4th Grade Instructional Packet
Week 4 (April 20-24, 2020)

ELA

- 4th grade Week 4 ELA Contents
- Lesson 4- Greek and Latin Word Parts (pgs. 17-18)
- Lesson 5- "Over Bridge Under Tunnel" (pgs. 19-20)
- Lesson 6- Short Response (pgs. 20-21)

Social Studies

- Springs and Wetlands (pg. 9)
- Analyze Images (pgs. 216-217)

Math

- Lesson 1- Using Strategies to Add (pgs. 7-9)
  Use anchor charts/references G, H, I, and J to assist.
- Lesson 2- Using Strategies to Subtract (pgs. 10-11)
  Use anchor charts/references K, L, M, and N to assist
- Lesson 3-Multiplication in word problems and multi-step problems
- Use anchor charts/references O, P, and Q to assist

Science

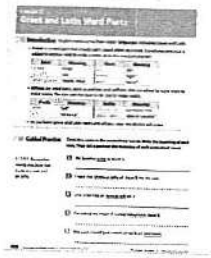
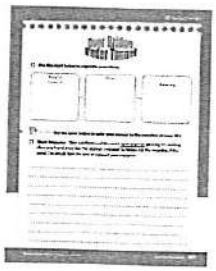
- Lesson 1-"Metamorphic Rocks"
- Lesson 2- All About the Rock Cycle

Read and complete the questions. If you access to the internet, you can watch the rock review tutorial:

https://www.cpalms.org/Public/index.html?id=118808

4th grade Week 4

Grade 4 Reading Activities in Section 1 (Cont.)

Lesson	Resource	Instructions	Page(s)
4	Grade 4 Ready Language Handbook, Lesson 17 	• Read the Introduction. • Complete Guided Practice.	17–18
5	Grade 4, Ready Reading Lesson 13, Part 3 	• Read "Over Bridge, Under Tunnel." • Complete Think, Talk	19–20
6	Grade 4, Ready Reading Lesson 13, Part 5 	• Reread the passage "Over Bridge, Under Tunnel." • Complete the Writing activity.	21

Lesson 4 ELA / Reading Grade 4 Week 4

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

Lesson 5 ELA/ Reading Gr. 4 Week 4

Read

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.

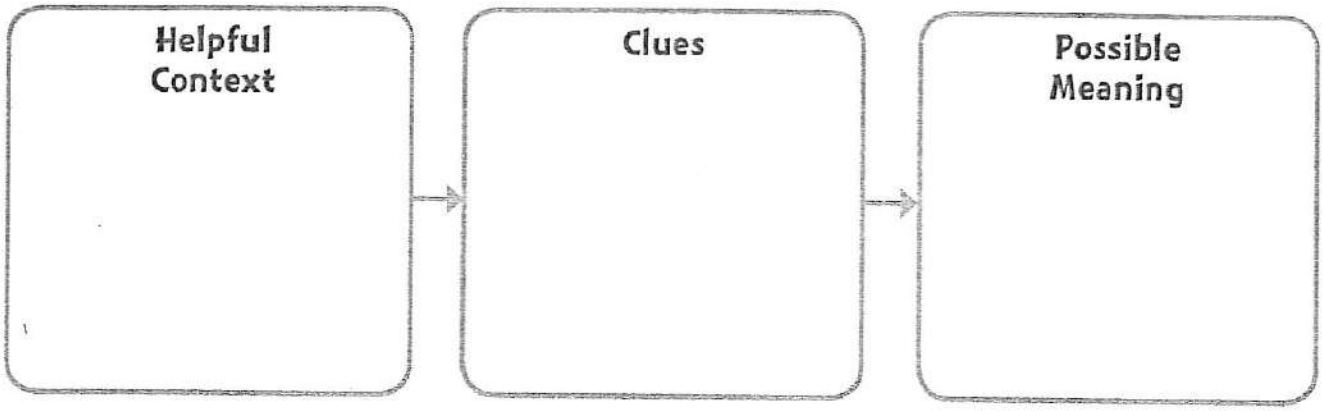
*Begin- Lesson 6 Instructions

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.

Gr. 4 Social Studies Lesson 1 Week 4

Springs and Wetlands

Not all of Florida's fresh water flows on the surface of the land. Some water seeps into the limestone underground and is stored there. When this water comes under pressure, it can be forced upward to the surface. It bubbles out of the ground, or sometimes a crack in the ground, forming a spring. Florida has hundreds of springs. One of the biggest freshwater springs in the world, Silver Springs, is in central Florida.

