

5th Grade



Enrichment Package 2020

VOLUME 2



Name: _____



Learning Enrichment Booklet Project for Grade 5

Volume II

Spring 2020

Dear Parents and Caregivers,

The OU BOCES Instructional Specialists have assembled ELA and Math Enrichment booklets for grades K, 1, 2, 3, 4, and 5 based on resources developed by NYSED and by OU BOCES. There is a Volume I and Volume II for each grade level. With the NYS Next Generation Standards in mind, we selected ELA and Math focused activities. We made an effort to choose reading passages that address social studies and science learning standards as well. It was our goal to offer learning and review tasks that students who are on grade level could do fairly independently. Ten days of learning enrichment have been designed to be completed while school is closed due to the COVID-19 outbreak.

In order to complete the work in this booklet one needs a pencil/pen, crayons, and sometimes a scissor. We have tried to include types of activities that should seem familiar to your child. We believe that each section could be completed within one day. Please help your child pace themselves. This booklet is designed to be completed over 10 days. One section of activities per day should feel comfortable for most students. If a child cannot complete a full section in day, he or she can do part of a section. As educators, we believe it is important to do some academic work each day.

Sincerely,

The Instructional Support Services Team

Dear Students,

We hope you find these activities interesting. We hope they help you keep your school skills sharp. Each section is designed for one day. If you have trouble finishing a section, ask an adult or friend for help. Please do your best work. Thank you for working on this enrichment book and practicing your academic skills and knowledge. Please also make time to read while you are home.

Sincerely,

The Instructional Support Services Team

www.ouboces.org

DAY 1

Read this story. Then answer Questions 1 through 7.

Excerpt from *The Woolly-Puff Rescue*

by Sue Mozena

- 1 Wendy and Alex stared at the strange flower at their feet. Dozens of them bloomed in this remote corner of the field.
- 2 Wendy bent down for a closer look. "We shouldn't name them until we're sure we can keep them," she warned. "But I like Woolly-Puffs. They look just like fleecy rainbows."
- 3 As tempting as it was to pet the feathery yellow-orange-red-purple-blue petals, neither of them did. Instead, Wendy pulled protective gloves from her belt pack.
- 4 On the asteroid-based colony of New Harmony, even twelve-year-old pioneers knew the number one rule for living in outer space: don't touch or taste or sniff anything that hasn't been tested.
- 5 "Where do you think they came from?" Wendy asked. With a gentle tug, she freed a Woolly-Puff from the thin layer of soil, sealed it in a clear bag.
- 6 "They were probably in the compost shipment that brought these naggers," Alex muttered. He slapped at one of the whining insects that swarmed around him looking for exposed skin to bite.
- compost = a mixture of decaying plants used to improve the soil in a garden
- 7 New Harmony depended on shipments of rich compost from nearby planets to build up its soil. Usually the compost was treated before it arrived, but one shipment had been accidentally overlooked. The whining gnat-like insects the colonists called "naggers" had hatched from the compost. Without any natural enemies in this new world, the insects had multiplied, becoming a constant torment to the colonists.
- 8 After turning in their discovery, Wendy settled on a stone bench in front of the New Harmony laboratory. Alex paced, then sat. "Poor Woolly-Puff," Wendy said. "What if it's just a weedy flower?"
- 9 "Then one living plant and a packet of seeds will be sent to the Botany Preserve on Mars," Alex answered, rubbing a hot-pink nagger welt just above his elbow.
- 10 Wendy gingerly held the extra bouquet she had picked, in case the Woolly-Puffs proved keepers. "And the rest of the plants—"

- 11 “The rest will be pulled up and destroyed to make room for ‘useful’ plants,” Alex said.
- 12 The colony of New Harmony did have flowers. It just didn’t have a lot of room. Woolly-Puffs would have to be more than pretty if they wanted to grow here.
- 13 The two friends scrambled to attention as the lab door opened.
- 14 “Your Woolly-Puff isn’t toxic,” Professor Raglin said. His smile faded as he went on. “The sap is thick and sticky, but we already have a good glue. The stems are too woody and the leaves too bristly to eat. And the petals, well, they smell funny. Not flowery at all. More like moldy lemons. I’m sorry, but I’ll have to make my report to the council this afternoon. The good news is that they seem to grow only in the soil where you found them, so it won’t be hard to get rid of them.”
- 15 “At least they’re not poison,” Wendy said after Professor Raglin had left. She hugged her colorful, fuzzy bouquet. She had to admit they did smell funny. “Mayor Murphy will probably send a reclaim crew out after the council meeting.” She sighed. “I wish the council would let us adopt one, like a pet.”
- 16 “Fat chance,” Alex said. He blew at a pair of nagggers trying to land on his knee. “Shoo! For harmless gnats, these bugs sure are pests.”
- 17 “Yeah.” Wendy reached up to scratch the end of her nose. Then she realized something. The end of her nose itched simply because that’s what the ends of noses do sometimes. The nagggers weren’t biting her. They weren’t even landing on her.
- 18 “We’re going to the council meeting,” she announced.
- 19 That afternoon, when the council members emerged from the community center, Alex and Wendy were waiting.
- 20 “What is the meaning of this?” Mayor Murphy demanded as Alex and Wendy presented each member of the council with a Woolly-Puff garland.
- 21 Glancing at Alex for courage, Wendy said, “Woolly-Puffs are bug chasers.”
- 22 “Sorry,” Mayor Murphy said firmly. “We have already made our decision.”
- 23 “Just watch,” Wendy pleaded. “Watch the nagggers.”
- 24 Then someone said, “What nagggers? I don’t see any.”
- 25 “Where are the nagggers?” asked Professor Raglin. “It’s as if they’re avoiding us.”
- 26 Wendy smiled. “They are. Nagggers don’t like Woolly-Puffs.”
- 27 So the Woolly-Puffs stayed in the vases and flower boxes and gardens of New Harmony because, of course, they weren’t just pretty. They smelled like moldy lemons. And luckily, nagggers couldn’t stand the smell of moldy lemons.

Questions from Excerpt from the Woolly-Puff Rescue

1. In paragraph two, what does the sentence “they look just like fleecy rainbows” suggest about the flowers?
 - A. The flowers are colorful and fuzzy
 - B. The flowers are wet and fluffy
 - C. The flowers are striped and shaggy
 - D. The flowers are transparent and puffy

2. What does the word “welt” mean used in paragraph nine?
 - A. Itch
 - B. Skin
 - C. Gnat
 - D. Bump

3. Read this sentence from paragraph 14.
His smile faded as he went on.
What does the sentence suggest about Professor Raglin?
 - A. He is suffering from the bad smell
 - B. He regrets having to study the plant
 - C. He dislikes the plant he is talking about
 - D. He is about to deliver disappointing news

4. Read this sentence from paragraph 15.
“At least they’re not poison,” Wendy said after Professor Raglin had left.
What does the sentence suggest about Wendy?
 - A. He looks for the positive side of situations
 - B. Wendy does not like people to give her bad news
 - C. Wendy challenges people who do not agree with her
 - D. Wendy encourages people to learn to love the flowers

5. How does the setting of the story affect what happens to the Woolly-Puff?
 - A. A lack of space causes the flower to be shipped away
 - B. They need for compost causes the plant to be valued
 - C. A problem with insects causes the flower to be kept
 - D. A lack of pets causes the plant to be adopted

6. What does the phrase “smell funny” mean as it is used in paragraph 15?

- A. The flowers made the children laugh
- B. The scent of the flowers was unusual
- C. The flowers caused the children to be itchy
- D. The stems of the flowers were strange

7. Which statement **best** states a theme of the story?

- A. Friends should support each other in difficult situations
- B. Following the rules can sometimes get you in trouble
- C. It may take courage to speak up when you have a good idea
- D. The smallest things can cause big problems

Math

Greatest Product or Game

Building Fluency: multiply a fraction by a fraction

Number of Players: 2 or more

Directions:

1. Take ten small pieces of paper and on each piece write a single number from 1 to 10. To avoid cheating, all the pieces of paper must be the same size and color.
2. Shuffle the papers and place them face down on a table or desk.
3. Player 1 picks 4 number cards and copies down the numbers.
4. Reshuffle the cards and let Player 2 pick 4 number cards and copy down the numbers.
5. Each player will arrange their numbers to make a fraction times a fraction multiplication problem. A fraction can be made by using two cards. One card is the numerator, and one card is the denominator. No fractions over one are allowed.
6. The player who forms the greatest product wins the round. The player who wins the most games in 10 rounds is the winner of the game.

Example: Let's say you were dealt a 3 , 1 , 5 , and 2 with these cards, you could make the fraction problem: 35×12

Score sheet

	Player 1	Player 2
Round 1		
Round 2		
Round 3		
Round 4		
Round 5		
Round 6		
Round 7		
Round 8		
Round 9		
Round 10		

Renewable Resources

Fresh Water Is a Renewable Resource

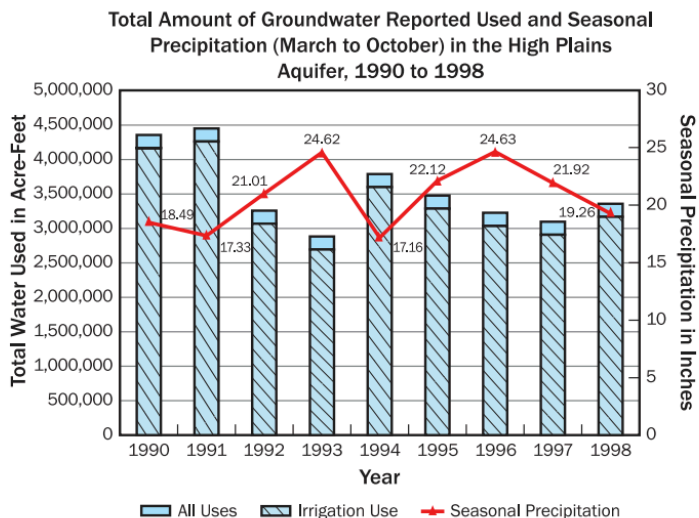
Surface water and groundwater are replaced by rainfall. Rainwater runs off into streams, rivers, and lakes. It also seeps underground, where it enters an aquifer. Resources that are quickly replaced are known as renewable resources. When something is renewable, it can be naturally replaced, or replenished.

But what happens if we use up renewable resources faster than they can be replaced? These resources are limited resources. Fresh water is replenished by rain, but people around the world are concerned about using fresh water faster than it is replenished.

In the United States, people's water use is monitored by the Environmental Protection Agency as well as by state and local agencies. If fresh water gets used faster than it can be replaced, these agencies may suggest ways or pass laws to help **conserve** the water. For example, a government agency may not allow people to water their lawns. There are many ways that people can conserve water.

Vocabulary

conserve, v. to save or protect



This graph shows that during some years there is not enough rainfall to replace the water that people use.

[illegible]

DAY 2

Read this story. Then answer Questions 1 through 7.

Excerpt from *The Brooklyn Bridge: New York's Graceful Connection*

by Vicki Weiner



- 1 John Roebling was a native of Germany. After studying engineering at his country's finest technical school, he came to the United States. It was 1831. Roebling was twenty-five years old. He wanted to put his skills and education to work. He and a group of fellow Germans purchased a large plot of land in Pennsylvania. The group built houses, stores, and churches on the land. They called their new farming town Saxonburg.
- 2 Roebling found the farmer's life too quiet, though. He told his son, Washington, that he longed to "employ science to useful purpose." In the early 1840s, Roebling got his first chance to do just that. He knew a new type of rope called wire cable was being used in Europe. It was made from iron wires. These wires were twisted together to form a long strand. Roebling made the first iron wire cable in the United States.
- 3 At first, people doubted that Roebling's cable could work better than rope. Once they tested it, though, they were amazed. The iron cable was thinner, stronger, and longer lasting than ordinary rope. Soon, delighted business owners were snatching up Roebling's iron cables. They used the cables to haul heavy loads over Pennsylvania's Allegheny Mountains.
- 4 Roebling's cable helped him create the modern suspension bridge. A suspension bridge spans a wide body of water. Ancient bridges were held up by rope made from hemp. Today's bridges are held up by thick metal cables. The cables are attached to two strong towers, made of stone, steel, or iron. These towers hold the bridge in place. The roadway is suspended, or held up, by the cable.

