Week #2 Fourth Grade Weekly Planner: April 27th-May 1st

INDEPENDENT **READING** 20 min/day	**Monday's Book Title:** **Tuesday's Book Title:**	**Wednesday's Book Title:** **Thursday's Book Title:**	**Friday's Book Title:** *Parent initial to verify daily reading:* _____
READING **Read Works** readworks.org **Class Codes** **Fry: 75CQDL** **Greer: 2AZZR4** **LaCourse: 3CXAYF** **Password: 1234**	**Read Works Article of the Day: "The Forces that Shape Rocks"** Each day, read one article and write at least two sentences of a response in the online Book of Knowledge or in your notebook.	**Read Works Articles: "The Forces that Shape Rocks"** ☐ Monday's Book of Knowledge ☐ Tuesday Book of Knowledge ☐ Wednesday's Book of Knowledge ☐ Thursday's Book of Knowledge ☐ Friday's Book of Knowledge	**Read Works Text: "How Can You Help"** ☐ Read the text in "How Can You Help" ☐ Answered Questions
MATH *Math Facts: 10 minutes* *My Math: They don't have to finish everything each day, but do what they can in about 40 minutes.*	**Monday:** ☐ **Math Facts 10 min:** Xtra Math or flash cards ☐ **My Math Book:** Review pg. 857-859 **Tuesday:** ☐ **Math Facts 10 min:** Xtra Math or flash cards ☐ **My Math Book:** Ch. 11 Lesson 1 pg. 697-702	**Wednesday:** ☐ **Math Facts 10 min:** Xtra Math or flash cards ☐ **My Math Book:** Ch. 11 Lesson 2 pg. 703-708 **Thursday:** ☐ **Math Facts 10 min:** Xtra Math or flash cards ☐ **My Math Book:** Ch. 11 Lesson 3 pg. 709-714	**Friday:** ☐ **Math Facts 10 min:** Xtra Math or flash cards ☐ **My Math Book:** Ch. 11 Lesson 4 pg. 715-720 *Parent initial to verify Math Facts practiced each day:* _____
WRITING -Thoughtful writing -Best spelling -Proper capitalization and punctuation -Title and Date -At least ½ page each day in their notebook	☐ **Monday's Prompt:** *If you could leave your house and go anywhere, where would it be and why?* ☐ **Tuesday's Prompt:** *Describe what you do all day from morning to night.*	☐ **Wednesday's Prompt:** *Write an opinion paragraph about your favorite school subject.* ☐ **Thursday's Prompt:** *Write an informational paragraph about any animal found in your neighborhood. (facts only)*	☐ **Friday's Prompt:** *Write a conversation you might have on the playground at school.* **Parent initial _____ to verify daily writing**

SCIENCE Science Studies Weekly	*Read all articles for:* *Fry/Tito Week #3: Soil* *Greer Week #7: Endangered Species* *LaCourse Week #2: Oceans and Waterways* **Parent initial _____ to verify reading**	☐ Crossword completed on the back of my studies weekly ☐ Checked my answers online at: studiesweekly.com or underlined my evidence in text	**Name of my favorite article:**
SOCIAL STUDIES California Studies Weekly	*Read all articles for:* *Fry/Tito Week #30: Immigrants Build California* *Greer Week #25: The Effects of the Gold Rush* *LaCourse Week #27: Statehood for California* **Parent initial _____ to verify reading**	☐ Crossword completed on the back of my studies weekly ☐ Checked my answers online at: studiesweekly.com or underlined my evidence in text	**Name of my favorite article:**

Submission of Work: *Assignments can be turned in digitally to your teacher sooner, but the paper drop off is scheduled at our site for Friday, 5/8/20 and Friday, 5/15/20.*

Submit Logs & Products: Scan / photo /upload/or deliver to site

Office Hours 11:00-1:00 Monday-Friday: *Teachers have two hours scheduled every day for emails, phone calls, conference calls, and virtual experiences. If your student needs additional help, please reach out and we will find a way to help anytime.*

Fry/Tito Contacts: sfry@tusd.net or atito@tusd.net or call/text (209) 426-0989

Greer Contact: cgreer@tusd.net or call/text (209) 624-0010

LaCourse Contact: jlacourse@tusd.net or call/text (209) 597-8683

Zoom Weekly Class Meetings: *Teachers will email invitations for Zoom meetings. Please have students join these important meetings for guidance, collaboration, motivation, reflection, and sharing assignments virtually.*

Time	Monday	Tuesday	Wednesday	Thursday	Friday
11:00-11:30	Zoom: Weekly Kick Off				Zoom: Reflection Day

How the Hoodoos Formed

This text is adapted from an original work of the Core Knowledge Foundation.

Mount Erciyes looms on the horizon near the towns of Cappadocia in Turkey. It is an active volcano and the highest mountain in this part of Turkey. Erciyes's rocky peak is 12,848 feet high. In winter, it is often dusted with snow.


Effects of volcanic rock erosion in Cappadocia

Only minor eruptions have shaken Erciyes in recorded history. At times in the distant past, however, Erciyes and other volcanoes near it were much more active. During one or more major eruptions, these volcanoes blasted out enormous amounts of ash. The volcanic ash rained down on the surrounding countryside. It collected in some areas to form large, thick deposits. Over time, this volcanic ash solidified. It hardened into a type of volcanic rock geologists call tuff. In parts of what is now Cappadocia, layers of tuff formed that were hundreds of feet thick.

