

LEWIS COUNTY SCHOOLS

6th Grade

DAY 11

NTI Day 11
6th

Using Order of Operations with Expressions with Exponents

- Simplify or evaluate each exponential expression using the order of operations. The answers are mixed up at the bottom of the page. Cross out the answers as you complete the problems.

1 $(6 + 3)^4$

$(9)^4$

6,561

2 $6 + 3^4$

3 $2(4^3) - 1$

4 $2(4^3 - 1)$

5 $5 + 9(1 + 2)^2$

6 $5 + 9(1) + 2^2$

7 $(18 - 4)^2$

8 $18 - 4^2$

9 $9 + 2(3^2)$

10 $(9 + 2)3^2$

11 $12 + x^4 - 6$ when $x = 8$

12 $m^3 + 9n$ when $m = 4$ and $n = 5$

Answers

27

196

2

18

126

99

127

86

109

4,102

87

~~6,561~~

Evaluating Algebraic Expressions

- Check each answer to see whether the student evaluated the expression correctly. If the answer is incorrect, cross out the answer and write the correct answer.

Algebraic Expressions	Student Answers
1 $5m + 26$ when $m = 3$	$5(3) + 26 = 15 + 26$ $= 31$ Possible answer: $5(3) + 26 = 15 + 26$ $= 41$
2 $8(x + 2)$ when $x = 6$	$8(6 + 2) = 48 + 2$ $= 50$
3 $7p + 5$ when $p = 12$	$7(12) + 5 = 7(17)$ $= 119$
4 $q + 9p$ when $q = 18$ and $p = 4$	$18 + 9(4) = 18 + 36$ $= 54$
5 $6w - 19 + k$ when $w = 8$ and $k = 2$	$6(2) - 19 + 8 = 12 - 19 + 8$ $= 1$
6 $12x + y$ when $x = 3$ and $y = 52$	$12(3) + 52 = 36 + 52$ $= 88$

- 7 Check your answer to problem 2 by using a different strategy.

READ THE PASSAGE Think about how the different kinds of salt are similar and different.

Flavoring the Globe

Most people are familiar with plain white table salt. But if you think that salt is just a bunch of tiny white crystals, you're mistaken. This common seasoning has many different colors and flavors.

French sea salt comes from seawater. The larger grains and milder flavor of this salt make it a popular choice for meals. Some people even like to sprinkle it on chocolate cakes and cookies.

Hawaiian sea salt, on the other hand, has a rosy color that comes from the clay in the region. The mellow flavor of the salt is perfect for pork dishes.

Like Hawaiian sea salt, Australian river salt is also pink. Its color, however, comes from algae in the groundwater. The soft pink flakes melt easily on warm foods.

Mediterranean black lava salt resembles tiny cubes of coal. This salt is made by mixing sea salt from the Mediterranean sea with charcoal from volcanic lava. The dark crystals, unlike the other salts mentioned, add a dramatic color contrast to baked potatoes.

Sampling different salts is a wonderful way to travel the world without leaving home! Try sprinkling one of the many varieties of salt on your food and enjoy the unique flavor and texture.

STRATEGY PRACTICE How are the different kinds of salt mentioned in the passage similar? How are they different?

SKILL PRACTICE Read each question. Fill in the bubble next to the correct answer.

- What makes French sea salt popular?
 - (A) the dark color
 - (B) the fine grains
 - (C) a chocolate flavor
 - (D) a mild taste
- What causes the rosy color of Hawaiian sea salt?
 - (A) the regional clay
 - (B) algae from underground water
 - (C) volcanic lava
 - (D) pork
- Which statement is an opinion?
 - (A) Most people are familiar with plain white table salt.
 - (B) French sea salt comes from seawater.
 - (C) Australian river salt is pink.
 - (D) Sampling different salts is a wonderful way to travel the world without leaving home.
- How are Australian and Hawaiian salts similar?
 - (A) Both melt easily.
 - (B) Both come from the sea.
 - (C) Both are pink.
 - (D) Both have large grains.

Great Pacific Garbage Patch an example of growing plastic pollution

By Los Angeles Times, adapted by Newsela staff on 04.02.18

Word Count **699**

Level **800L**

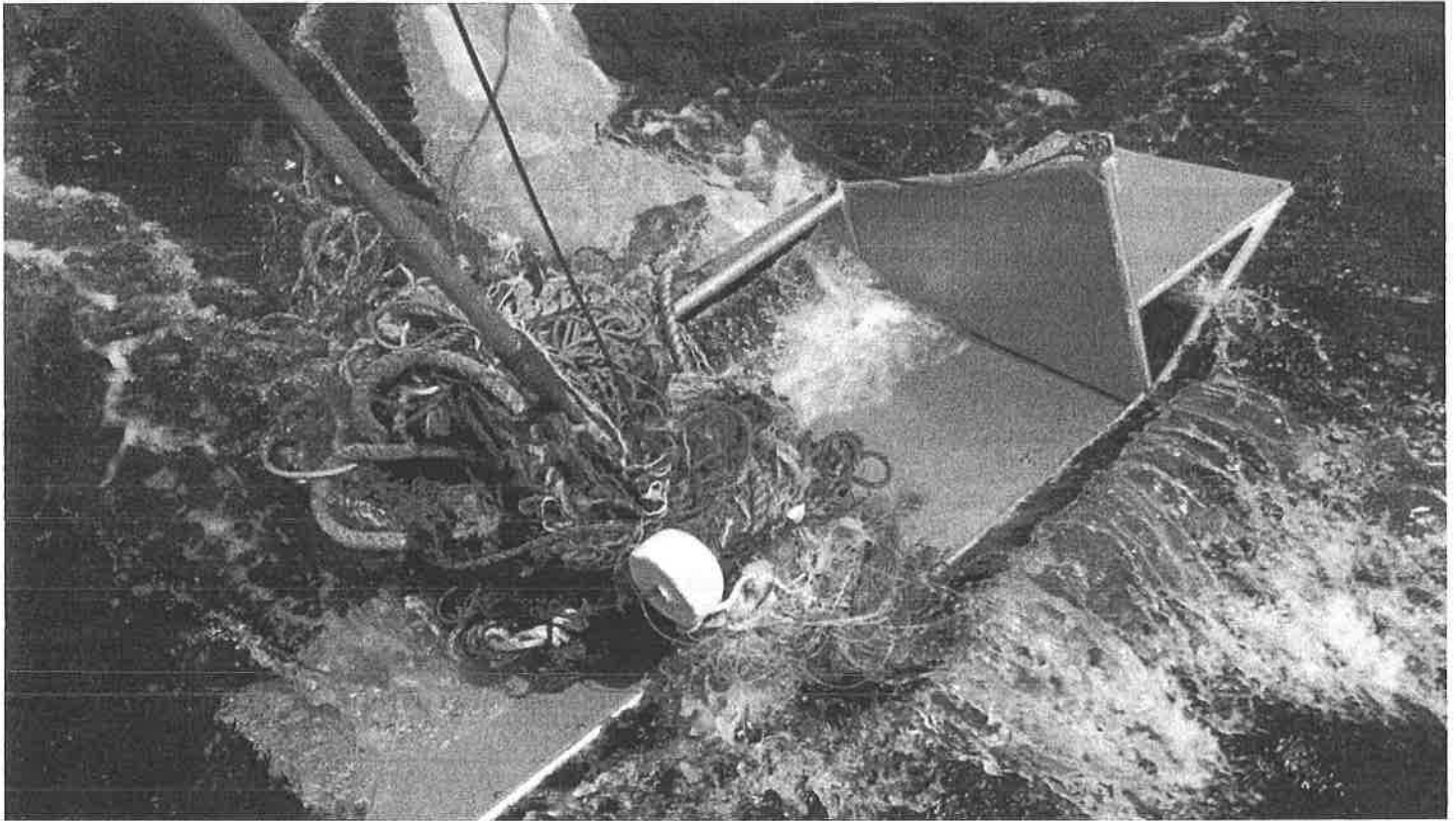


Image 1. A piece of floating debris snagged during an ocean sampling operation. Photo from Ocean Cleanup/TNS.

The Great Pacific Garbage Patch, or GPGP, is getting greater. It sits in the eastern Pacific Ocean between California and Hawaii. It's also a lot bigger than scientists thought. It's now twice the size of Texas. And, it is getting bigger.

A team of scientists recently studied the GPGP from above in an aerial study. They found that it was made of about 79,000 metric tons of plastic. That's up to 16 larger than previously thought. The new numbers were published in *Scientific Reports*, a science journal. Worse, they found that the garbage patch is still growing, and at a rapid pace.

GPGP Even Bigger Than It Looks

The GPGP is even bigger than it looks. That's partly because some of the plastic has been broken down into smaller and smaller bits over time. The garbage patch isn't equally tightly packed throughout.

Laurent Lebreton is the study's lead scientist. "It's quite frightening because we are so far from any mainland or island," he said. Out in the middle of the water, the plastic is a shocking reminder of what humans can do to the environment.

"Biofouled" Plastic Harms Food Chain

This garbage patch is just one of many in the ocean. Plastics are meant to last. That's great for making grocery bags or six-pack can holders. It's not so great when those plastics end up in the guts of sea turtles. A plastic that floats around for too long can become biofouled. That means a layer of slime, shellfish, and other ocean life has attached itself to the trash. Studies show that biofouled plastic can attract fish and seabirds and end up in the food chain. The full effects of these plastics on nature aren't yet known, but scientists are worried. Large or small, plastics of all sizes can harm ocean life.

Scientists have tried to get a closer look at the garbage patch to find out more. They drag nets through parts of the patch and take samples of the plastic they find. But this only gives them a snapshot. Most of the samples come from smaller pieces of plastic. The scientists aren't usually able to look at larger chunks.

Samples From Bird's-Eye Survey

Lebreton and his team decided to take a bird's-eye view. They did aerial surveys of the patch from above. They also sent boats to take samples of the trash. Then they brought all those samples back to shore for closer inspection.

The researchers split the plastic they collected into four groups, from super tiny (microplastic) to large (megaplastic). Microplastics made up 94 percent of the estimated 1.8 trillion pieces of trash in the patch. But they only accounted for 8 percent of the total mass. More than three-quarters of the rest of it came from larger plastic pieces.

Nets Left By Fishing Boats A Big Problem

Fishing nets accounted for just under half of the garbage patch's mass. They often get lost or abandoned by fishing boats. They're fairly cheap and easy to replace, but they can float through the ocean, trapping animals in their path.

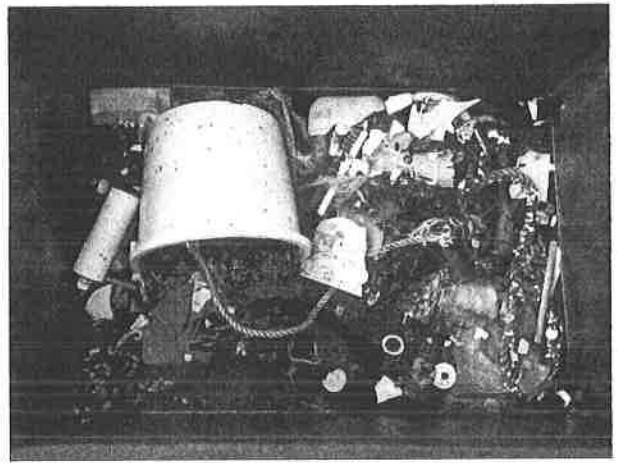
Fifty plastic items had readable dates. One was from 1977, seven from the 1980s, 17 from the 1990s, 24 from the 2000s and one from 2010. Of course, they might not have been in the water that whole time. There were 386 pieces that had words from nine different languages. A third of them were in Japanese and another third were in Chinese.

Tsunami In Japan



The scientists think they might know why. In 2011, the Tohoku tsunami hit Japan. The disaster reportedly washed 4.5 million metric tons of trash into the sea. About 1.4 million of that could have been moved across the ocean surface. Then it could have made its way to the garbage patch.

None of this, of course, counts all the plastics that may have sunk to the bottom of the ocean. "Levels of plastic pollution in deep water layers and seafloor below the GPGP remain unknown," the study authors wrote.



Quiz

- 1 Read the section "Biofouled Plastic Harms Food Chain."
Select the sentence that MOST suggests plastics can be dangerous.
- (A) Plastics are meant to last.
 - (B) It's not so great when those plastics end up in the guts of sea turtles.
 - (C) That means a layer of slime, shellfish and other ocean life has attached itself to the trash.
 - (D) Most of the samples come from smaller pieces of plastic.
- 2 Read the section "Nets Left By Fishing Boats A Big Problem."
Which sentence explains why so many nets wind up in the ocean?
- (A) Fishing nets accounted for just under half of the garbage patch's mass.
 - (B) They often get lost or abandoned by fishing boats.
 - (C) They're fairly cheap and easy to replace, but they can float through the ocean, trapping animals in their path.
 - (D) Of course, they might not have been in the water that whole time.
- 3 What effect did the 2011 tsunami have on the Great Pacific Garbage Patch?
- (A) The tsunami caused the formation of the Great Pacific Garbage Patch.
 - (B) The tsunami moved sunken plastics into the Great Pacific Garbage Patch.
 - (C) The tsunami broke the plastic in the Great Pacific Garbage Patch into smaller pieces.
 - (D) The tsunami washed tons of trash into the ocean and toward the Great Pacific Garbage Patch.
- 4 What is the MAIN reason why scientists are so interested in studying the Great Pacific Garbage Patch?
- (A) They want to protect the Great Pacific Garbage Patch from damage.
 - (B) They want to learn about how pieces of plastic become biofouled.
 - (C) They want to prevent fishing boats from entering the Great Pacific Garbage Patch.
 - (D) They want to learn more about how plastic affects the environment.

LEWIS COUNTY SCHOOLS

6th Grade

DAY 12

Name : _____

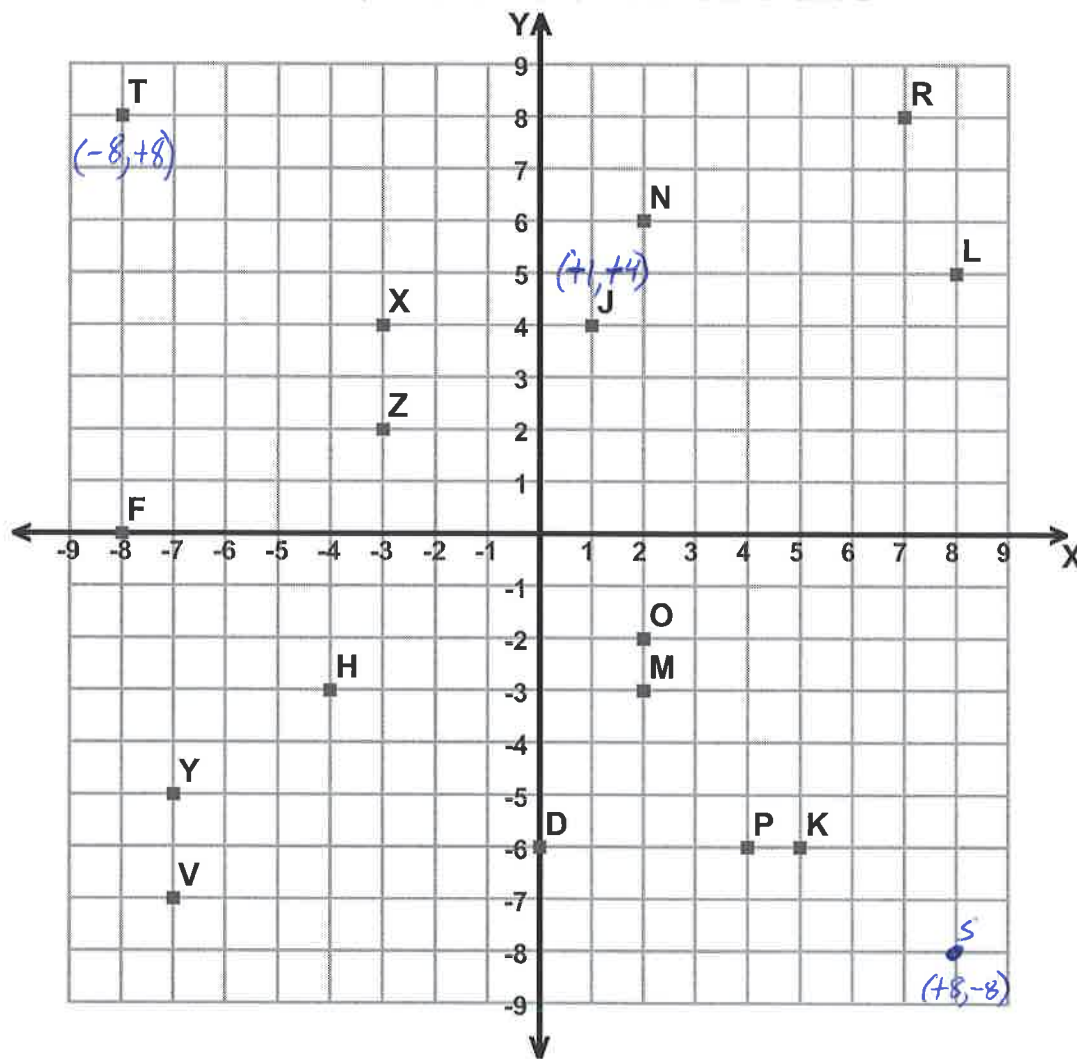
Score : _____

Teacher : _____

Date : _____

NTI Day 12
6th

Four Quadrant Ordered Pairs



Tell what point is located at each ordered pair.

- 1) $(+1, +4)$ J 3) $(+2, -2)$ _____ 5) $(+7, +8)$ _____ 7) $(-8, +0)$ _____
 2) $(+2, +6)$ _____ 4) $(+2, -3)$ _____ 6) $(+4, -6)$ _____ 8) $(-3, +2)$ _____

Write the ordered pair for each given point.

- 9) T $(-8, +8)$ 11) Y _____ 13) V _____ 15) D _____
 10) L _____ 12) K _____ 14) X _____ 16) H _____

Plot the following points on the coordinate grid.