- 5 In 1861 the American Civil War began. John's son, Washington, served in the Union Army. He even fought in the battle at Gettysburg. As a colonel, he built temporary suspension bridges using his father's ideas. Washington soon became his father's chief engineer.
- 6 Together, father and son built many suspension bridges. One of their most famous works was built in Cincinnati, Ohio. The Cincinnati Bridge spanned the Ohio River. At the time, in 1872, it was the largest suspension bridge ever seen. It was a triumph of engineering skills. Yet both father and son knew that harder work lay ahead. John Roebling never rested. He was an ambitious, driven man. Once he got an idea for a new bridge, he never forgot it.
- 7 John Roebling first presented his plan for the Brooklyn Bridge in 1867. His idea pleased many. Others thought Roebling's bridge seemed unnecessary. New Yorkers didn't go frequently to Brooklyn. To them, the project was a waste of money. On the other hand, Brooklyn's residents were in favor of a bridge. Brooklyn was growing fast as a city. Its residents needed an easier way to travel to New York for work, school, shopping, and entertainment.
- 8 Public opinion was divided. However, the terrible winter of 1866-67 swayed many city leaders' minds. Icy conditions along the East River froze ferry service for days on end. This convinced Brooklyn's mayor that the city couldn't continue to grow without a bridge. Meanwhile, New Yorkers were warming to the idea, too. They knew that Brooklyn was booming. Still, it remained a cheaper and less crowded city than New York. It would be wonderful to have easy access to Brooklyn's charms. On April 16, 1867, New York's legislature created the New York Bridge Company. The company would be dedicated to Roebling's dream—constructing a bridge over the East River. John Roebling was asked to be the bridge's designer.
- 9 Excitement about the bridge swelled. It was going to be unlike any structure seen before. Its length would measure 1,596 feet (486 m) from tower to tower. This would make it one-and-a-half times longer than the Cincinnati Bridge. The Brooklyn Bridge's towers would feature 117-foot-high (35.7 m) Gothic arches. Horse and carriage riders would use outer lanes across the span. Trains would travel across the bridge's inner lanes. A special walkway, called a promenade, would be built above the roadways. Pedestrians, or people walking, would stroll across the promenade and be treated to magnificent views of the city.
- 10 Everyone knew the completed bridge would be beautiful. However, many worried it would not be safe. Roebling invited a group of experts to study his plans. These experts were impressed with Roebling's vision. Finally, in 1869, all their questions were answered. The two cities gave their final approvals.

Excerpt from *The Brooklyn Bridge: New York's Graceful Connection* Questions

1. Which sentence **best** describes the main idea of the article?
 - A. John Roebling and his son formed an uncomfortable working relationship
 - B. John Roebling was an inspired engineer who designed modern bridges
 - C. John Roebling came to the United States to build bridges
 - D. John Roebling was a popular student and successful businessman

2. What does the phrase “snatching up” (paragraph 3) suggest about John Roebling’s iron cables?
 - A. They sold quickly
 - B. They were inexpensive
 - C. They lasted a long time
 - D. They pulled a lot of weight

3. What paragraph does the photo of the Brooklyn Bridge **best** support?
 - A. Paragraph 3
 - B. Paragraph 4
 - C. Paragraph 7
 - D. Paragraph 8

4. Which sentence **best** describes how John Roebling influenced his son Washington?
 - A. Washington learned why it was important to use science to improve his military skills
 - B. Washington applied what his father taught him about the different types of iron cables
 - C. Washington learned the reasons suspension bridges needed to be improved
 - D. Washington applied what his father taught him and build bridges when he was a soldier

5. What do paragraphs 7 and 10 **most** contribute to the article?
 - A. Introduce different opinions about the bridge
 - B. They outlined the long process involved in planning, paying for, and constructing the bridge
 - C. They highlight the concerns people had about the appearance of the bridge
 - D. They describe the disagreements people had about where the bridge should be built

6. What effect did the winter of 1866–67 have on the construction of the Brooklyn Bridge?
- A. The weather caused people to go to Brooklyn because they thought it was safer there
 - B. The weather caused ferry service to stop, making more people decide the bridge was a good idea
 - C. The weather made more people go to New York to find work and to shop
 - D. The weather made more people want to leave the area, making the mayor decide the bridge was necessary
7. Which detail from the article would be **most** important to include in a summary?
- A. John Roebling graduated from a technical school in Germany
 - B. John Roebling bought a large plot of farm land in Pennsylvania
 - C. John Roebling had a son who was promoted to Colonel in the Civil War
 - D. John Roebling made the first iron cable used in the United States

Math

1. A meteorologist set up rain gauges at various locations around a county and recorded the rainfall amounts in the table below. Use the data in the table to create a line plot using $\frac{1}{8}$ inches.
-

a. Which location received the most rainfall?

b. Which location received the least rainfall?

c. Which rainfall measurement was the most frequent?

d. What is the total rainfall in inches?

Location	Rainfall in inches
Chester	18
Cornwall	38
Florida	34
Greenwood Lake	34
Goshen	14
Maybrook	18
Monroe	12
Slate Hill	1
Warwick	14
Washingtonville	14

2. Draw to show how two friends can equally share 3 cookies. Write an equation, and express your answer as a fraction.

3. A principal evenly distributes 6 reams of copy paper to eight fifth-grade teachers. How many reams of paper does each fifth-grade teacher receive? Explain how you know using pictures, words, or numbers.
4. Ronald spent \$4 on 5 packs of gum. If he spent half as much money and bought twice as many packs of cards, how much did he spend on each pack? Explain your thinking.
5. Julian has to read 4 articles for science class. He has 8 nights to read them. If he decides to read the same number of articles each night, how many articles will he have to read per night?
6. Craig bought a 3-foot-long piece of bread and then made 4 equally sized sandwiches. If he used all the bread, how many inches long is one of Craig's sandwiches?
7. Scott has 6 days to save enough money for a \$45 concert ticket. If he saves the same amount each day, what is the minimum amount he must save each day in order to reach his goal? Express your answer in dollars.
8. A farmer collected 12 dozen eggs from her chickens. If he sold three-fourths of the eggs, how many dozens will he have left over?
9. Abbie spent $\frac{5}{8}$ of her money and saved the rest. If she spent \$45, how much money did she have at first?
10. There are 48 students going on a field trip. One-fourth are girls. How many boys are going on the trip?

World Culture

Read this selection from the Smithsonian Center - Arctic Studies Center and complete the organizer.

The Tlingit People and Their Culture By Rosita Worl (Tlingit), 2009

Sea, Land, Rivers Lingít haa sateeyí, "we who are Tlingit," have owned and occupied southeast Alaska since time immemorial (long ago). When we say haa aaní, "our land," we are speaking from the heart. Those words mean ownership, which we have had to defend through history. They mean identity, because this is our homeland. They mean the nourishment of body and spirit provided by bountiful rain forests, coasts and rivers. This land and its gifts have sustained us for hundreds of generations.

We believe that animals are our ancestors. Each *matrilineal* (mother's) clan has its ancient *progenitors* (a person or thing from which a person, animal, or plant is descended or originates; an ancestor or parent). I am an Eagle from the Thunderbird clan, of the House Lowered from the Sun in Klukwan. I am proud to be a child of the Lukaax.ádi, or Sockeye, my father's clan. The history of our lineages is portrayed by images of ancestral animals and by origin stories, ceremonial regalia, dances, songs and names. These things represent at.óow, or "crest" beings, to which each clan has exclusive rights. Mountains, glaciers and other places on the land are also at.óow, because they are linked to incidents in the birth of our people. For a Tlingit person at.óow embody history, ancestry, geography, social being and sacred connection. They symbolize who we are.

What do you <u>think</u> you know about this topic?	What questions or what <u>puzzles</u> you about the Tlingit?	What does the topic make you want to <u>explore</u> ?

More at: [https://learninglab.si.edu/cabinet/file/397b985d-2ce1-4598-9213-bea856fd6982/Alaska Native Cultures Tlingit.pdf](https://learninglab.si.edu/cabinet/file/397b985d-2ce1-4598-9213-bea856fd6982/Alaska_Native_Cultures_Tlingit.pdf)

DAY 3

Read this story. Then answer Questions 1 through 3.

Just Like Home

by Mathangi Subramanian

- 1 When the recess bell rang, Priya sighed and slowly hung up her smock. At her old school, she spent recess climbing the monkey bars and sharing secrets with her friends. Now she sat in the corner of the field and watched the other kids play without her.
- 2 The only thing Priya liked about her new school was art. They hadn't had art at her old school, but here, art was a whole hour. The studio had the most wonderful things, like aluminum pie tins, plaster of paris and India ink. During art, Priya forgot that she didn't have any friends at her new school. All she thought about was whatever she was working on.
- 3 As she cleared her table, Priya noticed a box of sidewalk chalk sitting on the counter by the window. She grabbed and stuffed it in her pockets. Then she took her usual place at the end of the recess line.
- 4 While she and her classmates filed through the halls and out into the yard, Priya thought about how she and her mother used to draw chalk patterns on the long driveway leading up to their old apartment building. The patterns were called *rangoli*, and they looked like stars and roses. Priya's mother said that the drawings were to welcome guests to their home. All the families in India, where Priya's family was from, did rangoli every morning, just like Priya and her mother. Their new apartment had barely any sidewalk in front of it, and there was no room for rangoli. Priya missed the early mornings she and her mother would spend drawing feathery, colorful patterns on the cement.
- 5 Priya walked over to the basketball court and sat on the hot pavement. She was glad to have something to do besides sit in her corner. She pulled the box out of her pocket and took out a bright red piece of chalk and began drawing the rangoli patterns she loved best. She drew flowers with huge, swirling petals and stars with eight points. She colored them green, yellow and blue, all colors her mother had used. She liked the soft, solid feeling of the chalk in her hand, and the way that the dust left patterns on her fingers.
- 6 "That's pretty," a voice said.

7 She turned around and saw that Enrique, a boy in her class, was watching her.

8 “It’s called rangoli,” she said. “They do this in India, where my parents are from.”

9 “You know what that reminds me of?” he asked, kneeling down beside her. “The floor of my grandmother’s house in Mexico has tiles that have designs like that.”

10 “What do you mean?” Priya asked.

11 “Hand me a piece of chalk,” Enrique said. “I’ll show you.” Enrique sat down on the pavement and began to draw. He used the green, orange, and yellow chalk to draw flowers that were more detailed than Priya’s, but still had huge, curvy petals. Then he drew circles inside circles, and surrounded them with small diamonds. Priya kept drawing too, in between and around Enrique’s designs.

12 “What are you guys doing?” a voice asked.

13 Priya and Enrique had been so absorbed in drawing that they hadn’t noticed that their classmate Farah had been watching them.

14 “Hey,” Farah said, sitting down beside them, “that looks like the rugs in my uncle’s house in Iran. Except on the rugs, the shapes are bigger, and aren’t as curly.”

15 “Show us,” said Enrique, handing her a piece of chalk.

16 Farah took the chalk and began drawing. She drew shapes that were full of straight lines and bold colors. They were bigger than the shapes Priya and Enrique had drawn, and they overlapped each other in diagonals to form new shapes. She colored the drawings purple, dark blue, and white.

17 “Wow!” Ms. Lopez, Priya’s teacher, said. “That’s beautiful!”

18 Priya, Enrique and Farah stood up and looked at what they had done. The pavement was covered in bright colors and shapes: triangles, circles, squares and diamonds, all mixed together. Their classmates began to drift over to see what was happening.

19 “It looks like a universe, with lots of planets and stars,” said Lily.

20 “It looks like a coral reef full of tropical fish,” said Jasper.

21 “What do you think it looks like Priya?” asked Enrique.

22 Priya looked at Enrique and Farah. Their knees, elbows, and fingers were covered in red, yellow, green and blue chalk dust. Priya smiled and said, “It looks like home.”

Just Like Home Questions

1. How are Priya's feelings about recess at her old school and her new school different? Use **two** details from the story to support your response.

2. What do Lily and Jasper's points of view reveal about the drawing? Use **two** details from the story to support your response.

3. How do Priya's actions in paragraph 5 help develop the theme of the story? Use **two** details from the story to support your response.

Math

1. When Home Depot donated 14 gallons of paint to Tuxedo Elementary School, the fifth grade decided to use it to paint murals. They split the gallons equally among the four classes.
 - a. How much paint did each class have to paint their mural?
 - b. How much paint will three classes use? Show your thinking using words, numbers, or pictures
2. Mrs. Kaloz baked 2 dozen cookies. Two-thirds of the cookies were oatmeal. How many oatmeal cookies did Mrs. Kaloz bake?
3. Express 36 minutes as a fraction of an hour: 36 minutes = _____ hour
4. Ava and Marc share a 16-ounce box of cereal. By the end of the week, Ava has eaten $\frac{3}{8}$ of the box, and Marc has eaten $\frac{1}{4}$ of the box of cereal. What fraction of the box is left?
5. Write three fractions that are equivalent to $\frac{3}{4}$.