Then weathering and erosion went to work. Wind and water slowly carved the tuff into ridges, mounds, and sharp pinnacles. The tallest of these slender, soaring rock formations are called hoodoos. Some rise more than 100 feet above the Cappadocian landscape.

Hoodoos are not just found in Turkey. You can find hoodoos on almost every continent. Most are formed from sedimentary rock rather than volcanic tuff. All of them, though, are the product of weathering and erosion. Bryce Canyon in the western United States has an abundance of hoodoos. Wind, rain, and ice wedging have carved them out of sedimentary rock that is 40 to 60 million years old. Geologists and visitors have named some of Bryce Canyon's largest hoodoos. One of the most impressive is Thor's Hammer.
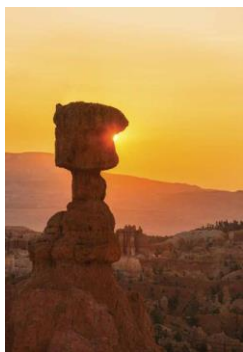
Thor's Hammer

Some people call hoodoos "fairy chimneys" because they look like something you might read about in a fairy tale

Fairy chimneys

Book of Knowledge: Write 2 or 3 things you learned from the article. Use complete sentences!

When Water Moves Sediments

This text is adapted from an original work of the Core Knowledge Foundation.

Glaciers, like this one in Alaska, are powerful forces that can cause erosion.

Erosion is any process or force that moves sediments to new locations. Wind and water both cause erosion. The tug of gravity pulls sediments out of wind and water. Flowing water picks up sediments and carries them downhill to new locations. A summer rain can wash fine sediments onto sidewalks and into gutters. A rushing mountain stream can sweep small stones into a valley. A flooded river can surge along with enough force to move large rocks many miles downstream.

As moving water slows, sediments sink to the bottom of the river or stream. The heaviest sediments are the first to be deposited. The finest sediments are the last. Layers of sediment accumulate at the mouths of rivers and on the bottoms of lakes. Vast layers of sediment are also deposited on the ocean floor over long periods of time. Like wind-deposited sediments, those laid down by water may someday be transformed into sedimentary rock.

Water doesn't have to be in its liquid state to erode sediments. Glaciers are enormous masses of ice found in polar regions and near the tops of tall mountains. Although ice is solid, glaciers do move. They flow—very, very slowly—downhill. As countless tons of ice creep over land or down mountainsides, they push, drag, and carry eroded sediments along. Moving glaciers also create sediments as they grind against rocks beside or below them. Glaciers are such powerful forces that they can carve huge U-shaped valleys through mountain ranges.

When glaciers melt, they deposit the sediments they have been carrying. About 20,000 years ago, glaciers covered large parts of North America, Europe, and Asia. As the climate warmed, the glaciers melted and retreated northward. They left behind massive deposits of sand, gravel, and silt, along with collections of rocks and boulders. You can still see these deposits as hills, mounds, and ridges on the landscape.

Book of Knowledge: Write 2 or 3 things you learned from the article. Use complete sentences!

Time, Weathering, and Erosion Shape Our World

This *text is excerpted from an original work of the Core Knowledge Foundation.*

The Grand Canyon

Weathering and erosion work slowly. It takes a long time to see their effects. Given time, these processes reshape Earth's surface on a scale so large it's almost impossible to grasp. For example, the Grand Canyon in the southwestern United States did not exist when dinosaurs roamed North America. Wind, rain, and the Colorado River slowly created it. These forces cut and shaped the landscape into what it is today—one of the world's largest canyons.

Millions of years ago, the Appalachian Mountains in eastern North America were a towering mountain range. The highest peaks may have been more than 20,000 feet above sea level. Weathering and erosion gradually wore the Appalachians down. Their highest point today is just 6,684 feet high. As permanent as mountains seem, weathering and erosion inevitably change them. Even Earth's tallest peaks—Everest in Asia, Aconcagua in South America, Africa's Kilimanjaro, and Europe's Mont Blanc—won't last. They will eventually be worn down by these endless geological processes. But don't worry. Other geological processes are creating new mountains to take their place.

Book of Knowledge: Write 2 or 3 things you learned from the article. Use complete sentences!

Physical Weathering at Work

This text is excerpted from an original work of the Core Knowledge Foundation.

The process of weathering breaks rock into smaller pieces. Some of these tiny pieces combine with once-living material to form topsoil. Other small pieces of rock collect as sediments. This breakdown of rocks happens as they interact with air, water, and living things. There are two basic types of weathering. One of them is physical weathering.

Physical weathering breaks big rocks into smaller ones without changing the minerals they contain. Widely swinging temperatures cause physical weathering. For example, rocks in a desert bake during the day beneath the sun's scorching heat. As rocks get hot, they expand. At night, temperatures in the desert fall. As rocks cool down, they contract, or shrink slightly. Expand, contract, expand, contract—this endless cycle gradually causes the rocks' outer layer to crumble or flake off.

Water also causes physical weathering. Water seeps into tiny cracks in rocks. If temperatures drop below freezing, the water turns to ice. Water expands as it freezes, pushing outward and enlarging the cracks. Geologists call this process ice wedging. Each time the water freezes, it opens cracks a little wider. Eventually, the rocks split apart. Ice wedging is what makes potholes in streets, too.