- 17) S $(+8, -8)$ 19) B $(+6, -7)$ 21) C $(-4, +7)$ 23) U $(-2, +6)$
 18) W $(-9, -7)$ 20) I $(+6, +3)$ 22) E $(-2, -8)$ 24) A $(-4, -5)$



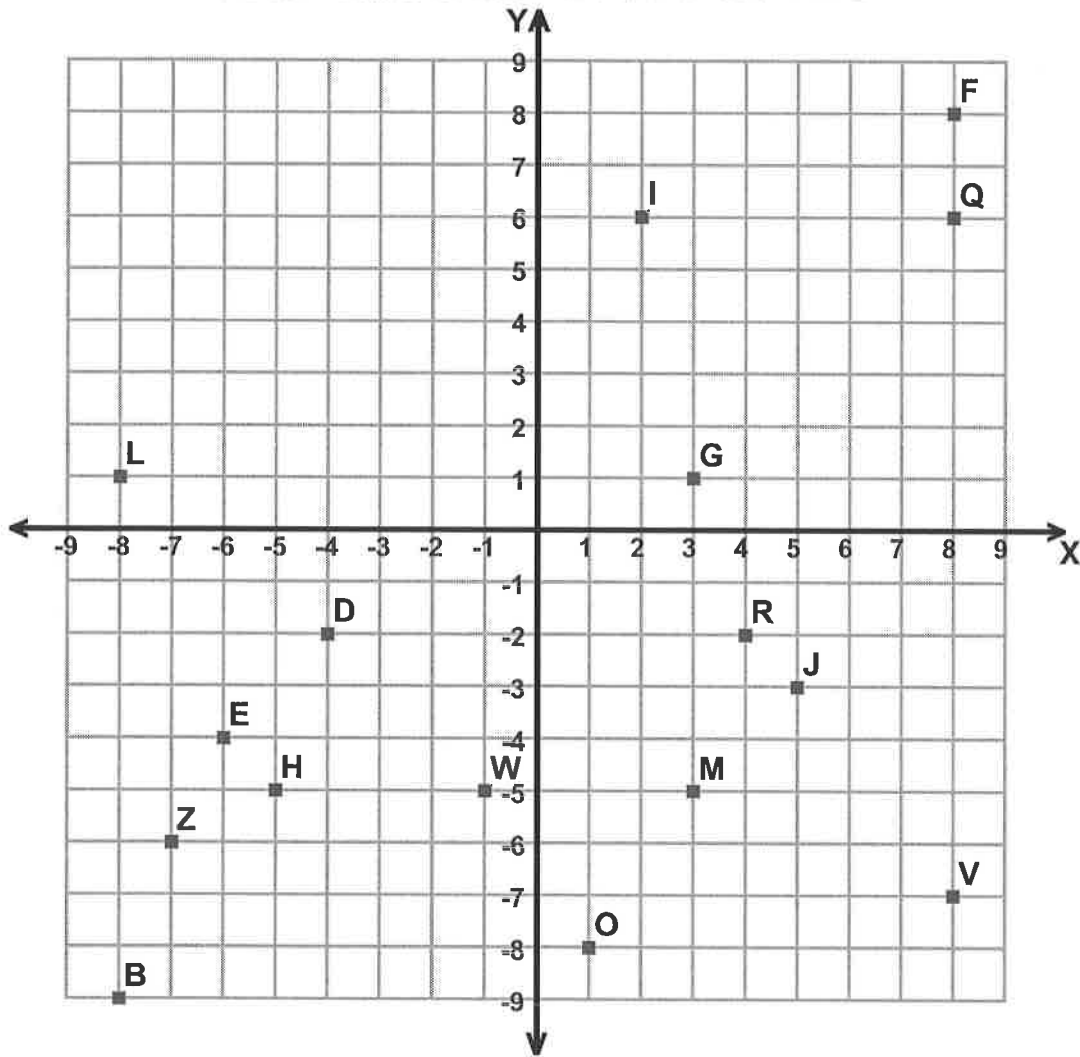
Name : _____

Score : _____

Teacher : _____

Date : _____

Four Quadrant Ordered Pairs



Tell what point is located at each ordered pair.

- 1) $(+3,+1)$ _____ 3) $(-4,-2)$ _____ 5) $(+1,-8)$ _____ 7) $(+8,+6)$ _____
2) $(+8,+8)$ _____ 4) $(-1,-5)$ _____ 6) $(+3,-5)$ _____ 8) $(-8,-9)$ _____

Write the ordered pair for each given point.

- 9) Z _____ 11) V _____ 13) E _____ 15) H _____
10) I _____ 12) J _____ 14) L _____ 16) R _____

Plot the following points on the coordinate grid.

- 17) C $(-8,-6)$ 19) A $(-5,+3)$ 21) P $(-4,+7)$ 23) S $(+7,-5)$
18) N $(+6,+9)$ 20) U $(+0,-1)$ 22) Y $(+0,-5)$ 24) X $(-7,-8)$



READ THE INTERVIEW

Think about the information that the interviewer is trying to learn from Janette Flores.

Planning a Beautiful Day

Janette Flores is a wedding planner in Baltimore, Maryland. **Bubbly Bride** magazine wanted to find out what it takes for a professional to plan one of the most important days of someone's life.

Bubbly Bride: What happens in a typical day for a wedding planner?

Janette Flores: Planning a wedding involves much more than the wedding day itself. I start at least six months in advance, calling catering companies and arranging flower deliveries and dress fittings.

Bubbly Bride: What do you do on the day of the wedding?

Janette Flores: I make sure everything goes smoothly. No matter how carefully you plan, there can often be last-minute problems or surprises.

Bubbly Bride: Have you planned any weddings that you think are especially memorable?

Janette Flores: Every wedding I plan is memorable for a different reason. One couple, both scuba divers, wanted to get married under water. Another couple wanted to exchange vows on the train where they had met. The best weddings reflect the couple's personalities.

**STRATEGY PRACTICE**

Summarize the tasks that Janette Flores does in her job.

SKILL PRACTICE

Read each question. Fill in the bubble next to the correct answer.

1. According to the interview, which is *not* a job for a wedding planner?
 - (A) calling catering companies
 - (B) arranging flower deliveries
 - (C) solving last-minute problems
 - (D) sewing wedding dresses
2. What is the purpose of the text between the title and the first question?
 - (A) to tell where the interview takes place
 - (B) to explain when the interview takes place
 - (C) to describe who is being interviewed
 - (D) to name the magazine in which the interview appears
3. Who would probably be most interested in reading the interview?
 - (A) a florist
 - (B) a scuba diver
 - (C) a couple that is engaged
 - (D) a married couple
4. When does Janette start planning a wedding?
 - (A) the day of the wedding
 - (B) at least six months before the wedding
 - (C) after calling catering companies
 - (D) no more than six months in advance

She's only 10 and already making a big difference in cleaning up the beaches

By Miami Herald, adapted by Newsela staff on 02.19.20

Word Count **690**

Level **830L**



Image 1. Sasha Olsen, 10 years old, during a January beach cleanup at Bal Harbour, Florida, that she organized through the nonprofit Iwantmyoceanback she created with her cousin. Photo: Iwantmyoceanback/TNS

In 2019, on a trip to Vietnam and Japan with her family, Sasha Olsen was horrified at the ocean's pollution levels. She saw dying sea animals.

"We went on this trip and I was so excited," said Sasha. She is 10 years old and lives in Bal Harbour, Florida. "But when I saw the way the oceans had become I got upset. I wanted to know why things were this way but couldn't find an answer."

Beaches Closed By Health Department

When she returned home, she grew even more disturbed. She learned that some of the beaches in South Florida had been closed by the health department because the water had too much bacteria in it.

Sasha asked for the help of her cousin, Narmina Aliyev. Aliyev is 23 years old and got a degree in business at Nova Southeastern University in Florida. Together, they started a nonprofit

organization, Iwantmyoceanback.

The group started small. Friends got together on the weekends to clean the beaches in Bal Harbour.

Hosting Events To Raise Money

Recently, however, Iwantmyoceanback has hosted events to raise money for beach cleanups. The money will also go to conservation groups such as Oceana and World Wildlife Fund, Aliyev said.

In January, Sasha organized "Kids Heal the Oceans" at Bal Harbour Beach. There, she spoke about the oceans' problems. Guests made art out of plastic gathered from the beach cleanup.

"At first, our guests were a little shy, but now they've felt inspired to speak up! Sasha has inspired many other kids to join Iwantmyoceanback and show people that we're able to make a change," Aliyev said.

On February 16, the group threw a Plastic-Free Party. The party involved a beach cleanup and guests creating art from the plastic trash they collect.



Working Together For A Common Goal

It's important to raise awareness and "to show people they can come together through their hobbies and working together to a common goal," said Sasha. She is a fourth-grader at Pine Crest School in Fort Lauderdale.

Sasha is also working on releasing a book with her sister, Mia. Her sister is 2 years old. She wanted to work with Mia to show how the state of the oceans affects children.

"We're scared sometimes to go into the water because it has had a reputation in recent years of not being safe," said Sasha. "I want my sister to care about these problems as much as I do." She hopes to set an example for young people.

Social Media

The nonprofit is also trying to spread the word online. They are using YouTube and other social media.

Sasha has started a YouTube channel, called Studio IWMOB. She posts videos from events and has begun a web series. The series is called "Table Talks." In it, she interviews people from different professions about the oceans.

After the interview, she and her guest will create a painting, signed by the guest, that will be auctioned off to raise funds. The money will go to conservation groups.

Jencarlos Canela, a popular Cuban-American singer and TV star, was Sasha's first guest. He appeared on January 12.

Canela posted on Instagram about the experience.

"This little warrior is at 10 years old, more conscious and aware than most adults I know," he wrote. "Sasha you can count on me from now on for anything and congratulations on the work you're doing to keep our oceans clean. You are so special and very talented!"

Sasha has also begun working with Bal Harbour Mayor Gabriel Groisman. "When a resident identifies an issue of importance and does something to effectuate change, it is to be applauded," Groisman said.

Sasha and Aliyev hope to extend their work to neighboring cities. Hollywood and Miami Beach are nearby.

"We really want to make ourselves visible and accessible to all," said Aliyev. Aliyev is the nonprofit's vice president. "After all, in Miami the ocean is everyone's backyard. This is the best place to start."

Quiz

1

Read the section "Social Media."

Which paragraph from the section shows that Sasha Olsen's effort to fight pollution has drawn recognition from community leaders?

- (A) The nonprofit is also trying to spread the word online. They are using YouTube and other social media.
- (B) Jencarlos Canela, a popular Cuban-American singer and TV star, was Sasha's first guest. He appeared on January 12.
- (C) Sasha has also begun working with Bal Harbour Mayor Gabriel Groisman. "When a resident identifies an issue of importance and does something to effectuate change, it is to be applauded," Groisman said.
- (D) "We really want to make ourselves visible and accessible to all," said Aliyev. Aliyev is the nonprofit's vice president. "After all, in Miami the ocean is everyone's backyard. This is the best place to start."

2

Read the section "Working Together For A Common Goal."

Select the sentence from the section that shows why Sasha is writing a book with her younger sister.

- (A) She is a fourth-grader at Pine Crest School in Fort Lauderdale.
- (B) Sasha is also working on releasing a book with her sister, Mia.
- (C) "I want my sister to care about these problems as much as I do."
- (D) She hopes to set an example for young people.

3

What effect did her family's trip to Asia have on Sasha Olsen?

- (A) It made her want to do something to help the oceans and sea animals.
- (B) It made her become closer to her cousin, Narmina Aliyev.
- (C) It made her want to learn more about Japan and Vietnam.
- (D) It made her sad that her family lives in Florida.

4

Why was Jencarlos Canela impressed after hearing about Sasha's work with Iwantmyoceanback?

- (A) He believed Sasha was more thoughtful and engaged than many adults.
- (B) He was surprised to learn that Sasha spoke Spanish.
- (C) He was surprised that Sasha had convinced so many people to help her clean up beaches.
- (D) He believed Sasha's group had made a big difference.

LEWIS COUNTY SCHOOLS

6th Grade

DAY 13

NTI Day 13_{6th}

Writing and Graphing One-Variable Inequalities

► Write an inequality to represent each situation.

- ① A farmer weighs a dozen chicken eggs. The heaviest egg is 56 g.

$$x \leq 56$$

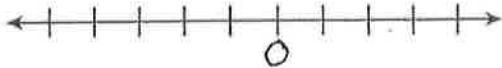
- ② A light bulb is programmed to turn on when the temperature in a terrarium is 72°F or cooler.

- ③ Martin is building a sandcastle at the beach. He pours no less than 5 cups of wet sand into each plastic mold.

- ④ The shortest tree in a park is at least 25.5 ft tall.

► Graph each inequality.

⑤ $n \geq -2$



⑥ $h \leq 5$



⑦ $t \leq 7.1$



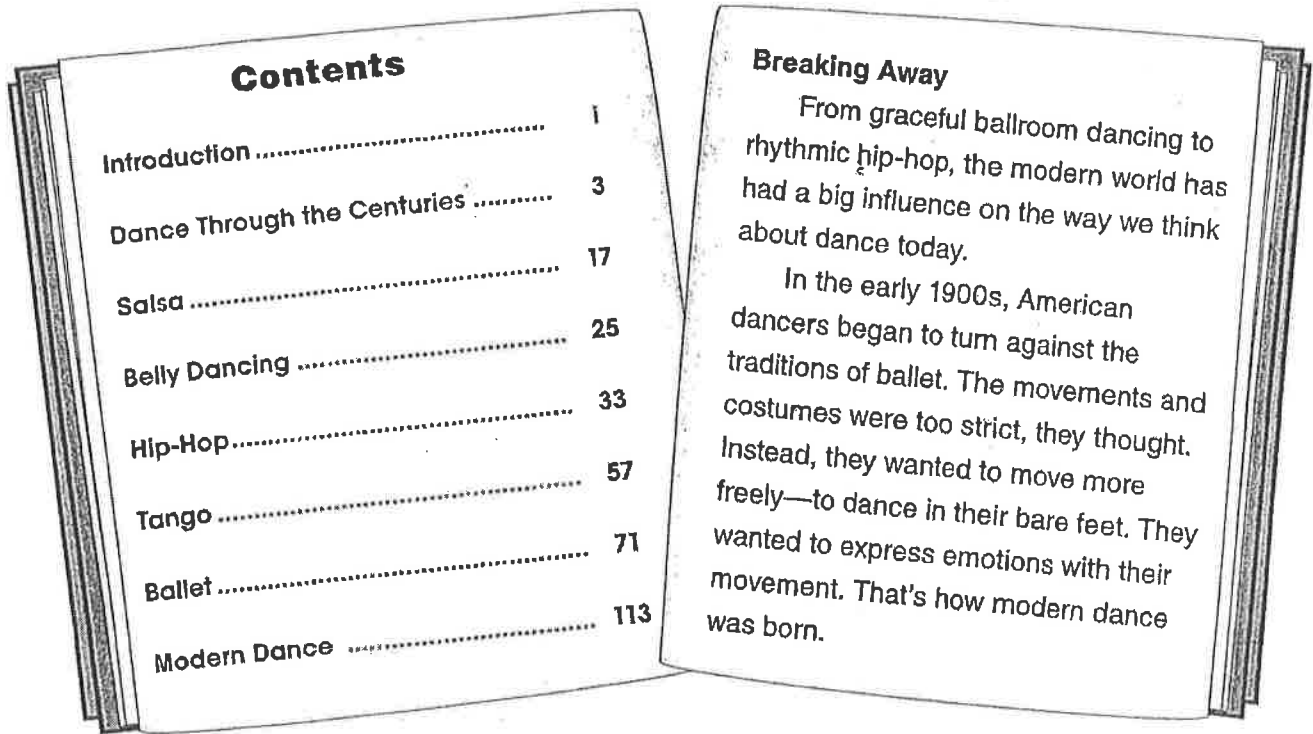
⑧ $r \geq -\frac{2}{3}$



- ⑨ What is the difference between the inequality $x \leq 5$ and the equation $x = 5$?

READ THE INFORMATION Study the table of contents and read the excerpt.

ELA



STRATEGY PRACTICE Which chapter would be most important for someone who wants to research the history of dance? Explain.

SKILL PRACTICE Read each question. Fill in the bubble next to the correct answer.

- From the excerpt, you could conclude that _____.
 - (A) modern music has changed dance
 - (B) hip-hop is older than ballroom dancing
 - (C) ballet has not changed since 1900
 - (D) the history of ballet began in 1900
- Which chapter could be added to this book?
 - (A) "Tap Dancing"
 - (B) "Classical Music"
 - (C) "History of Spain"
 - (D) "Satin Shoes"
- In which chapter would you most likely find the "Breaking Away" section?
 - (A) "Tango"
 - (B) "Ballet"
 - (C) "Modern Dance"
 - (D) "Dance Through the Centuries"
- Which style of dance *cannot* be found in this book?
 - (A) salsa
 - (B) belly dancing
 - (C) waltz
 - (D) tango

Opinion: Amazon's Alexa setting the stage for even more new tech

By Geoffrey A. Fowler, Washington Post, adapted by Newsela staff on 09.26.18

Word Count 694

Level 820L

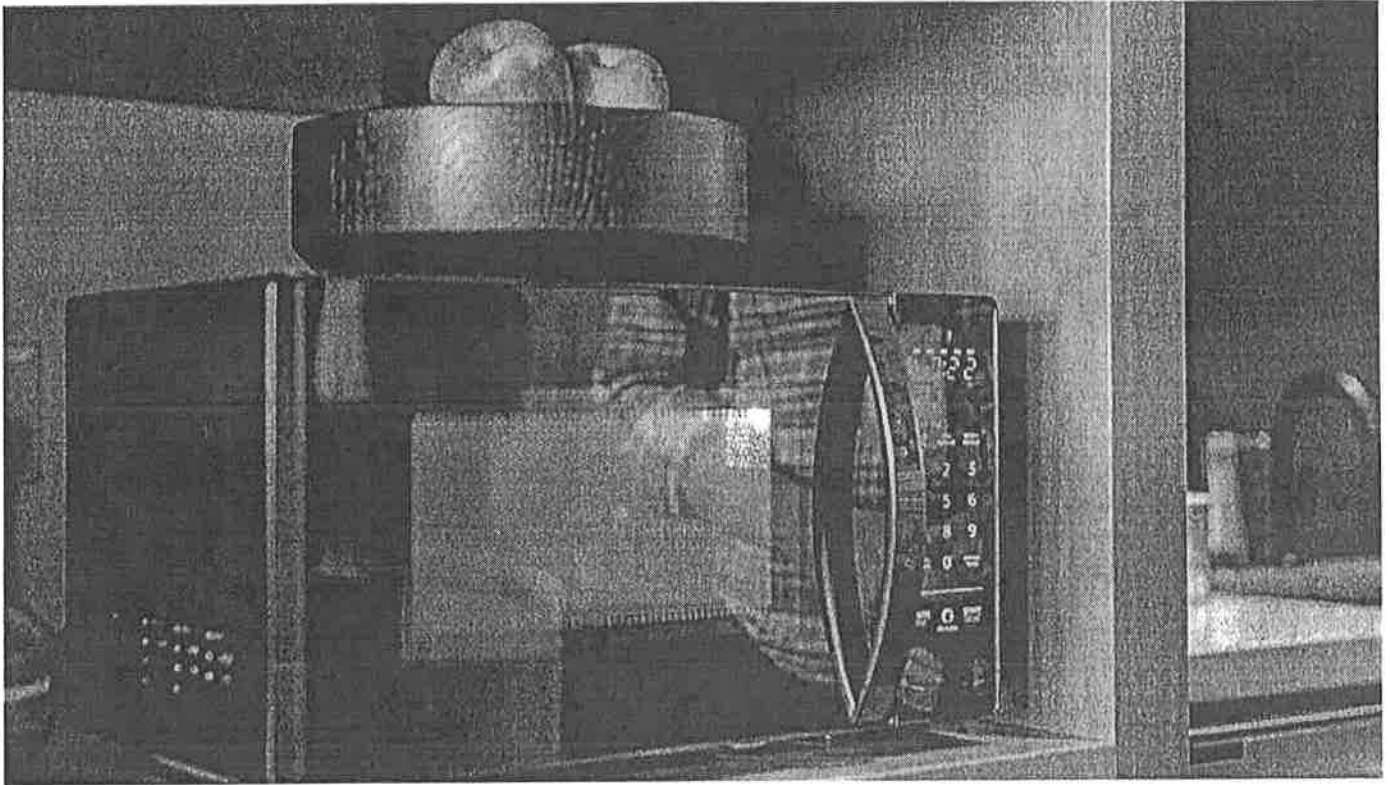


Image 1. An Amazon Basics microwave sits on display during an unveiling at Amazon.com headquarters in Seattle, Washington, on September 20, 2018. Photo by: Andrew Burton/Bloomberg photo

Will it soon feel normal to ask Alexa to microwave a bag of popcorn?

