

Dear Students and Families,

Welcome to the MCPS instructional resources for your child's grade level. All of the resources and materials in this course are available for students to work on while school is closed. Since these materials serve as review and practice of content, you may choose what experiences are most appropriate and meaningful for your child. Your child may work on any or all of the experiences, in any order. Feel free to modify the resources and provide your child with accommodations as necessary. Resources are intended to be completed with little or no adult support, but you are welcome to support your child as needed. Since these resources serve as review and practice, they do not need to be returned to school and will not be graded.

Literacy, mathematics, and science experiences have been designed for your child. A literacy experience requires students to engage with reading, writing, listening, speaking, and/or viewing and responding to literary or informational text. Mathematics experiences allow students to use multiple strategies in order to practice concepts that they have learned. Science experiences provide the opportunity for students to engage in a deeper exploration of real world phenomena, using the practices of scientists and engineers.

Literacy

Grade 4 Literacy Experiences #1-5

Literacy Experiences may be completed in one or multiple sittings. Keep track of the texts you are reading by filling in your Reading Log. You may record your responses to texts on paper, in a journal, or using a device.

Literacy Experience 1: Paired Informational Texts and Selected Response Questions Read the two <u>Basic Archaeology</u> texts and respond to the <u>Basic Archaeology</u> selected response questions.

Literacy Experience 2: Informational Text and Evidence Based Writing

Reread both <u>Basic Archaeology</u> texts and write a multi-paragraph response to the following prompt:

What steps would you take to do an archaeology dig at a spot where people might have lived in the past? Write an essay describing the process you would follow to learn about these people, using only the information in the articles. Be sure to include details from both of the articles in your response. Use the provided <u>essay map</u> as your plan your writing.

Literacy Experience 3: Respond to Informational Text

Select an informational text to read or listen to. Prior to reading, list what you know and want to know about the topic by completing the K and W columns of the provided <u>KWL chart</u>. As you read, record what you learned about the topic by completing the L column of the <u>KWL chart</u>.

Literacy Experience 4: Informative Writing

Use the information from your KWL chart in Literacy Experience 3 to write an informative paragraph or <u>acrostic poem</u> about your chosen topic. Consider locating additional texts about your topic to gather additional information for your paragraph or poem.

Literacy Experience 5: Respond to Literary Text

Read or listen to a literary text and respond to the following prompt. Use text evidence to support your thinking.

How did the setting change throughout the story? What caused the changes in setting? How did the changes in setting impact the character?

Name:

Home Reading Log

Read for at lea	Read for at least 15-20 minutes and fill in the log below. Reading could in reading to someone else, reading to yourself, and/or listening to a book.	Read for at least 15-20 minutes and fill in the log below. Reading could include having someone read to you, reading to someone else, reading to yourself, and/or listening to a book.	eone read to you,
Date	Title of Text	Author	Time Spent Reading

Grade 4 Written Response Text—Archaeology Pair

Article 1: Basic Archaeology: What's a Dig?

- One of the main things archaeologists do in their line of work is the dig. This is a project designed to find out more about a specific area and what it was like many, many years ago. Archaeologists might be looking for animal skeletons or plant remains. They might be looking for weather patterns or fire damage.
- Whatever they're looking for, it usually involves digging. Why? Well, first of all, the wind is constantly blowing fresh dirt and trash all over the world. This airborne debris lands on the ground in tiny layers. After years of these tiny layers building up, what was once on the surface is buried underground. It's not that the ground has really sunk; it's more that more layers have been added on top.
- So, archaeologists use their pickaxes and their drills and their brushes to find and piece together clues to what happened in an area's past. And the more they find, the more they understand.
- For instance, by discovering seeds, archaeologists can also discover what kinds of crops the people who lived there grew or, if people didn't live there at all, what kind of wild plants or fruits or vegetables grew there.
- Also, a dig might turn up fragments of clothing or shoes, giving archaeologists clues to what kind of clothing the people who lived there wore.
- The basic idea behind the dig is to discover the past.

Article 2: Basic Archaeology: What's a Midden?

- It might sound a little silly, but archaeologists can find out a lot about people by looking through their trash.
- People throw away things because those things aren't important or because the people have too much of those things already. By sifting through the garbage pile of a civilization, archaeologists can find out what was important to those people (or what they had too much of).
- Why is this important? Sometimes, garbage is all that's left of a people. Especially if that people has been conquered by others, the buildings, tools, and food were probably consumed or destroyed long ago. A people's trash, especially if it was also trash to the invaders, might be left alone, enabling archaeologists to discover more about a people who left few clues to what they liked and didn't like.
- Did they wear certain clothes? What kinds of food did they eat? What kind of tools did they use or throw away? Answers to all these questions can be found by sifting through a midden.
- It could also be possible to find out more about a conquered people by searching the midden of their conquerors. Some invaders, not really knowing what's valuable to the people they're conquering, might very well throw away things that are extremely valuable. It is left to archaeologists to find these things and piece together the life stories of people long since conquered.
- 6 One person's trash could be another person's treasure.

Basic Archaeology: "What's a Dig?" and "What's a Midden?" from socialstudiesforkids.com by David White, copyright 2002-2011.

Questions for Archaeology Text Pair

After reading the two texts about archaeology, complete the selected response questions.

1. In paragraph 2 of Article 1, "What's a Dig?" which two words help the reader understand what the word "debris" means?
A. wind
B. dirt
C. trash
D. ground
E. layers
F. surface
2. What does the information in paragraph 3 in Article 1 help the reader understand about archaeologists?
A. What types of tools they must use
B. How long it takes to complete a dig
C. How many clues are found at each dig
D. What they learn about people from the past
3. In paragraph 6 of Article 1, the author states, "The basic idea behind the dig is to discover the past." Which two paragraphs in Article 1 support the idea that digs can tell us specific information about people who lived in the past?
A. Paragraph 1
B. Paragraph 2
C. Paragraph 3
D. Paragraph 4
E. Paragraph 5

This question has two parts. First answer Part A and then answer Part B.

4. Part A: According to Article 1, what do archaeologists study in addition to people who lived long ago?

- A. The reason an area became full of debris long ago
- B. The general conditions in an area long ago
- C. The governments of the people long ago
- D. The ways people worked together long ago

4. Part B: Which detail from Article 1 best supports the answer to Part A?

- A. "It's not that the ground has really sunk; it's more that more layers have been added on top."
- B. "And the more they find, the more they understand,"
- **C.** "For instance, by discovering seeds, archaeologists can also discover what kinds of crops the people who lived there grew or, if people didn't live there at all, what kinds of wild plants or fruits or vegetables grew there."
- **D.** "Also, a dig might turn up fragments of clothing or shoes, giving archaeologists clues to what kind of clothing the people who lived there wore."

This question has two parts. First answer Part A and then answer Part B.

- 5. Part A: Which sentence best states the main idea of Article 2, "What's a Midden?"
- A. Conquering other people destroys details about the past.
- B. Learning about the past is more important than ever.
- C. Being an archaeologist is a very difficult job.
- D. Looking at old trash gives archaeologists useful knowledge.

5. Part B: Which detail from the article best supports the answer to Part A?

- **A.** "By sifting through the garbage pile of a civilization, archaeologists can find out what was important to those people (or what they had too much of)."
- B. "Sometimes, garbage is all that's left of a people."
- **C.** "Especially if that people has been conquered by others, the buildings, tools, and food were probably consumed or destroyed long ago."
- **D.** "Some invaders, not really knowing what's valuable to the people they're conquering, might very well throw away things that are extremely valuable.

Read the following sentence from Artic	Je 2	Z.
--	------	----

A people's trash, especially if it was also trash to the invaders, might be left alone, enabling archaeologists to discover more about a people who left few clues to what they liked and didn't like.

Which point is the author supporting by including this sentence in the article?

- A. how difficult it is to learn about people based on the objects they have left behind
- B. that objects that were considered worthless in the past are also worthless in the present
- C. that throughout history people have fought over valuable objects
- D. why some objects people used in the past may have survived to the present
- 7. The texts that you read include important ideas about archaeologists. One idea is found in both Article 1 and Article 2. One idea is found in Article 1 only, and one idea is found in Article 2 only. One idea is not found in either Article 1 or Article 2. Make check marks in the boxes below to match each important idea to the article or articles in which it appears.

	Both Articles	Article 1	Article 2	Not in Article 1 or Article 2
Important Idea: Archaeologists dig in the ground because old objects are found underground.			:	
Important Idea: An archaeologist's job is to learn about what things were like in the past.				
Important Idea: An archaeologist has to work slowly and carefully so that clues are not damaged.				
Important Idea: Archaeologists learn a lot about the past by digging in buried trash.				