6. Rewrite 5635 as a decimal.

7. Natalie sawed five boards of equal length to make a stool. Each was .9 of a meter long. What is the total length of the boards she sawed?

8. Nino used $\frac{1}{3}$ yard of ribbon to tie a package and $\frac{1}{6}$ yard of ribbon to tie a bow. How many yards of ribbon did Nino use?

9. Ron jogged $\frac{3}{4}$ mile and then walked $\frac{1}{6}$ mile to cool down. How far did he travel?

10. Penny used $\frac{2}{5}$ lb of flour to bake a vanilla cake. She used another $\frac{3}{4}$ lb of flour to bake a chocolate cake. If she had 2 lbs of flour before she started to bake, did she use more flour or less flour than she has left? How do you know?

Earth's Hydrosphere

The Water Cycle

The hydrosphere is constantly moving and changing. Evaporation, wind, and precipitation move water from one water reservoir to another. Gravity also moves water. Its pull causes water to flow downward. Currents in Earth's oceans continuously move the water, too.

The dynamic movement of water on, below, and above Earth's surface is called the **water cycle**. As water moves, the hydrosphere interacts with Earth's land, air, and living things. In addition to changing position, water in the water cycle is constantly changing states.

Word to Know

Dynamic means constantly changing. It comes from the Greek word *dynamikos*, which means "powerful."

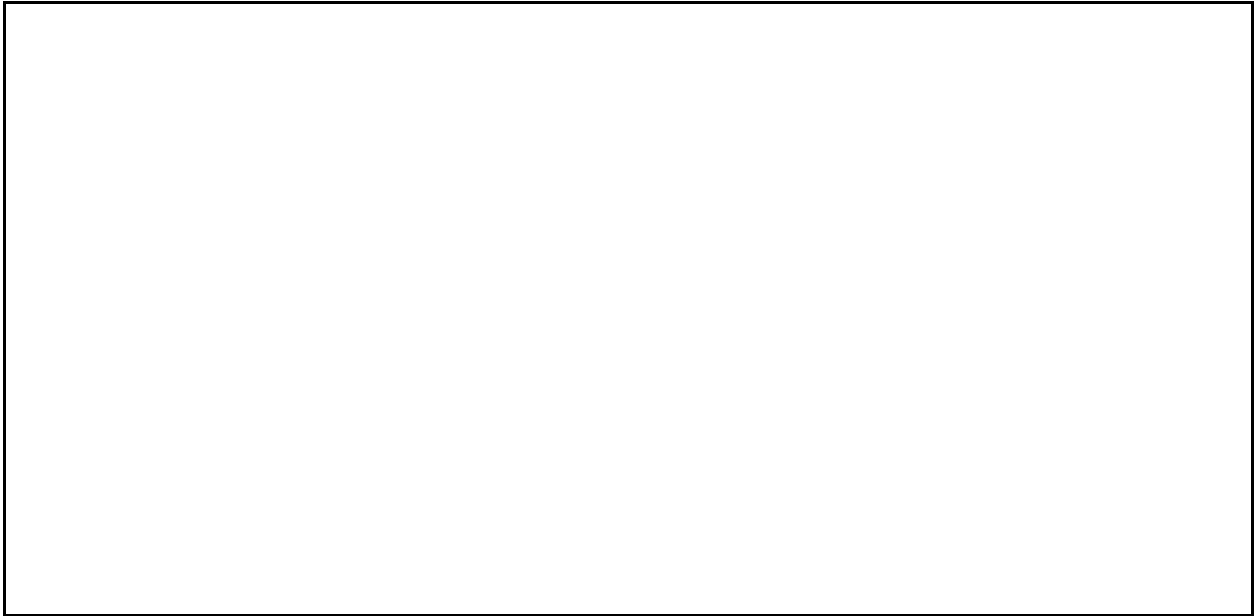
The sun is the energy source for state changes in the water cycle. It provides heat that causes water to evaporate. Water vapor rises, cools, and condenses into cloud droplets. Then liquid water falls back to Earth as precipitation somewhere else. This process happens over and over, in cycles.



Vocabulary

water cycle, n. the dynamic movement of water on, below, and above Earth's surface

Draw a model of the water cycle in the box below. You can use the image above to help you. Label the parts of your model using the key words evaporation, condensation, and precipitation.



Think of a time when you saw evidence of one of the parts of the water cycle (evaporation, condensation, or precipitation). Write about what you observed on the lines below.

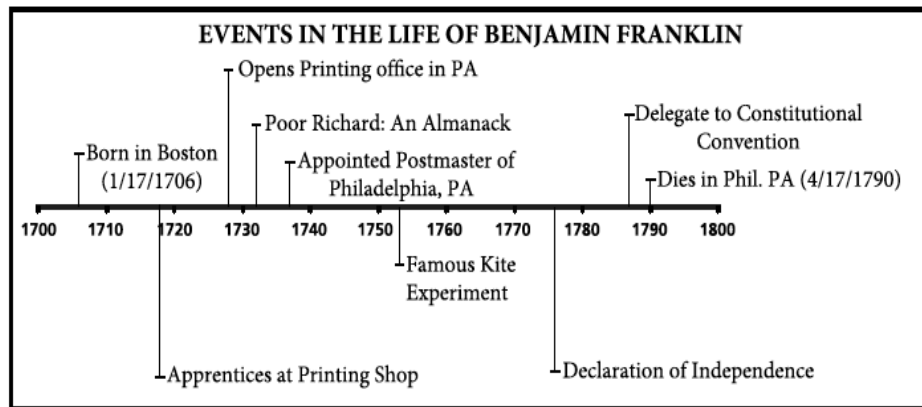
DAY 4

Excerpt from *Young Ben Franklin*

by Julie Doyle Durway

- 1 Ben's early childhood was happy. He spent a lot of time playing, swimming, and fishing on the Charles River in Boston. Determined to swim faster, young Ben designed and made paddles for his hands and feet to help him move through the water more easily. Even as a child, Franklin had an inventive mind and a desire to improve himself.
- 2 "From a Child I was fond of Reading," Ben wrote, "and all the little Money that came into my Hands was ever laid out in Books." Although he went to school for only two years, Ben learned about many different subjects by reading books and talking to people who knew more than he did. He looked at the world in a practical way, trying to find solutions for everyday problems.
- 3 When Ben was 10, he left school and began working in his father's soap and candle shop. He spent his days "employed in cutting Wick for the Candles, filling the Dipping Mold . . . attending the Shop, going on errands, etc." Although Ben did not enjoy this experience, it helped him learn the importance of hard work. He also spent time with his father watching other craftsmen at their work. He learned to appreciate good workmanship and creativity.
- 4 After several years, it became clear to Ben's father that his son wasn't happy in the soap and candle shop. Mr. Franklin sent Ben to work with his older brother James, who owned a print shop. Although James was often harsh with his younger brother, Ben enjoyed the printing business. "In a little time I made great Proficiency in the Business, and became a useful Hand to my Brother," he wrote later. Not only did Ben learn all the skills of printing, he also wrote poetry, essays, and articles for his brother's newspaper. Ben's natural ability as a writer developed quickly.
- 5 When Ben worked with his brother, he spent much of his free time reading. "Often I sat up in my Room reading the greatest part of the Night, when the Book was borrow'd in the Evening to be return'd early in the Morning." He also used this time to improve his writing skills. Studying the work of other authors, Ben would try to rewrite their essays in his own words.

- 6 When he was 17, Ben left his brother's print shop. He moved to Philadelphia and found work as a printer and writer. Eventually, he opened his own print shop. Later, his accomplishments as a scientist and statesman made him one of the most powerful and important men in America. But Ben Franklin never forgot the lessons he learned during his boyhood years.



Excerpt from Young Ben Franklin Questions

1. In paragraph 1 and 2 of “Excerpt from the Young Ben Franklin,” how does the author support the idea that Franklin had a curious mind? Use **two** details from the article to support your response.

2. In “Excerpt from the Young Ben Franklin,” how does the timeline support a point the author makes in paragraph 6? Use **two** details from the article to support your response.

Math

1. Write the number 185 in expanded form.
2. Write the number 23.7 in expanded form.
3. Write the number 5.006 in expanded form.
4. Place these 5 numbers in order from smallest to largest:
978.2 97.82 97.082 9.0782 90.802
5. Find the sum of 12 and .97
6. Find the sum of 185.6 and 18.56

7. Find the difference: $239.6 - 158.9$

8. Find the difference: $17.1 - 9.37$

9. Find the product of 0.56×432

10. Find the product of $15.6 \times .23$

Territories

Inka (Inca) Empire: Tahuantinsuyu, (Quechua -native language): “Realm of the Four Parts” had territories spread over parts of Ecuador, Peru, Bolivia, Chile, and Argentina that, by the 1500s, were all part of a single Inca state.

Cuzco was a holy city. It was the capital of the Inca Empire, home of the Shapa Inka (the Inca ruler), and the principal seat of religion. For the Inca, it was the *chawpi*, (center) of the empire and the universe.

Four gateways led into Cusco. At each gate was a sacred place where travelers would wash their hands, feet, and face while praying and asking permission to enter. Even today, Native people will pause a moment before entering Cusco.

The city of Cusco is said to be in the shape of a puma. The puma symbolizes the power of the earth.



1. In the area of the head of the puma was a temple. Two rivers outlined the body. The main plaza, Hawkaypata, was in the belly. High-ranking persons lived within the outline of the puma. All others lived outside it.
2. The dividing line of the upper and lower part of the body - each part was also divided into two symbolizing the four sections of the empire.
3. The main plaza was dedicated to the creator god, Tiqzi Wiracocha, this grand open space was used for ritual and ceremony.
4. The Qorikancha (golden enclosure) was the religious center of the empire. Dedicated to the sun, it was the most important temple in Tawantinsuyu. Its walls were covered in gold and visible throughout the Cusco Valley.
5. Upper Temple of the Sun
6. Dwellings In central Cusco, the *panacas* (royal families) of the Inca rulers lived in residences that the Spanish called palaces. Residences took the form of a *kancha*, a group of buildings surrounding a courtyard, all within an enclosing wall.
7. Several neighborhoods housed workers who came to Cusco to give their labor to the state as a kind of tax (*mit'a*). When their service was done, they returned to their villages

Based on the information about the Incan Empire complete the chart about the society of the Incan people.

Make a <u>claim</u> about the Incan empire	
Identify <u>support</u> for your claim based upon the information read and your social studies thinking	
Ask a <u>question</u> related to your claim (What is not explained? What new questions does your claim raise?)	

For more information about the Inca people and their empire
see: <https://americanindian.si.edu/inkaroad/inkauniverse/cusco/introduction.html>

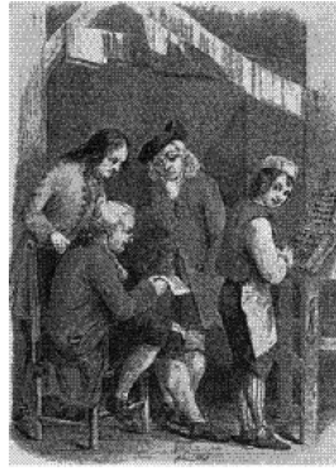
DAY 5

Excerpt from *Printer's Ink*

by Jerry Miller

1 When Benjamin Franklin was 12, he went to work in his brother James's print shop. Ben had trouble getting along with his brother, but he loved being a printer. Who wouldn't have loved it? Print shops were great places to be, whether you were interested in politics, science, books—or the local gossip.

2 In Ben Franklin's day, printers did more than just run the printing presses. Many printers published newspapers. When Ben was a man, he opened his own print shop in Philadelphia. Soon, he started publishing a weekly newspaper called *The Pennsylvania Gazette*. Later, he began a second newspaper, in German, to serve Pennsylvania's many German settlers. He published one of America's first magazines, too.



Young Ben in his brother's Boston print shop

3 Ben Franklin also published books: novels, schoolbooks, medical books for doctors, and more. He printed books about new scientific discoveries. And he became friends with many of the people who wrote those books.

