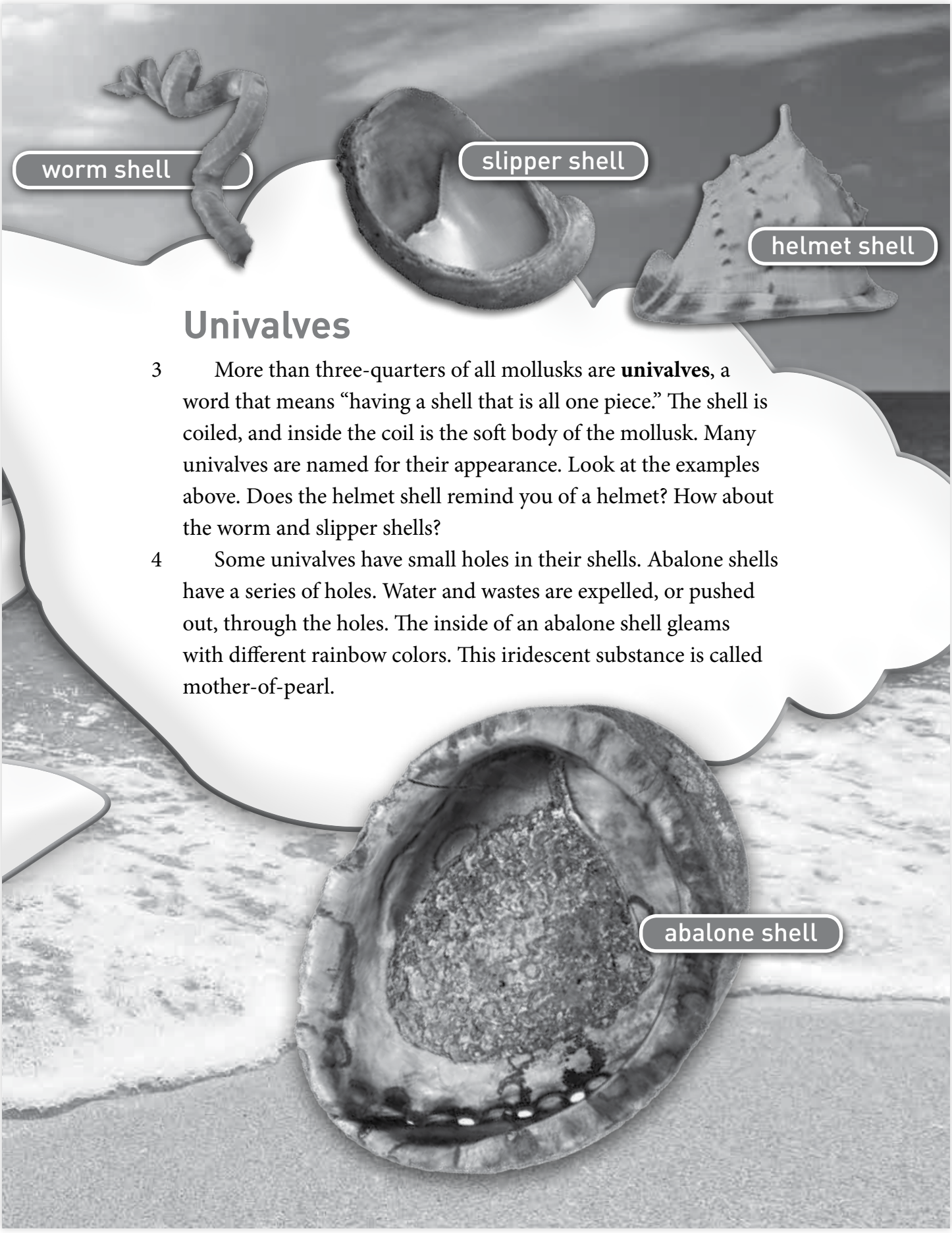
- **series**
- **hinged**
- **foreign**

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.