Date:	
Name:	

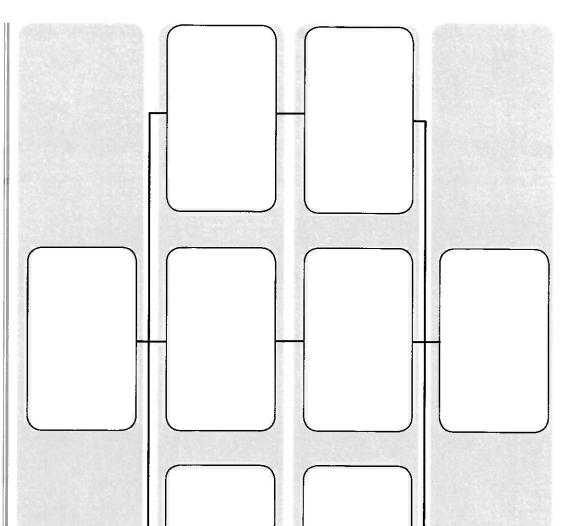
Essay Map

Introduction: Write one or two sentences that introduce your topic, including a brief description of the main ideas.

your topic that you will include in your you'd like to describe, points you'd like Main Ideas: List the main ideas about to explain, or elements you'd like to essay. There can be important facts

can further describe, explain, or define it. three details for each main idea that Supporting Details: Write at least

will conclude your essay. These can summarize about the topic, or talk about what the reader Conclusion: Write one or two sentences that the main ideas, describe what is important should take away from the essay.



	D	Date:		
• • • • • • • • • • • • •		••••••		
	KWL Chart			
he topic. In the seco	esearch. In the first column, write and column, write what you <u>wan</u> your research, write what you <u>lec</u>	to know about the		
What I K now	What I W ant to Know	What i L earned		

Name:	Date:
Acro	stic Poem
· · · · · · · · · · · · · · · · · · ·	
You can easily write an acrostic poem! L	lse the guidelines below.
1. Select a topic for your poem.	
2. Write the topic word vertically on your of the word.)	paper. (Be sure to capitalize each letter
3. Start each line of the poem with the c	apital letters you wrote.
4. Each line of the poem should consist of example below using the word poem.	of a word or phrase related to the topic. See the
Open your mind Everything is possible My, what a great poem I wrote! Try your own acrostic poem below.	

Grade 4 Literacy Experiences #6-10

Literacy Experiences may be completed in one or multiple sittings. Keep track of the texts you are reading by filling in your Reading Log. You may record your responses to texts on paper, in a journal, or using a device.

Literacy Experience 6: Literary Text and Selected Response Questions

Read the passage from <u>Walk Two Moons</u> and respond to the <u>Walk Two Moons selected</u> response questions.

Literacy Experience 7: Literary Text and Evidence Based Writing

Reread the passage from <u>Walk Two Moons</u> and write a multi-paragraph response to the following prompt:

Gram gets into a little trouble for trying to climb under the rope and get closer to Old Faithful. What does this part of the story reveal about Gram and her beliefs about life? How does the author develop Gram's belief throughout the passage? Give specific examples from the story to support your answer. Use the provided <u>essay map</u> as you plan your writing.

Literacy Experience 8: Respond to Informational Text

Read or listen to an informational text and respond to the following prompt. Use text evidence to support your thinking.

Summarize the text. Include the main idea and key details as evidence in your summary. Use the <u>Summary Checklist</u> to make sure you include all the characteristics of a summary in your response.

Literacy Experience 9: Respond to Literary Text

Read or listen to a literary text and respond to the following prompt. Use text evidence to support your thinking.

Describe the main character in the text. How does the character influence the story? Use the provided <u>character map</u> as you plan your response.

Literacy Experience 10: Opinion Writing

Write an opinion essay to respond to one of the questions below, or to share your opinion on an issue that is important to you. Use the provided opinion planner as you plan your writing.

Possible Opinion Writing Issues:

Should kids wear school uniforms?

Should kids be allowed to use cellphones in school?

Should kids have longer recess?

Should kids have homework?

What kind of field trip should your class take?

What is the best restaurant in your neighborhood?

What is one thing that should be free for everyone?

What is one place everyone should visit?

How much screen time should kids be allowed to have?

Grade 4 Written Response Text-Excerpt from Walk Two Moons

Excerpt from Walk Two Moons by Sharon Creech

Salamanca Tree Hiddle, "Sal," is traveling with her grandparents. Along the way, they stop in Wyoming so that her grandmother can see Old Faithful, the famous geyser located in Yellowstone National Park.

- Gramps was already up, but Gram was lying on the bed, staring at the ceiling. "Did you ever go to sleep?" I asked.
- 2 "No," she said, "I didn't feel like sleeping. I can sleep later." She climbed out of bed. "Let's go see that Old Faithful. I've waited my whole entire life to see Old Faithful."
- "You've sure got your heart set on that, don't you, you stubborn gooseberry?" said Gramps.
- 4 "I sure do," Gram said.
- We parked the car and walked up a low hill. I was afraid Gram was going to be disappointed because it didn't look like much at first. There was a rope fence around a mound on the side of the hill. The ground was scrabbly dirt, and in the center of the rope enclosure, about twenty feet away, was a hole.
- 6 "Heck," Gram said, "can't we get any closer than this?"
- 7 Gramps and I walked over to read a sign about Old Faithful. A park ranger rushed past us yelling, "Ma'am! Ma'am!"
- 8 "Gol-dang," Gramps said.
- 9 Gram was crawling under the rope. The ranger stopped her. "Ma'am, there's a reason for that rope," he said.
- 10 Gram brushed off her dress. "I just wanted a better look."
- "Don't worry," the ranger said. "You'll get a good look. Please stay behind the rope."
- The sign said that Old Faithful was due to erupt in fifteen minutes. More and more people gathered around the rope. There were people of all ages: little babies crying, grannies sitting on folding stools, teenagers plugged into radio headsets, couples smoothing. There were people speaking languages other than English: next to us was a tour group of Italians; across the way was a group of Germans.

- Gram tapped her fingers together, getting more and more excited. "Is it time?" she kept saying. "Is it almost time?"
- The crowd became quiet a few minutes before Old Faithful was due to go off. Everyone stared at the hole. Everyone was listening.
- 15 "Is it time?" Gram said.
- There was a faint noise and a little spit shot out of the hole. The man next to me said, "Aww, is that all—" Another noise, this time a little louder, a grating and crunching sound like walking on gravel. Two fitful spits. "Aww—" the man said.
- 17 Then it was like the radiator boiling over or the tea kettle blowing its top. Old Faithful hissed and steamed. A sudden spout of water shot out, maybe three feet high.
- 18 "Aww—" the man said. "Is that all—"
- More steam, boiling and hissing, and a huge jing-bang spray of water surged out, climbing and climbing, and then more and more, until it looked like a whole river of water was shooting straight up into the air. "It looks like an upsidey-down waterfall!" Gram said. All the while there was a walloping hissing, and I could have sworn the ground rumbled and trembled underneath us. The warm mist blew toward us and people started backing away.
- All except Gram. She stood there grinning, tilting her face up to the mist, and staring at that fountain of water. "Oh," she said. "Oh, huzza, huzza!" She shouted it into the air and noise.
- Gramps wasn't watching Old Faithful. He was watching Gram. He put his arms around her and hugged her. "You like this old geyser, don't you?" he said.
- "Oh!" Gram said. "Oh yes, I do."
- The man next to me was staring open-mouthed at Old Faithful. "Lordy," he said. "Lordy, that's amazing."
- Gradually, Old Faithful slowed down. We watched it undo itself and retreat into its hole. We stood there even after everyone else had drifted away. At last Gram sighed and said, "Okay, let's go."
- We were inside the car and about to leave when Gram started to cry. "Gol-dang—" Gramps said. "What's the matter?"
- 26 Gram sniffed. "Oh, nothing. I'm so happy I got to see Old Faithful."
- 27 "You old gooseberry," Gramps said, and on we went.

TEXT COPYRIGHT © 1994 BY SHARON CREECH. Used by permissions of HarperCollins Publishers. For rights in the United Kingdom: Walk Two Moons. Copyright © 1994, by Sharon Creech. Reprinted by permission of Writers House LLC, acting as agent for the author.

Questions for Walk Two Moons

After reading Walk Two Moons, complete the selected response questions.