Examples of physical weathering

Plants and animals also cause rocks to weather. Tree roots squeeze into the cracks in rocks. As the roots grow, they act like wedges, forcing the cracks wider and wider. Eventually the rocks break apart. Badgers, chipmunks, and other animals burrow into cliffs and hillsides like tiny bulldozers. As they dig or tunnel into the ground, they push buried rocks to the surface where most weathering takes place.

Book of Knowledge: Write 2 or 3 things you learned from the article. Use complete sentences!

Sediments in the Wind
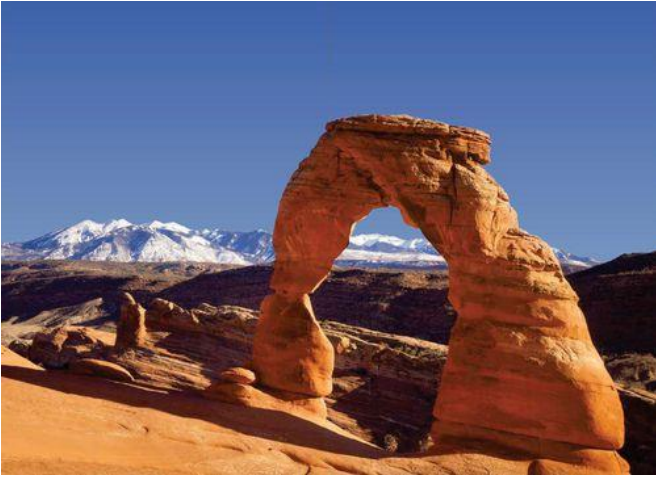
Delicate Arch, Arches National Park, Utah

Geologists describe erosion as any process or force that moves sediments to new locations. Wind, flowing water, moving ice, and gravity all transport sediments from place to place. These forces are the primary causes of erosion.

Have you ever stood on a sandy beach on a windy day? Did you notice that gusts of wind sent sand flying past? When air moves quickly across the ground, it picks up sediments and carries them away. Powerful winds can carry sediments for hundreds, even thousands, of miles.

On the windy beach, did your skin sting as it was struck by blowing sand? Wind carrying sediments can act like a sandblasting machine to wear away rocks in its path. When wind-driven sand hits rock, it chips off tiny pieces. The wind then whisks the pieces away. Over time, this form of weathering can polish rock surfaces or pepper them with tiny holes. It can shape huge blocks of rock into delicate stone arches and lofty towers. Weathering and wind erosion can also leave massive boulders balanced on slim supports. Have you seen wind-carved rocks like this?

As wind slows down, the sediments it carries fall back to Earth. They are deposited on land or in water. Where winds deposit sediments regularly, layers of sediment slowly build up. Over time, those layers may be transformed into sedimentary rock.

Book of Knowledge: Write 2 or 3 things you learned from the article. Use complete sentences!

How Can You Help?

Bullying doesn't affect just those who are bullied and those who bully; it has a huge impact on those who see the behavior!

The group of kids who witness bullying is really important. This group may not be getting bullied. They may not be bullying, but their reaction can make a big difference.

Think about it: Have you ever seen a group watching a fight? There are some who look, then walk away; there are others who watch and say nothing; and there are those who cheer it on.

How this group responds can really impact a situation.

Learn what you can do so that you have a positive influence!

Witnesses – What Can They Do?

If you see someone being bullied, speak up!

- When students are willing to say they think something is wrong, they can make a difference.
- Let others know that you don't accept bullying at your school, and others will be more willing to speak up, too.
- If you see bullying, you can tell a grown-up. Telling is not tattling. It's okay to tell. Reach out!
- Tell the kid who is being bullied that he or she doesn't deserve to be treated that way. Nobody does.
- Ask friends to join you in being a kid against bullying.

Telling vs. Tattling

A lot of kids say that they don't want to tell an adult about bullying because they don't want to be called a tattle-tale. But there's a big difference between "telling" and "tattling."

It's okay to tell an adult when you see bullying.

In fact, it's a really smart thing to do!

Telling done to protect yourself or another student from getting hurt. | **Tattling** done to get someone in trouble.

Comprehension Questions

1. Bullying doesn't affect only people who are bullied and people who bully. What other people does bullying have an impact on?

A. people who see bullying happening

B. people who do not realize bullying is going on

C. people who are tattle-tales

D. people who spend most of their time alone

2. The author contrasts telling with tattling. What is the difference between telling and tattling?

A. Telling is done by girls, but tattling is done by boys.

B. Telling is done by boys, but tattling is done by girls.
C. Telling is done to protect yourself or another student from getting hurt, but tattling is done to get someone

in trouble.
D. Telling is done to get someone in trouble, but tattling is done to protect yourself or another student from

getting hurt.

3. Read these sentences from the text.

"Have you ever seen a group watching a fight? There are some who look, then walk away; there are others who watch and say nothing; and there are those who cheer it on.

"How this group responds can really impact a situation. Learn what you can do so that you have a positive influence!

"If you see bullying, you can tell a grown-up. Telling is not tattling. It's okay to tell. Reach out!

Based on this evidence, what should people watching a fight probably do?

A. stand still until the fight ends

B. yell at the fighters

C. join the fight

D. tell a grown-up

4. Read this sentence from the text.

"Let others know that you don't accept bullying at your school, and others will be more willing to speak up, too."

Why might others be more willing to speak up if you let them know that you don't accept bullying?