Amazon.com made a big announcement on September 20. The company is adding 70 new devices and features to its Alexa product line. These products listen and respond to voice commands. They answer when users call out to "Alexa." New devices with the technology will include a microwave, a wall clock and more.

Amazon's goal is to take over the young but growing market for smart-home technology. Its new appliances make operations simpler by connecting to the Internet. However, they also gather all sorts of data on our lives. The benefit for users is that connected appliances can be easier to operate through voice commands. That's the idea, anyway.

One of the new products is the Echo wall clock (\$30). It shows timers set by Alexa and automatically updates its hands for daylight savings time. The Amazon Smart Plug (\$25) is

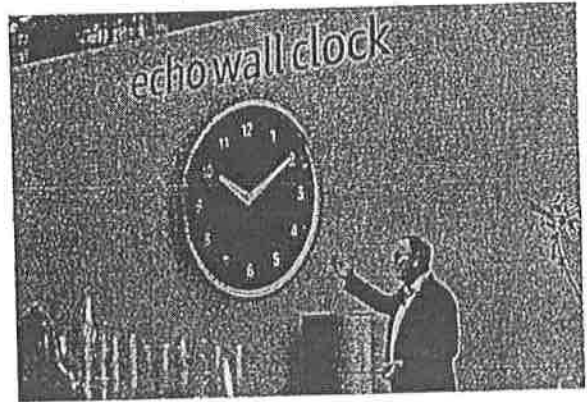
another new product. It lets you switch devices on or off through voice commands. This can include lights and the coffee maker.

Items Focused On The Kitchen

Many of Amazon's efforts are focused on the kitchen. After all, voice commands can be very useful when your hands are messy from cooking. The AmazonBasics Microwave (\$60) takes voice commands to cook things that might otherwise be complicated. In one demonstration, I asked Alexa to cook one potato. The microwave started itself for 6 minutes and 34 seconds. I still had to put the potato in the microwave myself.

The upside is that I didn't have to look up how long to cook a potato. The downside is that Amazon will now have a record of every time a family with this microwave cooks a potato. Also, Alexa didn't understand when I said, "Microwave a potato." Instead, I had to say, "Microwave one potato." A company representative said that's a bug that would be fixed later this year.

Amazon is setting the stage for the technology to simplify dinner preparation. In another demo, the company showed how to use its redesigned Echo Show (\$230). The device is a speaker with a screen. It can walk you through the steps to make a meal kit. A device that knows exactly how to cook your meal can't be far away.



Not all of Amazon's new devices have their own microphones. Instead, you command them through a nearby Amazon Echo speaker. Amazon announced new versions of those, too. A redesign of the company's Echo Dot speaker (\$50) appeared to be way louder in a demonstration.

What About Privacy?

Among Amazon's announcements, one thing stood out. There was no discussion of privacy and security. Amazon has buttons on all its Echo devices that cut off their microphones' ability to record. Earlier this year, though, a family caught one of its speakers recording its conversations. The device sent the recording to a family friend. News of this resulted in bad press for Amazon. However, the company said the incident was a random misunderstanding on the part of Alexa.

Amazon's goal is not only to sell its own Alexa devices. The company also wants to get Alexa technology built into other devices. It has its eyes on everything from thermostats to toilets. What is Amazon doing to make sure those gadgets handle our data appropriately?

Plan For Holiday Shopping Season

Amazon has a simple plan for the holiday shopping season. The focus is on low prices and new twists on everyday items. That's distinct from rivals such as Apple and Samsung. Those companies have announced new phones, tablets and smartwatches.

In the smart-speaker market, Amazon has been behind lately. In the last three months of 2018, Google's Home Mini was the world's best-selling smart speaker. It was followed closely by Amazon's Echo Dot. Google is expected to reveal its new products at an event on October 9.

Quiz

1

Read the introduction (paragraphs 1-4).

Which sentence from this section shows why people would want smart-home technology?

- (A) New devices with the technology will include a microwave, a wall clock and more.
- (B) Amazon's goal is to take over the young but growing market for smart-home technology.
- (C) The benefit for users is that connected appliances can be easier to operate through voice commands.
- (D) It shows timers set by Alexa and automatically updates its hands for daylight savings time.

2

Read the section "Items Focused On The Kitchen."

Which selection shows the author's point of view about one of Amazon's new devices?

- (A) In one demonstration, I asked Alexa to cook one potato. The microwave started itself for 6 minutes and 34 seconds.
- (B) The upside is that I didn't have to look up how long to cook a potato. The downside is that Amazon will now have a record of every time a family with this microwave cooks a potato.
- (C) The device is a speaker with a screen. It can walk you through the steps to make a meal kit.
- (D) Not all of Amazon's new devices have their own microphones. Instead, you command them through a nearby Amazon Echo speaker. Amazon announced new versions of those, too.

3

Read the section "What About Privacy?"

How was a family's experience with an Echo speaker different from how Amazon thought it should be?

- (A) The family's speaker did not sound the way that Amazon thought it should sound.
- (B) The family's speaker did not listen to commands the way that Amazon thought it should.
- (C) The family's speaker recorded a conversation, which Amazon did not think it would do.
- (D) The family's speaker did not understand a direction, which Amazon thought it would.

4

Read the paragraph from the section "Plan For Holiday Shopping Season."

Amazon has a simple plan for the holiday shopping season. The focus is on low prices and new twists on everyday items. That's distinct from rivals such as Apple and Samsung. Those companies have announced new phones, tablets and smartwatches.

Which of the following is the MOST accurate explanation of what this paragraph means?

- (A) Amazon is going to create new and improved technology this holiday season.
- (B) Amazon is going to make more products than Apple and Samsung this holiday season.
- (C) Amazon is going to outsell its rivals with new phones, tablets and smartwatches this holiday season.
- (D) Amazon is going to lower its prices and add new details to old products this holiday season.

LEWIS COUNTY SCHOOLS

6th Grade

DAY 14

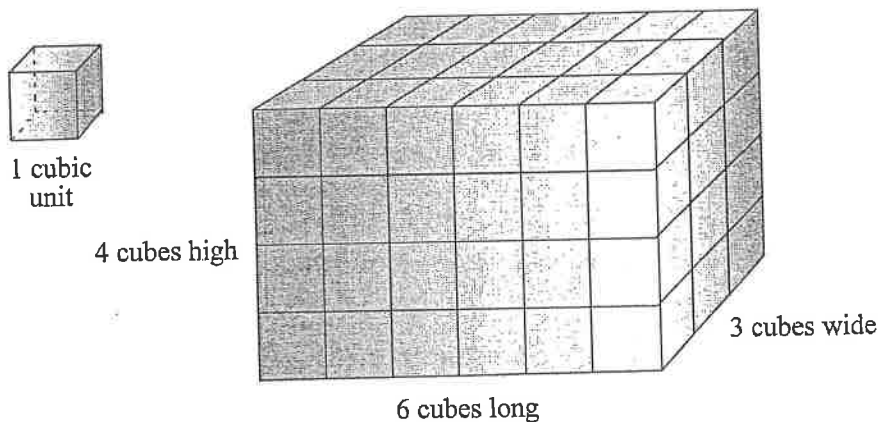
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12.2 Understanding Volume (DOK 2)

Measurement of volume is expressed in cubic units such as in^3 , ft^3 , m^3 , cm^3 , or mm^3 . The volume of a solid is the number of cubic units that can be contained in the solid.

First, let's look at rectangular solids.

Example 1: How many 1 cubic units will it take to fill up the figure below?



To find the volume, you need to multiply the length times the width times the height.

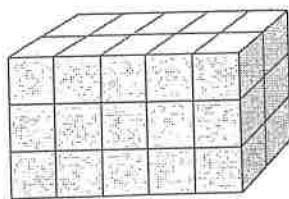
Volume of a rectangular solid = length \times width \times height ($V = lwh$).

$$V = 6 \times 3 \times 4 = 72 \text{ units}^3$$

Another way to find the volume is to count the cubes. Counting the cubes on the front side, we find a sum of 24 cubes. There are 3 thicknesses of 24 cubes = $24 + 24 + 24 = 72$ cubes.

Find the volume of the blocked figures below. Use the formula $V = lwh$. (DOK 2)

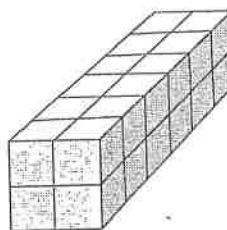
1.



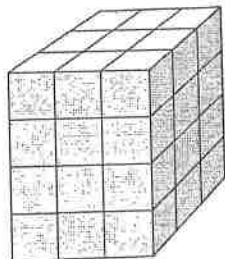
$$5 \times 2 \times 2$$

$$20 \text{ cubes}^3$$

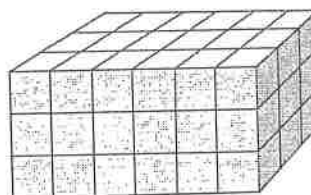
3.



2.



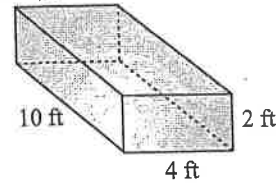
4.



12.3 Volume of Rectangular Prisms (DOK 2)

You can calculate the volume (V) of a rectangular prism (box) by multiplying the length (l) by the width (w) by the height (h), as expressed in the formula $V = (lwh)$.

Example 2: Find the volume of the box pictured here:



Step 1: Insert measurements from the figure into the formula.

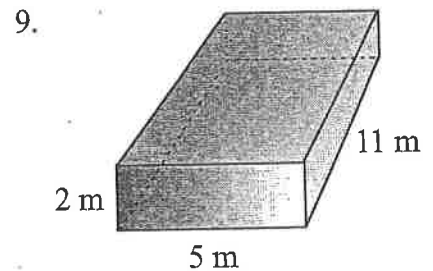
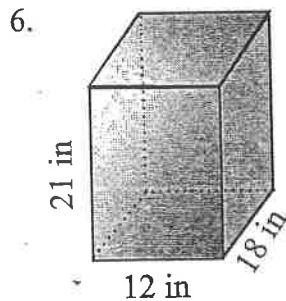
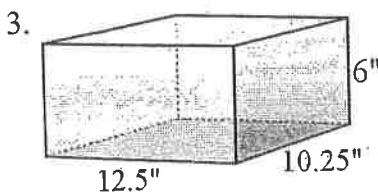
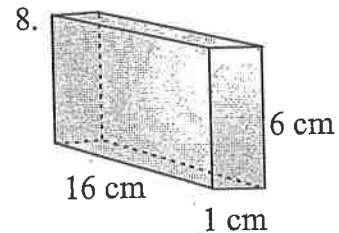
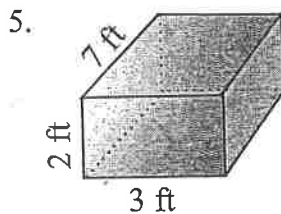
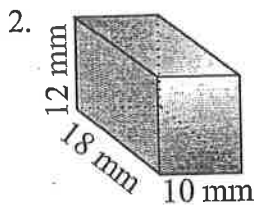
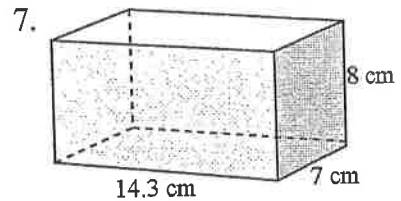
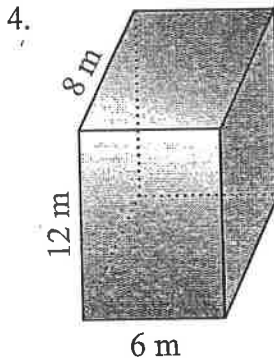
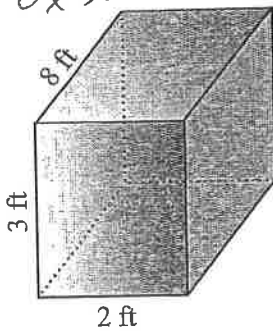
Step 2: Multiply to solve. $10 \times 4 \times 2 = 80 \text{ ft}^3$

Note: Volume is always expressed in cubic units such as in^3 , ft^3 , m^3 , cm^3 , or mm^3 .

Find the volume of the following rectangular prisms (boxes). (DOK 2)

$V_{\text{rectangular prism}} = lwh$

1. $8 \times 3 \times 2 = 48 \text{ ft}^3$



READ THE LETTER

Read each paragraph of Melissa's letter. Decide what it is mostly about.

674

ELA

Dear Johanna,

How are you? My name is Melissa. I've been looking forward to having a pen pal for a long time now. I hope we can become great friends!

Ever since I got your name and address from my teacher, Mrs. Sands, I have been thinking about what to write. First, I thought of giving you a description of what it's like to go to school here in Minnesota, but then I figured you could look up Minnesota on the Internet and read about it yourself. Then I had the idea to tell you about my family, but I realized that the story of my little brother losing a tooth or the time we got a new kitten might be kind of boring. After that, I thought about asking you questions about what it's like to live in Belgium, but I was afraid you might think my questions were silly.

I guess I can tell you a little about myself. In fact, you've probably already learned one thing about me. I sometimes have a hard time making up my mind! I hope you will write me back anyway.

Sincerely,
Melissa

SKILL PRACTICE

Read each question. Fill in the bubble next to the correct answer.

1. How did Melissa first hear about Johanna?

- (A) She saw an ad in the newspaper.
- (B) She got Johanna's name and address from her teacher.
- (C) She read about the pen pal program on the Internet.
- (D) She got a letter from Johanna.

2. Why does Melissa decide *not* to ask Johanna what Belgium is like?

- (A) She thinks her questions might sound silly.
- (B) She visited Belgium in the past.
- (C) She does not want to get to know Johanna.
- (D) She already has a pen pal in Belgium.

3. What is the main idea of Melissa's letter?

- (A) She wants to become friends with Johanna.
- (B) She does what Mrs. Sands tells her to do.
- (C) She lives in Minnesota.
- (D) Her little brother recently lost a tooth.

4. According to Melissa, which topic might be too boring for her letter?

- (A) going to school in Minnesota
- (B) Johanna's life in Belgium
- (C) her own personality traits
- (D) details about her family

STRATEGY PRACTICE

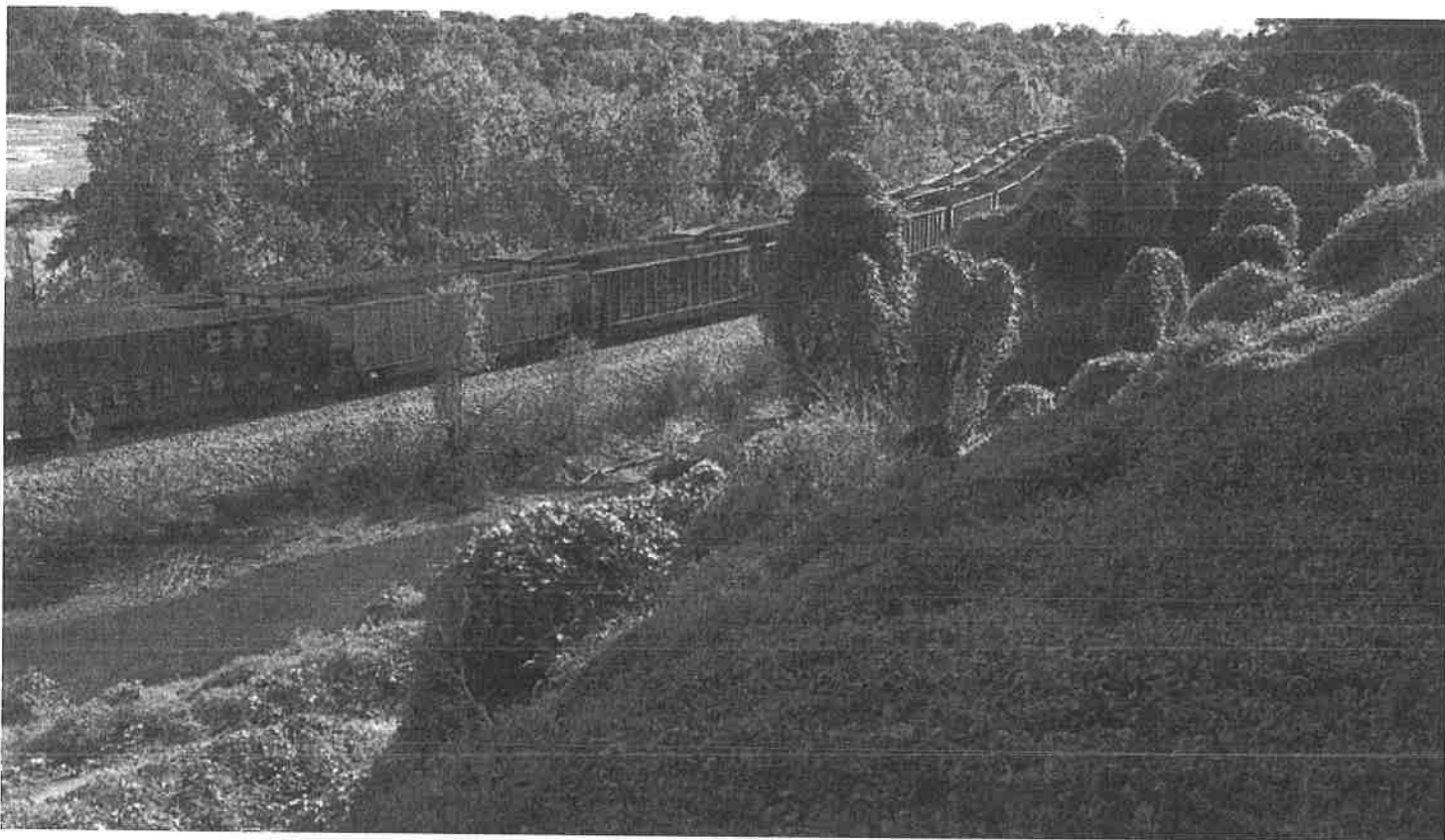
Write the main idea of the third paragraph in your own words.