1. In paragraph 19, the phrase surged out means
A. suddenly burst forth
B. increased in width
C. rapidly got hot
D. grew much louder
2. Which two phrases from paragraph 19 best help the reader to know the meaning of surged out?
A. "grating and crunching"
B. "more steam"
C. "climbing and climbing"
D. "whole river of water"
E. "straight up into the air"
F. "three feet high"
The following question has two parts. Answer Part A and then answer Part B.
3. Part A: Which statement best describes a main theme of the story?
3. Part A: Which statement best describes a main theme of the story?A. We should be generous to our loved ones.
A. We should be generous to our loved ones.
A. We should be generous to our loved ones. B. Life can be exciting at any age.
 A. We should be generous to our loved ones. B. Life can be exciting at any age. C. Staying safe is more important than having adventures. D. The childhood years are the best in life. 3. Part B: Which character from the story acts as the best example of this theme?
 A. We should be generous to our loved ones. B. Life can be exciting at any age. C. Staying safe is more important than having adventures. D. The childhood years are the best in life. 3. Part B: Which character from the story acts as the best example of this theme? A. Sal
 A. We should be generous to our loved ones. B. Life can be exciting at any age. C. Staying safe is more important than having adventures. D. The childhood years are the best in life. 3. Part B: Which character from the story acts as the best example of this theme? A. Sal B. the ranger
 A. We should be generous to our loved ones. B. Life can be exciting at any age. C. Staying safe is more important than having adventures. D. The childhood years are the best in life. 3. Part B: Which character from the story acts as the best example of this theme? A. Sal

The following question has two parts. Answer Part A and then answer Part B.

4.	Part A:	How does	Gram feel as	she waits	for the	eruption?
----	---------	----------	--------------	-----------	---------	-----------

- A. Gram is impatient and can hardly wait for the event to take place
- B. Gram is nervous that it will not be as special as she's dreamed it would be.
- C. Gram is more interested in watching the people around her.
- D. Gram is worried she might get hurt.

4. Part B: Which words from the text best support the answer to Part A?

- A. "I was afraid Gram was going to be disappointed . . . "
- B. "Gram brushed off her dress . . . "
- C. "There were people of all ages . . . "
- D. "Gram tapped her fingers together . . . "

5. What does the reader learn from the words of the man standing next to the narrator?

- A. that people are being especially noisy when they look at the eruption
- B. that people are disappointed when they see the first signs of the eruption
- C. that the eruption is later than the expected fifteen minutes
- D. that the eruption is not as exciting as it could have been

6. In paragraphs 16-19, the author includes several descriptions of the many sounds that Old Faithful makes. Why are these descriptions important to the story?

- A. They help the reader understand the science behind the eruption.
- B. They help to develop a theme of how nature is mightier than humans.
- C. They help to build the setting so that the reader can better imagine the site.
- D. They help the reader understand the dangers the characters face.

Essay Map

Introduction: Write one or two sentences that introduce your topic, including a brief description of the main ideas.

Main Ideas: List the main ideas about your topic that you will include in your essay. There can be important facts you'd like to describe, points you'd like to define.

Supporting Details: Write at least three details for each main idea that can further describe, explain, or define it.

Conclusion: Write one or two sentences that will conclude your essay. These can summarize the main ideas, describe what is important about the topic, or talk about what the reader should take away from the essay.

Characteristics of a Summary

When creating a summary, the reader sifts through important ideas from a text and restates the important ideas and details using his or her own words.



- ✓ Includes essential information from the text related to the main idea of the text.
- ✓ Selective in choice of information—focused on the most important information.
- ✓ Concise and presents the big picture of the text.
- ✓ Restates or paraphrases the information—does not just copy the original text.
- ✓ Uses vocabulary specific to the topic.
- ✓ Ideas are presented in a logical and meaningful way.

With information from:

Fountas, I.C. & Pinnell, G.S. (2001). *Guiding readers and writers grades 3-6.* Portsmouth, NH:Heinemann.

Fountas, I.C. & Pinnell, G.S (2006). *Teaching for comprehension and fluency*. Portsmouth, NH: Heinemann.

t t					
How other characters react to this character:					
		<u> </u>	 		
How the character acts:					
What the character looks like:					

Opinion Planner

	 	 	 	 	
My Thesis (Opinion statement)					
Reason #1 (with details)					
Reason #2 (with details)					
Reason #3 (with details)					~
Restate Thesis					

Grade 4 Literacy Experiences #11-15

Literacy Experiences may be completed in one or multiple sittings. Keep track of the texts you are reading by filling in your <u>Reading Log</u>. You may record your responses to texts on paper, in a journal, or using a device.

Literacy Experience 11: Paired Texts and Selected Response QuestionsRead the two texts about <u>Trees</u> and respond to the <u>Trees</u> selected response questions.

Literacy Experience 12: Paired Texts and Evidence Based WritingReread the two texts about <u>Trees</u> and respond to the following prompt:

Using information from the article and the poem, explain how each author supports the idea that tree rings are useful in gathering information about trees. Be sure to use details from both the article and the poem to support your answer. Use the <u>integrate information graphic organizer</u> to plan your response.

Literacy Experience 13: Paired Texts and Selected Response Questions Read the paired texts from <u>Yang the Eldest and His Odd Jobs and Out of the Dust and respond to the Yang the Eldest and His Odd Jobs and Out of the Dust selected response questions.</u>

Literacy Experience 14: Paired Texts and Evidence Based Writing Reread the paired texts from Yang the Eldest and His Odd Jobs and Out of the Dust and respond to the following prompt:

Think about who is telling the story about Eldest Brother and who is speaking in the poem. Write an essay comparing the person who tells the story to the person who is speaking in the poem, describing how each helps the reader understand the characters of Eldest Brother and Billie Jo and their love of music. Use details from both texts to support your response. Use the provided <u>compare and contrast chart</u> as you plan your response.

Literacy Experience 15: Vocabulary

Read or listen to an informational or literary text and select an unfamiliar word from your reading. Complete a <u>Frayer Model</u> to define and describe the unknown word.

Grade 4 Mini-Assessment – "Tree Rings"

Today you will read a passage and a poem about tree rings. You will then answer several questions based on the texts. You will notice as you answer the questions that some of the questions have two parts. You should answer Part A of the question before you answer Part B, but you may return to Part A if you wish.

Now read the passage and poem and answer the questions. I encourage you to write notes in the margin as you read.



IMAGE 1: A road through trees

Image credit: Flickr user Bernard Spragg, NZ

What Can Trees Tell Us About Climate Change?

Quite a lot, actually!

- 1) But to understand what the trees tell us, we first have to understand the difference between weather and climate.
- 2) Weather is a specific event—like a rain storm or hot day—that happens over a short period of time. Weather can be tracked within hours or days. Climate is the average weather conditions in a place over a long period of time (30 years or more).

- 3) Scientists at the National Weather Service have been keeping track of weather in the United States since 1891. But trees can keep a much longer record of Earth's climate. In fact, trees can live for hundreds—and sometimes even thousands—of years!
- 4) One way that scientists use trees to learn about past climate is by studying a tree's rings. If you've ever seen a tree stump, you probably noticed that the top of the stump had a series of rings. It looks a bit like a bullseye.



IMAGE 2: The light and dark rings of a tree.

Image credit: Flickr Creative Commons user Amanda Tromley

5) These rings can tell us how old the tree is and what the weather was like during each year of the tree's life. The light-colored rings represent wood that grew in the spring and early summer, while the dark rings represent wood that grew in the late summer and fall. One light ring plus one dark ring equals one year of the tree's life.

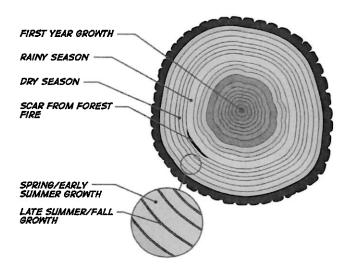


IMAGE 3: The color and width of tree rings can provide snapshots of past climate conditions.

- 6) Because trees are sensitive to local climate conditions, such as rain and temperature, they give scientists some information about that area's local climate in the past. For example, tree rings usually grow wider in warm, wet years and they are thinner in years when it is cold and dry. If the tree has experienced stressful conditions, such as a drought, the tree might hardly grow at all in those years.
- 7) Scientists can compare modern trees with local measurements of temperature and precipitation from the nearest weather station. However, very old trees can offer clues about what the climate was like long before measurements were recorded.