4 One of Ben Franklin's most famous works—and his first big success—was *Poor Richard's Almanack*. Ben wasn't the only printer to publish an almanac. Everyone used almanacs—helpful books that contain all sorts of useful information like calendars, weather forecasts, moon phases, and planting advice. And everyone bought a new almanac each year. What was different about Franklin's almanac were his wise and funny sayings and useful, everyday advice. Ben's sayings became popular. Today, people still repeat many of them. "Early to bed and early to rise makes a man healthy, wealthy, and wise" is one of his sayings.

5 Franklin never quit printing. When he was 42, he retired from business. But printing was still his hobby. During the Revolutionary War, Franklin moved to France. In Paris, he kept a small printing press. When he had time, he printed essays for his friends to read.

6 Many people believe that Ben Franklin's autobiography, the story of his own life, was the first great book ever written by an American. Franklin wrote it when he was an old man, finishing it at the age of 82. He continued writing even on his deathbed. His last writings were essays against slavery.

7 Benjamin Franklin became famous as a scientist, inventor, writer, and statesman. But when he wrote his will, he began with the words: "I, Benjamin Franklin of Philadelphia, printer. . ."

Excerpt from Printer's Ink Questions

1. In “Excerpt from the Printer’s Ink,” how are the main ideas organized in the article? Use **two** details from the article to support your response.

[illegible]

[illegible]

-
- This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Math

1. Melissa buys 22 pens that cost \$1.15 each and 15 markers that cost \$2.05 each. How much did Melissa spend?
2. A slice of pizza costs \$1.59. Mrs. Berger needs 32 slices for her class. How much will 32 slices cost?
3. Gas at Quick-Check is sold at \$2.36 a gallon. How much gas money will Sally need to drive to the beach if she needs 15 gallons of gas?
4. Mark drinks a glass of orange juice every day that contains 0.6 grams of Vitamin C. He eats a serving of strawberries for snack after school every day that contains 0.35 grams of Vitamin C. How many grams of Vitamin C does Seth consume in 14 days?
5. Gerry spends \$1.55 each day on lunch at school. On Fridays, she buys an extra snack for \$0.55. How much money will she spend in ten days?

6. The height of a man is 1.7 meters. What is his height in centimeters?

7. Ava's cat had six kittens! When Ave and her brother weighed all the kittens together, they weighed 4 pounds 14 ounces. Since all the kittens are about the same size, about how many ounces does each kitten weigh?

8. Compare the two expressions using $<$, $>$, or $=$. For each, explain how you can determine the answer without calculating.

a. 100×8 $25 \times (4 \times 9)$

b. 48×12 50 twelves – 3 twelves

c. 24×36 18 twenty-fours, doubled

9. Isabella makes hair bows to sell at the craft fair. Each bow requires 1.5 yards of ribbon. At the fabric store, ribbon is sold by the foot. If Isabella wants to make 100 bows, how many feet of ribbon must she buy?

10. Two fifth graders solved 400,000 divided by 800. Katie said the answer is 500, while Kim said the answer is 5,000. Who has the correct answer? Explain your thinking.

Science in the News for Grade 5

What Is the Coronavirus (COVID-19)?

At the end of 2019, a new type of virus began making people sick with flu-like symptoms. The illness is called coronavirus disease-19 — COVID-19 for short. The first cases were diagnosed in people who had visited a market in Wuhan, China that sold live seafood and animals. The virus spreads easily and has now affected people in many countries.

What Are the Signs & Symptoms of Coronavirus (COVID-19)?

COVID-19 causes a fever, cough, and trouble breathing. Symptoms are a bit like those people have with a cold or the flu. The virus can be more serious in some people and may lead to illnesses like pneumonia.

How Does Coronavirus (COVID-19) Spread?

Experts are still investigating how COVID-19 spreads. In general, coronaviruses spread through droplets sent into the air when people cough or sneeze. The virus can spread in communities from one person to another and through contact with surfaces that have germs on them. When people are close together the virus quickly spreads from one person to another person.

Do Children Get Coronavirus (COVID-19)?

Scientists and doctors are still learning about COVID-19, so we don't have enough information about it yet. There are far fewer cases of the virus reported in children than adults. Most of the children who have gotten COVID-19, caught the infection from a family member or someone who lives nearby. The virus seems to cause a milder infection in children than in adults or older people. It is a good idea to call the doctor if you or someone in your family has a fever, cough, or other flu-like symptoms. The doctor can help you make a plan to get better.

How Is Coronavirus (COVID-19) Treated?

Most people with COVID-19, including children, do not have serious problems. They usually get better with rest and fluids. But it is important to keep children with COVID-19 away from very old people who may have a harder time with the virus. Older people are more likely to have underlying health conditions like lung disease or diabetes which make it harder to fight off viruses. People who are very ill with COVID-19 get treatment in a hospital. Treatment may include breathing help, IV fluids, and other treatments.

How Can I Protect Myself From Coronavirus (COVID-19)?

The best ways to protect yourself and your family are:

- Stay home and away from public places as much as possible.
- Avoid people who are sick. COVID-19 may be contagious before a person has any symptoms. So avoid large gatherings and busy places until the outbreak is under control.

- Try to stay at least 6 feet (2 meters) away from other people. This is called social distancing. It probably would have made more sense to call it physical distancing.
- Wash your hands well and often. Wash for at least 20 seconds with soap and water.
- Try not to touch your eyes, nose, and mouth.

Experts around the world are studying and tracking COVID-19 and are taking steps to prevent it from spreading.

Science in the News Comprehension Questions

1. Who can get COVID-19?

2. When did the virus first start making people sick?

3. How is COVID-19 spread from person to person?

4. Doctors suggest that you stand 6 feet away from others to avoid getting the virus. This is called “social distancing.” What might be a better name for this strategy for avoiding the virus? Why do you think this is true?

5. Explain three different ways to try to avoid getting COVID-19.

6. Who is more likely to get COVID-19, older adults or children? Why is this true?

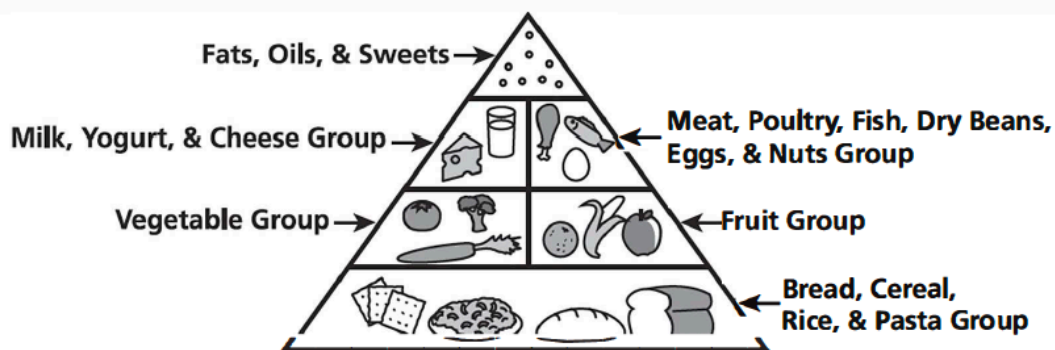
7. Why does social distancing help stop COVID-19 from spreading? Give at least 2 specific reasons why it works.

DAY 6

Excerpt from *Trading Places*

by Claudia Mills

- 1 Todd was lying on the family room floor doing math homework, when he heard his mother, back from her shift at the Crafts Cottage. She was later than usual, so she must have stopped on the way home to get groceries. Todd hoped so. Groceries were one of life's good things.
- 2 Math homework was another. Todd knew other kids thought it was strange to like having math homework, but he did. He loved questions that had answers, problems that had solutions, twenty of them, all on one page. He loved looking at a neat page of calculations and knowing that he had them all one hundred percent right.
- 3 His mother came into the family room and clicked off the TV. Todd looked at Amy, so lost in her book that she didn't seem to register their mother's presence in the room. But their father, dozing on the couch with the remote in his hand, came awake with a guilty startle.
- 4 "David. Todd. Amy." Quiet voices could sound so much more menacing than shouting ones. "I need you to come into the kitchen. Now."
- 5 Amy put her book down then, and the three of them straggled into the kitchen. If they had had tails like Wiggy, the tails would have been tucked between their legs.
- 6 "Look at this place," Todd's mother said.
- 7 It was bad: newspapers in an untidy heap on the table, dirty dishes everywhere, an empty milk carton standing on the counter next to spilled cereal left over from breakfast, and two sacks of groceries his mom had just carried in from the car.
- 8 "I want this cleaned up. I want these groceries put away. I want a decent meal with every part of the food pyramid represented on the table in sixty minutes. Call me when it's ready. I'm going to be upstairs soaking in a hot tub."
-



9 Then she was gone.

10 Once his first spasm of remorse had passed, Todd actually felt relieved. It was so much better to be doing something rather than nothing, to be solving a problem rather than pretending it didn't exist. He opened the dishwasher and started loading dirty dishes into it, as Amy and their father took the groceries out of the paper sacks and put them on the pantry shelves and in the fridge.

11 “How does the food pyramid work?” their father broke the silence to ask.

12 “You’re supposed to eat a lot of grains and cereals,” Todd explained. They had studied the food pyramid at school last year. “They’re on the bottom of the pyramid, the wide part. And hardly any fats and sugars. They’re the little point at the top. And eat lots of vegetables and fruits. And some protein, too.”

13 “I don’t think she really cares if we have the whole pyramid,” Amy said. “Just so it looks sort of balanced. I mean, not just popcorn and apples.”

14 “Maybe we should look in a cookbook,” their father suggested.

15 There was a whole bookcase full of cookbooks against one kitchen wall. It was hard to know where to begin. Some of them were as thick as dictionaries; others had obviously unhelpful titles such as *Fifty Christmas Cookies from One Basic Dough* or *Easy Entertaining*.

16 “Here’s one,” Todd said. He pulled out *Thirty-Minute Meals*.

17 Their father glanced at the clock on the microwave. “Can you find one that says *Fifteen-Minute Meals*?”

18 Todd checked the shelves again. “Nope. The only other one that tells the minutes is the *Sixty-Minute Gourmet*.”

19 “Okay, thirty minutes it is.”

20 “Let’s make something with chicken,” Amy said. “I just put away a lot of chicken.”

21 “How about curried chicken breasts with rice?” Todd asked. It looked good in the picture. “Do we have any rice?”

22 “Right here!” their father answered.

23 “What about fruits and vegetables?” Amy reminded them.

24 “We’ll have broccoli on the side,” their father said.

25 “Dairy products?” Todd thought the pyramid had dairy products on it somewhere.

26 “You kids can drink milk. And look, there’s some cream in the sauce. Do we have any cream?”

27 Amy checked the fridge. “We have half-and-half. That’s sort of like cream.”

28 The meal took more than thirty minutes to make. It turned out that the thirty minutes started *after* you had chosen the recipe, located the ingredients, and done whatever preliminary chopping you had to do, which for curried chicken breasts was a lot. Still, forty-five minutes later, their father sent Amy upstairs to summon their mother for dinner.

29 When she came into the kitchen, she stared in apparent disbelief. “You even fixed broccoli,” she whispered.

Excerpt from Trading Places Questions

1. What do details in paragraphs 1 through 5 suggest about Amy and Todd?
 - A. Todd has different interests than Amy does
 - B. Todd is more focused on school than Amy is
 - C. Todd is more interested in watching TV than Amy is
 - D. Todd has a different reaction to his mother's voice than Amy does

2. What does the word *struggled* in paragraph 5 suggest about Todd, Amy, and their father?
 - A. They are trying to keep the mother from seeing the kitchen
 - B. They are determined to finish the work in the kitchen
 - C. They want to keep close together in the kitchen
 - D. They want to avoid going into the kitchen

3. Why does Todd and Amy's father refuse to look at the *Sixty-Minute Gourmet* cookbook?
 - A. He thinks they do not have the skills to make the recipes
 - B. He knows the family does not have the right ingredients
 - C. He knows that the recipes will take too long to make
 - D. He thinks that the mother will dislike the meal

4. The narrator's description of the conversation in paragraphs 11 through 13 shows that:
 - A. The family has different ideas about a balanced diet
 - B. Amy knows which foods her mother likes best
 - C. Todd has experience with cooking
 - D. The father relies on his children's knowledge

5. The illustration **best** supports the information provided in which paragraph?
 - A. Paragraph 12
 - B. Paragraph 13
 - C. Paragraph 24
 - D. Paragraph 27

6. Does paragraph 28 relate to paragraph 8?

- A. Paragraph 28 provides further details about the problem
- B. Paragraph 28 shows the result of the mother's instructions
- C. Paragraph 28 presents a summary of the tasks that are introduced
- D. Paragraph 28 explains how the meal is unlike the mother's request

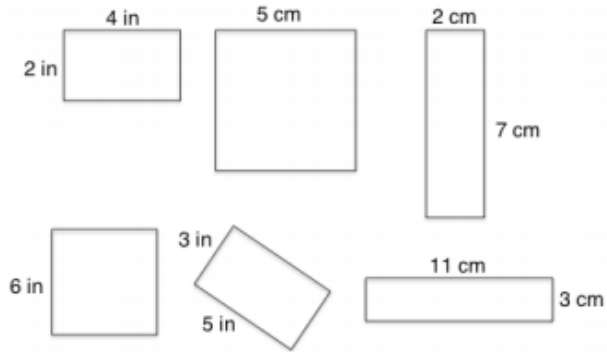
7. Which theme is supported by the events in the story?