   A. Knowing that you don't accept bullying makes others more afraid of speaking up.

   B. Knowing that you don't accept bullying makes others less afraid of speaking up.

   C. Knowing that you don't accept bullying makes others more likely to become bullies.

   D. Knowing that you don't accept bullying makes others unsure about what they should say.

5. What is the main idea of this text?

   A. Bullying affects those who are bullied as well as those who bully.

   B. When people are watching a fight, some of them cheer it on.

   C. Tattling is done to get someone in trouble.

   D. People who see bullying going on should speak up.

6. Read these sentences from the text.

"Bullying doesn't affect just those who are bullied and those who bully; it has a huge impact on those who see the behavior!

"The group of kids who witness bullying is really important. This group may not be getting bullied. They may not be bullying, but their reaction can make a big difference."

What does the word "witness" probably mean here?

   A. avoid

   B. support

   C. see

   D. dislike

7. Read this sentence from the text.

"Bullying doesn't affect just those who are bullied and those who bully; it has a huge impact on those who see the behavior!"

How could this sentence best be broken in two?

  A. Bullying doesn't affect just those who are bullied and those who bully. It never has a huge impact on those

     who see the behavior!
  B. Bullying doesn't affect just those who are bullied and those who bully. It also has a huge impact on those

     who see the behavior!
  C. Bullying doesn't affect just those who are bullied and those who bully. It instead has a huge impact on

     those who see the behavior!
  D. Bullying doesn't affect just those who are bullied and those who bully. It first has a huge impact on those

     who see the behavior!

8. Look at the box near the end of the article. According to the box, what is the purpose of "telling"?

9. If you see bullying, whom should you probably tell?

10. Read these sentences from the text.

"It's okay to tell an adult when you see bullying.

"In fact, it's a really smart thing to do!"

Why might telling an adult be a smart thing to do when you see bullying?

Support your answer with evidence from the text.

Review

Chapter 13

Perimeter and Area

Vocabulary Check

Use the word bank to complete each sentence.
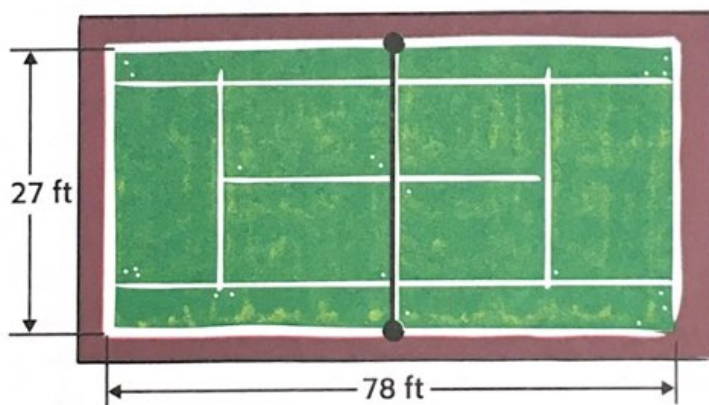
area   **perimeter**   **square units**   **unit square**

1. The distance around a figure is the _____.

2. _____ is the number of square units needed to cover a region or figure without any overlap.

3. Area is measured in _____.

4. A square with a side length of one unit is called a _____.
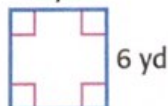
Concept Check

Look at the tennis court below. Find the perimeter and area.

27 ft

78 ft

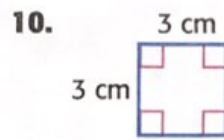5. Perimeter = _____

6. Area = _____

Find each perimeter.

7. 15 cm   3 cm   P = _____

8. 6 yd   6 yd   P = _____

Find each perimeter.

9.

12 in.

8 in.   8 in.

12 in.

$P =$ _____

10.

3 cm

3 cm
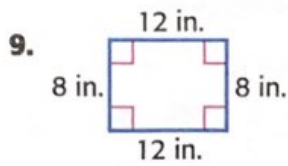
$P =$ _____

Find the area of each square or rectangle.

11.

$A =$ _____

12.

30 ft

10 ft

$A =$ _____

13.

12 cm

12 cm

$A =$ _____

14.

7 m

4 m
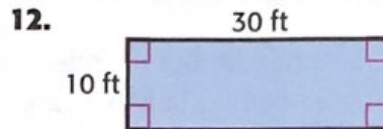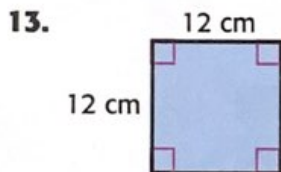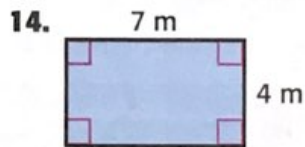
$A =$ _____

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15. Find the perimeter and area of the rectangle.

Perimeter: _____

Area: _____

Problem Solving

16. Rodolfo's ping pong table has an area of 45 square feet. The length is 9 feet. What is the perimeter of the ping pong table?

_____

17. Mr. Lobo is building a fence around his rectangular yard. It is 16 feet long and 14 feet wide. How many feet of fencing will he need?

_____

My Work!