The start of coal mining in Virginia

By Virginia Department of Mines, Minerals and Energy, adapted by Newsela staff on 03.10.20

Word Count **757**

Level **950L**



Coal trains follow the path of the James River on October 18, 2018 as they enter downtown Richmond, Virginia. Photo: Andrew Lichtenstein/Corbis via Getty Images

The first commercial production of coal in the American colonies began in 1748 with the Richmond coalfield located in Virginia. Over the next 200 years, hundreds of drill holes, shafts, slopes and open pit mines were developed. With the development of the coalfield came transportation improvements. They included roads, two canals and four railroad companies. Mining engineering practices were also improved by the Richmond coal industry. Initially, mining was haphazard. Accidents and lost coal were common. Explosions of methane or coal dust claimed hundreds of miners' lives. Modern mining methods such as ventilation, roof support and mechanized mining machinery did not appear until much later. However, Virginia coal mines were unable to compete with coalfields elsewhere and the last major mine closed in 1927.

Introduction

The United States is blessed with an ample supply of coal. This fossil fuel helped our country become the world's industrial leader. The story of coal in the American colonies began with discoveries in the 1670s in what is now western Illinois. Virginia's first mines were dug along the James River west of Richmond in 1701. With easy access to a tidewater port, the Richmond

coalfield developed rapidly. The first documented commercial coal production in the American colonies was in the Richmond field in 1748. This field eventually produced an estimated 8 million tons of coal.

Transportation facilities had a major influence on the Richmond coal industry. Ocean-going vessels could dock and load on the James River as far inland as Richmond. The Richmond coal mines were only 10 to 15 miles from the docks. Road improvements, such as the Midlothian Turnpike (now U.S. Highway 60), were built to handle coal wagon traffic. The James River moved large amounts of coal to tidewater docks. The Kanawha Canal — the brainchild of future president George Washington — did as well.

Later, canals were replaced by more efficient rail lines. The Chesterfield Railroad, one of Virginia's first rail lines, was built solely to move coal.

While Richmond coal production was increasing, other coalfields were also being developed. The coal regions of Pennsylvania, Maryland and the Valley fields of western Virginia began shipments to tidewater ports by the middle 1800s. Coals from Flat Top and Pocahontas fields in western Virginia soon followed. Such competition took its toll on Richmond coal production. Operations were also hampered by the U.S. Civil War (1861–1865) and mismanagement of mining operations. The larger mines continued operations until the late 1800s. Coal was becoming increasingly difficult to mine there, however, and production steadily declined.

Transportation And Development

For more than 200 years, the Richmond coalfield contributed to turning Richmond into a major trade center. Coal initially was used for household purposes. Later, and more importantly, it was burned as a forge fuel, and an iron industry soon developed in Richmond. Coal was transported on dirt roads from the mines. The Midlothian Turnpike, a major road, was built near the pits of Midlothian and Black Heath in 1802 to speed up delivery.

Kanawha Canal was completed in 1795. The mines north of the James River could then transport their coal by barge to Rocketts (now the Fulton area). It was replaced in 1880 by the Richmond and Alleghany Railroad.

Small mines opened in the Carbon Hill district in the early 1800s. They produced coal for the local market. By 1827, business was good. The supply of coal in the Carbon Hill mines proved to be worth commercial development.

To move larger quantities of coal, the Tuckahoe Creek Navigation Company was chartered. In 1828, the Tuckahoe Canal was completed. It connected Tuckahoe Creek to the James River and Kanawha Canal. The Tuckahoe Canal was in constant use until 1840, when the Tuckahoe and James River Railroad was built. This rail line increased the amount of coal delivered to Richmond and Fredericksburg from the Carbon Hill mines.

Interstate transportation of coal from the Richmond coalfield was interrupted in 1861 by the Civil War. Coal production during the war years, 1861-1865, was primarily directed to the Confederate war effort. When Union troops marched on Richmond, molds and machinery for forging cannons and other weapons were taken from foundries and dumped into the James River. The Confederates did not want them falling into the hands of the enemy. After the war, several new mines were dug, and old ones re-opened. By 1927, though, the last major mines had closed.

Today, only parts of this coal mining and transportation system are still preserved. The rest reverted to swamp or were removed as suburban Richmond grew.

Quiz

- 1 Which sentence from the article would be MOST important to include in a summary of the article?
- (A) The first documented commercial coal production in the American colonies was in the Richmond field in 1748.
 - (B) The Richmond coal mines were only 10 to 15 miles from the docks.
 - (C) For more than 200 years, the Richmond coalfield contributed to turning Richmond into a major trade center.
 - (D) Coal production during the war years, 1861-1865, was primarily directed to the Confederate war effort.

- 2 Read the following sentence from the section "Introduction."

With easy access to a tidewater port, the Richmond coalfield developed rapidly.

How does this detail develop the article's central idea?

- (A) It helps explain why such a large quantity of coal was located in the region around Richmond.
 - (B) It illustrates the importance of the transportation industry in Richmond's development.
 - (C) It helps explain how Richmond's location allowed it to develop into a center of coal production.
 - (D) It illustrates the impact of the coal industry on the water quality in Richmond's ports.
- 3 Read the following paragraph from the section "Introduction."

While Richmond coal production was increasing, other coalfields were also being developed. The coal regions of Pennsylvania, Maryland and the Valley fields of western Virginia began shipments to tidewater ports by the middle 1800s. Coals from Flat Top and Pocahontas fields in western Virginia soon followed. Such competition took its toll on Richmond coal production. Operations were also hampered by the U.S. Civil War (1861–1865) and mismanagement of mining operations. The larger mines continued operations until the late 1800s. Coal was becoming increasingly difficult to mine there, however, and production steadily declined.

How does this paragraph contribute to the development of the main ideas of the article?

- (A) It explains the expansion and growth of the United States' coal industry and how it affected the mines in Richmond.
- (B) It describes how the Civil War led to the destruction of Richmond's coal production.
- (C) It explains how technological advances in Richmond fueled the growth of coal production in other places.
- (D) It describes the major factors that led to the rise of the coal industry in Richmond.

- 4 Read the section "Transportation And Development."

What does this section explain that other sections do not?

- (A) the importance of coal in the industrial growth of the United States
- (B) the effects of competition on the coal industry in Richmond
- (C) the major technologies that improved the safety of coal mining
- (D) the ways that the Civil War affected Richmond's coal facilities

LEWIS COUNTY SCHOOLS

6th Grade

DAY 15

Comparing Positive and Negative Numbers

► Write $<$ or $>$ to make each comparison true.

1 $7 \bigcirc 10$

2 $7 \bigcirc -10$

3 $-7 \bigcirc -10$

4 $\frac{2}{3} \bigcirc -1\frac{2}{3}$

5 $-50 \bigcirc 0.3$

6 $-12 \bigcirc -35$

7 $-5 \bigcirc 4.5$

8 $\frac{1}{2} \bigcirc -80$

9 $-\frac{1}{4} \bigcirc -1.4$

► Write each set of numbers in order from least to greatest.

10 $5, -2, -1, 4$

11 $3.4, 7, -3.5, -3$

12 $-2.1, -2, -3, 0$

13 $-\frac{3}{4}, -2, -\frac{1}{4}, 2$

14 $5, 0, -6, -0.1$

15 $7.5, -200, -1.5, -8$

16 $\frac{1}{2}, -\frac{1}{2}, -\frac{1}{3}, \frac{1}{3}$

17 $1.2, -2.1, -21, 0.12$

18 $0.1, -0.2, 0.55, -0.31$

- 19 Describe how to determine which of two negative numbers is greater.
Give an example.

Understanding Positive and Negative Numbers *continued*

- 4 Plot and label 4, -3 , 1, and their opposites on the number line.



- 5 If several points are graphed on a number line, is the point that is the farthest from 0 always the greatest? Explain.

Understanding the Four-Quadrant Coordinate Plane

► For problems 1–6, plot and label each point in the coordinate plane. Name the quadrant or axis where the point is located.

1 $A(-3, -2)$

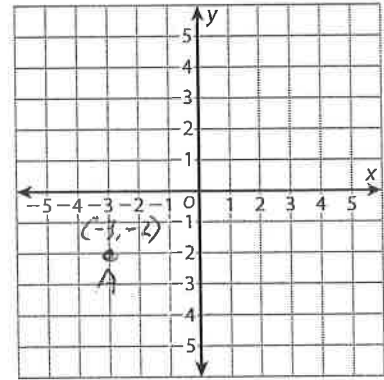
2 $B(4, -4)$

3 $C(2, 3)$

4 $D(-2, 4)$

5 $E(3, -3)$

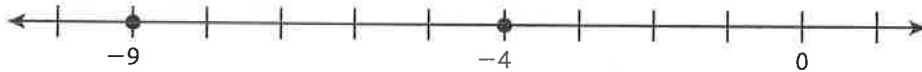
6 $F(4, 0)$



- 7 If point E above is reflected across the x -axis, what would be the coordinates of the reflection? Explain.
- 8 Imagine that one of the points given in problems 1–6 has been reflected. The reflection is in Quadrant II. What are the possible coordinates of the reflected point? Explain.
- 9 Bradley says that if point B is reflected across the y -axis and its reflection is then reflected across the x -axis, the result is point D . Is Bradley correct? Explain.

Understanding Absolute Value

- 1 Answer the questions about this number line.



Which is greater, -9 or -4 ? Explain.

Which is greater, $|-9|$ or $|-4|$? Explain.

- 2 A football team tries to move the ball forward as many yards as possible on each play, but sometimes they end up behind where they started. The distances, in yards, that a team moves on its first five plays are 2, -1 , 4, 3, and -5 . A positive number indicates moving the ball forward, and a negative number indicates moving the ball backward.

Which number in the list is the greatest?

What is a better question to ask to find out which play went the farthest from where the team started?

The coach considers any play that moves the team more than 4 yards from where they started a "big play." Which play(s) are big plays?

- 3 When does it make sense to compare the absolute values of numbers rather than the numbers themselves?

6th

ELA

READ THE PASSAGE

Pause after each paragraph and think about the main idea.

Life on a Sheep Farm

Life on Ernest Wilkins's sheep farm in southern Australia is not easy, but the work is satisfying. Sheep farming is hard physical work, and it requires a caring attitude toward animals.

On a typical day, Wilkins awakens at sunrise and eats a hearty breakfast to give him energy for the long hours ahead. Wilkins's first stop is the shed where all the mother sheep and their young lambs live. He fills the water trough and feeds the mother sheep a special blend of cornmeal and nutrients. He gives the lambs a different food blend. Next, Wilkins goes to a second shed to feed the other adult sheep, which eat a diet of plain hay. He spends the rest of the morning making repairs around the farm. He mends fences, fixes farm machinery, and performs regular maintenance on his truck.

Shearing season is the busiest time on the farm, and it occurs once a year. To shear the sheep, Wilkins and his sons move the fluffy sheep into the shearing shed. They work together to carefully shave the fleece, or wool, from each sheep. Then they collect, sort, and process the fleece to remove any twigs, burrs, or other materials stuck in it. On market days, Wilkins and his sons bring bales of raw fleece into town to sell or to trade for supplies needed for the farm.

A few sheep on the farm produce milk. Wilkins milks these sheep and processes the milk. He then sells the milk to other farmers, who use it to make cheese and yogurt. Running a sheep farm is a lot of work, but Wilkins enjoys it. He can't imagine any job he'd rather be doing.

SKILL PRACTICE

Read each question. Fill in the bubble next to the correct answer.

- What is the main idea of the passage?
 - Shearing season is the busiest time on a sheep farm.
 - Mornings are a busy time on the farm.
 - Running a sheep farm is a lot of work, but Wilkins enjoys it.
 - Lambs and adult sheep eat different foods.
- Which of these is produced on Wilkins's farm, according to the passage?
 - wool cloth
 - yogurt
 - cheese
 - sheep's milk
- According to the passage, which of these is *not* a chore that Wilkins does?
 - repair machines
 - plant seeds
 - shear sheep
 - feed lambs
- What is the main idea of paragraph 3?
 - Wilkins's sons help with the shearing.
 - Shearing takes place in a shearing shed.
 - Once a year, Wilkins shears the sheep for their wool.
 - Wool must be sorted and processed before it is sold.

STRATEGY PRACTICE

Explain how the details in paragraph 2 support the main idea of the entire passage.

Kentucky: The Bluegrass State

By National Geographic Kids, adapted by Newsela staff on 05.17.17

Word Count **807**

Level **MAX**



Kentucky has different landscapes. It has mountains, forests, swamps and waterfalls — like this one! Photo from: Pixabay.

People first came to the land now called Kentucky at least 14,000 years ago, possibly following mammoths and other large game that migrated here. Thousands of years later, Native American tribes lived on the land. These tribes included the Cherokee, Shawnee, Chickasaw and Yuchi.

It wasn't until 1774 that the first permanent white settlement was founded. Pioneers James Harrod and Daniel Boone founded other settlements in the following years.

For a while the eastern section of present-day Kentucky was considered part of Virginia. In 1792 it was declared its own state. The western part of Kentucky was later added in 1818 after being purchased from the Chickasaw Native American tribe.

When the Civil War broke out in 1861, Kentucky was officially neutral. Yet 140,000 of its citizens went to fight in the war.

Why Is It Called That?

Most experts think that the name Kentucky comes from a Native American language, but they don't agree on which one. It may have come from the Wyandot name for the area, Kah-ten-tah-

teh. This can be roughly translated as "Land of Tomorrow." It's also possible that it came from the Shawnee name for the area, Kain-tuck-ee, which means "At the Head of the River." Or, it may have been derived from the Iroquoian or Mohawk word Kentucke meaning "among the meadows."

Geography And Landforms

Kentucky is bordered by Indiana and Ohio in the north, where the Ohio River creates a wiggly boundary. It has West Virginia (separated from Kentucky by the Big Sandy River) and Virginia to the east, Tennessee to the south, and Missouri and Illinois to the west.

Kentucky contains six different geographical regions.

Farthest east is the Mountain region, a part of the Appalachian Mountain chain. Forests, high ridges and narrow, V-shaped valleys are here, plus the state's highest point, Big Black Mountain. This is also a land of coal fields — 10,500 square miles of coal are under this area, known as the Eastern Kentucky Coal Field.

Go west to the horseshoe-shaped Knobs region, where erosion has created hundreds of knob-shaped hills called monadnocks. Part of Daniel Boone National Forest is here.

In the middle of the Knobs is the Bluegrass region. It is named for the bluish-green grass that grows there. This region's hills, sinkholes, caves and springs were all created when the local limestone weathered, or broke down.

The Pennyroyal region (also spelled Pennyryle) is named after a type of mint plant that grows there. Spreading west across the center of the state, this area is rocky with trees, lakes and lots of caves. One of these caverns is Mammoth Cave, the world's longest. It stretches over 350 miles!

Surrounded by the Pennyroyal is the Western Coal Fields region, a hilly area overlying 4,680 square miles of coal. John James Audubon State Park, named after the famous artist and naturalist, is in this region.

The Jackson Purchase in the far west was added to Kentucky in 1818. This lowland is filled with ponds, lakes and swamps.

Wildlife

Black bears, bobcats, red foxes, minks and river otters are common Kentucky mammals. Gaze at the sky, and you might see a peregrine falcon, bald eagle, mountain bluebird, Kentucky warbler or northern cardinal (the state bird). Check the ground and trees for reptiles like the six-lined racerunner, broadhead skink or Eastern corn snake. Amphibians such as the Kentucky spring salamander or the Jefferson salamander can be found near water.

The tulip poplar (the state tree) is native to the eastern United States, as is the Kentucky coffeetree. Other native trees include red maple, sassafras, northern red oak and bald cypress.



Look for colorful native wildflowers such as wild columbine, purple coneflower, dwarf iris and the endangered Kentucky lady's slipper, a type of orchid.

Natural Resources

With almost half the state covered in forests, it's not surprising that Kentucky is one of the country's top three producers of hardwood. It's also the third-largest coal producer in the United States, thanks to its vast natural coal fields. Limestone is another top resource.

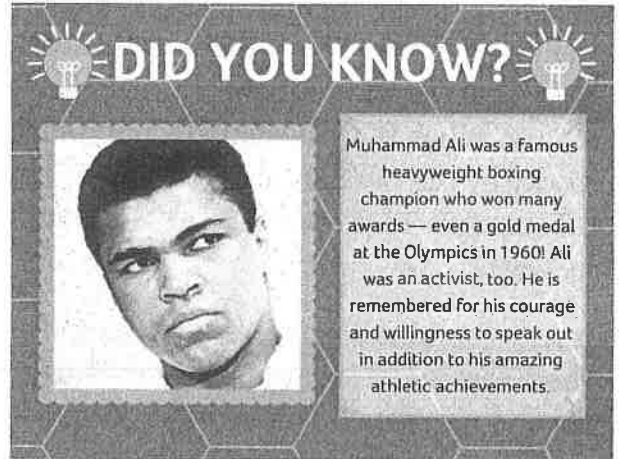
Fun Stuff

Lots of famous people come from Kentucky, including President Abraham Lincoln. Mildred and Patty Hill, who wrote the tune to "Happy Birthday to You," came from the state. So did the famous boxer Muhammad Ali.