- A. Solving problems becomes easier with daily practice
- B. Challenges can give people opportunities for learning
- C. Doing work and help people forget their problems
- D. Feelings of guilt may go away over time

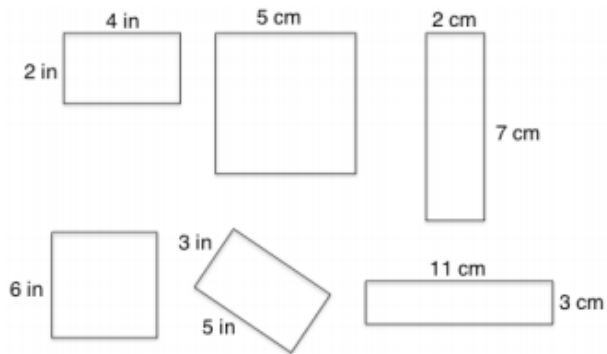
Math

1. Maria has \$11,295 in her bank account. If she saved \$45 a week in the bank, how many weeks did she save?
2. A number divided by 43 has a quotient of 3 with 28 as a remainder. Find the number. Show your work.
3. Mr. Duffy donates 79 pencils to his son's class. After each of the 15 students in the class get an equal number of pencils, he gives the leftover pencils to the teacher. How many pencils will the teacher receive?
4. Twenty polar bears live at the zoo. If they each eat 12,150 pounds of food a day, how much food does the zoo need to feed all the bears for a week?
5. If $7.29 \div 9 = 0.81$, then the quotient of $7.29 \div 90$ is ____? Use place value reasoning to explain the placement of the decimal point.

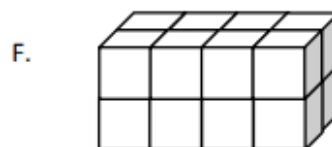
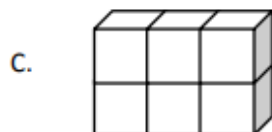
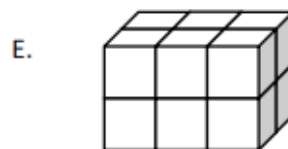
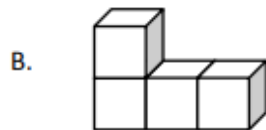
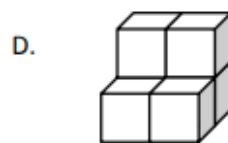
6. Find the perimeters of the below figures.



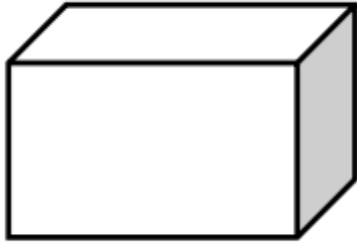
7. Find the areas of the below figures.



8. Find the volume of the below figures:



9. Imagine the rectangular prism below is 6 meters long, 4 meters tall, and 2 meters wide. Draw horizontal lines to show how the prism could be decomposed into layers that are 1 meter in height.



It has _____ layers from bottom to top.

Each horizontal layer contains _____ cubic meters.

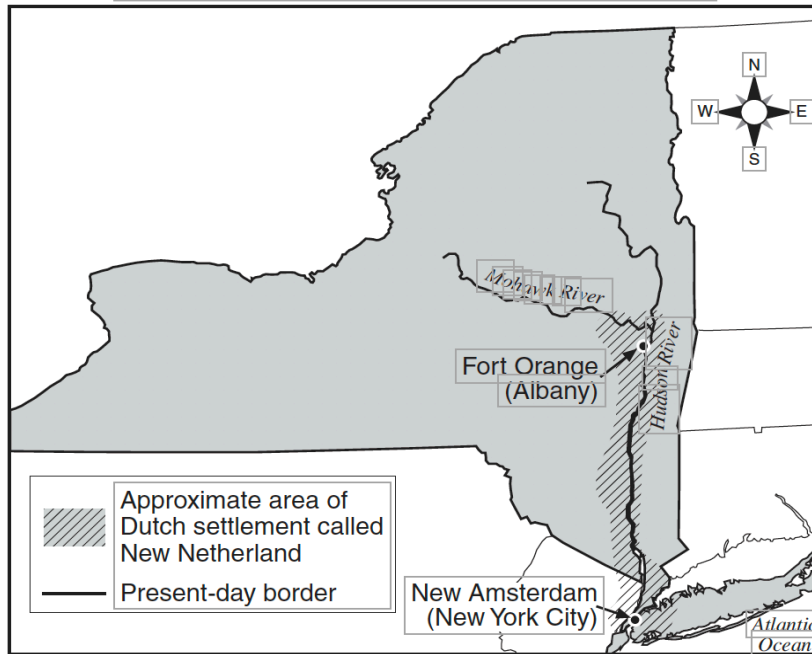
The volume of this prism is _____.

10. What is the volume of a box that has a length of 10 centimeters, a width of 7 centimeters, and a height of 8 centimeters?

New York Settlers

Directions: Read each of the documents and answer the corresponding questions that follow.

Areas of Dutch Settlement in New York



Source: *New York State Activity Book*, Harcourt Brace and Company (adapted)

New Amsterdam was located at the tip of Manhattan Island. It was part of the larger Dutch colony of New Netherland. New Netherland was established and controlled by the Dutch West India Company. The Dutch West India Company needed a strong leader who could run the colony. They hired Peter Stuyvesant as director-general [governor] of the colony of New Netherland in 1647.

1. What was the name of the original Dutch colony that later became part of New York State?

2. What was the name of the original Dutch town that later became part of New York City?

3. Which job was Peter Stuyvesant hired for by the Dutch West India Company?

... When the new governor [Peter Stuyvesant] arrived in New Amsterdam in 1647 with his wife, his recently widowed sister, and her three children, he was horrified. Instead of streets of gold—as he expected—he saw mud. The walls of Fort Amsterdam were used as grazing fields for a couple of cows. Chickens made their nests under the mouths of the fort's rusty cannons. Of the three windmills, one could no longer be used, while a second one had burned down. The houses were clumsily built of wood, with thatched roofs and wooden chimneys. The town's outhouses were set directly on the street, creating unpleasant odors. Pigs wandered about at will, kept out of vegetable gardens only by rough stockades. The church was unfinished. There were 150 dwellings and one quarter of them were taverns. There was drunkenness and fighting in the streets, even on the Sabbath [day of worship] which was supposed to be a day of quiet and prayer. Stuyvesant had a lot to do. ...

Source: Robert Quackenbush, *Old Silver Leg Takes Over!*, Prentice Hall, 1986 (adapted)

4. List three problems Peter Stuyvesant found when he arrived in New Amsterdam.

... Peter set to work. He told the people what they could and could not do. He closed the taverns at nine o'clock every evening. He fined people for fighting in the streets. He said that pigs must be kept behind fences, and that outhouses must be removed from the streets.

Walking along the streets of New Amsterdam was dangerous because people drove their carts and horses too fast. Peter made a new law. He said the drivers must get down from their carts and lead their horses. They could only ride through town on the street now called Broadway. Even on Broadway, he set a speed limit. ...

Source: Joan Banks, *Peter Stuyvesant*, Chelsea House Publishers, 2000

5. Based on this document, list two changes Peter Stuyvesant made that helped the town.

DAY 7

In 1881, Clara Barton founded the American Red Cross, an organization that helps people during times of need.

Excerpt from *Clara Barton*

by Stephen Krensky

- 1 "I was what is known as a bashful child," Clara confessed in later years. This was not surprising considering that she was surrounded by her family and had little contact with strangers. But shyness was not considered a virtue. In the hope of correcting this deficiency, her parents decided to send her to a nearby boarding school. It was quite a change. At home, she had been the only student, learning from her brothers and sisters. Now there were 150 students filling several schoolrooms. And almost all of them were bigger and older than she was.
- 2 Clara was good at her studies, but speaking up with dozens of eyes staring at her was unnerving. She grew pale and lost weight. At the end of her first term, her parents, her teachers, and her family doctor held a meeting. They decided it would be best for Clara to return home.
- 3 But home had changed. Her family was moving down the hill to a 300-acre farm. The new house needed to be fixed, and Clara pitched in to help. Among other things, she learned how to hang wallpaper and make her own paints.
- 4 Some cousins came to live with the Bartons as well. Clara's big sisters had stayed at the old house, which made the change feel even more dramatic. On the bright side, Clara's cousins were closer to her own age. "From never having had any playmates, I now found myself one of a very lively body of six—three boys and three girls . . ."
- 5 Clara and her cousins explored the new farm thoroughly, learning the best spot to cross the streams and where to find the tastiest chestnuts. They played hide-and-seek and balanced on poles in the millstream. Clara's parents, worried that she was becoming too much of a tomboy, forbade her from learning to ice skate. But it was a little late to rein Clara in now. She enlisted the boys to teach her secretly at night. They pulled her along, one on each side, which was fine, as long as the ice was smooth. But, as Clara remembered, "at length we reached a spot where the ice had been cracked and was full of sharp edges." Here, she fell repeatedly, injuring herself seriously enough that her parents soon found out. They were not pleased, and Clara endured several weeks of their disappointment before life went on as before.
- 6 In warmer weather, she continued to practice riding—now with her own horse. Riding became second nature to her, and she remembered the skill well later in life. But not every advance was planned or predictable. In 1832, when she was 11, her brother David was helping to build a new family barn. He was working on the ridgepole¹ when a plank snapped beneath him and he fell to the ground. At first he seemed to be largely unharmed by the accident, but his internal injuries turned out to be serious.
- 7 No one had to tell Clara what she should do next, and she didn't need to ask. She simply knew it in herself. She took care of David day and night, rarely leaving his side. And he grew just as attached to her in return. Clara learned to administer his medicine and manage his treatment with great aplomb.² Among her many duties was applying the leeches that were supposed to suck the bad blood out of David's body.

- 8 For two years, Clara tended to her brother, leaving him for only half a day in all that time. He recovered at last, no thanks to the leeches, due to rest and the ability of his body to heal over time.
- 9 Clara's devotion was not unheard of in the Barton family. Her great aunt Martha Ballard, who died a few years before Clara's birth, had been a well-respected midwife. She had delivered babies and treated illnesses across a wide swath of the wilderness of Maine. Caring for her brother had given Clara a special satisfaction. It was something she would always remember.
- 10 As delighted as Clara was to see David recover, she had trouble simply returning to a life of her own. The freedom to do as she pleased was no substitute for the feeling of usefulness she had felt nursing her brother back to health. She felt anxious and unsettled and cast about for some meaningful way to fill her time.
- 11 For the moment, she stayed busy doing chores around the farm and helping to look after her sister Sally's children. As time passed, though, she roamed farther from home, coming to the aid of poor families in the nearby countryside. Some had illnesses that she tended to. Others had money troubles, and she tried to point these families in a direction where they could get assistance.

¹ **ridgepole:** the horizontal beam that runs along the peak of a roof; the upper ends of the rafters are attached to it

²

aplomb: confidence and skill

Excerpt from Clara Barton Questions

1. How do paragraphs 1 through 4 support a main idea of the article?

- A. By describing how well Clara did at school
- B. By showing how Clara's parents made decisions
- C. By showing Clara's behavior around other people
- D. By providing details about Clara's cousins

2. Why did Clara return from boarding school?

- A. The people who cared for Clara were concerned about her health
- B. Clara was younger and smaller than most of the other students
- C. The teachers thought Clara could learn more at home
- D. Clara was unhappy because she missed her family

3. Read this sentence from paragraph 5.

But it was a little late to rein Clara in now.