Fresh water is also found in the state's wetlands. **Wetlands** are areas where water sits on the surface for part or all of the year, covering the roots of plants. A marsh is a wetland filled mostly with grasses. A swamp is a wetland with mostly trees. Many kinds of plants and wildlife thrive in the warm, shallow waters of a wetland. The most famous of Florida's wetlands is the Everglades. This huge wetland in southern Florida is a mix of freshwater and saltwater swamps and marshes.

5. **Compare and Contrast** **Read** the title of the chart. **Write** in each box how springs, swamps, and marshes are alike and different.

Compare and Contrast Bodies of Water

Spring	Swamp	Marsh
Like some swamps and marshes, springs have fresh water. Unlike swamps and marshes, spring water comes up from the ground.		

FL SS.4.G.1.1 Identify physical features of Florida.

Analyze Images

Images are everywhere, so it's important to understand them. There is a saying "A picture is worth a thousand words." This means that images tell us something in a way that writing does not.

Analyzing an image means looking at it in a new way. Instead of looking at the picture as a whole, try looking first at the people, then the objects, and finally the activities that are going on in the picture. Read the caption, too. It will give you important information about the photo.

In the photo below, the man is standing by his cab. He has dressed carefully and has added a hat. It almost looks like a uniform. He is touching his cab and gives the viewer a sense that he is proud of his job and his cab.

The car helps to date the picture. It is a car from many years ago. It has been washed and shined. The name of his company *Economy Cab* has been painted on the door and the phone number painted on the back. The town behind the cab looks pleasant but not wealthy.

(FL) **SS.4.A.1.1** Analyze primary and secondary resources t identify significant individua and events throughout Flori history.
SS.4.A.1.2 Synthesize information about Florida history through print and electronic media.

Seth Gaines and his taxi. He drove his own taxi during the 1940s and 1950s.

The caption tells you who the man is and when and where the photo was taken. Captions add information about the image. They can give you a better understanding of the story the photographer wanted to tell through the picture.

Learning Objective

I will know how to analyze images.

FL **SS.4.A.1.1** Analyze primary and secondary resources to identify significant individuals and events throughout Florida history.

SS.4.A.1.2 Synthesize information related to Florida history through print and electronic media.

Try it!

College students wave at an empty bus in Tallahassee, Florida, in 1956.

1. What does the image on this page show?

2. When and where does the image take place? How do you know?

3. Using the clues in the photo, what conclusions can you draw about how the students felt?

Gr. 4 Math Week 4

Lesson 1

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.

Gr. 4

Lesson 1 continued

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*

Gr. 4

Lesson 1 continued

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.

Lesson 1 Chart G

Two-digit Addition

Break Apart

$89 + 34 = 123$

$80+9 \quad 30+4$

ones $9+4=13$

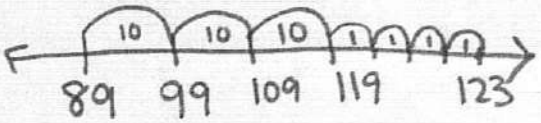
tens $30+80=110$

$$\begin{array}{r} 110 \\ +\ 13 \\ \hline 123 \end{array}$$

Use a number line

$89 + 34 = 123$

$30 \quad 4$



vertical addition

$$\begin{array}{r} 89 \\ +\ 34 \\ \hline 13 \text{ ones} \\ +\ 110 \text{ tens} \\ \hline 123 \end{array}$$

algorithm

$$\begin{array}{r} 89 \\ +\ 34 \\ \hline 123 \end{array}$$

13 regroup

Three-digit Addition

Break Apart

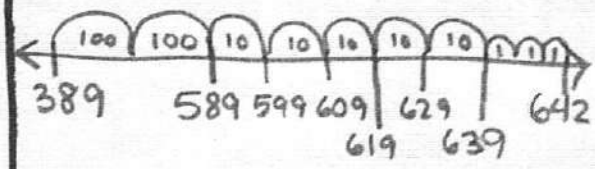
$389 + 253 = 642$

$300 \quad 80 \quad 9 \quad 200 \quad 50 \quad 3$

hundreds	$300 + 200 =$	500
tens	$80 + 50 =$	130
ones	$9 + 3 =$	12
		642

Use a number line

$389 + 253$



vertical addition

$$\begin{array}{r} 389 \\ +\ 253 \\ \hline 12 \text{ ones} \\ +\ 130 \text{ tens} \\ \hline 500 \text{ hundreds} \\ \hline 642 \end{array}$$