In Kentucky you can visit the Louisville Slugger museum and factory, where the first of its now-famous baseball bats were manufactured in the 1880s. You can't miss the place: Outside is a 120-foot-tall steel bat!

Fort Knox is home to the United States Bullion Depository. This underground vault contains one of the world's largest gold reserves—estimated to be about 260 billion dollars' worth!

Eastern Kentucky is home to so many country music stars that a stretch of highway was renamed the "Country Music Highway."



Quiz

- 1 Why does the author include the section "Geography And Landforms"?
- (A) to explain how Kentucky's geography has contributed to the growth of its industry
 - (B) to argue that Kentucky's geography is its most important identifying characteristic
 - (C) to introduce readers to the diverse natural features of Kentucky's six regions
 - (D) to describe why Kentucky is considered to have the most unique land features in the world
- 2 Which paragraph in the section "Fun Stuff" supports the idea that Kentucky has been home to several important historical figures?
- (A) With almost half the state covered in forests, it's not surprising that Kentucky is one of the country's top three producers of hardwood. It's also the third-largest coal producer in the United States, thanks to its vast natural coal fields. Limestone is another top resource.
 - (B) Lots of famous people come from Kentucky, including President Abraham Lincoln. Mildred and Patty Hill, who wrote the tune to "Happy Birthday to You," came from the state. So did the famous boxer Muhammad Ali.
 - (C) In Kentucky you can visit the Louisville Slugger museum and factory, where the first of its now-famous baseball bats were manufactured in the 1880s. You can't miss the place: Outside is a 120-foot-tall steel bat!
 - (D) Fort Knox is home to the United States Bullion Depository. This underground vault contains one of the world's largest gold reserves—estimated to be about 260 billion dollars' worth!
- 3 Which section from the article highlights a disagreement some people have about a piece of Kentucky's history?
- (A) Introduction [paragraphs 1-4]
 - (B) "Why Is It Called That?"
 - (C) "Wildlife"
 - (D) "Natural Resources"
- 4 Read the introduction of the article [paragraphs 1-4]. What purpose does the introduction serve in developing the main idea?
- (A) It provides examples of how Native Americans and white settlers lived together.
 - (B) It describes in detail the struggles faced by early settlers to Kentucky.
 - (C) It details the challenges that Kentucky's settlers faced during the Civil War.
 - (D) It gives an overview of all the different people who have settled in Kentucky.



Read the Native American story. Use the Study Buddy and the Close Reading to guide your reading.

Genre: Native American Legend/Myth



Based on the first paragraph, I think Young Man is a patient and determined person. I'll underline the phrase that tells me about Young Man's character.

Close Reading

What does Young Man learn on his journey? **Underline** the sentences that explain the lesson of his journey.

The willow tree is kind and wise. **Circle** words and phrases that describe the tree.

The Wisdom of the Willow Tree

by Wilson Mekashone

- 1 Young Man often felt lost and pondered questions about the purpose of his life. He decided to journey far away, seeking wisdom. He hiked tirelessly for several days.
- 2 One day, the sun blazed down and he was hot, thirsty, and desperate for shade. In the distance, he saw a willow tree and crawled to it. Exhausted, he lay between its roots and had a vivid dream. In the dream, the tree had a wise old face that smiled at him and looked strangely familiar.
- 3 Young Man said to the tree, "I have failed on my journey. I still don't understand how to live my life. I'm thirsty and weary, and I cannot summon the strength to return home."
- 4 The tree then reached down its oldest branch, stroked Young Man gently on the cheek, and said, "Sleep in my shade. I am old and know the value of rest. When you wake up, follow my roots. They are wrinkled but know the way."
- 5 Young Man awoke and followed the tree's enormous roots to a burbling stream. As he drank, he saw his reflection and was shocked when he realized that the face he had seen in the willow's trunk had been his own, only much older.
- 6 He smiled as he now understood that he must age like the wise tree and help others find their way when they feel lost and defeated. Over time, he would gradually become Wise Man, whom people would seek out for help, shelter, and advice. This, he knew, would take much strength and patience.



Hints

Which choice describes what it takes for Young Man to become Wise Man?

Read each answer choice carefully. Which answer contains a word that describes something people do when they are happy?

How does Young Man feel when he approaches the willow tree? How does the willow tree encounter change Young Man's feelings?

Use the Hints on this page to help you answer the questions.

- 1** A student makes the following claim about Young Man in "The Wisdom of the Willow Tree."

Young Man has to develop skills if he wants to become Wise Man. Which sentence from the text best supports this claim?

 - A** "He decided to journey far away, seeking wisdom."
 - B** "This, he knew, would take much strength and patience."
 - C** "I am old and know the value of rest."
 - D** "In the distance, he saw a willow tree and crawled to it."

- 2** Which sentence from the text best shows that Young Man is happy about his encounter with the willow tree?

 - A** "Young Man awoke and followed the tree's enormous roots to a burbling stream."
 - B** "As he drank, he saw his reflection and was shocked when he realized that the face he had seen in the willow's trunk had been his own, only much older."
 - C** "I'm thirsty and weary, and I cannot summon the strength to return home."
 - D** "He smiled as he now understood that he must age like the wise tree and help others find their way when they feel lost and defeated."

- 3** Explain how the willow tree's kindness and wisdom help Young Man. Include at least one detail from the story to support your explanation.

LEWIS COUNTY SCHOOLS

6th Grade

DAY 16

READ THE PASSAGE As you read, think about how Jamie feels.**A Long Day**

Jamie was tired. She had been on her feet for hours. Her mom owned a small but busy restaurant in town. Three of her mom's employees had called in sick that morning. There was a big festival in the city park that day, and Jamie had wanted to go. But her mom had asked for her help at the restaurant.

All Jamie wanted to do was sit down for a while. Instead, she hurried around the restaurant, taking orders and refilling coffee cups. As soon as one table was cleared, a new set of customers walked in. The customers just kept coming! That meant more orders and more coffee.

"Order up!" called the cook from the kitchen. Jamie stared at the kitchen. She thought about all of the food stalls at the festival. Cooks there were preparing special foods from all over the world. Jamie imagined the delicious smells of new and exotic foods.

"Hurry, Jamie!" the cook called, catching Jamie lost in thought.

"I'm coming," Jamie grumbled. But her mom had already picked up the plates of hot food from the counter and delivered them to a table by the window.

"Wake up, Jamie," her mom said. "I know you don't want to be here, but I need your help."

STRATEGY PRACTICE Describe how you think Jamie feels and why she feels that way.

SKILL PRACTICE Read each question. Fill in the bubble next to the correct answer.

- Why is Jamie daydreaming?
 - She is half asleep.
 - She has nothing better to do.
 - She would rather be working in the kitchen.
 - She wants to be somewhere else.
- What will most likely happen next in the story?
 - The cook will quit.
 - Jamie will leave and go to the festival.
 - Jamie will become busy again.
 - Jamie's mom will close the restaurant.
- What will Jamie most likely do when she gets home?
 - make dinner for her mom
 - go for a walk
 - see if the festival is still going on
 - apply for a waitress job
- What is the main idea of the story?
 - Festivals are more fun than work.
 - It is important to daydream.
 - Owning a restaurant is difficult.
 - We cannot always do what we want to do.

Virginia teacher draws national audience reading bedtime stories to children

By Moriah Balingit, Washington Post, adapted by Newsela staff on 01.24.20

Word Count **957**

Level **MAX**

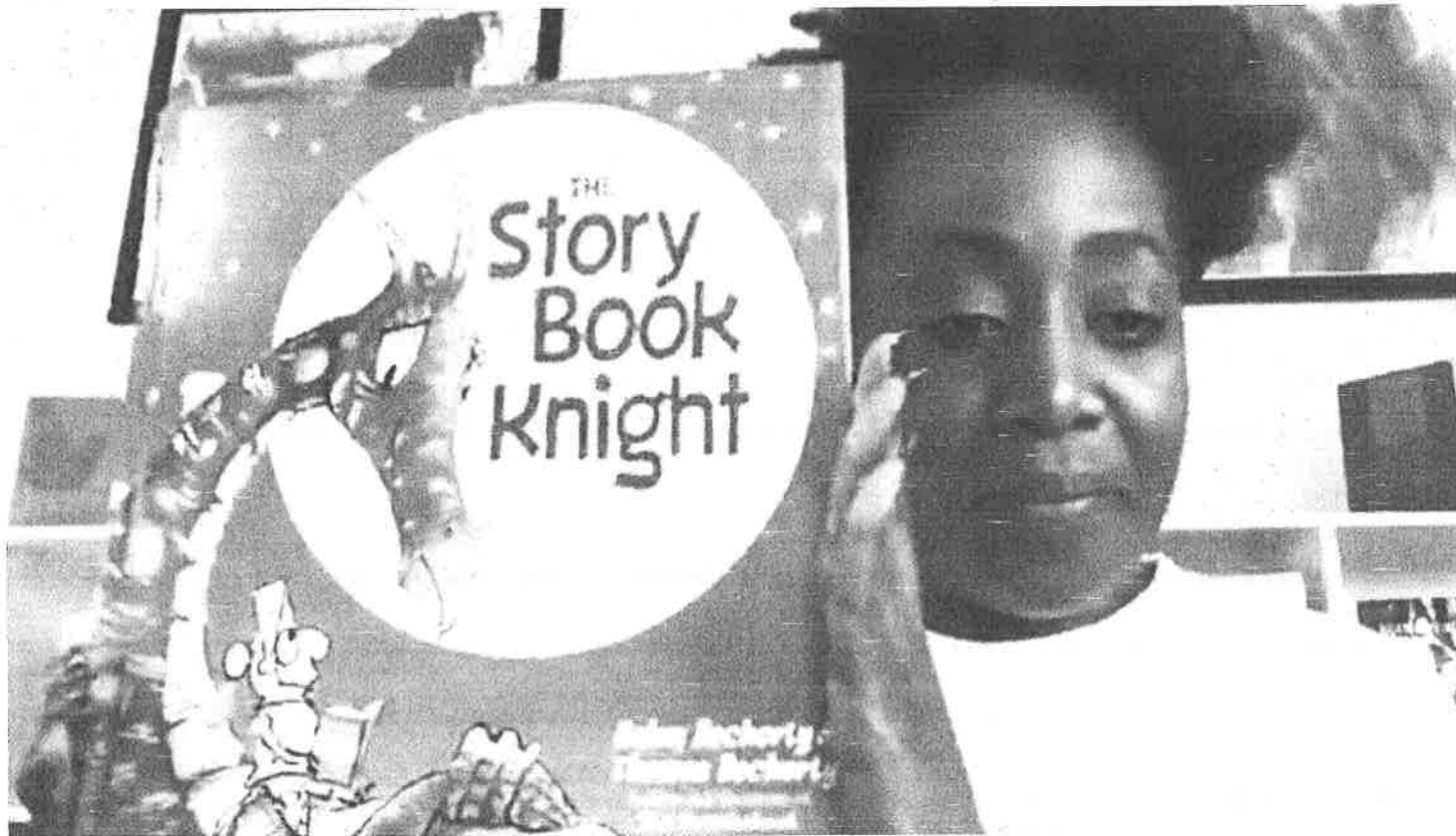


Image 1. Keisha Yearby, a second-grade teacher in Chesapeake, Maryland, reads books on Facebook Live on Tuesdays. Image: Keisha Yearby/Welcome To Ms. Yearby's Reading Adventures Facebook

Long after leaving the classroom and returning home, second-grade teacher Keisha Yearby of Chesapeake, Virginia, switches on a laptop in her spare bedroom to deliver to children a nighttime ritual she cherished as a little girl: a bedtime story.

On Tuesdays, the B.M. Williams Primary schoolteacher logs on for a new episode of "Ms. Yearby's Reading Adventures." It is broadcast on Facebook Live where viewers — often schoolchildren connecting through a parent's account — can interact with her in real time by posting comments.

"Happy Tuesdayyyy!" Yearby sang, stretching out the words with vibrato, during an episode on Christmas Eve. "How are you, great ones?"

In an age when video games, television shows and devices vie for children's attention, Yearby's homemade show has developed a surprising following. She began the program in March for her own students. Now, she has viewers in California, Florida and South Carolina who have no

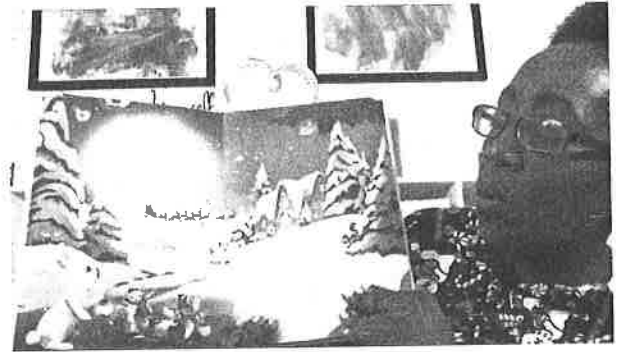
connection to B.M. Williams Primary. The shows, which last about 20 minutes, have drawn up to 800 viewers at times.

Study after study has extolled the value of caretakers reading aloud to children. Some experts advise starting the ritual when babies are as young as 8 weeks old, and continuing even after children have learned to read. Reading aloud can help bond a caretaker to a child, boost social and emotional development and improve children's literacy skills as they begin to read. It can even spur conversations about difficult topics, including race.

Yearby decided to start reading to students online after she met parents who said they were fearful that they did not know how to help their children keep up in school. B.M. Williams is a Title I school, which means many of the students come from low-income households.

Yearby was inspired by Belinda George, a school principal in Beaumont, Texas, who reads to students over Facebook Live weekly in a program called "Tucked-in Tuesday."

She also drew from her own love of reading, which began when she was a child. Growing up in Chicago, Yearby would tote a Fisher-Price cassette player around the house and listen to children's audiobooks.



"I loved the sound effects," Yearby said. "I can still hear them now."

Parents laud Yearby's ability to convey over the internet the enthusiasm she displays in the classroom. Yearby said she aims to do more than just help children learn how to read. She closes each episode urging children to be good to their parents and classmates, and to be grateful for the things that make them happy. She said she worries that with the increased focus on standardized testing, teachers are losing out on the opportunity to teach students how to be good friends, and how to cope with challenges.

"We don't take the time to develop these kids. They have to learn how to be people," Yearby said. "They have to learn how to deal with their problems."

Quiana Thurston, a member of the B.M. Williams PTA, said all three of her children watch the show, even though only one, 7-year-old Jayden, is in Yearby's class. Jayden crowds around a laptop in the kitchen with his 10-year-old brother, Elijah, and 5-year-old sister, Amiyah, watching Yearby with rapt attention and tapping out responses to the questions she asks. Thurston said it heartens her to see that the show has created an opportunity for her children to bond, in addition to boosting Jayden's reading skills.

"They make it a big family thing," Thurston said. "My kids have really enjoyed watching her read the stories."

Monique Womack's daughter Zoë attended B.M. Williams Primary last year and now goes to Crestwood Intermediate. Even though the third-grader has never had Yearby as a teacher, she heard about the program and got hooked. She continues watching even though she is no longer at the school.

Womack said Yearby's program is not just for children learning to read. The stay-at-home mother has learned plenty from the way Yearby reads books online. The teacher will often cover up photos to teach children to focus on the letters, and she peppers her readings with questions for viewers, who can tap out their answers in a comments box in real time.

"As much as it's geared toward the children, the parents can pick up more than what you would think," Womack said. She has learned, for example, what kinds of questions to ask to ensure her daughter understands the book they are reading together.

On Christmas Eve, Yearby read the classic "The Night Before Christmas."

" 'Twas the night before Christmas, when all through the house / Not a creature was stirring, not even a mouse," Yearby read. Then, she paused: "What's that mean, 'stirring?' Give me another word for 'stirring.'"

And later, she read: "I heard on the roof / The prancing and pawing of each little hoof."

"What would you do if you were lying in bed, and you all the sudden hear that on your roof?" she asked.

On one Tuesday, she read "Ruby's Worry," an illustrated book about a little girl troubled by anxiety that follows her around in the shape of a yellow cloud. At the conclusion of the book, she asked students to name something that made them happy. "i am happy that i can see my dad agen," one student wrote.

"My daughter and how far she has come," a parent typed. "Makes me happy."

"You're beautiful," Yearby told the viewers at the end of the episode.

And then, she gave them homework: "I want you to do one thing today to make someone else smile."

Quiz

1 Read the conclusion below.

Parents as well as children can benefit from listening to the show "Ms. Yearby's Reading Adventures."

Which sentence from the article provides the BEST support to the statement above?

- (A) It is broadcast on Facebook Live where viewers — often schoolchildren connecting through a parent's account — can interact with her in real time by posting comments.
- (B) Parents laud Yearby's ability to convey over the internet the enthusiasm she displays in the classroom.
- (C) She closes each episode urging children to be good to their parents and classmates, and to be grateful for the things that make them happy.
- (D) She has learned, for example, what kinds of questions to ask to ensure her daughter understands the book they are reading together.

2 Which sentence in the article BEST supports the conclusion that Ms. Yearby cares about more than just children's ability to do well in school?

- (A) Now, she has viewers in California, Florida and South Carolina who have no connection to B.M. Williams Primary.
- (B) Womack said Yearby's program is not just for children learning to read.
- (C) Even though the third-grader has never had Yearby as a teacher, she heard about the program and got hooked.
- (D) And then, she gave them homework: "I want you to do one thing today to make someone else smile."

3 Read the following passage introducing Ms. Yearby.

Long after leaving the classroom and returning home, second-grade teacher Keisha Yearby of Chesapeake, Virginia, switches on a laptop in her spare bedroom to deliver to children a nighttime ritual she cherished as a little girl: a bedtime story.

On Tuesdays, the B.M. Williams Primary schoolteacher logs on for a new episode of "Ms. Yearby's Reading Adventures." It is broadcast on Facebook Live where viewers — often schoolchildren connecting through a parent's account — can interact with her in real time by posting comments.

"Happy Tuesdayyyy!" Yearby sang, stretching out the words with vibrato, during an episode Christmas Eve. "How are you, great ones?"

What does the author MOST likely want the reader to think about Ms. Yearby based on this introductory passage?