What does this mean "to rein Clara in" suggest?

- A. Clara was too old to play with her cousins
- B. Clara was often outside after dark
- C. Clara was determined to learn new things in the country
- D. Clara was unable to ride horses

4. What do paragraphs 5 and 6 show about Clara?

- A. Clara is active and adventurous
- B. Clara is obedient and intelligent
- C. Clara is quiet and cooperative
- D. Clara is creative and serious

5. Why is paragraph 9 important for the article?

- A. It explains why Clara was a good caretaker to her brother
- B. It shows a result of Clara's caretaking skills
- C. It suggests why Clara's great aunt inspired her
- D. It connects Clara and her desire to care for people to her great aunt

6. How did Clara's relationship with her brother David most affect her life?
- A. By doing chores for David, Clara realized she enjoyed living at home
 - B. By caring for David when she was injured, Clara developed a desire to help others
 - C. By giving David his medicine, Clara learned about effective medical treatments
 - D. By being home when David fell to the ground, Clara felt responsible for his injuries
7. Which detail would be **most** important to include in a summary of the article?
- A. Clara learned how to ride horses at a young age
 - B. Clara had a great aunt who was a skilled midwife
 - C. Clara was seriously hurt while ice-skating with her cousins
 - D. Clara remembered how good it felt to care for her brother

Math

1. Jack and Jill each carried a 48-ounce bucket full of water down the hill. By the time they reached the bottom, Jack's bucket was only $\frac{3}{4}$ full and Jill's was $\frac{2}{3}$ full. How many ounces of water did they spill altogether on their way down the hill?
2. Mr. Scott had two-thirds liter of salt water. He used one-fifth of a liter for a science experiment. How much salt water does Mr. Scott have left?
3. Katrina needs 35 kilogram of flour for a recipe. Her mother has 37 kilogram of flour in her pantry. Is this enough flour for the recipe? How do you know? Draw a diagram to support your answer.
4. Of the students in Mr. Smith's fifth-grade class, $\frac{1}{3}$ were absent on Monday. Of the students in Mrs. Jacobs' class, $\frac{2}{5}$ were absent on Monday. If there were 4 students absent in each class on Monday, how many students are in each class? Draw a tape diagram to help you arrive at the answer.

Use the following information to answer questions 5 to 8.

Mrs. Green uses the following recipe for crispy rice treats.

2 cups melted butter

24 oz marshmallows

13 cups rice crispy cereal

5. If she decides to make $\frac{2}{3}$ of the recipe, how many cups of rice crispy cereal will she need?

6. If she decides to make $\frac{5}{6}$ of the recipe, how many cups of butter will she need?

7. If she decides to make $\frac{5}{6}$ of the recipe, how many ounces of butter will she need? (there are 8 ounces of butter in 1 cup)

8. When the crispy rice treats have cooled, Mrs. Green cuts them into 30 equal pieces. She gives two-fifths of the treats to her son and takes the rest to school. How many pieces will she take to school?

- 9 and 10. Melissa is designing a bedspread for her bed. $\frac{2}{3}$ of the bedspread is covered in flowers and the rest is striped. $\frac{1}{4}$ of the stripes are red. What fraction of the bedspread is covered in red stripes?

Space Science: Space Junk

Directions: Read and practice these vocabulary words. Then, read the article and answer the questions.

Key Vocabulary:

collision: a crash

debris: pieces of something that has been broken or destroyed

satellite: an object that circles something else, such as a planet

space junk: objects that have been left behind in space

unique: uncommon

Space junk: why is trash in space causing problems?

[WR News, Edition 3 \(including Science Spin\)](#). 78.22 (Apr. 3, 2009): p3+.

Space officials have a huge mess on their hands! Two satellites recently slammed into each other in outer space. A satellite is an object that circles something else, such as a planet.

The collision, or crash, took place about 500 miles above Earth. It was the first collision between two satellites in space.

The crash has scientists worried--and for good reason. There's a lot of stuff floating around in space, and most of it is junk. Space junk includes objects that have been left behind in space. There are about 1 million pieces of space junk floating around Earth.

Space junk includes satellite debris, nuts and bolts, and old rocket parts. Debris are pieces of something that has been broken or destroyed. There is also a camera, a golf ball, and several screwdrivers in space. There is even a spatula floating around our planet!

Spatulas and tiny satellite parts may not sound dangerous. However, some objects can zip around Earth at up to 25,000 miles per hour. Going that fast, even the smallest debris can damage spacecraft. The space junk could "trash" important equipment, such as the International Space Station. The floating lab cost more than \$100 billion to build.

Scientists are trying to come up with a solution to deal with space junk. Some want to figure out how to bring the objects back to Earth. The European Space Agency (ESA) wants to learn exactly where the debris is located. That way, astronauts can avoid it. "The problem of space debris is unique [or uncommon]," says ESA spokesperson Jean-Francois Kaufeler. "We need to work together ... if we are going to solve it."

The Satellite Scoop

Scientists have sent hundreds of satellites into space. Some satellites track weather. Others send signals to radios, televisions, cell phones, and computers. Check out some different types of satellites.

Sputnik 1

This was the first artificial, or human-made, satellite launched into space, in 1957. Sputnik 1 sent radio signals back to Earth. It burned up after three months in space.

Hubble Space Telescope

The Hubble Space Telescope was launched in 1990. It takes photos of our solar system. The photos help scientists learn about space.

NOAA-18

The NOAA-18 launched in 2005. The satellite tracks temperatures. Scientists use that information to predict, or guess, weather, such as big storms.

Further Information

* How is space junk monitored?

The U.S. Space Surveillance Network keeps a catalog of space junk bigger than a baseball. It uses telescopes and antennas to watch the objects. If a collision might happen, the network sends a warning to countries and companies operating the satellites.

* Does space junk pose a risk to astronauts traveling in space?

Yes. There is so much space junk, experts say, that floating debris is now the biggest threat to a space shuttle in flight. The odds of a space shuttle colliding with a piece of junk is greater than having an accident during liftoff or landing.

* What types of satellites were involved in the recent collision?

The crash involved a U.S.-made communications satellite and a nonworking Russian military satellite. Experts say the debris from the collision could remain in space for up to 10,000 years.

* How can space officials prevent more debris in space?

The United Nations has adopted voluntary guidelines to control space debris. One guideline suggests removing fuel from spacecraft at the end of missions. Another suggests that old satellites be moved out of some orbits.

Think Critically About Space Science

How might have some of the space junk ended up in space?

Why are small items like tiny satellite pieces or cooking spatulas in space? Use text evidence from the article to support your answer.

Is space junk dangerous to astronauts? Use text evidence from the article to support your answer.

DAY 8

Coach Motivates Her Girls, Both On and Off the Court

by Martha Irvine

- 1 The coach leans forward, her hands pressed on a table in a room off the gymnasium. A basketball game is about to start. She is silent for a minute or two. Her players shift uncomfortably.
- 2 When Dorothy Gaters finally speaks, her message is familiar and firm. As usual, it's about fundamentals.
- 3 "Move your big feet." "Box out." "No fouls."
- 4 If they don't do that, she doesn't hesitate to take it up a notch on the court.
- 5 "You're embarrassing yourselves!" she tells them. She is the same, even when they're winning handily.
- 6 Gaters later explains: "Sloppy play is never enjoyable. Sometimes I'll be like, 'I hope this game is over soon. I can go home and watch some real basketball.'"
- 7 That candor¹ might be hard for the members of the girls' basketball team at John Marshall Metropolitan High School to hear. But they listen. They know this is a woman who can take them places.
- 8 For 40 years, Gaters has brought respect and pride to a West Side Chicago neighborhood that has seen more than its share of hard times. They understand this and also how much Gaters cares about them and their futures. And that's whether they end up playing basketball after high school or not.
- 9 "Just do something. So that you can be self-supportive, help your family, and set an example for those who are going to follow you," the coach tells her players. They call her Ms. Gaters or often just "G."
- 10 This current crop of players helped Gaters reach her 1,000th career win in November. The victory placed her among an elite group of coaches at any level of basketball.
- 11 Gaters' attention to detail and her competitiveness have led her teams to eight Illinois state titles and 23 city titles.
- 1 **candor:** the quality of being open, sincere, and honest
- 12 A few of her players have gone on to play professionally, including Cappie Pondexter, a WNBA All Star and Olympic gold medalist.
- 13 "She's the first coach who really taught me the game of basketball," says Pondexter, whom Gaters first saw play in a YMCA recreational league and then helped hone² her talent. "I credit it all to her, my humble beginnings."
- 14 Pondexter starred at Rutgers University, but she is far from the only one Gaters helped get to college. And that is among the coach's proudest accomplishments.
- 15 In fact, her players must regularly bring in academic progress reports or report cards for her to check.
- 16 "School before basketball," says Tineesha Coleman, a junior who hopes to play in college.
- 17 When asked what Gaters is like, former player Rhonda Greyer, now 33, ponders the question.

- 18 "She's a sweetie pie," Greyer says, quickly adding, "Off the court. OFF the court!"
- 19 She laughs, as does Pondexter when recalling the seemingly endless laps her team ran on the track above Marshall practice Gym 12. The gym has since been named for Gaters.
- 20 "I wasn't a troubled kid. My problem was focusing on basketball so much," Pondexter says, remembering how Gaters would call her mother if Pondexter skipped class. In her case, the punishment would be to lose gym time.
- 21 But though Gaters is tough, it is a tough love, her former players say. They recall a coach who occasionally took them to movies or out for burgers and fries.
- 22 They note how Gaters has quietly provided a coat, clothing or shoes for a player who needs them.
- 23 Gaters started coaching in 1975, and understands how one can learn and succeed, in big ways. The Mississippi native grew up in Chicago. She says she took on the Marshall girls' team, fresh out of DePaul University, because "no one else wanted to do it."
- 24 Gaters liked basketball, even played a bit herself. But she didn't know much about coaching, so she watched the boys' coaches carefully and took in any games she could find.
- 25 She won her first state championship in 1982.
- 26 Now, tucked amid the memorabilia³ in her office is a photo of Gaters shaking the hand of President Bill Clinton at the White House. She was honored for her work with young people in 1998. Another photo shows her being inducted into the Women's Basketball Hall of Fame. In 2009, the Naismith Memorial Basketball Hall of Fame recognized Gaters with one of its lifetime achievement awards for high school coaches.
- ² **hone:** make something better
- ³ **memorabilia:** things collected as souvenirs
- 27 The 68-year-old coach says she thinks about retiring. But some are doubtful she'll leave anytime soon.
- 28 Assistant coach Gwen Howard smiles and rolls her eyes playfully at the thought of the coach retiring.
- 29 "Please! I think this lady would do this forever if she could."

Coach Motivates her Girls, Both On and Off the Court Questions

1. What does “take it up a notch” mean in paragraph 4?

- A. To make more interesting
- B. To become more forceful
- C. To complete another level
- D. To make another play

2. Read this sentence from paragraph 7?

That candor might be hard for the members of the girls’ basketball team at John Marshall Metropolitan High School to hear.

What idea does this sentence help to support?

- A. That Gaters can be considered impolite
- B. That Gaters speak very softly at times
- C. That Gaters demands a lot from her players
- D. That Gaters is impatient with her players

3. Read this sentence from paragraph 7?

They know this is a woman who can take them places.

How does the author **best** support this point?

- A. By explaining how Gaters helps many of our players attend college
- B. By describing the long hours of practice Gaters makes her players perform
- C. By providing examples of how Gaters helps players in need
- D. By providing examples of the basketball tips Gaters teachers her players

4. Read this sentence from paragraph 21?

But though Gaters is tough, it is a tough love, her former players say.

Which point in the article does this detail **best** support?

