

Fourth Grade ELA & Mathematics Week 1 Packet



First & Last Name: _____

Teacher: _____

Grade: _____

School: _____

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.

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.



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.

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

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

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

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

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

► Talk

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

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

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.

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

Understanding of Place Value *continued*

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?

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

$27 \text{ thousands} + 97 \text{ tens} + 4 \text{ ones}$

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
$\begin{array}{r} 8,997 \\ + 2,301 \\ \hline \end{array}$	31,998 Estimate: $\begin{array}{r} 9,000 \\ + 2,000 \\ \hline 11,000 \end{array}$ 11,298
$\begin{array}{r} 23,411 \\ + 35,507 \\ \hline \end{array}$	12,918
$\begin{array}{r} 72,418 \\ + 41,291 \\ \hline \end{array}$	113,709
$\begin{array}{r} 67,802 \\ + 3,443 \\ \hline \end{array}$	10,225
$\begin{array}{r} 5,188 \\ + 9,024 \\ \hline \end{array}$	6,112

Using the Standard Algorithm to Add Greater Numbers *continued*

Name: _____

Addition Problems	Student Answers
$\begin{array}{r} 21,822 \\ + 75,333 \\ \hline \end{array}$	$97,155$
$\begin{array}{r} 60,125 \\ + 69,205 \\ \hline \end{array}$	$75,330$
$\begin{array}{r} 4,899 \\ 5,224 \\ + 9,296 \\ \hline \end{array}$	$108,209$

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

4,003
— 13

4,003
— 103

4,003
— 1,103

4,003
— 2,103

2 2,000
 — 1,999

2,000
— 1,990

2,000
— 1,985

2,000
— 1,500

2,000
— 1,490

3 3,007
 — 7

3,007
— 27

3,007
— 307

3,007
— 1,307

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
$$\begin{array}{r} 95,217 \\ - 39,871 \\ \hline \end{array}$$

2
$$\begin{array}{r} 62,554 \\ - 31,618 \\ \hline \end{array}$$

3
$$\begin{array}{r} 92,023 \\ - 71,578 \\ \hline \end{array}$$

4
$$\begin{array}{r} 84,724 \\ - 43,951 \\ \hline \end{array}$$

5
$$\begin{array}{r} 56,417 \\ - 24,009 \\ \hline \end{array}$$

6
$$\begin{array}{r} 71,677 \\ - 13,197 \\ \hline \end{array}$$

7
$$\begin{array}{r} 99,902 \\ - 33,227 \\ \hline \end{array}$$

8
$$\begin{array}{r} 87,591 \\ - 46,280 \\ \hline \end{array}$$

9
$$\begin{array}{r} 90,434 \\ - 51,533 \\ \hline \end{array}$$

10
$$\begin{array}{r} 78,282 \\ - 40,983 \\ \hline \end{array}$$

11
$$\begin{array}{r} 71,731 \\ - 61,320 \\ \hline \end{array}$$

12
$$\begin{array}{r} 50,118 \\ - 18,306 \\ \hline \end{array}$$

13
$$\begin{array}{r} 86,496 \\ - 54,101 \\ \hline \end{array}$$

14
$$\begin{array}{r} 59,176 \\ - 17,222 \\ \hline \end{array}$$

15
$$\begin{array}{r} 89,971 \\ - 11,499 \\ \hline \end{array}$$

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: $5 \times 6 = ?$