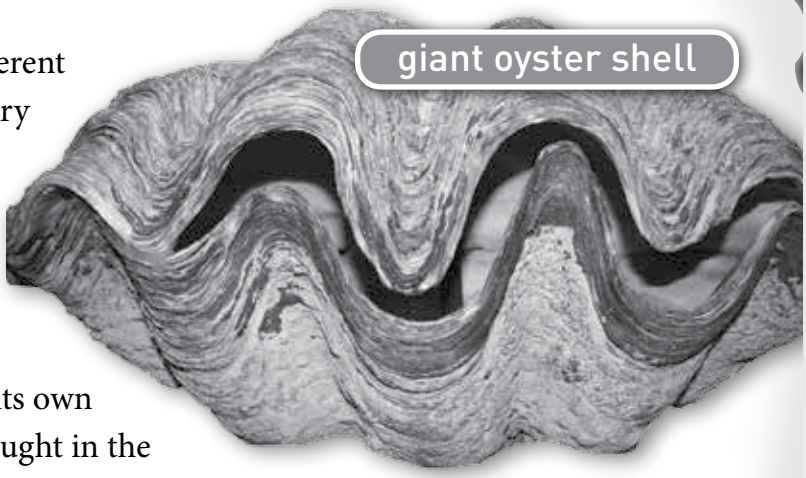
6 Many bivalves have names that reflect their appearance. A jackknife is a knife that folds into its own case. The jackknife clam has an appropriate name because it has about the same shape as a closed jackknife. Are angel wing and kitten's paw fitting names for the shells shown here?

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.


angel wing shell


kitten's paw shell


giant oyster shell


jackknife shell


pearl oyster shell

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.

Use Context to Find Word Meaning

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

Three Ways to Teach

Identify Sentence-Based Context Clues 20–30 minutes

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

- Display the following chart. Name the first type of clue, and read aloud the example sentence. Help students figure out a meaning for the italicized word and identify the (highlighted) context clues in the sentence, which give a definition for the word. Then guide students to tell how they can recognize definition clues in other sentences. Record a simple explanation in the "What It Does" column.
- Repeat the process to introduce the remaining types of clues. Each time, note signal words that emphasize the clue, including *is, or, and other,* and *but*.

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

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

Identify Paragraph or Text-Based Context Clues 10–15 minutes

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

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

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

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

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

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

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

Check for Understanding

If you observe...	Then try...
difficulty using context to define an unfamiliar word	confirming that students have sufficient background knowledge to understand the context. Ask students to briefly summarize the paragraph in their own words. Correct any misunderstandings, and proceed to model using the context to define the unfamiliar word.
errors in determining word meanings based on context	substituting students' definitions for the unfamiliar word, and verifying whether the inserted meaning makes sense.

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

$$\begin{array}{r} 4{,}003 \\ -\quad 3 \\ \hline \end{array}$$

$$\begin{array}{r} 4{,}003 \\ -\quad 13 \\ \hline \end{array}$$

$$\begin{array}{r} 4{,}003 \\ -\quad 103 \\ \hline \end{array}$$

$$\begin{array}{r} 4{,}003 \\ -\ 1{,}103 \\ \hline \end{array}$$

$$\begin{array}{r} 4{,}003 \\ -\ 2{,}103 \\ \hline \end{array}$$

2

$$\begin{array}{r} 2{,}000 \\ -\ 1{,}999 \\ \hline \end{array}$$

$$\begin{array}{r} 2{,}000 \\ -\ 1{,}990 \\ \hline \end{array}$$

$$\begin{array}{r} 2{,}000 \\ -\ 1{,}985 \\ \hline \end{array}$$

$$\begin{array}{r} 2{,}000 \\ -\ 1{,}500 \\ \hline \end{array}$$

$$\begin{array}{r} 2{,}000 \\ -\ 1{,}490 \\ \hline \end{array}$$

3

$$\begin{array}{r} 3{,}007 \\ -\quad 7 \\ \hline \end{array}$$

$$\begin{array}{r} 3{,}007 \\ -\quad 27 \\ \hline \end{array}$$

$$\begin{array}{r} 3{,}007 \\ -\quad 307 \\ \hline \end{array}$$

$$\begin{array}{r} 3{,}007 \\ -\ 1{,}307 \\ \hline \end{array}$$

$$\begin{array}{r} 3{,}007 \\ -\ 2{,}307 \\ \hline \end{array}$$

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

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

Using the Standard Algorithm to Subtract Greater Numbers

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.

Science: Fourth Grade

Please complete at least one investigation using the provided worksheets.

Name _____

Date _____

HOME/SCHOOL CONNECTION

INVESTIGATION 1: TERRESTRIAL ENVIRONMENTS

THE LIVING AND NONLIVING ENVIRONMENT

Make a list of the living and nonliving environmental factors found in and around your home.

LIVING	NONLIVING
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Discuss the list with a family member. Does he or she agree? Select one item you disagree on. Write a brief explanation telling why you think the environmental factor is living or nonliving.