- A. Gaters has a very strong desire to win so can get upset easily
- B. Gaters is unlikely to retire because she enjoys coaching
- C. Gaters cares about every aspect of her player’s lives
- D. Gaters is only nice after practice or games are finished

5. What does paragraph 26 suggest about Gaters?
- A. Gaters is appreciated for her important contribution to girls basketball
 - B. Gaters considered the best high school basketball coach in the country
 - C. Gaters has coached basketball almost as long as more famous coaches
 - D. Gaters has been honored mainly for her work with students off the basketball court
6. How do you paragraphs 26 through 29 contribute to the article?
- A. By comparing Gaters's work ethic with Howard's
 - B. By showing an effect Gaters has had on Howard
 - C. By giving an example of Gaters's desire to win
 - D. By suggesting how Gaters feels about her job
7. According to the article, why do so many people respect Gaters?
- A. Gaters teaches her players about more than just basketball
 - B. Gaters encourages her players to play college basketball
 - C. Gaters teaches her players about the importance of playing basketball
 - D. Gaters wants her players to concentrate on improving their basketball skills

Math

1. Steven jogged around a pond in $1\frac{1}{4}$ hours. Ron jogged the same distance in $\frac{5}{6}$ hour. How much longer did Steven take than Ron?
2. Jack had $1\frac{3}{8}$ kg of fertilizer. He used some to fertilize a flower bed, and he only had $\frac{2}{3}$ kg left. How much fertilizer was used in the flower bed?
3. Sara sold $\frac{3}{4}$ gallon of lemonade. Keira sold some lemonade, too. Together, they sold $1\frac{1}{2}$ gallons. Who sold more lemonade, Sara or Keira? How much more?
4. Anna planned to spend 9 hours practicing piano this week. By Tuesday, she had spent $2\frac{1}{2}$ hours practicing. How much longer does she need to practice to reach her goal?
5. Bella jogged $2\frac{1}{4}$ miles on Monday. Wednesday, she jogged $3\frac{1}{3}$ miles, and on Friday, she jogged $2\frac{2}{3}$ miles. How far did Bella jog altogether?

6. Mr. Mahon mixed up 1235 gallons of punch for a party. If 7 34 gallons of punch was sugar free, and the rest was extra sugar, how much extra sugar punch did Mr. Mahon make?

7 to 10. Use $>$, $<$, or $=$ to make the following statements true. Estimate to get your answer.

a. $5\frac{2}{3} + 3\frac{3}{4}$ _____ $8\frac{2}{3}$

b. $4\frac{5}{8} - 3\frac{2}{5}$ _____ $1\frac{5}{8} + \frac{2}{5}$

c. $5\frac{1}{2} + 1\frac{3}{7}$ _____ $6 + \frac{13}{14}$

d. $15\frac{4}{7} - 11\frac{2}{5}$ _____ $4\frac{4}{7} + \frac{2}{5}$

Cultures in Western vs. Eastern Hemispheres

Directions: Read each document and answer the corresponding questions that follow.



NEW YEAR'S CELEBRATION IN MEXICO

Name of the holiday in Mexico: *Año Nuevo*
Celebrated on December 31 and January 1

In Mexico, some people build castles or towers from sticks of wood especially for the new year. They string them with firecrackers. At midnight on December 31, they light their creations to welcome the new year and listen to the fireworks explode. All over Mexico at the stroke of twelve on December 31, there are displays of fireworks and the sound of firecrackers, horns, and bells. In many homes, people quickly eat twelve grapes or raisins the moment midnight comes. They believe this brings good luck for each month of the new year.

Source: Arlene Erlbach, *Happy New Year, Everywhere!*,
The Millbrook Press

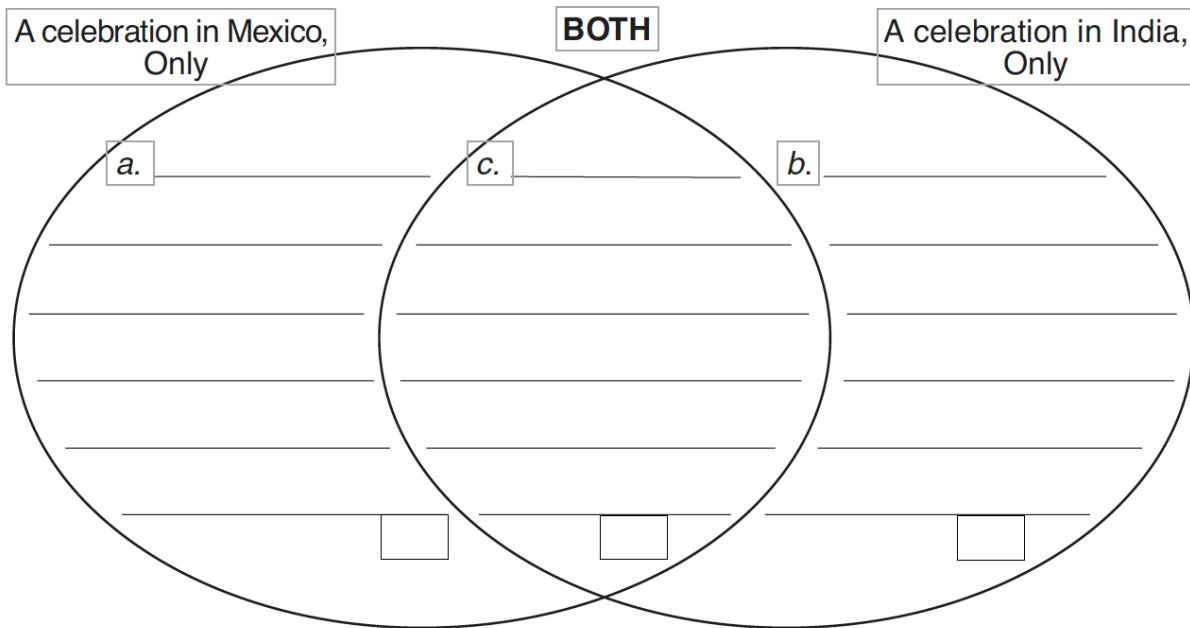


NEW YEAR'S CELEBRATION IN INDIA

Name of the holiday in India: *Diwali*
Celebrated by Hindus sometime in October or November

Diwali is a time to put on new clothes, eat sweets, visit relatives, exchange gifts, and make offerings to the deities [gods]. The highlight of the celebration is the Festival of Lights. Fireworks light up the night sky, and small clay lamps called *dipas* twinkle from every rooftop and windowsill like thousands of stars. These tiny oil lamps are lit to welcome the goddess of wealth, Lakshmi. Merchants worship Lakshmi because they believe she brings prosperity [wealth]. They compete for her favor by trying to set off the loudest and longest set of firecrackers.

Source: Bobbie Kalman, *India the Culture*, Crabtree
Publishing Company



Historical Background: The celebration of a new year is one of the oldest festivals observed from ancient times. It is the only holiday that most of the world observes, although not always on the same date.

[illegible]

DAY 9

Excerpt from *High Volume*

Hearing loss is on the rise.

Listening to MP3 players at high volumes can damage young ears.

- 1 Yahaira likes listening to rap and hip-hop music on her MP3 player, and she likes it loud! "It doesn't have the same effect when it's quiet," says the 14-year-old student from New Rochelle, N.Y.
- 2 Yahaira and other teens should pay attention to a recent study that shows that hearing loss has been rising among U.S. teens. Researchers at Brigham and Women's Hospital in Boston, Mass., found an increase of 30 percent in hearing loss since the early 1990s. About one in five teenagers now have some degree of hearing damage.
- 3 The researchers did not say why hearing loss has risen, but other experts have strong suspicions. One likely culprit, they say, is MP3 players. "These are very powerful instruments," says Tommie Robinson Jr., a professor of pediatrics at George Washington University.

Damaged Hairs

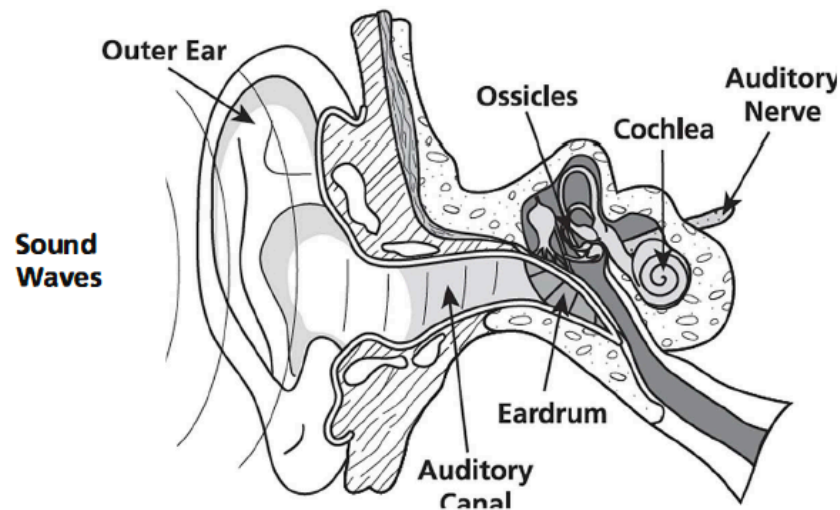
- 4 An MP3 player can be hazardous to hearing when its decibel level is turned up too high. A decibel is a unit that indicates how loud a sound is. High-decibel sounds can damage tiny, delicate nerve endings, called hair cells, in the inner ear, according to Robert Novak, a professor of speech, language, and hearing science at Purdue University.
- 5 If a sound is loud enough, the damage can be permanent. A loud sound can shake the membrane on which the hair cells sit—"like an earthquake," he says. That vibration can break or even uproot hair cells. "When that happens, the hair cells are finished," he adds. Human ears cannot regrow hair cells.

Turn It Down

- 6 What is a safe volume level on your personal stereo? Novak suggests setting it to a comfortable volume in a quiet room. From then on, don't turn the volume above that level no matter where you are. "You should be able to hear someone talking to you at a normal conversational level from a distance of 3 feet," says Novak. If others can hear your music, the volume is too high.
- 7 Yahaira admits that sometimes after listening to loud music, her ears make a ringing sound. That could be a sign that her habit of listening to loud music is damaging her hearing. She plans to start playing her music quieter.
- 8 "Hearing is the one sense that enables humans to most easily use language and develop speech and build relationships," says Novak. "So we need to protect that very special sense."

The LOUDNESS War

- 9 The loudness of today's music may not be totally under your control. Music companies have been deliberately turning up the volume. It's a trend called the loudness war.
- 10 Play a CD from the 1980s or '90s. Then play a newly released tune. Don't touch the volume control. You'll probably notice that the new CD sounds louder than the old one. Why? Sound engineers who create CDs are using dynamic range compression, a technology that makes the quiet parts of a song louder and the loud parts quieter. The overall effect of compression is a louder recording.
- 11 Many musicians and sound engineers aren't pleased. They say that compression is driving down the quality of today's music, making it sound flat and blaring. Gary Hobish, a sound engineer, explains that music should be a combination of loudness and softness. "This is one of the things that gives our music dimension," he says. But music companies want to make music louder so it will stand out. That's important in the competition among recording companies.
- 12 What about listeners? Many people listen to music on the go in noisy places and through headphones, all of which reduce sound quality. So young listeners may not notice the poorer quality of modern recordings. "To their ears," says Hobish, "the music sounds fine because they've never compared it to anything else."



How an Ear Hears

- 13 Sound waves travel down the outer ear's auditory canal and strike the tympanic membrane (eardrum), causing it to vibrate. The vibrations are transmitted through the middle ear by three ossicles (tiny bones). The third ossicle sends waves through a fluid inside the cochlea, an organ in the inner ear. The cochlea contains about 15,000 hair cells, which respond to the waves. The hair cells relay signals by way of the auditory nerve to the brain, which interprets the signals as sounds. No sound is heard until a signal reaches the brain.