18. Brett painted 3 walls. Each wall was 9 feet tall and 12 feet long. How much wall area did he paint?

_____

19. Is there a relationship between the area and the perimeter of a rectangle? Explain.

_____

_____

_____

Test Practice

20. Heidi ran two laps around the city block shown. How many feet did she run?
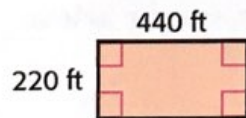
440 ft

220 ft

Ⓐ 660 ft

Ⓒ 1,320 ft

Ⓑ 880 ft

Ⓓ 2,640 ft

Customary Units of Length

Length is the measurement of a line between two points. Inch, foot, and yard are units that are part of the **customary system** of measure for length.
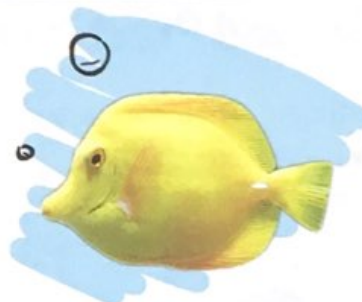
Math in My World
Tools Watch Tutor

Example 1

The actual size of a neon damsel marine fish is shown. How long is this fish to the nearest inch, $\frac{1}{2}$ inch, and $\frac{1}{4}$ inch?

1 **Measure to the nearest inch.**
Compare the length to what you know about inches. Record the length in the table.

2 **Measure to the nearest $\frac{1}{2}$ inch.**
Using a ruler, measure the length of the fish to the nearest $\frac{1}{2}$ inch. Record the length in the table.

3 **Measure to the nearest $\frac{1}{4}$ inch.**
Measure the length of the fish to the nearest $\frac{1}{4}$ inch. Record the length in the table.

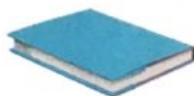| Length of Neon Damsel Marine Fish	
Nearest Inch	
Nearest $\frac{1}{2}$ inch	
Nearest $\frac{1}{4}$ inch	

An inch (in.) is about the length of one paper clip.

A **foot (ft)** is about the length of a textbook.

A **yard (yd)** is about the height of a chair.

Example 2

Tutor

Choose the best estimate for the length of the caterpillar.
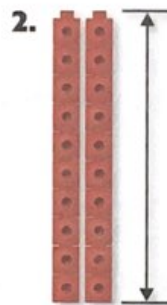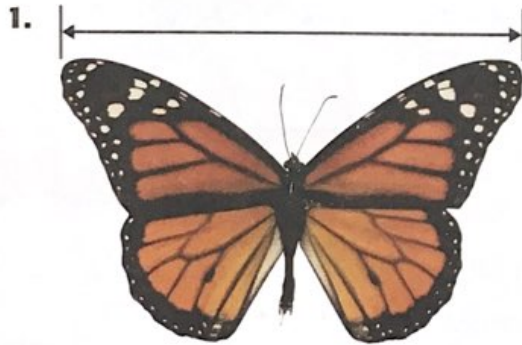
Ⓐ 2 inches

Ⓑ 20 inches

Ⓒ 20 feet

Ⓓ 2 yards

A caterpillar is small. So, inches are better estimates than feet or yards. Since 20 inches is more than a foot and is too big,

the best estimate is _____ .

Guided Practice

Check ✓

Estimate. Then measure each to the nearest inch, $\frac{1}{2}$ inch, and $\frac{1}{4}$ inch.

1.

2.

3. Choose the best estimate for the length.

Ⓐ 12 inches

Ⓑ 4 feet

Ⓒ 12 feet

Ⓓ 4 yards

Talk MATH

Why do you think there is more than one unit of length for measure?
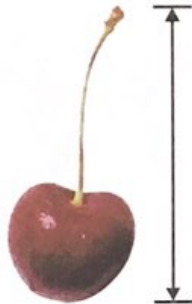
Independent Practice

Estimate. Then measure each to the nearest inch, $\frac{1}{2}$ inch, and $\frac{1}{4}$ inch.

4.

5.

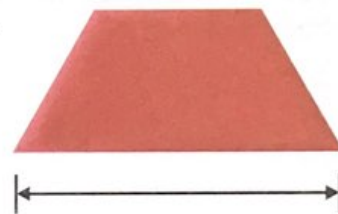**6.**

7.

Choose the best estimate for each length.

8. length of a whistle

    Ⓐ 2 yards

    Ⓑ 2 feet

    Ⓒ 12 inches

    Ⓓ 2 inches

9. length of a chalkboard

    Ⓕ 1 foot

    Ⓖ 2 feet

    Ⓗ 1 yard

    Ⓘ 2 yards

10. Patrice found a book that was $2\frac{1}{4}$ inches thick. She stacked it with another book that was the same thickness. How tall was the stack?

_____

11. Helki found a stick that was $5\frac{3}{4}$ feet long. He needed one that was about 5 feet long. Is it reasonable to say that this stick will work? Explain.

_____

_____

Mathematical
12. PRACTICE 4 Model Math Addison needs 6 feet of string for an art project. Her teacher gave her 3 pieces of string, each measuring $2\frac{1}{2}$ feet. Does she have enough string? Explain.

_____

_____

My Work!

HOT Problems

Mathematical
13. PRACTICE 5 Use Math Tools Find two objects in your classroom that are each longer than two inches and shorter than 4 inches. How did you use estimation in selecting objects?