IMAGE 4: This is said to be the Methuselah Tree, one of the oldest living trees in the world. Methuselah, a bristlecone pine tree in White Mountain, California is thought to be almost 5,000 years old. Image credit: Oke/Wikimedia Commons

8) In most places, daily weather records have only been kept for the past 100 to 150 years. So, to learn about the climate hundreds to thousands of years ago, scientists need to use other sources, such as trees, corals, and ice cores (layers of ice drilled out of a glacier).

https://climatekids.nasa.gov/tree-rings/ Courtesy NASA/JPL-Caltech

RINGS NOT LETTERS

by Juanita Havill

1) A tree writes the story of its life

2)	In rings not letters.
3)	One tiny ring at the center:
4)	"Here is where I began."
5)	Next year a new ring:
6)	"Look how much I grew."
7)	Wide bands between rings:
8)	"Hooray for rain and sun."
9)	Narrow bands:
10)	"It's hot and dry and I'm so thirsty."
11)	Fires, insects, the weight
12)	Of a fallen tree against the trunk,
13)	All written in rings, not letters,
14)	the life story of a tree.
	yright ©2014 by Juanita Havill from <i>The Poetry of Science: The Poetry Friday Anthology for Science for Kids</i> compiled Vardell and Janet Wong

QUESTIONS:

1. The following question has two parts. Answer Part A and then answer Part B.

Part A: In the article, what point is the author making in paragraphs 1 - 3?

- A. Scientists can use trees to study climate change because trees live for long periods of time.
- B. By studying trees, we can learn about the relationships between weather and climate.
- C. Scientists have discovered that trees impact the climate and should be closely studied.
- D. By studying trees, we can learn how people from long ago lived during weather events and in different climates.

Part B: Which sentence from the article supports the author's point above?

- A. "If you've ever seen a tree stump, you probably noticed that the top of the stump had a series of rings."
- B. "If the tree has experienced stressful conditions, such as a drought, the tree might hardly grow at all in those years."
- C. "Scientists can compare modern trees with local measurements of temperature and precipitation from the nearest weather station."
- D. "However, very old trees can offer clues about what the climate was like long before measurements were recorded."

2. How does Image 2 most contribute to the reader's understanding of the article?

- A. It shows what a tree might look like that has lived for "thousands" of years.
- B. It clarifies the meaning of the term "stump."
- C. It shows the contrasts between "rings" that scientists are studying.
- D. It clarifies what might be considered a "stressful condition" for a tree.

3. Based on information in paragraphs 5 and 6 of the article, draw a line from each tree ring sample below to the description it best matches.

EXAMPLE OF TREE RING SAMPLE

DESCRIPTION OF TREE



This tree experienced dry weather for a few seasons and then wetter weather later.

This tree experienced consistently wet weather patterns.



This tree experienced wet conditions at first but then experienced drier weather later.



4. What information is revealed by Image 3 that is not discussed in the article?

- A. Trees can also provide information about natural disasters in the area.
- B. Trees rings can show how old a tree was.
- C. Tree rings can show how tall a tree was.
- D. Trees can also provide information about temperatures in the area.

5. This item has two parts. First answer Part A. Then answer Part B.

Part A: What does the word sensitive mean as it is used in paragraph 6 of the article?

- A. easily pained or annoyed
- B. able to learn things through senses
- C. able to sense how others are feeling
- D. easily affected or influenced

Part B: Which phrase from paragraph 6 helps determine the meaning of the word <u>sensitive</u> as defined in Part A?

- A. "... local climate conditions ..."
- B. "... such as rain and temperature...."
- C. "... give scientists some information..."
- D. "... tree rings usually grow wider...."

6. What are the <u>two</u> most likely reasons the poem begins and ends with the references to the life story of a tree?

- A. to suggest that trees have a long life
- B. to highlight the central idea of the poem
- C. to hint that the entire life of the tree is included in the poem
- D. to reinforce the image of the rings of a tree representing the passage of time
- E. to imply that all living things have a story to tell
- F. to establish and then build on the rhythm of the poem

7. How do lines 4, 6, 8, and 10 most contribute to the poem?

- A. They allow the reader to see the tree as a living thing.
- B. They work together to develop the setting where the tree grows.
- C. They allow the reader to understand exactly how long the tree lived.
- D. They work together to develop the conflicts the tree encounters.

8. The following question has two parts. Answer Part A and then answer Part B.

Part A: How are the points of view of the article and the poem different?

- A. The author of the article writes about tree rings in an informative way while the poet tells a story about a newly planted tree.
- B. The author of the article writes a descriptive explanation of the life cycle of a tree while the poet writes an informative explanation of tree rings.
- C. The author of the article writes an informative explanation of tree rings while the poet writes a creative explanation of tree rings.
- D. The author of the article writes a creative story about the climate and weather while the poet writes a descriptive explanation of tree growth.

Part B: Choose one detail from the article and one sentence from the poem that <u>best</u> support the answer to Part A.

Article	Poem
"Weather can be tracked within hours or days."	"Fires, insects, the weight"
"One light ring plus one dark ring equals one year of the tree's life."	"A tree writes the story of its life"
"So, to learn about the climate hundreds to thousands of years ago, scientists need to use other sources, such as trees, corals, and ice cores (layers of ice drilled out of a glacier)."	"Hooray for rain and sun."
"In fact, trees can live for hundreds— and sometimes even thousands—of years!"	"Look how much I grew.'"

9. The following question has two parts. Answer Part A and then answer Part B.

Part A: Read lines 11, 12, and 13 from the poem:

Fires, insects, the weight

Of a fallen tree against the trunk,

All written in rings, not letters

Why does the poet include these lines?

- A. to reinforce the idea that a tree's rings tell a story
- B. to compare the tree to an author to make the poem easier to understand
- C. to explain the events that happen to trees in a scientific manner
- D. to describe how the rings of a tree are created through natural disasters

Part B: Which sentence from the article has the same purpose as the lines from the poem in Part A?

- A. "In fact, trees can live for hundreds—and sometimes even thousands—of years!" (paragraph 3)
- B. "It looks a bit like a bullseye." (paragraph 4)
- C. "One light ring plus one dark ring equals one year of the tree's life." (paragraph 5)
- D. "If the tree has experienced stressful conditions, such as a drought, the tree might hardly grow at all in those years." (paragraph 6)

Name____

Integrate Information: Trees

Use the chart to integrate information from the two sources about trees.

How are tree rings useful in gathering information about trees?	How are tree rings useful in gathering information about trees?	
Source 1	Source 2	

Grade 4 Mini-Assessment – Paired excerpts from Yang the Eldest and His Odd Jobs and Out of the Dust

Today you will read two texts about people who love to play music. You will then answer questions based on these texts. You will notice as you answer the questions that some of the questions have two parts. You should answer Part A of the question before you answer Part B.

Now read the passages and answer the questions. I encourage you to write notes in the margin as you read the passages.

Text 1: An excerpt from Yang the Eldest and His Odd Jobs

by Lensey Namioka

Eldest Brother, a talented musician, discovers the violin he has been working so hard to purchase has been sold. Also, he has hurt his hand so badly at work that playing the violin is now difficult, but he is too sad to do the exercises that would make him able to play the violin without pain.

- 1 Now that Eldest Brother had no hope of buying the violin he had set his heart on, I would have thought that earning money would be less important to him.
- 2 But he went off to the Sushi Hi, and when he returned home, he counted his earnings just as eagerly as before.
- 3 "What are you going to do with all this money you saved?" I asked him. "Even though you can't buy Mr. Vitelli's violin, you have more than enough to rent a good one."
- 4 He turned on me savagely. "Stop nagging me! I'm sick and tired of hearing you go on and on about renting a violin!"

- In the weeks that followed, Eldest Brother seemed to have lost interest in music. When some of Father's fellow musicians came over to play quartets and trios, Eldest Brother didn't even go downstairs to listen.
- What if he decided to give up music entirely? He might want to become a full-time carpenter instead, like Mr. Conner. Or he might open up a restaurant, make polyester shingles, sell felt tents and silk parkas... On that thought, I wanted to cry.

* * *

- 7 I thought about what Fourth Brother had said: Eldest Brother had to want to play again.
 The way things were going, it didn't seem like he ever would. "It's time for us to think up a plan," I said to Fourth Brother.
- Fourth Brother had an idea. "I'll get Matthew to come over and play for Eldest Brother.

 Maybe when he sees how beautifully Matthew plays, Eldest Brother might get back his own love for music."
- 9 I liked his idea, but I added a twist. "Let's ask Matthew to play a piece that's way too hard for him. Then Eldest Brother will have to pick up his violin to help."