Excerpt from High Volume Questions

1. What does the simile “like an earthquake” in paragraph 5 help the reader understand?
 - A. That volume can strongly affect parts of the ear
 - B. That hair cells are easily damaged
 - C. How our body is unable to regrow hair cells
 - D. How much damage the ear can take

2. How do you paragraphs 4 and 5 connect to paragraph 6?
 - A. Paragraphs 4 and 5 explain how hearing loss can occur, and paragraph 6 explains how to prevent it
 - B. Paragraphs 4 and 5 show what damage can occur, and paragraph 6 shows how it affects people
 - C. Paragraphs 4 and 5 describe how the ear can be damaged, and paragraph 6 describes how people react to the damage
 - D. Paragraphs 4 and 5 explain why ears get damaged, and paragraph 6 explains why protecting hearing is important

3. Which evidence **best** supports a claim made by the author in paragraph 4?
 - A. “If others can hear your music, the volume is too high” (paragraph 6)
 - B. “Yahaira admits that sometimes after listening to loud music, her ears make a ringing sound” (paragraph 7)
 - C. “So we need to protect that very special sense” (paragraph 8)
 - D. “Music companies have been deliberately turning up the volume” (paragraph 9)

4. According to paragraphs 9 through 12, how is the music business today different from the business in the 1980’s or 1990’s?
 - A. Today’s music companies control the volume of music more than in the past
 - B. Today’s music companies compete against each other more than in the past
 - C. Today’s listeners of music like their music louder than they did in the past
 - D. Please sound engineers make music sound clearer than it did in the past

5. Which paragraph **best** explains how loud noises can damage our hearing?

- A. Paragraph 1
- B. Paragraph 5
- C. Paragraph 7
- D. Paragraph 13

6. Information explained in paragraph 13 does the drawing help the reader understand?

- A. The shape of the parts of the ear
- B. The position of the parts of the ear
- C. The order in which sound waves strike the parts of the ear
- D. The size of sound waves when moving through the parts of the ear

7. Which idea is **most** important to include a summary of the article?

- A. Music is not as powerful when played at quiet volumes
- B. Powerful instrument cause most hearing loss
- C. Choosing to play music quietly can protect hearing
- D. Music companies determine safe volume levels

Math

1. Diego eats $\frac{1}{5}$ of a loaf of bread each day. On Tuesday, Diego eats one-fourth of the day's portion before lunch. What fraction of the whole loaf does Diego eat before lunch on Tuesday? Draw a rectangular fraction model to support your thinking.
2. $\frac{5}{8}$ of the songs on Harry's music player are hip-hop. $\frac{1}{3}$ of the remaining songs are classical. What fraction of all the songs are classical?
3. Cheryl bought a sandwich for \$5.29 dollars and a drink for \$2.60. If she paid for her meal with a \$10 bill, how much money change did she get back?
4. At Trailside Treats, the scale says that Sara has 8 ounces of vanilla yogurt in her cup. Her father's yogurt weighs 11 ounces. How many pounds of frozen yogurt did they buy altogether?
5. An art teacher uses 1 quart of blue paint each month. In one year, how many gallons of paint will she use?

6. Three trucks are carrying cement to a construction site. Truck A carries 3,545 lb, Truck B carries 1,758 lb, and Truck C carries 3,697 lb. How many tons of cement are the 3 trucks carrying altogether?

7. Lorenzo said that if you take a number and multiply it by a fraction, the product will always be smaller than what you started with. Is he correct? Why or why not? Explain your answer, and give at least two examples to support your thinking.

8. Look at the inequalities in the box. Choose a single fraction to write in all three blanks that would make all three number sentences true. Explain how you know.

$\frac{3}{4} \times \underline{\hspace{1cm}} > \frac{3}{4}$	$2 \times \underline{\hspace{1cm}} > 2$	$\frac{7}{5} \times \underline{\hspace{1cm}} > \frac{7}{5}$
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9. Choose a single fraction to write in all three blanks that would make all three number sentences true. Explain how you know.

$\frac{3}{4} \times \underline{\hspace{1cm}} < \frac{3}{4}$	$2 \times \underline{\hspace{1cm}} < 2$	$\frac{7}{5} \times \underline{\hspace{1cm}} < \frac{7}{5}$
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10. During science class, Ted, Carlson, and Jim measure the length of their bean sprouts. Carlson's sprout is 0.9 times the length of Ted's, and Jim's is 1.08 times the length of Ted's. Whose bean sprout is the longest? The shortest? Explain your reasoning.

Space Junk Review

Look back at the Space Junk article on Day 7 if you need more information to complete this page.

Vocabulary Review:

1. An object that circles something else is called a _____.
2. Pieces of something that has been broken or destroyed is called _____.
3. A collision is a _____.
4. If something is unique, it is _____.
5. Objects that have been left behind in space are _____.

Review the Space Junk article. What kind of solution can there be for the space junk problem?

Use the vocabulary words to complete this passage.

Space Junk Summary

Space _____ includes satellite debris, nuts and bolts, and old rocket parts. _____ are pieces of something that has been broken or destroyed. There is also a camera, a golf ball, and several screwdrivers in space. There is even a spatula floating around our planet!

Spatulas and tiny satellite parts may not sound dangerous. However, some objects can zip around Earth at up to 25,000 miles per hour. Going that fast, even the smallest _____ can damage spacecraft. The space _____ could "trash" important equipment, such as the International Space Station. The floating lab cost more than \$100 billion to build.

DAY 10

Excerpt from *A Home for the President*

by Patricia West

- 1 The White House has stood as an important symbol of the U.S. presidency for over two centuries. It has seen a wide range of occupants and visitors from all over the world. In spite of its endurance, the home of the U.S. presidency has changed a lot. It was not the home of every U.S. President. It was not always called the "White House." In fact, it was not always white.

George Washington Plans a Presidential Home

- 2 When George Washington became the first President of the United States, the nation did not yet have a capital city. The government's headquarters at that time was in New York City and later moved temporarily to Philadelphia, Pennsylvania. Several of the thirteen original states wanted the honor of hosting the capital. A compromise was worked out between the Southern states and the Northern states. In exchange for Thomas Jefferson's support of a bill Alexander Hamilton favored, Hamilton agreed to urge his fellow Northerners in Congress to vote to put the capital in the South.
- 3 President Washington was asked to name the exact location of the new capital. He chose a 10-square-mile spot on the Potomac River. This spot had been the home of several Native American tribes. By 1791, European settlers were living there.
- 4 The first plan for the President's House was for a huge, grayish stone building, much like a European palace. The building was designed by the distinguished Frenchman, Pierre L'Enfant. Washington rejected his plan and announced a competition calling for a new architect. James Hoban, of South Carolina, won the contest and laid the cornerstone of the President's House in 1792.
- 5 To this day, Americans should feel indebted to George Washington. He supervised every detail of the building, which was just one-fifth the size called for in the original plan. Unfortunately, Washington was the only U.S. President who never got to live in the beautiful building.
- 6 It took eight years to build the President's House. No one could guarantee that Congress would provide enough money for construction. It was hard to bring building materials to the swampy area. Mosquitoes buzzing everywhere in the steamy summer heat made the workers' lives miserable.
- 7 By 1800, the President's House was barely finished. Only six rooms were completed. Even in these rooms, the plaster walls were still damp.

A New Home in “Wilderness City”

- 8 It would be misleading to say that Washington, D.C., was a grand city at the start of the nineteenth century. When President John Adams and First Lady Abigail Adams moved into their new home, Washington, D.C., was quite a mess. The unpaved streets became a sea of mud whenever it rained. Potholes and tree stumps made travel by horse and carriage dangerous. Pigs roamed the streets eating the garbage dumped there. Conditions were so rough and dirty that some people called the capital “wilderness city.” Abigail Adams had to hang laundry inside the house to dry because it would have gotten dirty all over again on an outside clothesline.
- 9 In spite of the hardships, the Adamses appreciated their home. Calling the house “the President’s Palace,” President Adams wrote to a friend, “May none but honest and wise Men ever rule under this roof.” His wife commented that “this House is built for ages to come.”
- 10 A new President moved into the house in 1801. President Thomas Jefferson said that the big stone house was large enough for “two emperors, one Pope, and the Grand Lama.” Since he didn’t think that Presidents should live in a palace, he called his new home simply “the President’s House.” Jefferson had good taste, and he furnished the house beautifully. He also had three large rooms on the main floor (the Blue Room, the Red Room, and the Green Room) painted in the colors that are still used today.
- 11 With all that space at his disposal, Jefferson loved to entertain at home. His guests included foreign heads of state, Native Americans, and ordinary citizens.

Disaster in the President’s House

- 12 The next President, James Madison, was away in 1814 when he received word that the British were marching on Washington during the War of 1812.¹ First Lady Dolley Madison hurriedly packed up important state papers and sent them away. At the last minute, when British troops were storming the capital, she saved a large portrait of George Washington by ripping it from its frame. Then she fled in disguise.
- 13 British soldiers feasted on the food they found on the banquet table. They set the President’s House on fire, along with all the other government buildings in the city. Only a torrential rainstorm saved the house from total destruction. By the next day, all that remained standing were four soot-blackened exterior walls. The architect, James Hoban, was asked to use his original plans to rebuild the President’s House. While the Madisons lived elsewhere, the famous house was rebuilt.

¹ **War of 1812:** a war between the United States and Great Britain lasting from 1812 to 1815

Excerpt from A Home for the President Questions

1. How do paragraphs 2 and 3 contribute to the development of “Excerpt from A Home for the President”? Use **two** details from the article to support your response.

[illegible]

[illegible]

Math

1. Write a statement using one of the following phrases to compare the value of the expressions. Then, without doing the multiplication, explain how you know.

is slightly more than *is a lot more than* *is slightly less than* *is a lot less than*

a. 4×0.988 _____ 4

b. 1.05×0.8 _____ 0.8

c. $1,725 \times 0.013$ _____ 1,725

d. 989.001×1.003 _____ 1.003

e. 0.002×0.911 _____ 0.002

2. A pallet holding 5 identical crates weighs 14 of a ton. How many tons does each crate weigh? Draw a picture to support your response.

3. The Canadian side of Niagara Falls has a flow rate of 600,000 gallons per second. How many gallons of water flow over the falls in 1 minute?

4. Tickets to a baseball game are \$20 for an adult and \$15 for a student. A school buys tickets for 45 adults and 600 students. How much money will the school spend for the tickets?
5. Michael saves \$425 dollars a month for college. How much will he save in 5 years?
6. Juan delivers 174 newspapers every day. Edward delivers 126 more newspapers each day than Juan. Write an expression to show how many newspapers Edward will deliver in 29 days.
7. A young snake has a length of 0.19 meters. During the course of his lifetime, he will grow to be 13 times his current length. What will his length be when he is full grown?
8. Solve using the standard algorithm. 531×2.1
9. Solve using the standard algorithm. $5.1 \times .5$
10. Solve using the standard algorithm. 7.03×1.5

World Geography



There are seven continents. Continents are very large land masses separated by the oceans of the world. Continents are the huge places that contain land surfaces. Continents may have countries, forests, mountains, lakes, rivers, people, animals, plants, deserts, ice, and more more on them. Some continents have many things on them and some have only a few things on them. All parts of the world are covered with land or water. The largest masses of water are called oceans. The largest land masses are continents.

The largest continent in terms of square miles is Asia. It is located in the Northern Hemisphere. The Great Wall of China and Mt. Everest is located on this continent. It includes fifty-one countries such as India, Japan, South Korea, Vietnam, China and parts of Russia.

The second largest of the seven continents in the world is Africa. It is located in the Southern Hemisphere. The continent contains Egypt, Kenya, Ethiopia, Algeria, Nigeria, South Africa, Morocco, and about 47 other countries. Major landmarks on the continent include the Sahara Desert, which covers about 1/3 of the surface, and the Nile River, the longest river in the world. Africa is also home to some the fastest animals in the world including the cheetah, wildebeest, lion, and gazelle.

North America is the third largest continent. The third longest river in the world, the Mississippi River at 2,320 miles is in North America. There are three countries in North America: Mexico, Canada, and the United States. The largest freshwater lake in the world, Lake Superior, is also a part of North America. North America is between two oceans, the Atlantic and Pacific Ocean.

Next comes South America, where the longest mountain range in the world is located, the Andes Mountain range, which is about 4,500 miles long. They run along the western coast of the continent, which includes the countries of Brazil, Peru, Argentina, Chile, Ecuador, and 10 others. The Amazon Rain Forest is also in South America. Except for Brazil, Spanish is the official language throughout the continent. In Brazil they speak Portuguese. North America and South America are in the Western Hemisphere.

The continent of Antarctica is mostly covered in ice, only 2% of it is not frozen. There is zero permanent population. Only scientists or visitors can be found on the continent. It is the windiest and coldest place on the Earth and there are no countries on the continent.

The second smallest continent is Europe. It also contains the smallest country, Vatican City. There are 50 countries in Europe including the United Kingdom, Germany, Ireland, Turkey, Greece, Spain, Italy, and many others. Two landmarks on the continent include the Eiffel Tower in France and the Big Ben clock tower in England.

The smallest continent in the world is Australia. It is unique because it is also a country, the only country making up the continent. English is the primary language of Australia. It is home to the kangaroo. The native people of Australia are called Aborigines.

In summary, the seven continents from largest to smallest include Asia, Africa, North America, South America, Antarctica, Europe, and Australia.

1. Which oceans does North America lie between?

2. Which of the contents is most interesting to you? Provide two facts you find intriguing.

3. Which continents does not have a permanent population?

4. Which continents are in the Western Hemisphere?

5. Which continent is home to over 3 billion people?

6. If you had to explain "What is a continent?" to a third grader what would you say to them?

Congratulations!

You've completed the at home
Enrichment Program Volume 2!