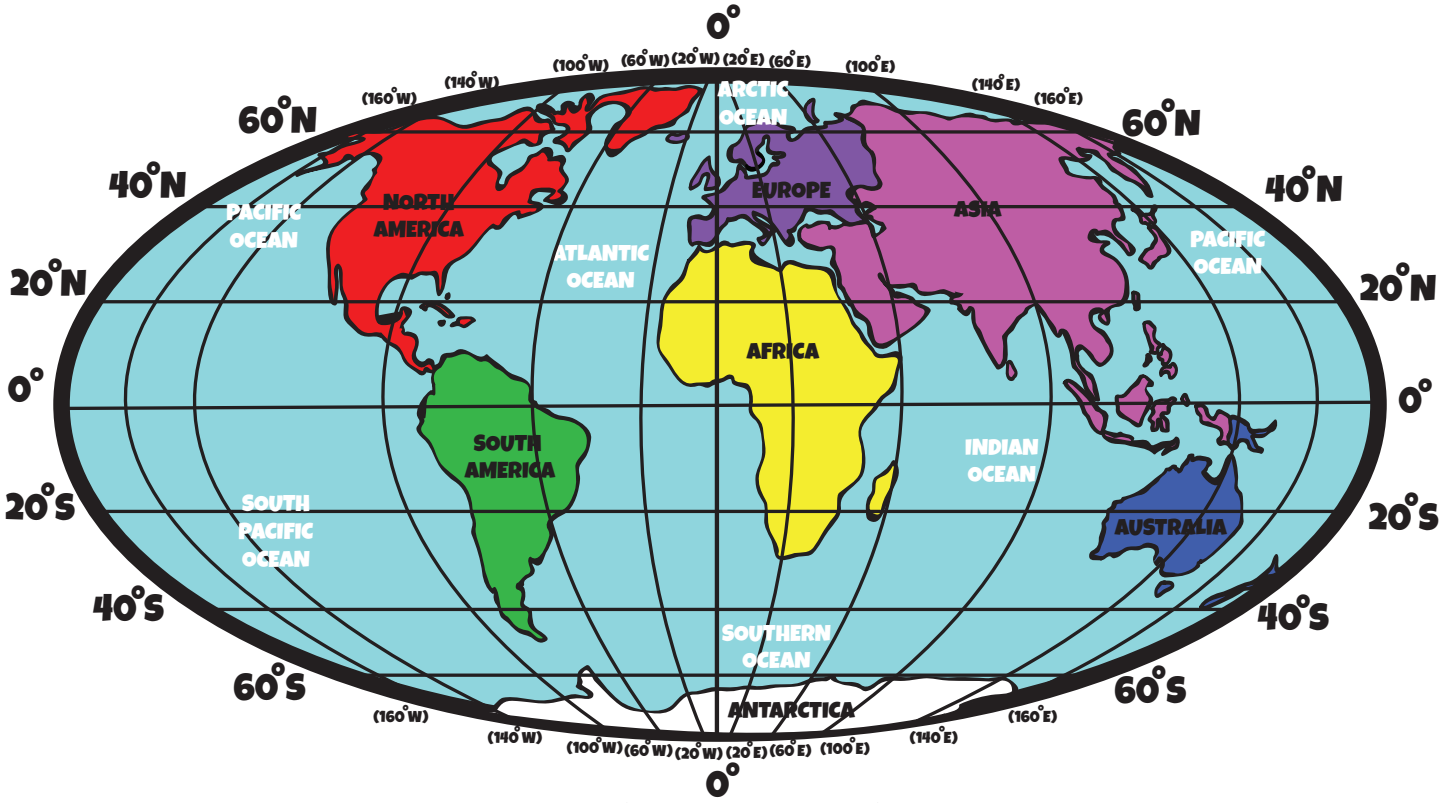
What is Latitude and Longitude, and How Do You Use It?

Some of this journey will take place over water. To navigate the ocean, you will have to understand latitude and longitude coordinates.

What is Latitude and Longitude?

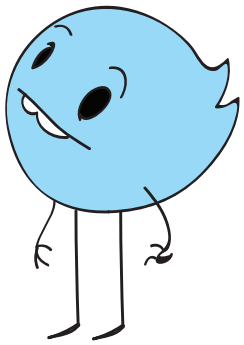
Latitude – lines that go around the globe (they go by the directions north and south)

Longitude – lines that point from top to bottom of the globe (they go by the directions east and west)



Example: What continent is at 20° south and 40° west? South America

1. What continent is 40° north and 20° east? _____
2. What ocean is found at 20° south and 100° east? _____
3. What continent is at 20° south and 140° east? _____
4. What ocean is at 40° south and 160° west? _____
5. What continent is at 40° north and 100° east? _____