algorithm

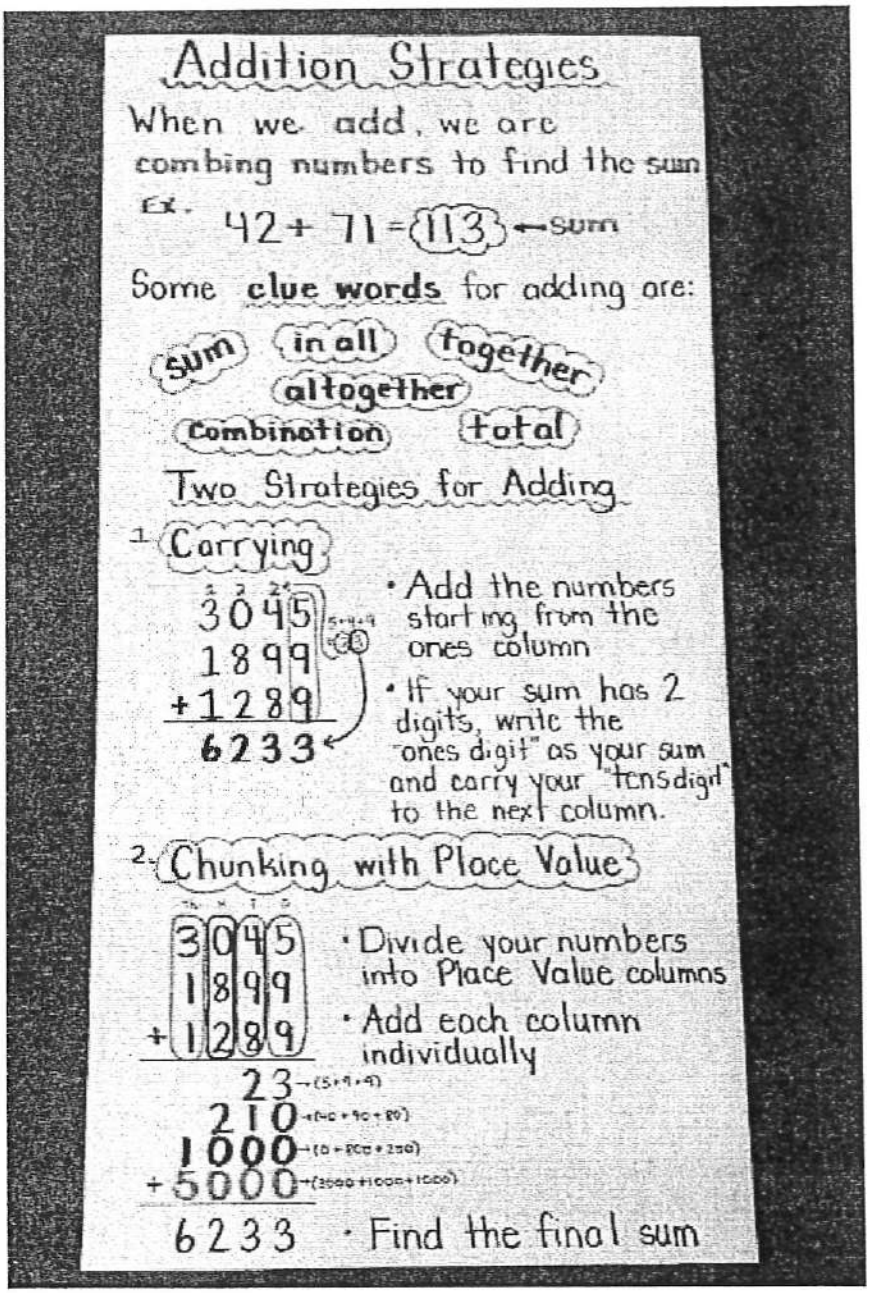
$$\begin{array}{r} {\scriptstyle 1\ 1} \\ 389 \\ +\ 253 \\ \hline 642 \end{array}$$

regroup

WHAT I have LEARNED

G

Lesson 1 Chart H



Lesson 1 Chart I

Break Apart Strategy for Adding

$$\begin{array}{rl} 542 & \rightarrow 500 + 40 + 2 \\ +\ 373 & \rightarrow 300 + 70 + 3 \\ \hline & 800 + 110 + 5 = 915 \end{array}$$

I can put these numbers in expanded form.

So $542 + 373 = 915$

Lesson 1 Chart J

Ex.

Actual		Estimate
4592	ROUND →	5000
+ 5417	ROUND →	+ 5000
10,009		10,000

The estimate is reasonable because it is very close to the actual number.