- 10 Matthew was eager to be part of the plan. He also missed playing in our family quartet. He came over that night with his fiddle and asked which piece he should play. I handed him the music for a Bach unaccompanied partita¹. It was one of Eldest Brother's favorite pieces, and it much too hard for Matthew.
- 11 When Matthew saw the music, he yelped. "I can't do that piece! I'd murder it!"
- 12 "That's exactly what we want to do," I told him. We convinced him that it was for a good cause.
- 13 So Matthew, Fourth Brother, and I trooped into Eldest Brother's room. We found him lying in bed, looking at the ceiling. His pay stubs were stacked in a neat pile on his desk next to a calculator. His violin was nowhere to be seen. "What do you want?" he snapped.
- 14 Matthew cleared his throat. "I'm planning to audition for the All-City Orchestra this fall, and I'm thinking of playing a movement of this. What do you think?"
- He held out the sheet music. After a few seconds, Eldest Brother heaved himself up and glanced at the music. Then he looked more closely. "It's the gigue² from the E Major Partita! You're thinking of playing that?"
- 16 "I thought I'd impress the conductor," Matthew said. "The problem is, there are some passages that don't sound quite right."

¹ An ordered series or set of music

² The end of a set of music

- 17 Eldest Brother raised his eyebrows. "I'm not surprised! All right, let's hear you play."
- 18 Matthew took out his fiddle, tuned it quickly, and swallowed hard. Then he plunged in. You had to give him credit for guts—or gall. Anyway, some part of his innards. He struggled heroically, but there were just too many flying notes for him.
- 19 Even Fourth Brother knew that things were not going well. Matthew's sweating brow and tightly clenched teeth told the whole story. At the end, Matthew lowered his fiddle and hung his head.
- 20 There was a long silence. Then Matthew looked up. "I think I need some help with those double and triple stops," he admitted.
- 21 Another long silence. I felt a hysterical urge to laugh, but managed to fight it down. Finally Eldest Brother got up from the bed, walked over to Matthew, and took the violin gently from his hands. "You need help with a few other things, too," he said.
- He picked up Matthew's bow and started to play. After a couple of measures, he suddenly winced, and the bow screeched across the string. He put the instrument down and lay back down on his bed.
- 23 "Maybe I should play an easier piece, huh?" asked Matthew. He took out another piece of music, the one he had really intended to play for the audition.

- 24 It was the "Meditation" from *Thaïs*, by Massenet, a short work and not very showy, but very lyrical. Matthew closed his eyes and began to play. He had obviously practiced hard on the piece, and he went into it without having to worry about the notes. We had all known for some time that Matthew was talented, so I was not surprised at the musicianship he showed. But I was still overwhelmed by the beauty that poured out of his instrument and flooded the small room.
- 25 Matthew played his heart out. He fully understood the importance of what he was doing.

 Eldest Brother's recovery meant almost as much to him as it did to our family.
- 26 I felt my eyes fill with tears. I glanced at Eldest Brother and saw that tears were rolling down his cheeks. Our plan had worked.
- 27 Eldest Brother started his rehab exercises that very night.

Excerpt from "Yang the Eldest and His Odd Jobs" by Lensey Namioka, pages 99-104, ©2000 Lensey Namioka, ISBN 0-316-59011-8

Text 2: Excerpt from Out of the Dust

by Karen Hesse

In this excerpt, Billie Jo, a teenager living through a hard time in American history, explains how she feels while she plays the piano.

On Stage

1 When I point my fingers at the keys,

the music

springs straight out of me.

Right hand

5 playing notes sharp as

tongues,

telling stories while the

smooth

buttery rhythms back me up

on the left.

Folks sway in the

Palace aisles

grinning and stomping and

out of breath,

15 and the rest, eyes shining,

fingers snapping,

feet tapping. It's the best

I've ever felt, playing hot piano, 20 sizzling with Mad Dog, swinging with the Black Mesa Boys, or on my own, crazy, 25 pestering the keys. That is heaven. How supremely heaven Playing piano 30 can be. January 1934

From OUT OF THE DUST by Karen Hesse. Copyright ©1997 by Karen Hesse. Reprinted by permission of Scholastic Inc.

QUESTIONS:

1. This item has two parts. Answer Part A, and then answer Part B.

Part A: In paragraph 14 of Text 1, what does the word audition mean?

- A. perform for
- B. copy the style of
- C. learn from
- D. enjoy the music of

Part B: Which two details from the text best help the reader understand the meaning of the word <u>audition</u>?

- A. "Matthew cleared his throat."
- B. "'...I'm thinking of playing a movement of this."
- C. "He held out the sheet music."
- D. "After a few seconds, Eldest Brother heaved himself up..."
- E. "Then he looked more closely."
- F. "I thought I'd impress the conductor,' Matthew said."

2. Which <u>two</u> sentences from Text 1 <u>best</u> show that the narrator's home is always filled with music?

- A. "When some of Father's fellow musicians came over to play quartets and trios, Eldest Brother didn't even go downstairs to listen."
- B. "I thought about what Fourth Brother had said: Eldest Brother had to want to play again."
- C. "He also missed playing in our family quartet."
- D. "After a few seconds, Eldest Brother heaved himself up and glanced at the music."
- E. "We had all known for some time that Matthew was talented, so I was not surprised at the musicianship he showed."
- F. "Eldest Brother's recovery meant almost as much to him as it did to our family."
- 3. Circle two different paragraphs in Text 1 that show that Eldest Brother feels upset about hurting his hand and losing the chance to buy the violin he wanted.

4. From the list called "The Narrator's Qualities," choose the two qualities that best describe the narrator in Text 1 and write them in the chart. Then choose one supporting detail for each quality and write the detail in its place in the chart.

The Narrator's Qualities	Supporting Detail
1.	
2.	

The	Narrator's Qua	alities
clever	curious	talented
bossy	shy	caring

Supporting	g Details
Tries not to laugh at Matthew	Worries about Eldest Brother
Asks Eldest Brother about his money	Wants Fourth Brother to help her
Tells Matthew to play badly	Enjoys Matthew's playing

5. This item has two parts. Answer Part A, and then answer Part B.

Part A: Read the lines from Text 2.

or on my own/crazy,/pestering the keys.

What does the word pestering mean as it is used in these lines?

- A. pretending to know
- B. being mean or cruel to
- C. touching over and over
- D. asking for help

Part B: How does the poet's use of the word pestering help the reader better understand the poem?

- A. It shows that the speaker is not always a kind person.
- B. It shows that the speaker plays in a quick and forceful way.
- C. It shows that the speaker talks a lot during her music lessons.
- D. It shows that the speaker has trouble with certain pieces of music.

6. This item has two parts. Answer Part A, and then answer Part B.

Part A: In Text 2, what does the speaker seem to be most aware of as she plays?

- A. whether she is hitting the right notes
- B. how people are enjoying her music
- C. the fact that everyone is watching her
- D. her memories of past performances

Part B: Which detail from the poem best supports the answer to Part A?

- A. She says playing the piano is "supremely heaven."
- B. She mentions people she has played music with.
- C. She explains how she uses her hands as she plays.
- D. She describes everything her audience is doing.

7. Which statement best describes how Text 1 and Text 2 convey events?

- A. Text 1 uses narration and dialogue, while Text 2 uses narrated rhythmic stanzas.
- B. Text 1 uses dialogue and stage directions, while Text 2 uses repeated words and phrases.
- C. Both texts use description, but Text 1 uses narration and Text 2 uses rhyming verse.
- D. Both texts use multiple scenes, but Text 1 uses long speeches and Text 2 uses short lines.
- 8. From the list of themes, choose the main theme shared by Text 1 and Text 2 and write it in the correct place on the chart. Then, choose one statement from Text 1 and one statement from Text 2 that support this theme. Write the supporting statements to their correct place on the chart.

Main Theme in Both Texts	Support from Text 1	Support from Text 2

Themes

Musicians enjoy being around each other.

Musicians need a lot of admiration and support.

Music can bring happiness to people's lives.

Musicians must practice in order to play well.

Support in Text 1

I thought about what Fourth Brother had said: Eldest Brother had to want to play again.

Matthew was eager to be part of the plan.

He had obviously practiced hard on the piece, and he went into it without having to worry about the notes.