_____

_____

_____

14. ? Building on the Essential Question Name two customary units of length. Which measurement is more accurate? Explain.
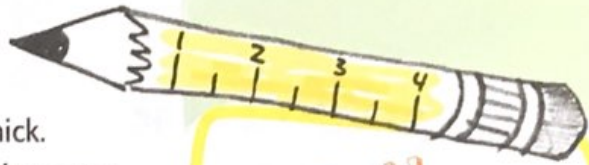
_____

_____

MY Homework

Homework Helper

eHelp

Need help? ⟋ connectED.mcgraw-hill.com

Estimate the length. Then measure to the nearest inch, $\frac{1}{2}$ inch, and $\frac{1}{4}$ inch.

1 Estimate.
Compare the length of the crayon to what you know about inches. You know that a paper clip is about 1 inch long. You can estimate that the crayon is about 3 paper clips, or 3 inches, long.

crayon

0   1   2   3   4   5   6
$\frac{1}{4}$ inches

2 Measure to the Nearest:
Inch: The length is closer to 3 inches than 4 inches.

$\frac{1}{2}$ **inch:** The length is closer to $3\frac{1}{2}$ inches than to 3 inches.
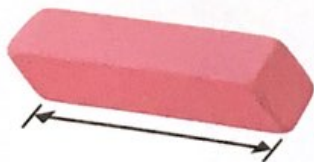
$\frac{1}{4}$ **inch:** The length is closer to $3\frac{1}{4}$ inches than to $3\frac{1}{2}$ inches.

So, the crayon is about 3 inches, $3\frac{1}{2}$ inches, or $3\frac{1}{4}$ inches long.
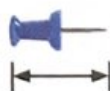
Practice

Estimate. Then measure each to the nearest inch, $\frac{1}{2}$ inch, and $\frac{1}{4}$ inch.

1.

2.

_____   _____

Which customary unit—inch, foot, or yard—is best for measuring the length of each of the following?

3. baseball _____

4. refrigerator _____

5. football field _____

6. jump rope _____

7. parking lot _____

8. shoe _____

Problem Solving

9. Brice needs 2 feet of ribbon to tie a bow around a birthday present. He has 3 feet of ribbon. Is that enough?

_____

10. Clark says that his parents' car is 96 units long. Jay says that his parents' car is 8 units long. Which customary unit of length was each person using?

_____

11. **Mathematical PRACTICE 1** **Check for Reasonableness** Glenna says that the height of her house is 1 yard. Is her claim reasonable?

_____

_____

Vocabulary Check

Write a vocabulary term in the correct space to complete each sentence.

customary   foot   yard

12. An inch is one kind of _____ unit for measuring length.

13. A textbook is about 1 _____ long.

14. A door is about 1 _____ wide.

Test Practice

15. Which is the best estimate for the length of a pencil?

Ⓐ 6 inches   Ⓑ 6 feet   Ⓒ 6 yards   Ⓓ 60 yards

Need more practice? Download Extra Practice at ⌁connectED.mcgraw-hill.com

Name

Convert Customary Units of Length

Lesson 2

ESSENTIAL QUESTION
Why do we convert measurements?

You can multiply to **convert**, or change between, units.

Customary Units of Length
1 foot (ft) = 12 inches (in.)
1 yard (yd) = 3 feet (ft)
1 **mile (mi)** = 5,280 feet (ft)

Math in My World

Watch   Tutor

Example 1

Marla's dog, Cory, loves to jump into water. Cory's longest jump is 7 yards. How many feet are in 7 yards?

You know the number of yards and want to find the number of feet. Yards are a larger unit than feet. One yard is 3 times as long as one foot. So, use multiplication.
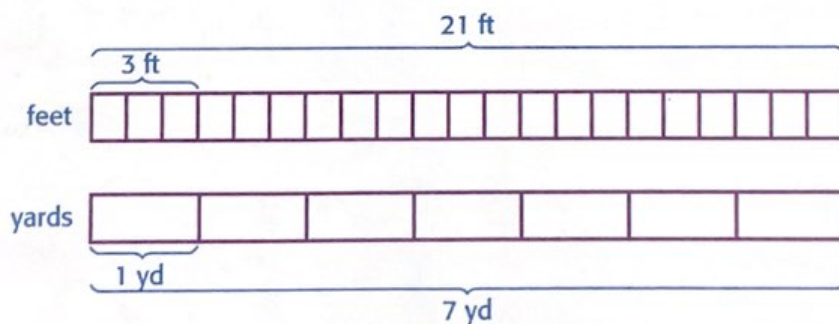
7 yd = ? ft

Multiply by 3 because 1 yard = 3 feet. $7 \times 3 =$ _____

So, there are _____ feet in 7 yards.

Check

You can check by drawing a picture. You know that 3 feet = 1 yard.

21 ft

3 ft

feet

yards

1 yd

7 yd

Independent Practice

Complete each conversion table.

3.

yards (yd)	feet (ft)	(yd, ft)
2		
3		
4		
5		

4.

yards (yd)	inches (in.)	(yd, in.)
2		
4		
5		
8		

5.

feet (ft)	inches (in.)	(ft, in.)
3		
6		
9		
12		

6.

feet (ft)	miles (mi)	(ft, mi)
	1	
	2	
	3	
	4	

Algebra Find each unknown number.

7. 11 ft = ■ in.

■ = _____

8. 18 yd = ■ ft

■ = _____

9. $2\frac{1}{3}$ yd = ■ ft

■ = _____

10. How many times longer is one yard than one foot? _____

11. How many times longer is one mile than one foot? _____

12. How many times shorter is one inch than one foot? _____

13. How many times shorter is one foot than one yard? _____

Problem Solving

14. Ramiro sits $5\frac{1}{2}$ feet from the bookshelf. Michelle sits 64 inches from the bookshelf. Who sits closer to the bookshelf?