Answers: 1. Europe 2. Indian Ocean 3. Australia 4. South Pacific Ocean 5. Asia

Plymouth Colony

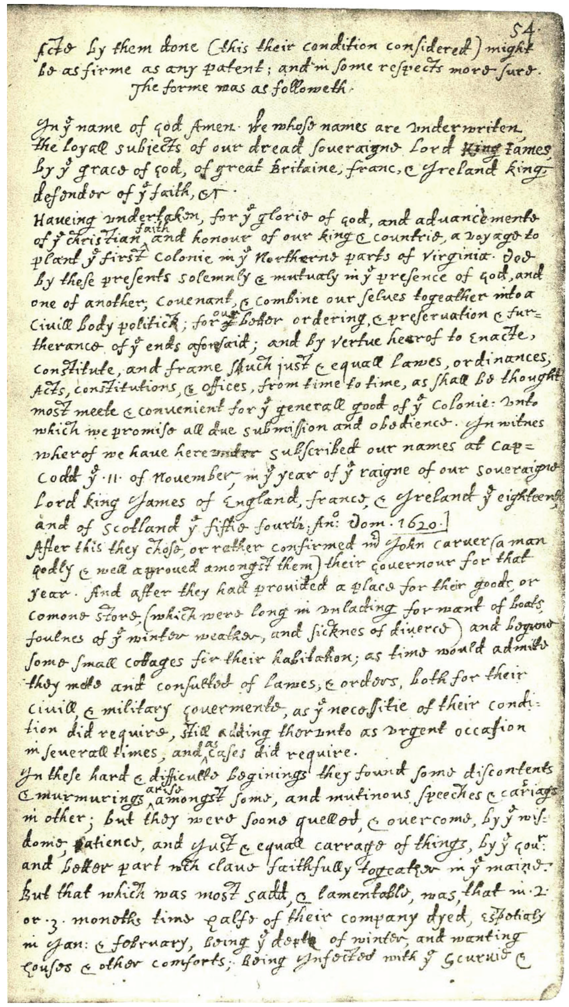
By March 1621, the Pilgrims had settled into life in the New World. Despite the fact that they had come to this new land with no money and few possessions, they had started a successful town, which they called Plymouth Colony.

Before they left, the Pilgrims – called 'Separatists' at the time – had signed a contract with a company called the London Company. The contract said that they would settle in an area near the Hudson River, which is in present-day New York City. However, bad weather forced them to sail in a different direction, and they ended up landing in what's now Massachusetts in November of 1620. Because the contract they had signed with the London Company only applied to the land around the Hudson River that they had meant to settle in, they were on their own! Since they had no government in their new settlement, they wrote the Mayflower Compact. The Mayflower Compact listed the rules that would be obeyed in the colony. This is one of the first known examples of a group of citizens working together to write their own laws.

However, Plymouth wasn't an overnight success. They had arrived in the middle of winter, and the weather made it hard for them to start growing food or building houses. Most of the settlers continued to live on their ship until houses could be built. By spring, about half of the original settlers had died due to poor nutrition and lack of shelter.

Though Native Americans lived in the area, most of the Native Americans had died the year before the Pilgrims arrived after an illness swept through the region. In March of 1621, the settlers were surprised to meet Samoset, a local Native American. They were even more surprised to learn that he spoke English – he had learned it from fur traders that had passed through the region. Shortly after they met Massasoit, the leader of the local Wampanoag tribe, and also Squanto, who helped them plant crops and catch fish, and helped them communicate and make peace with the Wampanoag.

As families grew and more and more people began to join them in the New World, smaller communities began to pop up around the outskirts of the colony. Plymouth Colony remained independent for over 70 years before it became part of the Massachusetts Bay Colony.



acte by them done (this their condition considered) might 54
be as firme as any patent; and in some respects more sure.
The forme was as followeth.