- (A) Ms. Yearby sings the stories she tells on her show "Ms. Yearby's Reading Adventures."
- (B) Ms. Yearby prefers doing her show "Ms. Yearby's Reading Adventures" than being a schoolteacher.
- (C) Ms. Yearby enjoys reading bedtime stories on her show "Ms. Yearby's Reading Adventures."
- (D) Ms. Yearby has to read stories on her show "Ms. Yearby's Reading Adventures" in secret.

4 How does the author build understanding of the value of the show "Ms. Yearby's Reading Adventures"?

- (A) by explaining how the show started and describing the increase in the viewers of the show
- (B) by comparing the show to other entertainment programs and describing the goal of the show
- (C) by explaining how children react to the show and describing some books that were read on the show
- (D) by describing study results and some personal experiences of viewers of the show

Using Unit Rates to Find Equivalent Ratios

► Solve each problem. Show your work.

- 1 Rachel mows 5 lawns in 8 hours. At this rate, how many lawns can she mow in 40 hours?

$$\frac{5 \text{ lawns}}{8 \text{ hours}} = \frac{x}{40 \text{ hours}}$$

$\xrightarrow{\times 5}$
 $\xleftarrow{\times 5}$

25 lawns

- 2 A contractor charges \$1,200 for 100 square feet of roofing installed. At this rate, how much does it cost to have 1,100 square feet installed?
- 3 It takes Jill 2 hours to run 14.5 miles. At this rate, how far could she run in 3 hours?
- 4 Bobby catches 8 passes in 3 football games. At this rate, how many passes does he catch in 15 games?
- 5 Five boxes of crackers cost \$9. At this rate, how much do 20 boxes cost?
- 6 It takes a jet 2 hours to fly 1,100 miles. At this rate, how far does it fly in 8 hours?

Using Unit Rates to Find Equivalent Ratios *continued*

- 7 It takes Dan 32 minutes to complete 2 pages of math homework. At this rate, how many pages does he complete in 200 minutes?
- 8 Kendra gets a paycheck of \$300 after 5 days of work. At this rate, how much does she get paid for working 24 days?
- 9 Tim installs 50 square feet of his floor in 45 minutes. At this rate, how long does it take him to install 495 square feet?
- 10 Taylin buys 5 ounces of tea leaves for \$2.35. At this rate, how much money does she need to buy 12 ounces of tea leaves?
- 11 In problem 10, how would your work be different if you were asked how many ounces of tea leaves Taylin could buy with \$10?

LEWIS COUNTY SCHOOLS

6th Grade

DAY 17

READ THE PASSAGE

As you read about the Snowdonia hawkweed, think of other rare plants and animals you know of, and think about how people treat rare things.

Rare and Beautiful Blooms

One of the rarest flowering plants in the world, the Snowdonia hawkweed, grows wild only in Snowdonia National Park in northern Wales. The region is rocky and mountainous, and the air is cool and damp. The Snowdonia hawkweed prefers this habitat. In fact, it grows nowhere else in the world. It is even picky about where it grows in the park.

Snowdonia hawkweed is about 11 inches tall. Its bright yellow blossoms have thin petals with ragged edges. The Snowdonia hawkweed may not be the most beautiful plant in the world, but it is a favorite snack of sheep.

In 1953, the Snowdonia hawkweed disappeared. People feared that the plant was gone forever. They believed that sheep grazing on the land had eaten the last few plants. So, the people who ran the park removed the sheep from the area, hoping that the hawkweed might return. Forty-nine years later, a group of plant scientists found the yellow flowers blooming in one spot in the park. The hawkweed had returned!

Scientists collected seeds from the plant in case it disappeared again. But since 2002, the rare plant has continued to bloom in the park.

STRATEGY PRACTICE

Describe something rare or special that you have seen and where you saw it.

SKILL PRACTICE

Read each question. Fill in the bubble next to the correct answer.

- Which phrase best describes the climate of Snowdonia National Park?
 - cold and snowy
 - hot and dry
 - cool and damp
 - warm and windy
- Which group of people would probably care most if Snowdonia hawkweed disappeared?
 - scientists who study plants
 - farmers who graze their sheep in the mountains
 - scientists who study rare birds and insects
 - visitors who enjoy hiking in the mountains
- From the passage, you can conclude that Snowdonia hawkweed _____.
 - is the most beautiful plant in the world
 - grows like a weed in northern Wales
 - was always rare
 - will never be seen again in the wild
- Which adjective best describes how people felt when Snowdonia hawkweed was found in 2002?
 - curious
 - disappointed
 - concerned
 - thrilled

S.F. Giants hire first female full-time coach in MLB history

By Des Bieler, Washington Post, adapted by Newsela staff on 01.30.20

Word Count **624**

Level **MAX**

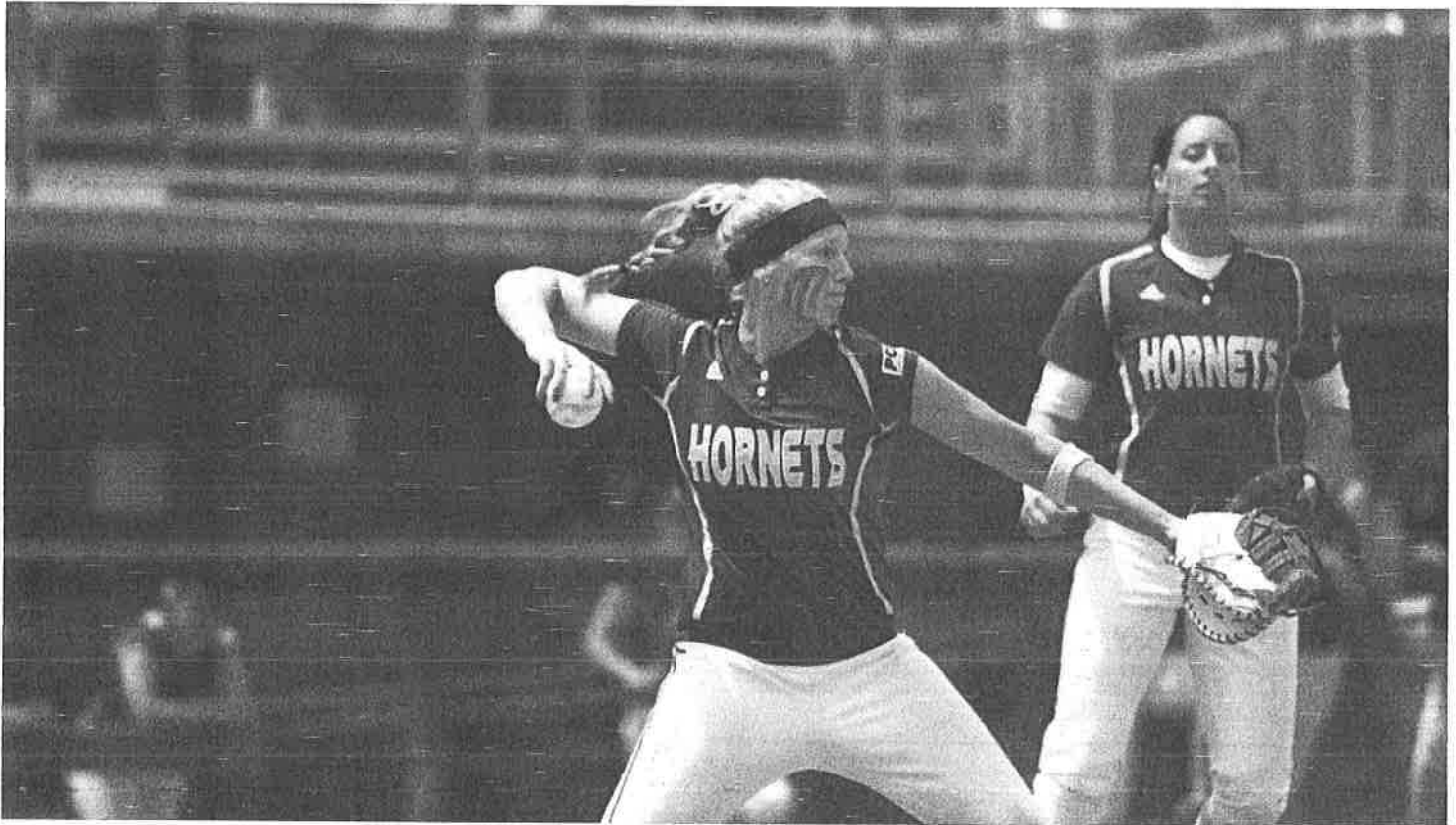


Image 1. Alyssa Nakken, pictured here with the Sacramento State University Hornets softball team, will be the first full-time female coach in Major League Baseball. She's with the San Francisco Giants. Photo: Bob Solorio/Sacramento State Athletics

The San Francisco Giants announced on January 16 that they hired the first full-time female coach in Major League Baseball (MLB) history, Alyssa Nakken. Nakken is a former standout softball player at Sacramento State. She will be "helping to build a winning culture in the clubhouse," according to Manager Gabe Kapler.

Nakken has worked in the Giants' organization since 2014, where she began as an intern. More recently, she has been overseeing health and wellness initiatives for the organization. She played first base for Sacramento State from 2009 through 2012. She is a four-time Academic All-American, three-time Pacific Coast Softball Conference selection and the 2012 conference Scholar-Athlete of the Year.

Another coach, Mark Hallberg, was added to the major league squad on January 16. He is a former teammate of Giants catcher Buster Posey. They were teammates at Florida State. He spent the past two years in player development for the club. Now, there are a total of 13 coaches for the Giants.

"Alyssa and Mark are highly respected members of the organization and I'm delighted that they will now focus their talents on helping to build a winning culture in the clubhouse," Kapler said in a statement. "Mark and Alyssa will focus on fostering a clubhouse culture that promotes high performance through, among other attributes, a deep sense of collaboration and teamwork."

Nakken is among a handful of women who have earned opportunities in MLB teams' operations. Other women include Justine Siegal. Siegal became the first woman to throw batting practice for an MLB squad in 2011. She was given a two-week stint in 2015 by the Oakland A's as a guest instructor for their instructional league team.

Jessica Mendoza is an ESPN analyst. She was hired by the New York Mets in March 2019.

Veronica Alvarez worked last spring with the A's minor leaguers. She worked with catchers.

Rachel Folden became the Chicago Cubs' lead hitting lab tech in 2019. She is also the fourth coach for their Rookie League team.

Rachel Balkovec became a minor league hitting coach for the New York Yankees in 2019. She previously worked as a strength-and-conditioning coach for the St. Louis Cardinals and Houston Astros.

Before joining the Giants, Nakken was employed by the University of San Francisco baseball team. She was its chief information officer. In 2015 she earned a Master's Degree in Sport Management from the University of San Francisco.

She will assist with pregame outfield work. She may also serve as a batting practice pitcher during the season, according to the San Jose Mercury News. She is not expected to be in uniform in the Giants' dugout during games. This is because the MLB limits teams to seven coaches on the bench.

Nakken will, however, wear a uniform before games and will travel full-time with the team, according to Kapler.

"Simply, I think she's going to be a great coach," he said. "Merit and the ability to be a great coach trumps all."

"I'm still getting goose bumps," Nakken's coach at Sacramento State, Kathy Strahan, told the San Francisco Chronicle. "I always knew she'd do something great, I really did, but didn't know what because she could do so many things. I think she'll bring a lot to the organization.

"And as a female, with her intelligence and determination and hunger and drive to excel — I understand some of her responsibility is keeping her fingers on the pulse of the culture — it's invaluable. She'll broaden the scope and perspective, and I applaud Gabe for doing this."



Quiz

- 1 Select the sentence from the article that suggests MLB teams do not typically hire female coaches.
- (A) Nakken has worked in the Giants' organization since 2014, where she began as an intern.
 - (B) Nakken is among a handful of women who have earned opportunities in MLB teams' operations.
 - (C) Before joining the Giants, Nakken was employed by the University of San Francisco baseball team.
 - (D) She is not expected to be in uniform in the Giants' dugout during games.

- 2 Read the conclusion below.

The majority of women who have coaching positions in the MLB are part-time employees.

Which sentence from the article provides the BEST support for the conclusion above?

- (A) The San Francisco Giants announced on January 16 that they hired the first full-time female coach in Major League Baseball (MLB) history, Alyssa Nakken.
- (B) Siegal became the first woman to throw batting practice for an MLB squad in 2011.
- (C) She may also serve as a batting practice pitcher during the season, according to the San Jose Mercury News.
- (D) "I always knew she'd do something great, I really did, but didn't know what because she could do so many things."

- 3 Read the selection below.

Before joining the Giants, Nakken was employed by the University of San Francisco baseball team. She was its chief information officer. In 2015 she earned a Master's Degree in Sport Management from the University of San Francisco.

Why did the author include this information?

- (A) to explain Nakken's history with the Giants organization
- (B) to illustrate some of Nakken's qualifications and experience
- (C) to describe how Nakken became interested in baseball
- (D) to show the reader what Nakken will be doing for the Giants

- 4 Which answer choice accurately characterizes Kathy Strahan's reaction to the Giants hiring Nakken?

- (A) She was happy for Nakken, but also disappointed because she doesn't like the Giants.
- (B) She was upset that they hired her because she wanted Nakken to coach at Sacramento State.
- (C) She is surprised that the Giants hired a full-time female coach, but relieved that it was Nakken.
- (D) She is proud of her former player and eager to see how she will contribute to the team.

Using Unit Rates to Convert Measurements

► Solve each problem. Show your work.

- 1 Susan has a 12-inch board for constructing a wooden chair. The directions say to use a board that is 29 centimeters long. Is her board long enough to cut?
(1 inch = 2.54 centimeters)

$$\begin{array}{r}
 \cancel{12 \text{ inches}} \quad 2.54 \text{ centimeters} \\
 \times \quad 12 \text{ inches} \\
 \hline
 508 \text{ centimeters} \\
 + 2540 \\
 \hline
 30.48 \text{ centimeters}
 \end{array}$$

No.

- 2 Kevin uses 84 fluid ounces of water to make an all-purpose cleaner. The directions call for 4 fluid ounces of concentrated soap for every 3 cups of water. How many fluid ounces of soap should he use? (1 cup = 8 fl oz)

- 3 Shannon test-drives a car in Germany and drives 95 kilometers per hour. What is her speed in miles per hour? (1 kilometer \approx 0.62 mile)

- 4 Keith works 8 hours per day for 5 days per week. Melba works 2,250 minutes each week. Who spends more time at work?

Using Unit Rates to Convert Measurements *continued*

- 5 Jason runs 440 yards in 75 seconds. At this rate, how many minutes does it take him to run a mile? (1 mile = 1,760 yards)
- 6 Boxes of granola are on sale at a price of 2 for \$4.50. There are 12 ounces of granola in each box. What is the unit price in dollars per pound?
- 7 Sam is delivering two refrigerators that each weigh 105 kilograms. There is an elevator with a weight limit of 1,000 pounds. Can he take both refrigerators on the elevator in one trip? (1 kilogram \approx 2.2 pounds)
- 8 For every 140 feet that Kelly rides on her bicycle, the wheels turn 20 times. About how many times do the wheels turn in 5 miles? (1 mile = 5,280 feet)

Understanding Rate Concepts

- 1 It takes Maya 30 minutes to solve 5 logic puzzles, and it takes Amy 28 minutes to solve 4 logic puzzles. Use models to show the rate at which each student solves the puzzles, in minutes per puzzle.

If Maya and Amy had the same number of puzzles to solve, who would finish first? Explain.

- 2 A garden hose supplies 36 gallons of water in 3 minutes. Use a table of equivalent ratios to show the garden hose's water flow in *gallons per minute* and *minutes per gallon*.

How many gallons of water does the hose supply in 10 minutes? Explain.

Understanding Rate Concepts *continued*

- 3 Max travels to see his brother's family by car. He drives 216 miles in 4 hours. What is his rate in miles per hour? Use a double number line to show your work.

Suppose he makes two stops of 10 minutes each during his journey. Will he be able to reach the town in 4 hours if he keeps the speed the same?

LEWIS COUNTY SCHOOLS

6th Grade

DAY 18

READ THE PASSAGE Read slowly and notice details about how the flowers look, smell, and taste.

Flowers for Dinner

Flowers might look pretty on the dinner table. But what about serving them for dinner? In many cultures all around the world, people eat and enjoy different flowers in a variety of dishes.

The purple flowers of the lavender plant add a sweet lemon taste to chocolate cake or ice cream. Pansies, which have a grassy flavor, are a delicious addition to green salads. Bright yellow dandelion petals look cheerful when sprinkled over rice. Squash blossoms can be fried or stuffed with cheese. And the flowers of plants such as jasmine and chamomile are commonly used to make tea.

Does snacking on flowers sound weird? You may have eaten flowers already without realizing it! Several vegetables, such as cauliflower and broccoli, are actually flower buds. Broccoli forms tiny yellow blossoms as it continues to grow. Artichokes, if left on their stalks, form fuzzy purple blooms. And asparagus tips open into small, pale green or white flowers.

If you're interested in eating flowers, be sure to learn about the plants first. Not every flower is safe to eat. The best way to find a tasty—and safe—flower is to visit your local grocery store.

STRATEGY PRACTICE Draw a picture to show how you visualized one of the flowers that can be eaten.

SKILL PRACTICE Read each question. Fill in the bubble next to the correct answer.

- How are broccoli and lavender similar?
 - Both have a lemon taste.
 - Both are flowering plants.
 - Both are used for tea.
 - Both have yellow flowers.
- Why should you learn about a plant before eating its flower?
 - to make sure the flower is safe to eat
 - to find out how to serve the flower
 - to learn more about other cultures
 - to find out how the flower tastes
- What is the main idea of the third paragraph?
 - Eating flowers is weird.
 - Plants produce flowers of different colors.
 - Some vegetables are flower buds.
 - The flowers of some plants are used for teas.
- What is the main idea of the passage?
 - Many flowers can be eaten.
 - Flowers are often eaten with desserts.
 - Many people eat flowers without realizing it.
 - Flowers are tastier than vegetables.

Finding alternatives to most wasteful plastics

By PBS NewsHour, adapted by Newsela staff on 10.05.18

Word Count 760

Level 830L



Garbage washed up on a beach in Compton Bay, Isle of Wight, United Kingdom. Photo by: Jason Swain/Getty Images

We use plastic every day. Companies produce 420 million tons of plastic each year, and as much as 14 million tons of plastic enter the oceans. Scientists are finding traces of plastic in our sea salt and tap water.