_____

15. The Costa family hiked a trail that was 2 miles in one direction. How many feet was the hike round-trip?

_____

16. **Mathematical PRACTICE** 3 **Justify Conclusions** Sumi lives 2 miles from school. Valerie lives 10,542 feet from school. Who lives closer to school? Explain your answer.

_____

_____

HOT Problems

17. **Mathematical PRACTICE** 1 **Make Sense of Problems** Darin is 4 feet 10 inches tall. His brother is 68 inches tall. How many inches taller is Darin's brother than Darin?

_____

18. **Mathematical PRACTICE** 4 **Model Math** Write a real-world problem involving the conversion of customary lengths. Solve.

_____

_____

_____

19. ? **Building on the Essential Question** How are yards and feet related?

_____

_____

MY Homework

Homework Helper

eHelp

Need help? 🔗 connectED.mcgraw-hill.com

Andrew lives 2 miles from the school. How many feet from the school does Andrew live?

To convert miles to feet, multiply the number of miles measured by the number of feet in 1 mile. You know that 1 mile = 5,280 feet.

Customary Units of Length
1 foot (ft) = 12 inches (in.)
1 yard (yd) = 3 feet (ft)
1 **mile (mi)** = 5,280 feet (ft)

$$\begin{array}{r} \overset{1}{5,280} \\ \times \quad 2 \\ \hline 10,560 \end{array}$$ → 2 miles = 10,560 feet

So, Andrew lives 10,560 feet from the school.

Conversion table		
miles (mi)	feet (ft)	(mi, ft)
2	10,560	(2, 10,560)
4	21,120	(4, 21,120)
6	31,680	(6, 31,680)
8	42,240	(8, 42,240)

Practice

Convert units to complete each equation.

1. 3 ft = _____ in.

2. $6\frac{1}{2}$ ft = _____ in.

3. 4 yd = _____ in.

4. 760 yd = _____ ft

5. 7 ft = _____ in.

6. 3 yd = _____ in.

7. $2\frac{1}{3}$ yd = _____ ft

8. 5 ft = _____ in.

9. 64 ft = _____ in.

10. _____ in. = 3 yd

11. _____ ft = 7 yd

12. $12\frac{1}{2}$ ft = _____ in.

Draw lines to match the equivalent lengths.

13. 24 ft   • 60 ft

14. 120 in.   • 72 in.

15. 2 yd   • 180 in.

16. 5 yd   • 8 yd

17. 20 yd   • 10 ft

Problem Solving

18. **Mathematical PRACTICE 5** **Use Math Tools** The Millers' house is 25 yards from Mrs. Shapiro's house. How many feet apart are the two houses?

_____

19. Kate walks half a mile to the library. How many yards does she walk?

_____

20. Pe Ling needs 2 yards of fabric for a craft project. She has 3 feet already. How many inches of fabric does she still need?

_____

Vocabulary Check

Write a vocabulary term in the correct space to complete each sentence.

convert   mile

21. One _____ equals 5,280 feet.

22. To _____ from feet to inches, multiply by 12.

Test Practice

23. Matthew is 2 yards tall. How many inches tall is he?

Ⓐ 74 inches   Ⓒ 64 inches
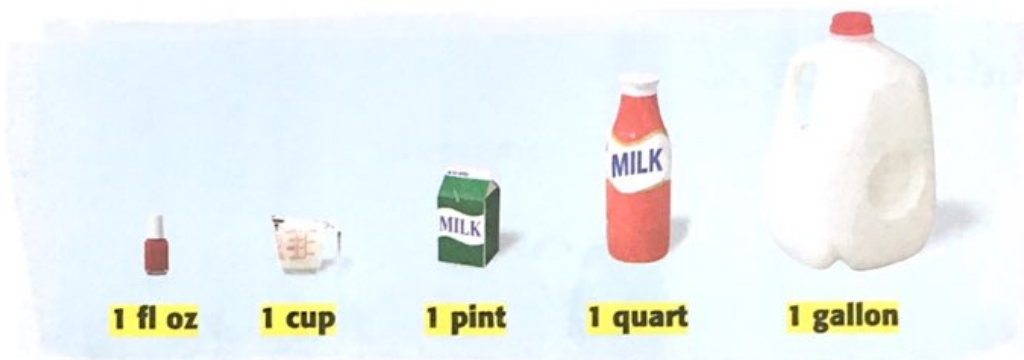
Ⓑ 72 inches   Ⓓ 60 inches

Name

Customary Units of Capacity

Lesson 3

ESSENTIAL QUESTION ❓
Why do we convert measurements?

The amount of liquid a container can hold is its **capacity**. Different containers measure different capacities.

1 fl oz   **1 cup**   **1 pint**   **1 quart**   **1 gallon**

Math in My World   Watch ▶   Tutor 💬

Example 1

Jorge is filling an aquarium. Which container should Jorge use to fill his aquarium most quickly?

1 cup   1 quart   1 gallon

To fill the aquarium most quickly, Jorge should use the container that will hold the most liquid.

The _____ is the largest unit. It will fill the aquarium most quickly.