Gr. 4 Math Week 4
Lesson 2

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?

Lesson 2 continued

Using the Standard Algorithm to Subtract Greater Numbers

Name: _____

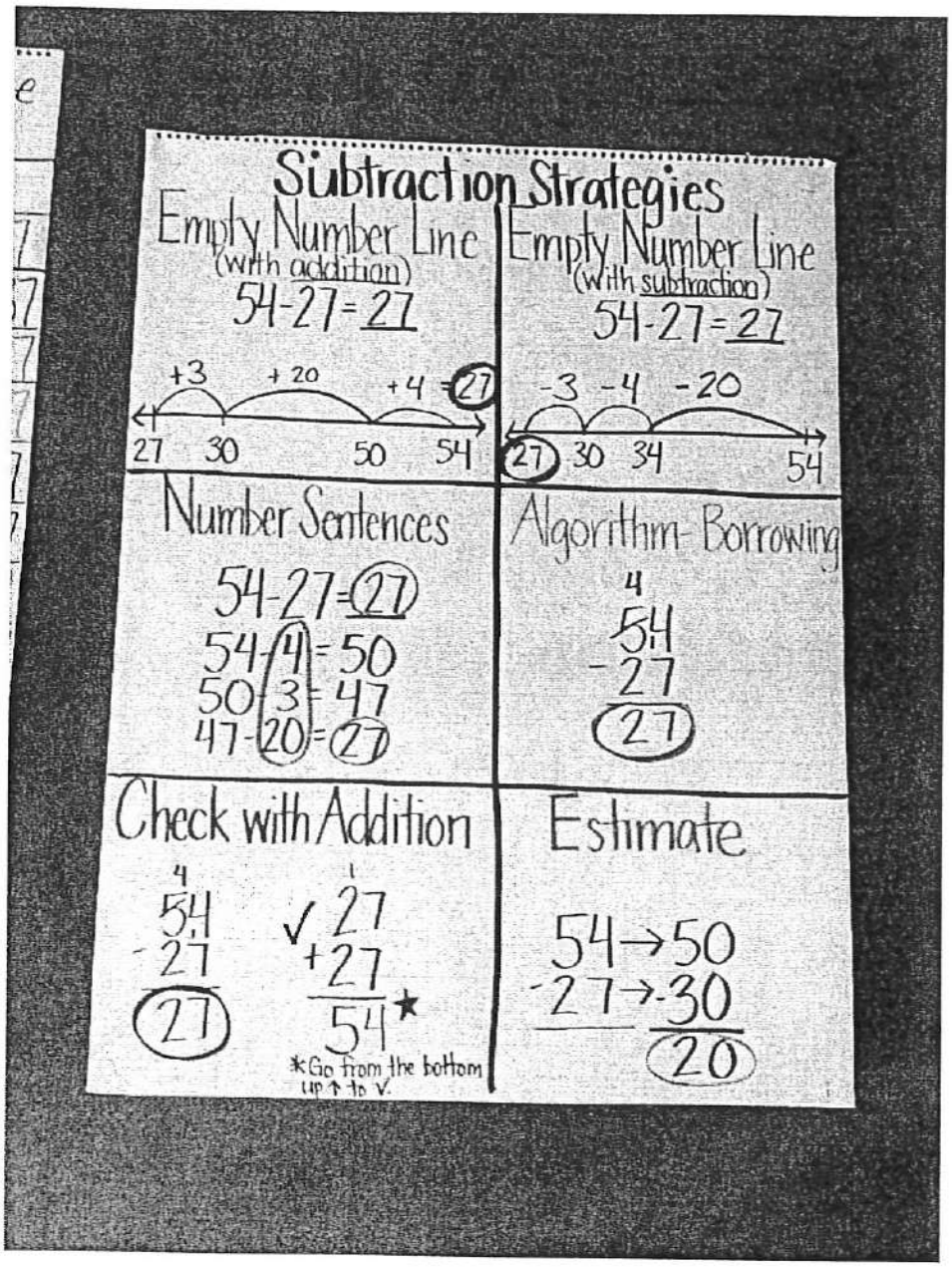
Estimate. Circle all the problems with differences between 30,000 and 60,000. Then find the differences of only the circled problems.

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?