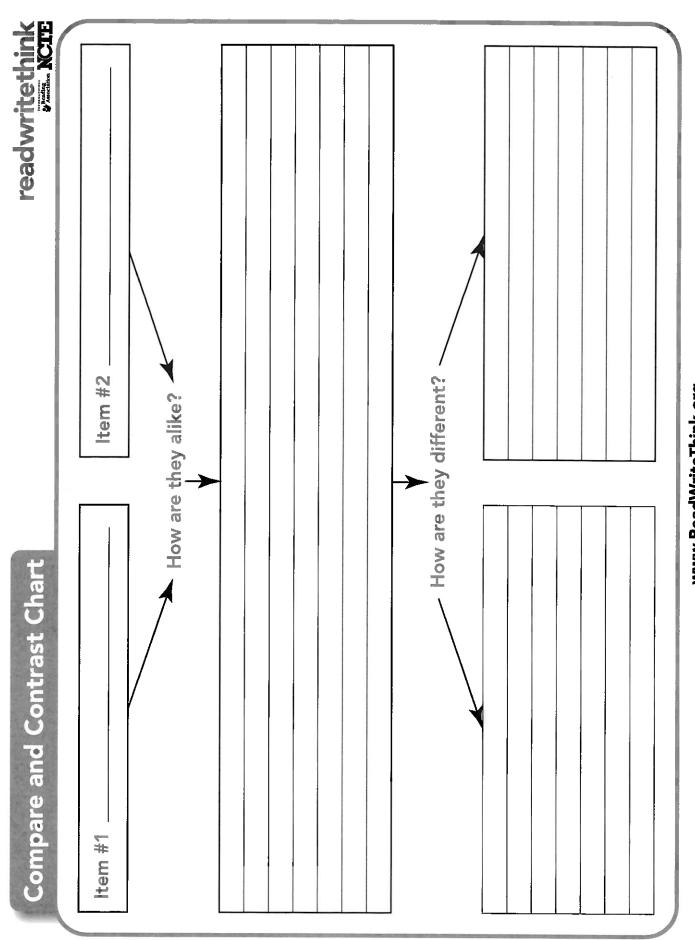
I glanced at Eldest Brother and saw that tears were rolling down his cheeks.

Support in Text 2

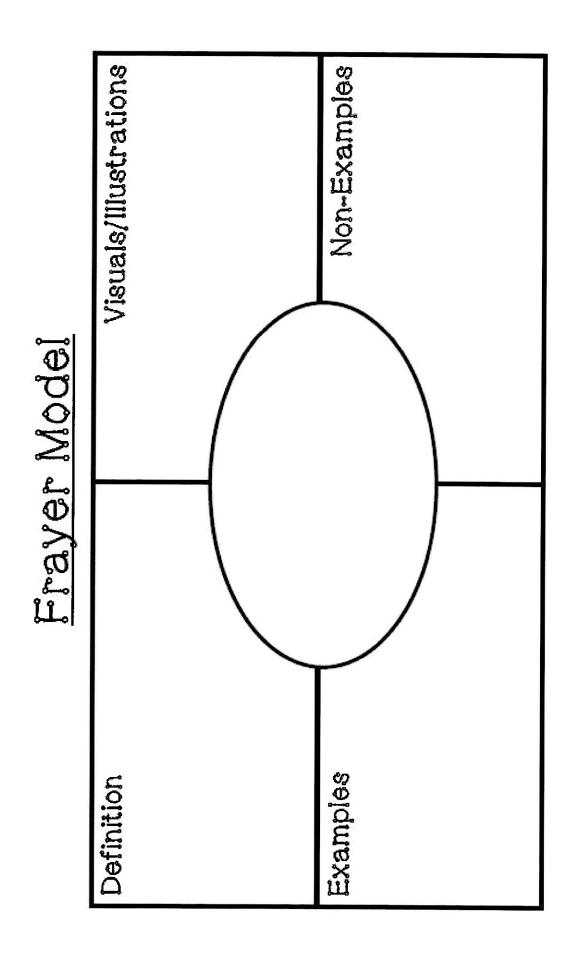
the music/springs straight out of me.

and the rest, eyes shining/fingers snapping,

It's the best/ I've ever felt/playing hot piano,
swinging with the Black Mesa Boys,



www.ReadWriteThink.org © 2011 IRA/NCTE. All rights reserved. ReadWriteThink.org materials may be reproduced for educational purposes.



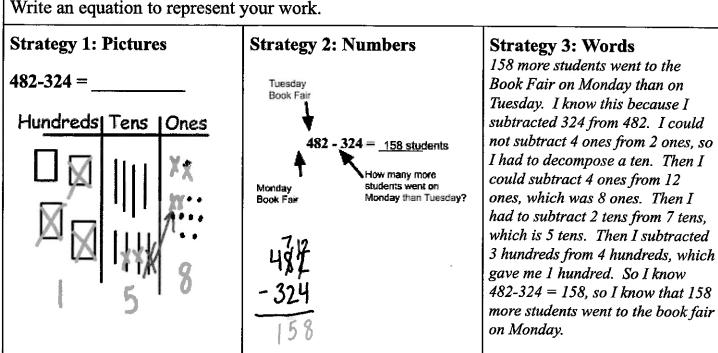
Mathematics

Grade 4 Mathematics Experiences

During mathematics instruction, students are expected to be able to use multiple strategies to solve problems. While completing the problems that follow at home, students should also use multiple strategies to show their complete understanding. An example of different strategies students should use to complete problems is provided below.

Sample Problem:

482 students went to the Book Fair on Monday. 324 students went to the book fair on Tuesday. How many more students went to the Book Fair on Monday than on Tuesday? Write an equation to represent your work.



Additionally, it is important to discuss with your student the steps they take to solve the problem and why those steps are important. With the Common Core State Standards, students are expected to be able to talk about their understanding of the mathematical concepts and their analysis of problems.

Complete 4 boxes each day.

What number must be added to 13,072 to result in a sum of 45,066? Draw a tape diagram to represent the problem. Use numbers to solve, and write your answer as a statement.	Margie jumped rope 125 times. Margie jumped 5 times as much as Lisa. How many times did Lisa jump? Write an equation to represent your work and solve.	Paula biked 6.5 miles on Saturday. On Sunday, she biked 2.7 miles. Monday she biked 4.2 miles. How many miles did she bike altogether?	Add: 1,009 + 234 + 103,987 = 12 + 34 + 907 + 14 = 102 + 34 + 87 + 100 =	Use a strategy to solve the following problems. Explain your strategy to someone at home. • 4 × 527 = • 603 × 8 = • 9 × 232 =
Write a word problem to match one of the expressions listed below. Then draw a model to represent the problem. • 3,444 + 2,444 + 212 = • 12,409 + 345 + 2,399 = • 1,222 + 456 + 210 =	Janet has three coins. One coin has a value that is 5 times another coin. The third coin has a value that is 2 times another coin. She has 40¢ altogether. What coins does she have? Write an equation to represent your work and solve.	Harriet had a package that weighed 2 lbs. and 3 oz. Hannah had a package that weighed 26 oz. Whose package weighed more? How do you know?	Use a strategy to solve the following problems. Explain your strategy to someone at home. 159 X 7 = 5 x 376 = 932 x 6 =	What is the greatest number you can make using the digits 3, 4, 7, and 8 (use each digit only once)? What is the least number you can make? Explain how you know.
It takes Mary 55 minutes to get ready for school, eat breakfast, and walk to school. If she needs to be at school by 8:30, what time does she need to get up? How long could it take her to get ready? Eat breakfast? Walk to school?	Mrs. DuBois has 325 packs of index cards. If 6 index cards come in a pack, how many index cards does Mrs. DuBois have in all? Use a strategy to solve and write an equation to represent the problem.	Which of the following fractions are greater than 1/2? Which of them are smaller than 1/2? Explain how you know to someone at home. 1/3 3/2 9/8 5/8	The fourth graders held a fundraiser to raise money for a field trip. They needed \$4,590. They earned \$1,389. How much more money do they need to earn? Write an equation to represent your work and solve.	Write the following in expanded notation. 17 tens, 4 ones 3 thousands, 22 tens, 6 ones 14 thousands, 2 hundreds, 14 ones

ı			
ľ		1	
l	Ē	5	
ľ	7	0	
ŀ			
ŀ	1		
l	0	٥	
l		3	
ľ	1	2	
ŀ		3	
l			
l		2	
ď	۳	۴	

				Hulluleus, 7 Olics
				hundrade / once
	· 876 x 3 =		your work and solve.	B) 12 thousands, 7
your answer.	, , , , , , , , , , , , , , , , , , ,	farthest?	equation to represent	tens, and / ones
a model to represent	: 12 × 347 =	the two boys ran the	month? Write an	A) 13 nunareas, o
length of one side? Draw	· 236 X 5 =	Jose ran a mile, which of	spend reading last	200
wide, what would be the		the past two days? If	much time did Michelle	notation.
If one side is 14 1/4 feet	someone at home.	How far has he run over	much as Michelle. How	form, and expanded
total perimeter is 79 feet.	Explain your strategy to	ran 2/3 of a mile today.	Jose read 5 times as	standard form, word
new playground. The	the following problems.	to school yesterday. He	minutes last month.	value representations in
The local park built a	Use a strategy to solve	Diego ran 2/3 of a mile	Jose read for 325	Write the following place



Drag one number into each box to complete the subtraction problem shown.