People need plastics. They're important for our food packaging. They also help keep out germs. Doctors choose plastic for their gloves and equipment because it helps prevent contamination. Plastic often replaces metal on cars to make them better on gas mileage and safer in accidents.

More than 90 percent of plastics do not get recycled. Now scientists and inventors are finding new uses for plastics that would end up in the trash. They are also finding alternatives to the most wasteful plastic products we use.

Plastic Could Have A Second Life

More than 27 million tons of polystyrene are made every year. Polystyrene is a thin layer of plastic used in many products. Polystyrene takeout containers, plastic spoons and packing peanuts are

often thrown away. They might be used just once. However, this plastic could have a second life or could be avoided altogether, thanks to two studies.

"The question was never really asked" about what to do with plastics after we use them, said John Williams. He is a scientist and a leader at Aquapak, which makes plastic that is biodegradable. This means it breaks down in nature.

Rather than making unnecessary plastic items, Williams said plastic products should be made with more purpose. They should be saved after use, even if that costs more, he said.

Social And Environmental Cost

Plastic pollution comes with a social and environmental cost. It's estimated at \$139 billion a year by The Economist, a British news magazine.

Damage to our health and the environment account for one-third of this cost. There is plastic-related pollution in air, water and land. So although reusing waste products might raise prices for companies and people, it could reduce other costs.

Williams' company spent 15 years developing a plastic alternative called Hydropol. It can be more easily recycled.

Hydropol can replace plastics in products like a plastic coating on a food label, which would normally make recycling more difficult. Hydropol breaks down in water and dissolves harmlessly. It can also be recycled with paper and plastic.

It sounds great, but the material in Hydropol still needs work, said Yu Dong. He is a scientist from Curtin University in Perth, Australia.

Dong studies polyvinyl alcohol, the main material in Hydropol. While polyvinyl alcohol is biodegradable, he said it has some setbacks.

The cost to use it is higher than other plastic, he said. Dong said polyvinyl alcohol plastic is also affected by the environment. The wrong temperature or humidity can break it down.

Work To Be Done To Find Better Choices

There's still work to be done to find better choices, Dong and Williams said.

Swapping polystyrene with alternatives will keep waste from entering landfills. However, it doesn't address the plastic waste already in the environment.

Reprocessing polystyrene is difficult. It produces only a small amount of material that can be used again.

Take a bathtub full of packing peanuts made of polystyrene. It would provide only about three bowling balls' worth of recyclable plastic.

So, some scientists are using one environmental problem to solve another.

Scientists in Brazil and the United Kingdom have created a way to break down pollution from wastewater plants. The pollution comes from dyes used to color cloth and paper.

The scientists use polystyrene to make foam blocks for cleaning. The scientists then shine a light on the mixture. They add a chemical to the mix.

Think of the foam block like a kitchen sponge. Think of the chemical as dish soap, cleaning up pollution. The combination also breaks down pollutants into compounds that are better for the environment, like carbon dioxide.

The blocks clean up a type of dye that can kill fish and animals. The dye also might be dangerous to humans.

"The concept was to try and see if there was another way of making use of waste plastics," said Julian Eastoe. He is a scientist at the University of Bristol in England.

When tested in the study, the foam blocks broke down almost all of the dyes. The blocks can be reused. Eastoe hopes to use them in more ways.

"It uses a waste product to get rid of another waste product. It's kind of a win-win situation," said Erica Wanless. She is a scientist at the University of Newcastle, Australia. She wasn't involved in the project.

Quiz

1 Read the paragraph from the section "Social And Environmental Cost."

Plastic pollution comes with a social and environmental cost. It's estimated at \$139 billion a year by The Economist, a British news magazine.

HOW does this paragraph support the main idea of the article?

- (A) It gives some reasons why people use plastic products.
- (B) It shows that companies produce lots of plastic each year.
- (C) It gives a reason why scientists want to reduce plastic pollution.
- (D) It shows that plastic is used to make many different products.

2 What do scientists John Williams and Yu Dong AGREE on in the article?

- (A) It is important to develop alternatives to plastic.
- (B) Hydropol is a plastic alternative that is ready for people to use.
- (C) Hydropol is a product that people should avoid using.
- (D) It makes sense to use plastic products that cost a lot.

3 Read the paragraph below from the section "Work To Be Done To Find Better Choices."

"The concept was to try and see if there was another way of making use of waste plastics," said Julian Eastoe. He is a scientist at the University of Bristol in England.

How would scientist Erica Wanless MOST LIKELY respond to Eastoe's comment?

- (A) She would point out that waste plastics are difficult to find.
- (B) She would say that it is a waste of time to make use of waste plastics.
- (C) She would say it is too difficult to find uses for waste plastics.
- (D) She would agree that making use of waste plastics is important.

4 Which two choices are main ideas of the article?

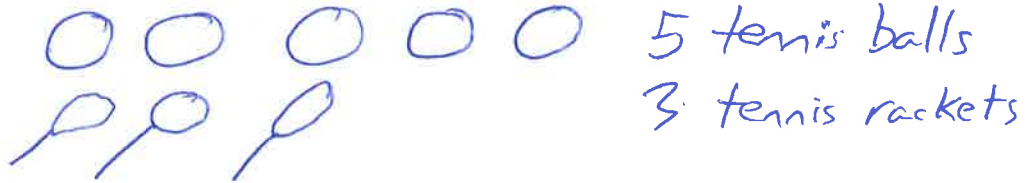
1. Companies produce 420 million tons of plastic each year.
2. Plastic is causing harm to the environment.
3. Dyes used to color cloth and paper cause pollution.
4. Scientists hope to find ways to reuse plastic products.

- (A) 1 and 2
- (B) 1 and 3
- (C) 2 and 4
- (D) 3 and 4

Understanding Ratio Concepts

► Complete each problem about ratio relationships.

- 1 Ms. Omar runs the school tennis club. She has a bin of tennis balls and rackets. For every 5 tennis balls in the bin, there are 3 tennis rackets. Draw a model to show the ratio of tennis balls to tennis rackets.



Write the following ratios.

tennis balls to tennis rackets 5 to 3

tennis balls to total pieces of tennis equipment 5 to 8

- 2 Christian has a collection of 18 shark teeth. He identified them as 6 tiger shark teeth, 8 sand shark teeth, and the rest as bull shark teeth.

What does the ratio 6 : 8 represent in this situation?

What does the ratio 4 : 18 represent in this situation? Explain your reasoning. Include a model in your explanation.

- 3 How are part-to-part ratios different from part-to-whole ratios?

Using Equivalent Ratios

► Solve each problem.

1 Josie is training for a race. The ratio of the number of minutes she runs to the number of miles she runs is 24 to 3. She plans to run 10 miles. How many minutes will it take her?

2 A chef planning for a large banquet thinks that 2 out of every 5 dinner guests will order his soup appetizer. He expects 800 guests at the banquet. Use equivalent ratios to estimate how many cups of soup he should prepare.

3 Fred is making a fruit salad. The ratio of cups of peaches to cups of cherries is 2 to 3. How many cups of peaches will Fred need to make 60 cups of fruit salad?

4 A community garden center hosts a plant giveaway every spring to help community members start their gardens. Last year, the giveaway supported 50 families by giving away 150 plants. Based on this ratio, how many plants will the center give away this year in order to support 65 families?

5 The first week of January, there are 49 dogs and 28 cats in an animal shelter. Throughout the month, the ratio of dogs to cats remains the same. The last week of January, there are 20 cats in the shelter. How many dogs are there?

6 A wedding planner uses 72 ivy stems for 18 centerpieces. When she arrives at the venue, she realizes she will only need 16 centerpieces. How many ivy stems should she use so that the ratio of ivy stems to centerpieces stays the same?

LEWIS COUNTY SCHOOLS

6th Grade

DAY 19

READ THE PASSAGE

Pay attention to how the main idea and details about synchronized swimming are organized.

A Splashy Sport

The sport of synchronized swimming is one part swimming, one part dancing, and one part gymnastics. This unique sport features a pair or a team of athletes performing acrobatic routines in the water. It is one of the most difficult sports because it requires concentration, athletic skill, endurance, and gracefulness.

Professional synchronized swimmers need strong basic skills. They must be good swimmers and must be able to hold their breath underwater for long periods of time. They must also be able to tread water, supporting themselves without touching the bottom of the pool. The swimmers learn challenging moves, such as holding themselves upside down vertically in the water while moving their legs and rotating their bodies. They also learn how to lift their teammates out of the water and to stay perfectly in sync with each other.

You will find synchronized swim teams throughout the country. They compete with each other and give performances to audiences of all ages. The sport of synchronized swimming is sure to take your breath away, whether you're watching or participating.

STRATEGY PRACTICE

What details does the author use in the second paragraph to support the main idea expressed in the first paragraph? List at least two details.

SKILL PRACTICE

Read each question. Fill in the bubble next to the correct answer.

- Which one is a fact about synchronized swimming?
 - It is one of the most difficult sports.
 - The moves are very challenging.
 - Routines include vertical positions.
 - Everyone enjoys watching it.
- Which of these is *not* important in synchronized swimming?
 - the ability to hold your breath
 - knowing how to tread water
 - the strength to lift other swimmers
 - the ability to touch the bottom of the pool
- What do you think it means to tread water?
 - to hold your breath underwater
 - to swim upside down
 - to keep moving so you stay on the surface of the water
 - to swim with great speed across the pool
- Which of the following is an opinion about synchronized swimming?
 - All of the movements are graceful.
 - A team has two or more athletes.
 - There are teams across the country.
 - The sport includes dance moves.

In a "bizarre" biological twist, a mother lion adopts a leopard cub in India

By Brigit Katz, Smithsonian.com, adapted by Newsela staff on 03.12.20

Word Count 808

Level **MAX**



Image 1. The mother lion, her lion cubs and her adopted spotted leopard baby all get along just fine. Photo by: Dheeraj Mittal/Deputy Conservator of Forests in India

In December 2018, researchers at the Gir National Park in India stumbled upon a lioness with a surprise. She appeared to have adopted a baby leopard as one of her own. The little male cub, who was around 2 months old, was seen nursing from the lioness. It was seen feeding from her kills and playing with her two biological cubs, who were around the same age as the leopard. This rare case of interspecies foster care left the researchers entirely befuddled. The researchers published an article in the journal *Ecosphere* in February. In the article, they describe the lioness' behavior as plainly "bizarre."

From an evolutionary perspective, caring for the offspring of another animal doesn't make much sense. Raising young — nursing them, gathering food for them, making sure they stay safe — requires a lot of time and energy. And this is typically done in the interest of propagating one's own genes. It's not unheard of for animals to look after non-biological offspring of the same species. But "such acts directly help in boosting the [caregiver's] lifetime reproductive success,"

the study authors write. Female cheetahs, for instance, are known to adopt orphaned male cubs. And once they reach adulthood they form large coalitions with the mother's own offspring.

Before the lioness and her leopard cub pounced onto the scene, there had been just two other documented instances of interspecies adoption. In 2006, scientists described the adoption of a marmoset by a family of wild capuchin monkeys. More recently, a bottlenose dolphin mother was observed caring for a melon-headed whale calf over the course of more than three years. But in these cases, according to the researchers, "none of the foster parents and adoptees ... belonged to mutually competing species." Lions and leopards, by contrast, compete for the same resources in the wild — and are usually not very fond of one another.

"They are at perpetual odds," Stotra Chakrabarti said. He is the study co-author and animal behavior researcher at the University of Minnesota. Lions kill both adult leopards and their cubs, while leopards are prone to attacking unguarded lion cubs.

And yet, the mother lion, her lion cubs and her spotted leopard baby, all got along just fine. Researchers thought the blended family would last only briefly. In 2017, an African lioness in Tanzania was seen nursing a leopard cub. But the association lasted for just one day and was "not considered as a formal adoption," the study authors write. Over the course of a 45-day observation period, however, the researchers saw the leopard cub hanging out with its foster family on 29 different days.

The relationship only seems to have come to an end when the leopard baby died. In February 2019, his body was found near a watering hole. There were no signs of injury suggesting that he had been attacked. A necropsy, in fact, indicated that the cub had been suffering from a congenital femoral hernia. This is a blood vessel rupture, which likely caused his death.



The circumstances that led to this unusual animal adoption are not entirely clear. One day after the leopard cub was seen with the lioness, a female leopard was sighted at the same location. She may have been the cub's biological mother. However, researchers could not say for certain whether she was lactating. Perhaps she abandoned her baby, who was subsequently adopted by the lioness. But why?

It is possible, the researchers suggest, that the lioness' response was prompted by her inexperience. At 5 or 6 years old, she was a relatively young mother. Her first litter of two cubs had died very young. And so her more recent litter marked her first foray into parenting. What's more, "given that she was a lactating mother with cubs of her own, her maternal and hormonal instincts could have overridden her recognition or the lack thereof for an unusually spotted cub," the researchers write.

The distinct behavior of Asiatic lions may have made this unexpected alliance possible. Male Asiatic lions do not tend to live with females unless they are mating or sharing a large kill. African lions do, though. Females also tend to exist on their own for a few months after giving birth. This perhaps allowed the lioness and leopard cub to exist in happy isolation. How would the leopard

have fared if his adopted family had interacted more with adult lions? It's an intriguing question that can't be answered, due to the cub's premature death.

"It would have been fantastic to see, when the leopard cub grew up, how things would be," Chakrabarti tells the Times. "But it didn't happen."

Quiz

- 1 Select the sentence from the article that suggests adopting an orphan of the same species can be advantageous for a mother.
- (A) This rare case of interspecies foster care left the researchers entirely befuddled.
 - (B) And once they reach adulthood they form large coalitions with the mother's own offspring.
 - (C) And yet, the mother lion, her lion cubs and her spotted leopard baby, all got along just fine.
 - (D) The circumstances that led to this unusual animal adoption are not entirely clear.
- 2 Which detail in the article BEST supports the conclusion that it is highly unexpected for a lioness to adopt a leopard cub?
- (A) From an evolutionary perspective, caring for the offspring of another animal doesn't make much sense.
 - (B) Lions and leopards, by contrast, compete for the same resources in the wild — and are usually not very fond of one another.
 - (C) But the association lasted for just one day and was "not considered as a formal adoption," the study authors write.
 - (D) The distinct behavior of Asiatic lions may have made this unexpected alliance possible.
- 3 Which answer choice accurately characterizes Chakrabarti's reaction to the death of the adopted leopard cub?
- (A) He was relieved that the leopard died of natural causes and was not killed by the mother lion.
 - (B) He felt sad that they could not treat the leopard's ruptured blood vessel.
 - (C) He felt curious to see how the lioness would react to the cub's death.
 - (D) He was disappointed that he would not get to study the unusual family as the leopard grew up.

- 4 Read the following selection.

Before the lioness and her leopard cub pounced onto the scene, there had been just two other documented instances of interspecies adoption. In 2006, scientists described the adoption of a marmoset by a family of wild capuchin monkeys. More recently, a bottlenose dolphin mother was observed caring for a melon-headed whale calf over the course of more than three years.

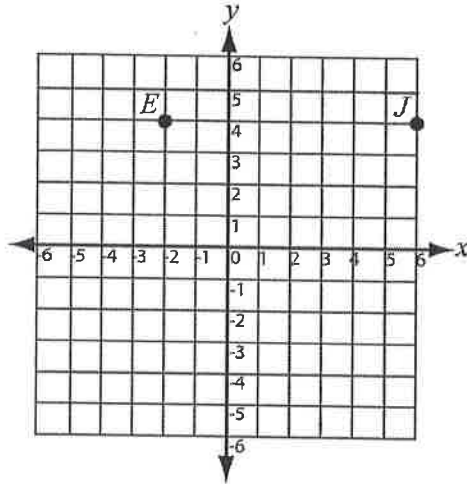
Why did the author include this information?

- (A) to illustrate how rare it is for wild animals to care for offspring of a different species
- (B) to explain which animals are most likely to care for offspring of a different species
- (C) to illustrate that it is not unusual for animals to care for offspring of a different species
- (D) to explain why scientists believe some animals care for offspring of a different species

NTI Day 19
6th**5.4 Finding Distance Between Points (DOK 2)**

The distance between points can be found by using the rules of absolute value.

Example 2: Find the distance between points E and J on the coordinate plane below.



Step 1: Find the coordinate pairs of each point. Note: they are in different quadrants. Point $E = (-2, 4)$ and Point $J = (6, 4)$

Step 2: Both points have the same y -coordinate, so the x -coordinates are the ones to be added together. Change both x -coordinates into absolute values. $E = |-2|$ and $J = |6|$

Step 3: Add the two values: $|-2| + |6| = |8|$

Answer: The distance between points E and J is 8 units.

Rules for finding the distance between two points if the two points are in different quadrants:

If both points have the same x -coordinates, then change the y -coordinates to absolute values and **add** them together.

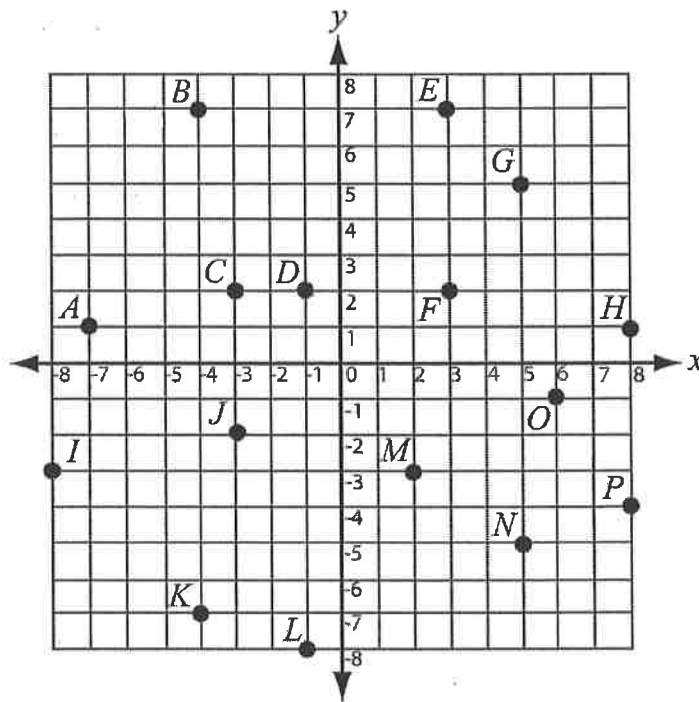
If both points have the same y -coordinates, then change the x -coordinates to absolute values and **add** them together.