Lesson 2 chart K



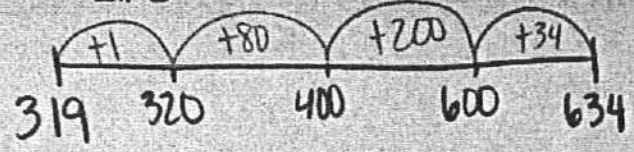
K

Lesson 2 Chart L

- Subtraction Strategies -

$$\begin{array}{r} 634 \\ -319 \\ \hline \end{array}$$

*Number Line



200 + 80 + 34 + 1 =

280 + 35 = (315)

* Place Value / Decomposing the Number

634 - 300 = 334

334 - 10 = 324

324 - 4 = 320

320 - 5 = (315)

* Shifting Up / Shifting Down

$$\begin{array}{r} 634 \\ -319 \\ \hline \end{array} \begin{array}{l} +1 \\ +1 \end{array} = \begin{array}{r} 635 \\ -320 \\ \hline 315 \end{array}$$

No Borrowing!

$$\begin{array}{r} 634 \\ -319 \\ \hline \end{array} \begin{array}{l} -5 \\ -5 \end{array} = \begin{array}{r} 629 \\ -314 \\ \hline (315) \end{array}$$

- More Subtraction Strategies -

Breaking Up by Place Value

247 - 139

(108)

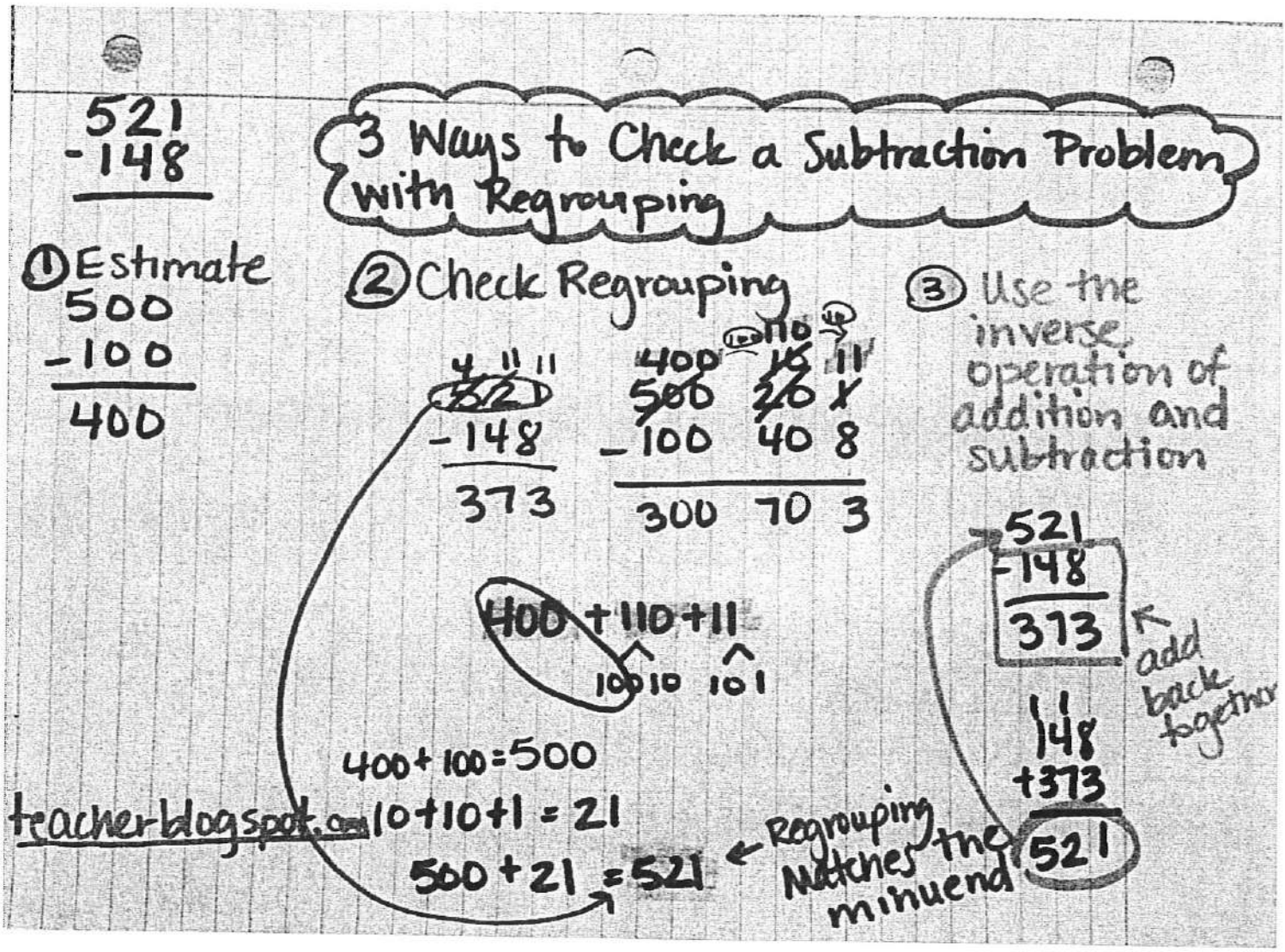
		30	17
	200	~~40~~	~~7~~
-	100	30	9
	100	0	8