5 6 5 0 <u></u>] 6
1 2 3 4 5 6 7 7 8 9	

Complete 4 boxes each day.

22 tens, 3 ones	0.3	Savannah saves \$5.50	In Waterville, it rained	Ms. Love's class read for
4 thousands, 12 tens, 2	1.5	able to buy a bicycle for	Monday, 4.6 inches on	If the class read more of
ones	1.6	\$275 after she saves for	Tuesday, and 3.05	the minutes in March
24 thousands, 12	ā	one year?	inches on Wednesday.	than they did in January,
hundreds, 14 ones	1.71	Explain how you can use	Waterville has a record	how many minutes might they have read in
	Which decimal does not	estimation to answer the	days.	March?
	Explain your thinking.	duconon.	How much does it have to rain on Thursday to	Provide at least three different possibilities for
			break the record?	how the minutes may
				have been split, and
Isabel does not like	Use a strategy to solve	Solve the number	You multiply 2 numbers.	A rectangle has an area
apple Juice.	Explain your strategy to	numbers given.	There are 4 digits in the	of 26 feet. What could be
and orange juice.	someone at home.	• 12, 4, 9, 3, 18, 2	product.	the possible measurements for the
Jerome does not like	· 3 X 619 =		How many digits can there be in each factor?	length and width? Draw a picture to help you. List
grape Juice or orange juice.	. 603 x 8 =	When you multiply the	Explain your thinking.	all equations to
If there is one box of	· 9 × 232 =	numbers, you get 36. When you divide the	Give examples.	represent your work.
each type of juice, which		numbers, you get 4. The		
kind will each person		numbers are and		
choose?				

Which is the greatest?	Which is greater 2.9 or	Add.	The perimeter of the	Jose worked for his
• One third of 60	2.09?	2 007 + 123 + 204 765 =	mystery rectangle is 32	father for 136 minutes. If
	What can you draw or		mystery rectangle is 10	between Jose and his
 One fourth of 60 	say to explain the	14 + 46 + 805 + 21 =	feet.	father is 340 minutes,
 One fifth of 60 	answer?	131 + 55 + 78 + 300 =	10/hat in the own of the	how many hours did his
			mystery rectangle?	father work?
How did you decide?				
Name a fraction	To solve a word problem,	Place a decimal point in	Use a strategy to solve	Write a word problem to
between:	Ben added 3.7 and 2.4.	each addend to make	the following problems.	match one of the
	Then he subtracted the	the sum true.	Explain your strategy to	expressions listed below.
0 and 1	sum from 15.		someone at home	Then draw a tape
 0 and ½ 		457 + 343 = 8	· 247 X 6 =	diagram to represent the problem.
 0 and ½ 	Write a word problem		· 12 x 234 =	. 98,007 — 4,876 =
	that way.		· 765 x 5 =	· 106,009 — 17,333 =
				· 40.007 — 3.555 =

600						0
Javier sa	ys that all odd nu	mbers greater tha	n 2 and less tha	n 20 are prime.		
Find an o	odd number great	er than 2 and less	than 20 that is	n ot prime. Explain	why the number	is not prime

Complete 4 boxes each day.

Write the following in expanded notation.	I am thinking of two fractions.	Find the greatest number that makes the	What is the greatest fraction you can think of	Paula had 6/8 of a pizza left. If she ate less than
30 tens, 6 ones	When you add them,	r sentei	that, when rounded to the nearest whole	half of the remaining pizza, how much could
5 thousands, 31 tens, 6 ones	their sum is 1.When you subtract them, their difference	6 x < 2300	number, rounds to 4? What is the least fraction	she have eaten? Draw a model of your choice that represents your
16 thousands, 8	is 0.		you can think of that,	equation and answer,
hundreds, 17 ones	What are the fractions?		nearest whole number, rounds to 4?	and explain your rationale.
Write a decimal number	Use a strategy to solve	l am a decimal number.	Find the number.	The soccer team
in tenths, hundredths, and thousandths that is	the following problems. Explain your strategy to	When you add me to 0.5, you get the same	Clues: • It is less than 5 x	washed cars and sold sports mugs to raise
between:	someone at home.	answer as when you	5.	money for new uniforms.
4 and 5	· 8 X 147 =		28 ÷ 4.	\$6 each. They sold 21
3 and 3.4	· 705 x 6 =	vvnat number am i r	 When you divide it by 4, the 	mugs for \$8 each. All the supplies were donated.
0 and 0.2	· 9 x 434 =		remainder is 2.	Has the team raised
			It is a multiple of 3.	enough money to buy \$500 worth of uniforms?
Place a decimal point in each addend to make the sum true.	Eric and Kiran went on a bike tour. They rode 8.4 miles before lunch. They	Add: 2,008 + 568 + 403,987 =	Suppose you know that $96 \div 6 = 16$	Write a word problem that the expression 5 x % could represent.
1245 + 321 = 15.66	miles after lunch. How many miles did they ride in all?	21 + 67 + 808 + 29 = 221 + 78 + 66 + 400 =	How can you use this information to figure out 96 ÷ 12?	represent your problem.

	•			
Which offer is the better	Keenan, Bryan, and	The Lyons family is	Use a strategy to solve	Solve the number
buy?	Vanessa work for the	going to a wedding in	the following problems.	mystery, Use the
	Eager Lawn Mowing	Salt Lake City, Utah. The	Explain your strategy to	numbers given.
Blaire's Blow-Ups:	Company. This weekend	distance from their home	someone at home	
8 balloons for \$0.96	they each mowed 4	in Atlanta, Georgia to		4, 6, 3, 8, 2, 12
	lawns and worked for 12	Salt Lake City is 1,880	· 362 X 7 =	
Perry's Poppers:	hours.	miles. The wedding is	. 12 < 828 -	When you multiply the
6 balloons for \$0.78.	 Keenan earned 	June 6, and the family	2 > 020 -	numbers, you get 24.
	\$250.	wants to arrive one day	· 654 x 9 =	When you divide the
Explain how you know.	 Bryan earned \$72 	early.		numbers, you get 6. The
	for each lawn he	They plan to drive an		numbers are and
	mowed.	average of 50 miles per		
	 Vaness received 	hour, for 7 hours per day.		
	\$22 an hour.	When should they begin		
	Estimate to find out who	their trip? Tell how you		
	earned the most money	decided.		



4.0A Carnival Tickets

Alignments to Content Standards: 4.OA.A.3

Task

Every year a carnival comes to Hallie's town. The price of tickets to ride the rides has gone up every year.

Year	Ticket Price
2008	\$2.00
2009	\$2.50
2010	\$3.00
2011	\$3.50
2012	\$4.00

- a. In 2008, Hallie's allowance was \$9.00 a month. How many carnival tickets could she buy with one month's allowance?
- b. If her allowance had stayed the same, \$9.00 a month, how many carnival tickets could she buy in 2012?
- c. In 2012, Hallie's allowance was \$14.00 per month. How much did her monthly allowance increase between 2008 and 2012?
- d. How much more did a carnival ticket cost in 2012 than it did in 2008?
- e. Was Hallie able to buy more carnival tickets in 2008 or in 2012 with one month's allowance?



f. What would Hallie's allowance need to be in 2012 in order for her to be able to buy as many carnival tickets as she could in 2008?

g. What happens to your ability to buy things if prices increase and your allowance doesn't increase?

IM Commentary

The purpose of this task is for students to solve multi-step problems in a context involving a concept that supports financial literacy, namely inflation. Inflation is a sustained increase in the average price level. In this task, students can see that if the price level increases and people's incomes do not increase, they aren't able to purchase as many goods and services; in other words, their purchasing power decreases. If the price level rises and people's incomes increase at a slower rate, their purchasing power increases but not as much as if their income increases at the same rate as the cost of goods and services. This task is a variation on another task 6.NS Movie tickets that also addresses inflation. From a mathematical perspective, students are asked to solve word problems involving operations only with whole numbers because students are not required in fourth grade to compute with decimal numbers. However, they are asked to understand decimal notation for fractions with denominators of 10 and 100 (see 4.NF.6) and so this task capitalizes on this by representing whole numbers with decimal notation and including dollar amounts that are not whole numbers in the table. Also, students in 4th grade should be comfortable with two-column tables (see e.g. 4.MD.1), so this task gives them some practice reading information in a table. Note that the numbers were chosen specifically so that there would be remainders for them to interpret (as described in 4.OA.3). This task is part of a set collaboratively developed with Money as You Learn, an initiative of the President's Advisory Council on Financial Capability. Integrating essential financial literacy concepts into the teaching of the Common Core State Standards can strengthen teaching of the Common Core and expose students to knowledge and skills they need to become financially capable young adults. A mapping of essential personal finance concepts and skills against the Common Core State Standards as well as additional tasks and texts will be available at http://www.moneyasyoulearn.org.