Rules for finding the distance between two points if the two points are in the same quadrant:

If both points have the same x -coordinates, then change the y -coordinates to absolute values and **subtract**.

If both points have the same y -coordinates, then change the x -coordinates to absolute values and **subtract**.

Use the coordinate plane below to find the distance between the points in each problem. The first one is done for you. (DOK 2)



1. Find the distance between points B and K . Answer: 14 units.
2. Find the distance between points A and H .
3. Find the distance between points E and F .
4. Find the distance between points C and J .
5. Find the distance between points G and N .
6. Find the distance between points H and P .
7. Find the distance between points C and D .
8. Find the distance between points B and E .
9. Find the distance between points C and F .
10. Find the distance between points I and M .
11. Find the distance between points D and L .

LEWIS COUNTY SCHOOLS

6th Grade

DAY 20

READ THE INTERVIEW

Think about the information that the interviewer is trying to learn from Janette Flores.

Planning a Beautiful Day

Janette Flores is a wedding planner in Baltimore, Maryland. **Bubbly Bride** magazine wanted to find out what it takes for a professional to plan one of the most important days of someone's life.

Bubbly Bride: What happens in a typical day for a wedding planner?

Janette Flores: Planning a wedding involves much more than the wedding day itself. I start at least six months in advance, calling catering companies and arranging flower deliveries and dress fittings.

Bubbly Bride: What do you do on the day of the wedding?

Janette Flores: I make sure everything goes smoothly. No matter how carefully you plan, there can often be last-minute problems or surprises.

Bubbly Bride: Have you planned any weddings that you think are especially memorable?

Janette Flores: Every wedding I plan is memorable for a different reason. One couple, both scuba divers, wanted to get married under water. Another couple wanted to exchange vows on the train where they had met. The best weddings reflect the couple's personalities.

**STRATEGY PRACTICE**

Summarize the tasks that Janette Flores does in her job.

SKILL PRACTICE

Read each question. Fill in the bubble next to the correct answer.

- According to the interview, which is *not* a job for a wedding planner?
 - (A) calling catering companies
 - (B) arranging flower deliveries
 - (C) solving last-minute problems
 - (D) sewing wedding dresses
- What is the purpose of the text between the title and the first question?
 - (A) to tell where the interview takes place
 - (B) to explain when the interview takes place
 - (C) to describe who is being interviewed
 - (D) to name the magazine in which the interview appears
- Who would probably be most interested in reading the interview?
 - (A) a florist
 - (B) a scuba diver
 - (C) a couple that is engaged
 - (D) a married couple
- When does Janette start planning a wedding?
 - (A) the day of the wedding
 - (B) at least six months before the wedding
 - (C) after calling catering companies
 - (D) no more than six months in advance

NASA unveils "astonishing" details of most distant object ever visited

By Hannah Devlin, The Guardian, adapted by Newsela staff on 03.13.20

Word Count 727

Level 830L

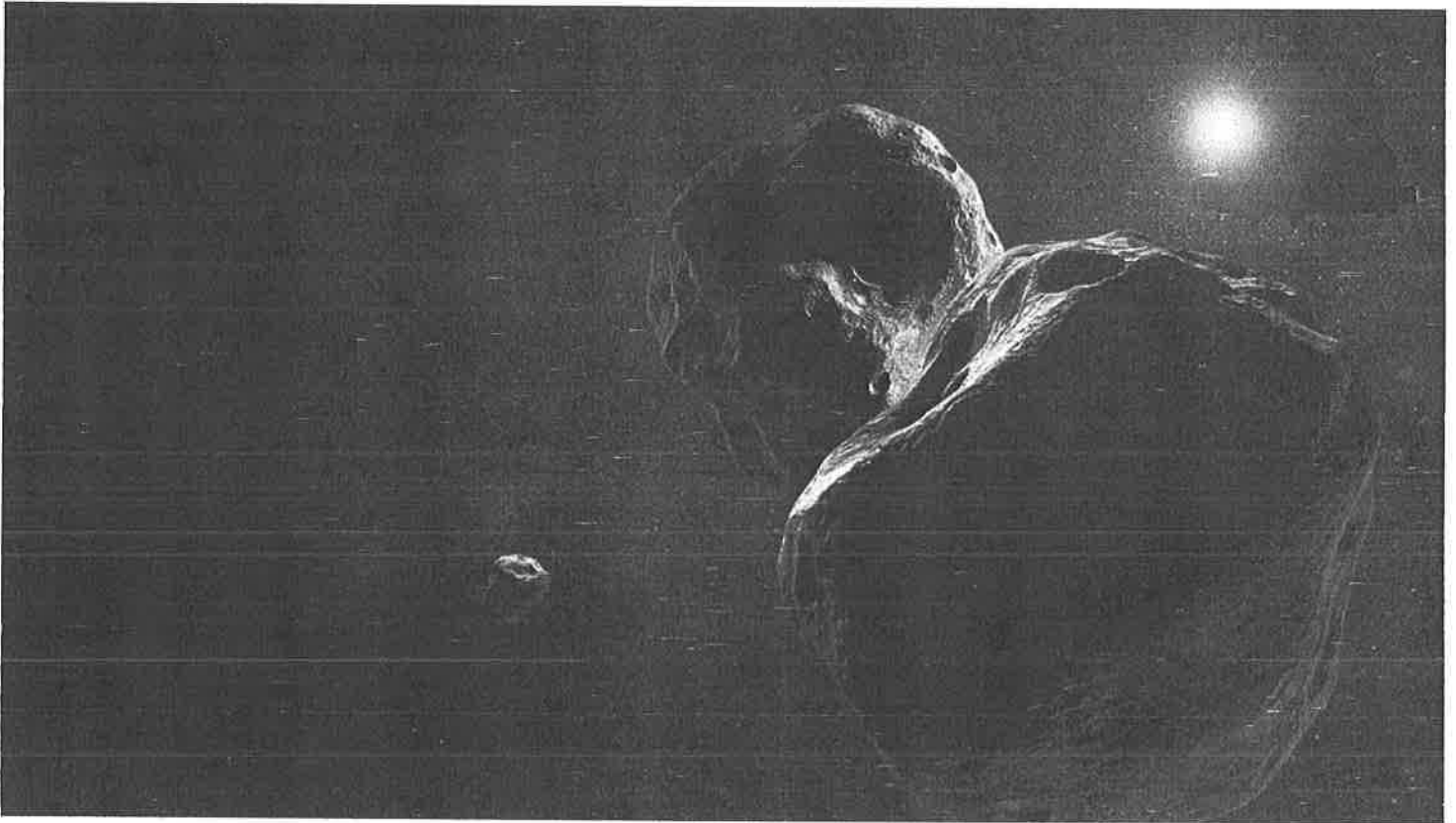


Image 1. An artist's impression of NASA's New Horizons spacecraft encountering Arrokoth, a Kuiper Belt object that orbits 1 billion miles beyond Pluto, on January 1, 2019. Image: NASA/Johns Hopkins University Applied Physics Laboratory/Southwest Research Institute/Steve Gribben

NASA is the U.S. space agency. It released details of the most distant object visited by a spacecraft. The information could help explain how the planets got their start in the early solar system.

The distant object is called Arrokoth. It is red and peanut-shaped. It sits 1 billion miles beyond Pluto in the Kuiper Belt. The belt is a region that is home to thousands of dwarf planets and icy objects. NASA's New Horizons spacecraft made a flyby on New Year's Day 2019. However, the extreme distance from Earth means the space agency's probe is still sending back data from the brief visit.

Bill McKinnon is a scientist at Washington University in St. Louis, Missouri. He wrote about the latest work on the object. He said the findings from Arrokoth are valuable. The information is so

important that the New Horizons team was debating if it would be viewed as more important than the probe's first visit with Pluto in 2015, he said.

A Remarkable World That's Told A Remarkable Story

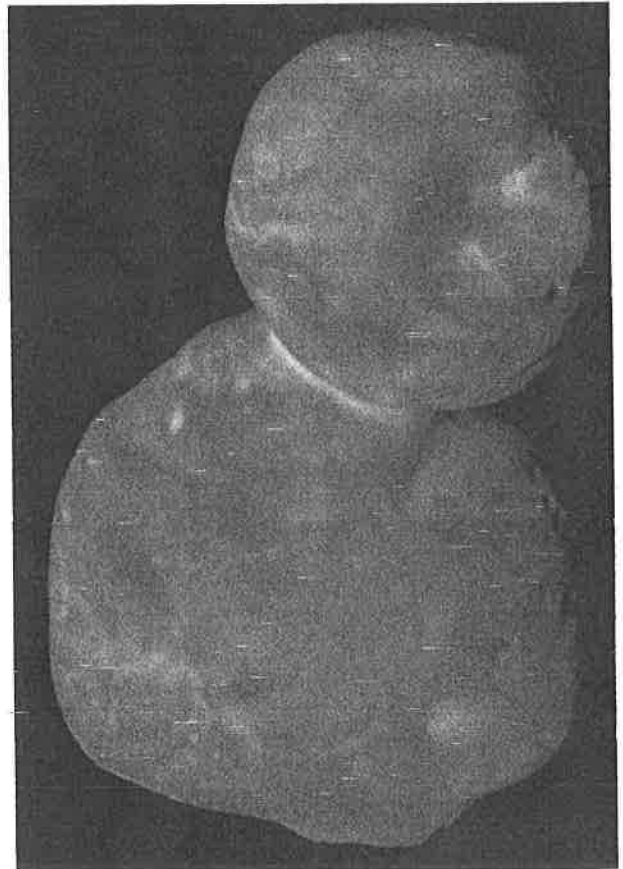
"Arrokoth has turned out to be astonishing in terms of what we've learned from it," he said before a meeting of the American Association for the Advancement of Science in February. "It tells us some profound truths about our solar system. This is not just a space potato. It's a remarkable world that's told us a remarkable story."

Arrokoth's position in the Kuiper Belt marks what was once the edges of the cloud of dust and gas around the newly formed sun. The cloud is known as the solar nebula. In this region, planets stopped developing at an early stage. Exploring these frozen areas allows scientists to look back. They can study a time when the seeds of today's planets were being planted.

Very Far From Sun

"This place is very far from the sun," with very low temperatures, said Alan Stern. He is New Horizons' main investigator. The cold keeps objects in a kind of time capsule, he said.

For many years, scientists have compared two ideas on how planets began to be formed. The first is called hierarchical accretion. In it, small grains and pebbles zipped around, occasionally crashing into each other with enough force to stick. They made bigger and bigger objects. Slowly, over millions of years, planets grew through these collisions.



The second idea is known as cloud collapse. In it, certain regions of the nebula had clumps of particles that were drawn toward each other, until they collapsed together. Collisions were gentle and the planets were "born big." Objects got huge within hundreds of years.

Arrokoth's appearance and makeup give evidence to support the cloud collapse idea. There are no signs that the object's two parts smashed together, said Stern.

A Gentle Joining

Everything about Arrokoth points toward a gentle joining, he said. The object's two parts are the same in color and makeup. They both have red surfaces with similar material. That suggests the fragments were near each other, rather than coming from different parts of the nebula.

The findings appear in the journal *Science*.

Andrew Coates works at the Mullard Space Science Laboratory, University College London. It is in the United Kingdom. He said there are signs that Arrokoth's two parts came together gently and stuck. He said it was more like the speed of a person walking than a high-speed crash.

Coates said there are signs of "faster collisions in the inner solar system later." An example was when the moon formed from a large object hitting Earth, he said. However, he said, this work shows more about the early history of the solar system. It shows that much slower events were important then, he said.

New Horizons was launched in 2006. It did a six-month flyby study of Pluto and its moons in 2015. Then it fired its engines to swing its route toward Arrokoth.

The spacecraft will continue to sail through the Kuiper Belt and beyond. Its fuel is expected to keep communication open until the 2030s.

Quiz

1 Read the following statements.

1. *Information about Arrokoth could help explain how the planets got their start in the early solar system.*
2. *Planets slowly grew over millions of years through hierarchical accretion.*
3. *Arrokoth's appearance and makeup provide evidence to support the idea of cloud collapse.*
4. *New Horizons spacecraft will continue to travel through the Kuiper Belt and beyond.*

Which two statements are main ideas from the article?

- (A) 1 and 2
- (B) 2 and 3
- (C) 1 and 3
- (D) 2 and 4

2 Read the paragraph from the article.

The distant object is called Arrokoth. It is red and peanut-shaped. It sits 1 billion miles beyond Pluto in the Kuiper Belt. The belt is a region that is home to thousands of dwarf planets and icy objects. NASA's New Horizons spacecraft made a flyby on New Year's Day 2019. However, the extreme distance from Earth means the space agency's probe is still sending back data from the brief visit.

Which statement summarizes the paragraph?

- (A) The New Horizons spacecraft recently passed Arrokoth and is sending information back to Earth.
- (B) Arrokoth is an odd, peanut-shaped object in the Kuiper Belt that is a great distance away from Earth.
- (C) The NASA probe is sending information from a 2019 flyby of Arrokoth back to Earth.
- (D) Arrokoth is far from the sun in the region of dwarf planets and icy objects.

3 According to the section "Very Far From Sun," how did Arrokoth form?

- (A) Two large parts crashed together and immediately joined.
- (B) One large object crashed into another, breaking off a large chunk.
- (C) Objects were drawn together and gently collided to form larger bodies.
- (D) Small pebbles crashed into each other, got stuck and grew bigger and bigger.

4 What is the relationship between the New Horizons spacecraft and Arrokoth?

- (A) New Horizons passed by Arrokoth, gathering images and data to send back to Earth.
- (B) New Horizons crashed into Arrokoth after completing the data-gathering for Pluto.
- (C) New Horizons discovered Arrokoth, a new dwarf planet, after passing by Pluto.
- (D) New Horizons' scientists worked with NASA to explain Arrokoth's potato shape.

Name : _____

Score : _____

Teacher : _____

Date : _____

NTI Day 20
6th

Find the Least Common Multiple for each number pair.

1) 12, 30 60

12, 24, 36, 48, 60
30, 60

2) 2, 30 _____

3) 30, 10 _____

4) 40, 3 _____

5) 15, 6 _____

6) 6, 5 _____

7) 40, 20 _____

8) 15, 5 _____

9) 5, 30 _____

10) 40, 20 _____



Name : _____

Score : _____

Teacher : _____

Date : _____

Find the Greatest Common Factor for each number pair.

1) 5, 12 1 5: ①5
12: ①12; 2, 6; 3, 4

2) 8, 6 _____

3) 5, 2 _____

4) 12, 20 _____

5) 2, 20 _____

6) 10, 8 _____

7) 6, 30 _____

8) 40, 30 _____

9) 4, 15 _____

10) 10, 30 _____



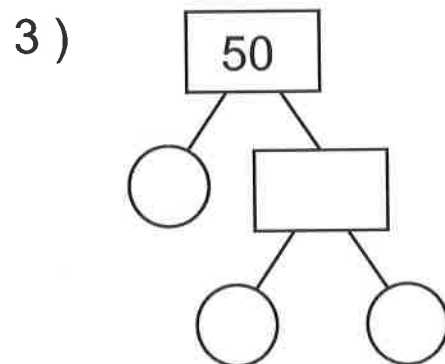
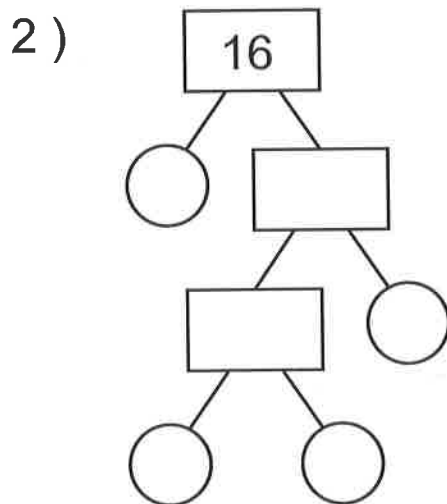
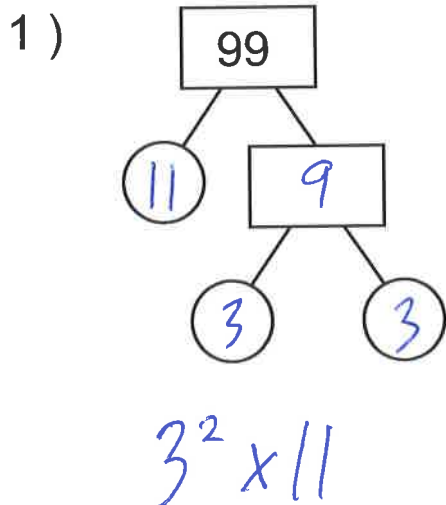
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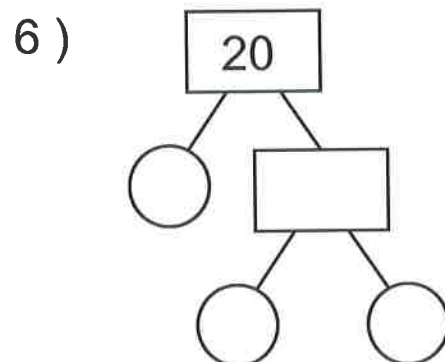
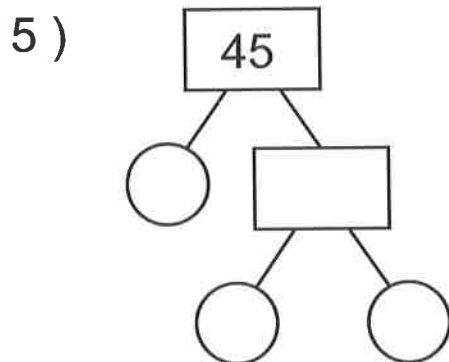
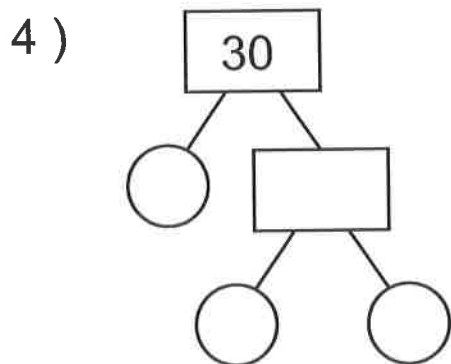
Find the Prime Factors of the Numbers



Prime Factors
_ x _ x _ = 99

Prime Factors
_ x _ x _ x _ = 16

Prime Factors
_ x _ x _ = 50



Prime Factors
_ x _ x _ = 30

Prime Factors
_ x _ x _ = 45

Prime Factors
_ x _ x _ = 20