1,204 - 638

(566)

	0	1,100	90	
	~~1,000~~	~~100~~	~~100~~	14
		~~200~~	~~8~~	~~4~~
-		600	30	8
		500	60	6

Lesson 2 Reference N



N

Gr. 4 Math Week 4
Lesson 3

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: $5 \times 6 = ?$

Lesson 3 continued

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.

Lesson 3 continued

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.

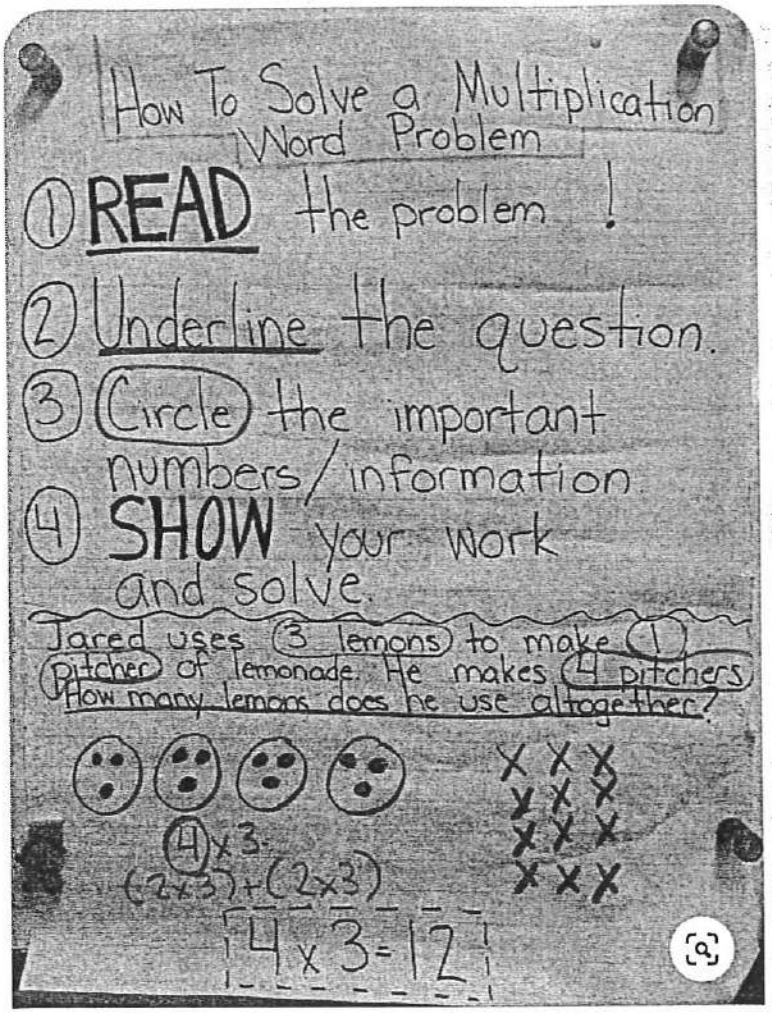
Mrs. Miller will need _____ tables.

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.

Lesson 3 chart D



Step ⑤

Check your answer to make sure it is REASONABLE and your math is correct.

Lesson 3 chart P

Gary ate a burger and fries for lunch and had a cookie for dessert. His burger and fries had a total of 1,098 calories, and his cookie had a total of 530 calories. How many calories did Gary eat for lunch?