The Standards for Mathematical Practice focus on the nature of the learning experiences by attending to the thinking processes and habits of mind that students need to develop in order to attain a deep and flexible understanding of mathematics. Certain tasks lend themselves to the demonstration of specific practices by students. The practices that are observable during exploration of a task depend on how instruction unfolds in the classroom. While it is possible that tasks may be connected to



several practices, only one practice connection will be discussed in depth. Possible secondary practice connections may be discussed but not in the same degree of detail.

This particular task helps illustrate Mathematical Practice Standard 2, Reason abstractly and quantitatively. Students make sense of quantities and how they are related in a problem situation. In the task at hand, students decontextualize each step of the problem and represent it with numbers and symbols. As they work through each step, they will pause to make sense of the quantities and operations that the symbols represent. The problem culminates in students making connections between their solutions in each step to the bigger idea of inflation. Problems that begin with a context and are represented with mathematical objects or symbols are also examples of modeling with mathematics (MP.4).

Edit this solution

Solution

a. If she has \$9 and tickets cost \$2 each, we divide 9 by 2 to find out how many tickets she has (this is a "How many groups?" division problem).

$$9 \div 2 = 4$$
, with a remainder of 1

So she could buy 4 carnival tickets with one month's allowance in 2008 and would have \$1.00 left over.

b. As before, we divide to find how many tickets she can buy. $9 \div 4 = 2$ with a remainder of 1. So if her allowance was \$9.00 in 2012, she could only buy 2 tickets with one month's allowance.

c. Her allowance was \$9.00 and now it is \$14.00, and

$$14 - 9 = 5$$

so her allowance increased by \$5.00.

d. Since Tickets cost \$4 in 2012 and they cost \$2.00 in 2008, and

$$4 - 2 = 2$$

a carnival ticket cost \$2.00 more in 2012 than it did in 2008.

e. We will divide as we did in parts (a) and (b)



$14 \div 4 = 3$, with a remainder of 2

So she could buy 3 carnival tickets with one month's allowance in 2012 and would have \$2.00 left over. Even though her allowance went up, the number of tickets she could buy went down.

f. Since carnival tickets cost \$4.00 in 2012 and she could buy 4 tickets in 2008, and $4 \times 4 = 16$, her allowance in 2012 would need to be at least \$16.

g. You can buy fewer things if prices increase but your allowance doesn't increase.



4.OA Carnival Tickets

Typeset May 4, 2016 at 20:55:26. Licensed by Illustrative Mathematics under a

Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.

Science

Name:			
rame.	 		

Grade Four Science Experiences

Your child may complete one or two experiences per week.

Experience #1

Look outside for evidence of soil that has been washed away by rainwater. Explain why the soil was washed away.

Think about:

- Are there plants or rocks on the surface?
- How much soil was washed away?

Experience #2

Read a story or watch a video about streams or rivers or erosion.

→ You may use any story or video that you like. Two examples are provided here: https://google.discoveryeducation.com/learn/videos/42a82cd4-7f43-4844-ae2e-7b4c408b0332/ https://google.discoveryeducation.com/learn/videos/fe0b91ad-3412-4c68-8ffa-08a5108846c3/

Think about:

- Describe some evidence of erosion.
- What do you think happens to the rate of erosion when water moves faster?

Experience #3

Fill a bowl or other container halfway with water. Create small waves by dropping small objects or drops of water into the water.

Think about:

- How can you make the waves longer?
- How can you make the waves taller?

Experience #4

Use a simulation to investigate differences in wavelength and height.

→ You may use any simulation that you like. One example is provided here: https://phet.colorado.edu/sims/html/waves-intro/latest/waves-intro_en.html [Set to Side View, and use the green button to create waves.]

Think about:

- How can you make the waves longer?
- How can you make the waves taller?

Health and Physical Education



health.mowes.mlnds.

Elementary Mind & Body Calendar

March 2020

						T
	SATURDAY	7 Wild Arms As fast as you can complete: 10 Arm Circles front & back 10 Forward punches 10 Raise the Roof's Repeat 3x	14 Chest Pass Practice your chest passes against a brick wall. Remember to step towards your target.	21 Walking Race Pick a distance and challenge a friend to a speed walking race. No running!	28 Vertical Jump Jump as high as you can for 30 seconds. Repeat.	nds school-age children utes and up to several ar day. Each bout of followed by cool-down soreness and avoid
oons caleman	FRIDAY	6 Bear Walk With your bottom in the air, step forward with your right hand & step forward with your left foot. Step forward with the left hand then the right foot. Continue to move across the room.	13 Toe Fencing With a partner, hold each other's shoulders. Try to tap the other person's toe without having yours tapped.	Stroll During a commercial break take a walk around your entire house. Still a commercial? Go again this time speed walking so you don't miss a thing!	27 Set the Menu Talk with who takes care of you about choosing the dinner menu. Pick whole grains and veggies.	SHAPE America recommends school-age children accumulate at least 60 minutes and up to several hours of physical activity per day. Each bout of physical activity should be followed by cool-down stretches that help reduce soreness and avoid injury. Happy exercising!
Lieilleiltai y Millia & Boay Caleildai	THURSDAY	5 Sidewalk Chalk Balance Draw different kinds of lines on the ground with chalk. Walk along them one foot in front of the other balancing.	12 Happy Baby Pose Straighten your legs for an added challenge.	19 Pretend! Pretend to: -Sit in a chair for 10 -Shot a basketball 10 times - Ride a horse -Be a frog	26 Do this: -Hop on one leg 30 times, switch legs -Take 10 giant steps -Walk on your knees -Do a silly dance -Sprint for 10 seconds	ervances: onth ness Day of Unplugging n)
	WEDNESDAY	4 Walking Race Pick a distance and challenge a friend to a speed walking race. No running!	Knees Gather rounded objects of varying size. Starting with the largest try walking around your house keeping the object between your knees.	Minute For 60 seconds, clear your mind & only focus on your breathing. If your mind starts to wander, bring your attention back to your breathing.	25 Army Crawl Lay on your stomach resting on your forearms. Crawl across the room dragging your body as if you're moving under barbed wire.	National Health Observances: National Nutrition Month 1st. Self-Injury Awareness Day 6th -7th National Day of Unplugging (sundown-to-sundown)
	TUESDAY	3 Mincful Minute For 60 seconds, clear your mind & only focus on your breathing. If your mind statis to wander, briting your attention back to your breathing.	10 Crazy 8's 8 jumping jacks 8 leaps 8 frog jumps 8 vertical jumps (as high as you can) Repeat 3 times	17 Code Words While watching TV any time you hear the code words complete 10 jumping jacks. Code words: green, St. Patrick's Day, lucky, leprechaun	24 Read & Move Pick a book to read and select an "action word" that will be repeated often. When the "action word is read stand up and sit down.	31 Mindful Minute For 60 seconds, clear your mind & only focus on your breathing. If
	MONDAY	2 Musical Frogs This game is just like musical chairs except players hop around like frogs and sit on lily pads (pillows).	9 Limbo Grab a broom stick and have 2 people hold it. Take turns going under the stick arching backwards. Lower the stick after each successful pass. How low can you go?	16 Mindful Minute For 60 seconds, clear your mind & only focus on your breathing. If your mind starts to wander, bring your attention back to your breathing.	Tag A regular game of tag, A regular game of tag, but if someone touches your arrivleg you can no longer use that body part. If both legs are tagged start a new round.	30 Crabby Clean Up Tidy up while walking like a crabl Carry items on your belty across the
	SUNDAY	I Mindful Minute For 60 seconds, clear your mind & only focus on your breathing. If your mind starts to wander, bring your attention back to your breathing. Self-Injury Awareness Day	8 Sugarcane Pose Hold Sugarcane Pose for 30 seconds on each side.	15 Put a piece of tape on the ground and jump back and forth as quick as you can for 30 seconds.	22 Dance, Dance Put on your favorite song or turn on the radio. Dance however you like during the entire song!	29 Ragdoli Pose Hold Ragdoll Pose for 30 seconds. Repeat.

Yoga pictures from www.forteyoga.com