In ye name of god Amen. We whose names are underwriten,
the loyall subjects of our dread soveraigne Lord King James
by ye grace of god, of great Britaine, Franc, & Ireland king,
defender of ye faith, &c.
Haveing undertaken, for ye glorie of god, and advancemente
of ye christian faith and honour of our king & countrie, a voyage to
plant ye first colonie in ye Northerne parts of Virginia. Doe
by these presents solemnly & mutualy in ye presence of God, and
one of another, covenant, & combine our selves togeather into a
civill body politick; for our better ordering, & preservation & fur-
therance of ye ends aforesaid; and by vertue hearof to enacte,
constitute, and frame such just & equall lawes, ordinances,
Acts, constitutions, & offices, from time to time, as shall be thought
most meete & convenient for ye generall good of ye Colonie: unto
which we promise all due submission and obedience. In witnes
wherof we have hereunder subscribed our names at Cap-
Codd ye 11. of November, in ye year of ye raigne of our soveraigne
Lord king James of England, France, & Ireland ye eighteenth
and of Scotland ye fiftie fourth. Ano: Dom. 1620.]
After this they chose, or rather confirmed Mr John Carver (a man
godly & well approved amongst them) their Governour for that
year. And after they had provided a place for their goods, or
comone store, (which were long in unlading for want of boats
foulnes of ye winter weather, and sicknes of diverce) and begune
some small cottages for their habitation; as time would admite
they mette and consulted of lawes, & orders, both for their
civill & military Governmente, as ye necessitie of their condi-
tion did require, still adding therunto as urgent occasion
in severall times, and as cases did require.
In these hard & difficulte beginings they found some discontents
& murmurings arise amongst some, and mutinous speeches & carriags
in other; but they were soone quelled, & overcome, by ye wis-
dome, patience, and just & equall carrage of things, by ye Govr
and better part wch clave faithfully togeather in ye maine.
But that which was most sadd, & lamentable, was, that in 2
or 3 monthes time halfe of their company dyed, espetialy
in Jan: & February, being ye depth of winter, and wanting
houses & other comforts; being infected with ye scurvie &

Original *Mayflower Compact*

The Landing of the Pilgrims
by Henry A. Bacon – 1877

Write Your Own Compact!

In the Pilgrims' time, *compact* was another word for *contract*, which is a written agreement between people. Pick a group of friends or classmates and write up a list of rules you can all agree on. They don't have to be serious – you can agree to always show each other respect, or you can agree to always eat pizza together on Fridays! List the rules for you and your friends and have everyone sign it below.

1

2

3

4

5

6

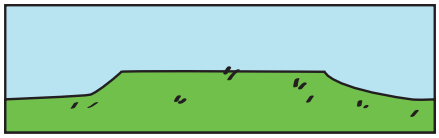
Signatures

Different Landforms

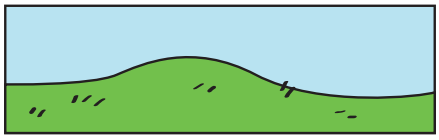
When you are traveling, it's important to know the definitions of each type of land so you know how to travel across it.

Directions:
Draw a line and match the landform picture with the correct definition.

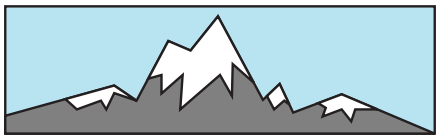
1. Plateau



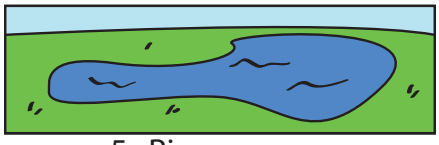
2. Hill



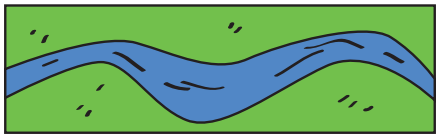
3. Mountain



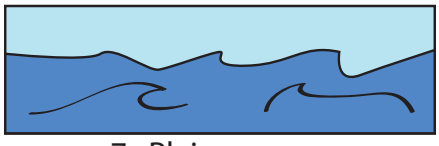
4. Lake



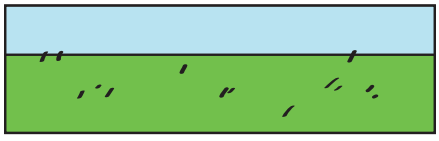
5. River



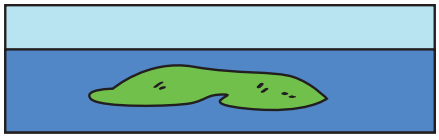
6. Ocean



7. Plain



8. Island



a. A small piece of land with water all around it

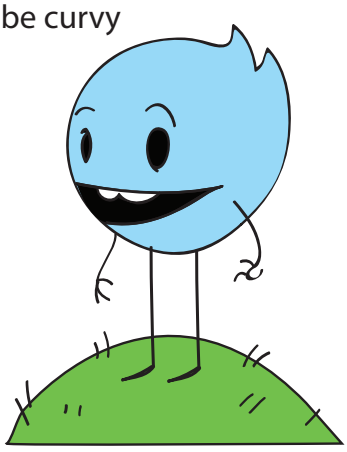
b. An area of land that is higher than the land around it, but flat

c. A tall piece of land, usually with steep sides

d. A line of water; can be curvy

e. Flat, open land

f. A small mound



g. A small body of water, with land all around it

h. A very large body of water