NUMBERS & OPERATION

Burgers + Fries: 1,098 calories
Cookie: 530 calories
Add

MODEL

EQUATION

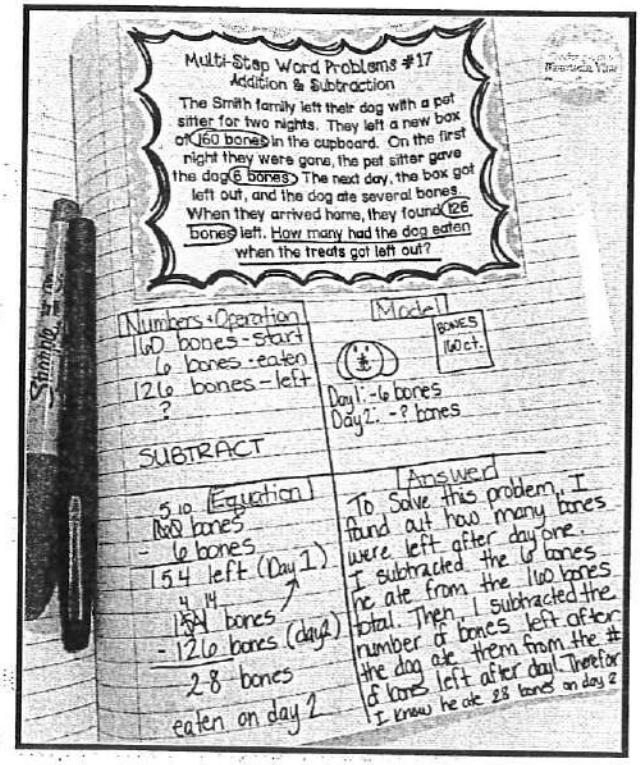
1,098 calories
+ 530 calories
1,628 calories

ANSWER

To solve this problem, I added the calories in both items that he ate. Therefore I know Gary ate 1,628 calories for lunch.

Lesson 3 chart Q

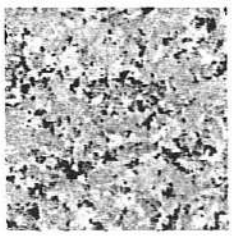
: Mastering Multi-Step Word Problems



Gr. 4 Science Lesson 1 Week 4

Metamorphic Rocks

Metamorphic rocks are rocks that change from extreme heat and pressure inside the Earth. The temperature inside the Earth, along with the weight of tons of land pressing down on the rock, causes it to go through a physical or chemical change. Some metamorphic rocks are made by sandstone being pressed together. Sandstone will change to quartzite, one of the hardest rocks, through this process. Another type of metamorphic rock forms when pressure rearranges the minerals inside rocks into layers, instead of grains that are found in igneous rock. In the picture, you can see that the first rock, granite, contains specks, or grains of minerals. After being pushed down from the pressure of the earth, these specks form layers and change to the metamorphic rock, gneiss.



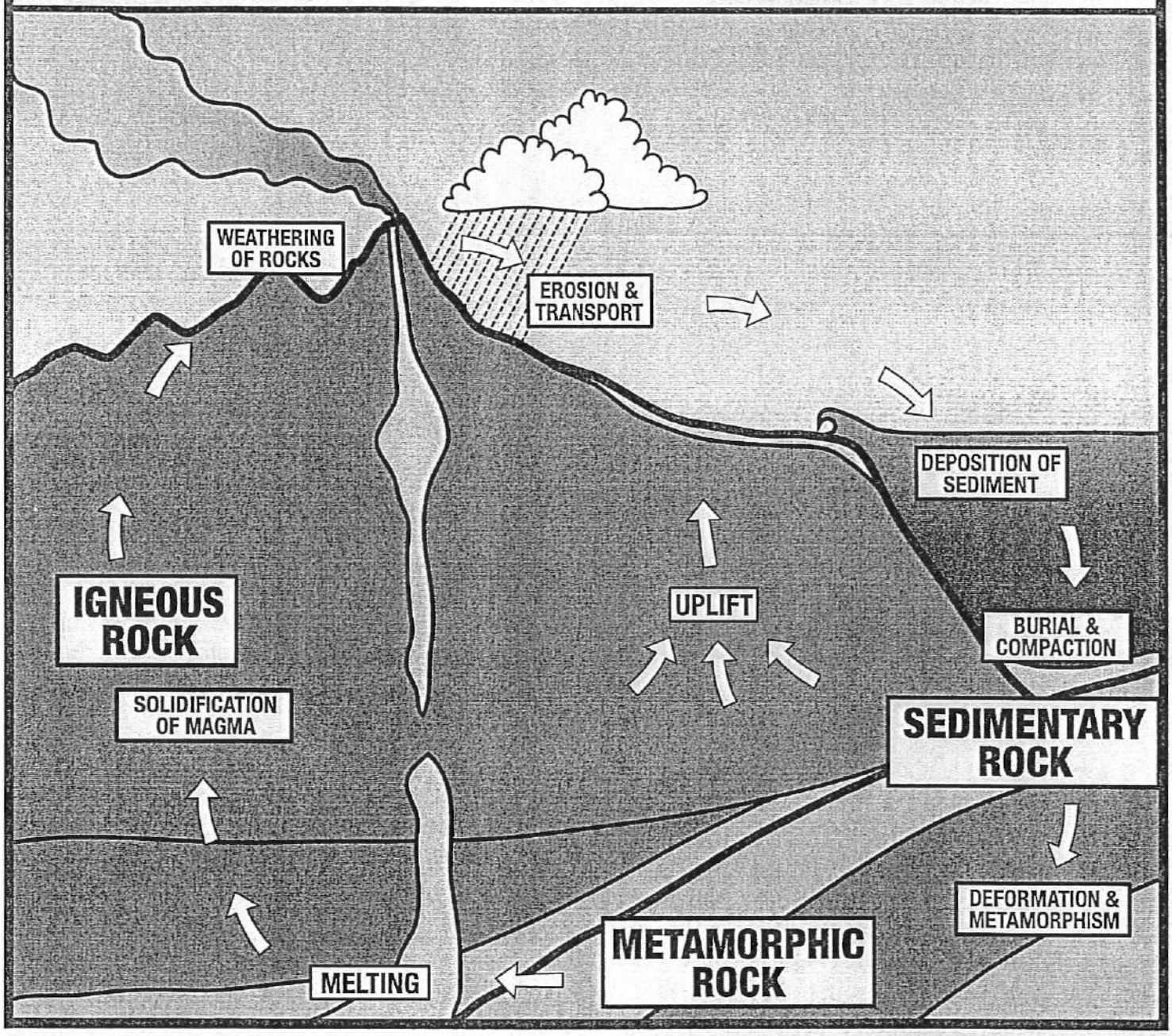
Fill in the blank with the words from the word bank.

pressure	layers	metamorphic	heat	change

1. _____ rocks go through a physical or chemical change.
2. Metamorphic rocks are formed from extreme _____ and _____.
3. The pressure of the Earth can cause grains in igneous rock to change into _____ that are commonly found in metamorphic rocks.
4. Metamorphic rocks are rocks that _____ into another type of rock.

Gr. 4 Science Lesson 2 Week 4

All About The Rock Cycle



The rock cycle describes the change and movement of materials on and inside the Earth. The cycle is essentially a loop; stating that materials are neither created nor destroyed, they only change form when the environment changes. Sediments eroded from solid rocks are transported to a new location; in this diagram, the sediments are carried into the ocean where they settle and compact. Sedimentary rocks are created at the end of this stage. As the sedimentary rocks are buried deeper and deeper, heat and pressure cause physical or chemical changes in the rock, and they change to metamorphic rock. When the rock is pushed deep into the Earth, they can melt into magma. Once this magma solidifies, either inside the crust or after being expelled by a volcano, they change to igneous rocks. Eventually the rocks are worn down through weathering, and the process begins anew with the erosion and transport of the new sediments.

All About The Rock Cycle

On page two of this worksheet, you will answer questions based on the information you read on page one.

Circle the best answer.

1. The Nile river carries sediments to the ocean. Over time, the sediments are compressed as more sediments are deposited on top of them. Which type of rock will be formed?

A. Sedimentary
B. Metamorphic
C. Igneous

2. The volcano Kilauea on the big island of Hawai'i is erupting and lava is ejected from the volcano vent. The lava solidifies to form what type of rock?

A. Sedimentary
B. Metamorphic
C. Igneous

3. Off the coast of the Pacific Northwest in the United States, the Pacific plate is being pushed underneath the North American plate in a subduction zone, caused by plate tectonics. As the rock from the Pacific plate is pushed under the North American plate, it is subjected to high temperatures and pressures. Which rock will be created from this process?

A. Sedimentary
B. Metamorphic
C. Igneous

4. In the Arizona desert, a sudden rainstorm washes sand and sediment into the Colorado river, which eventually deposits the sediments into the ocean. This process is called:

A. Erosion & Transport
B. Deposition
C. Weathering

5. In the desert, wind picks up and carries fine particles of sand and dirt. As the wind blows against the rocks, the particles rub against the rocks and wear them down in a process called:

A. Weathering
B. Transport
C. Erosion

6. Which one of the following is NOT one of the three types of rock?

A. Sedimentary
B. Lava
C. Metamorphic
D. Igneous

7. True or False? Magma is lava that has been ejected from beneath the Earth's crust through a volcano.

True
False