Example 2 📱 Tutor

Nita is pouring salsa into a small bowl.
Is the most reasonable estimate for the
capacity of the bowl: 8 fluid ounces,
8 cups, 8 quarts, or 8 gallons?

The salsa is a small amount. So, 8 gallons,
8 quarts, and 8 cups are too large.

The most reasonable estimate for the

capacity of the bowl is _____ .

Guided Practice ✓ Check

Choose the most reasonable estimate for each capacity.

1.

Ⓐ 1 fluid ounce
Ⓑ 1 pint
Ⓒ 1 quart
Ⓓ 100 quarts

2.

Ⓕ 4 fluid ounces
Ⓖ 10 cups
Ⓗ 400 cups
Ⓘ 10 gallons

Talk MATH

Is it possible for
both of us to
have a capacity of
1 pint? Explain.

3.

Ⓐ 1 fluid ounce
Ⓑ 1 cup
Ⓒ 1 pint
Ⓓ 1 gallon

Whipping Cream
Pint (473 mL)
OPEN ▶
Whipping Cream

Ice Cream
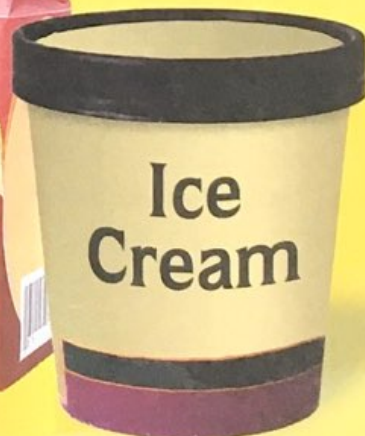
Name ....

Independent Practice

Choose the most reasonable estimate for each capacity.

4.

Ⓐ 12 fluid ounces

Ⓑ 1 gallon

Ⓒ 12 gallons

Ⓓ 12,000 gallons

5.

Ⓕ 2 fluid ounces

Ⓖ 2 cups

Ⓗ 2 pints

Ⓘ 2 gallons

6.

Ⓐ 1 fluid ounce

Ⓑ 1 cup

Ⓒ 1 quart

Ⓓ 1 gallon

7.

Ⓕ 8 fluid ounces

Ⓖ 8 cups

Ⓗ 8 pints

Ⓘ 8 gallons

8.

Ⓐ 1 quart

Ⓑ 10 quarts

Ⓒ 100 quarts

Ⓓ 1,000 quarts

9.

Ⓕ 16 gallons

Ⓖ 16 quarts

Ⓗ 16 fluid ounces

Ⓘ 16 cups

Estimate the capacity of each object.

10. water bottle

11. juice box

12. sink

_____

_____

_____

13. Is it faster to water two large flower pots using a 1-cup pitcher

or a 1-quart pitcher? _____

Problem Solving

Some household activities and the amount of water they consume are listed in the table. Use the table for Exercises 14 and 15.

Water Consumption	
Activity	**Water Used (gallons)**
Take shower	15–30
Brush teeth (water running)	1–2
Wash dishes (by hand)	20
Wash dishes (in dishwasher)	9–12
Flush toilet	5–7

14. If Callie takes one shower each day, is it reasonable to say that she could use 210 gallons of water in one week? Explain.

_____

_____

_____

15. **Mathematical PRACTICE 3** **Draw a Conclusion** Callie brushes her teeth three times each day. She leaves the water running. Is it reasonable to say that she uses 2 cups of water in one day? Explain.

_____

_____

_____

_____

My Work!

HOT Problems

16. **Mathematical PRACTICE 2** **Reason** Name two things in your classroom that can hold more than 1 cup.

_____

17. **Mathematical PRACTICE 3** **Find the Error** Alexander estimates the capacity of a small soup can to be about 1 fluid ounce. Find and correct his mistake.

_____

_____

18. **?** **Building on the Essential Question** Why do I measure capacity?

_____

Name _____

MY Homework

Lesson 3

Customary Units of Capacity

Homework Helper

Need help? connectED.mcgraw-hill.com

Ethan is pouring himself a drink of juice. Is it reasonable to say that he will pour about a gallon of juice? Explain.

You know that a large carton of milk is a gallon. That would be way too much for one drink. It is not reasonable to say that Ethan will pour about a gallon of juice.

One cup equals 8 fluid ounces. It would be more reasonable to say that Ethan is pouring one cup, or 8 fluid ounces, of juice.

Practice

Choose the best estimate for each capacity.

1.
   Ⓐ 1 fluid ounce
   Ⓑ 4 fluid ounces
   Ⓒ 1 cup
   Ⓓ 4 cups

2.
   Ⓕ 6 fluid ounces
   Ⓖ 16 fluid ounces
   Ⓗ 1 gallon
   Ⓘ 6 gallons

3.
   Ⓐ 50 gallons
   Ⓑ 50 pints
   Ⓒ 50 cups
   Ⓓ 50 ounces

4.
   Ⓕ 8 quarts
   Ⓖ 8 pints
   Ⓗ 8 cups
   Ⓘ 8 fluid ounces

Name _____

CCSS

Convert Customary Units of Capacity

Lesson 4

ESSENTIAL QUESTION
Why do we convert measurements?

You can use multiplication to convert units. To change from a larger unit to a smaller unit, multiply.

Customary Units of Capacity	
1 cup (c) = 8 fluid ounces (fl oz)	2 pints (pt) = 1 quart (qt)
2 cups (c) = 1 pint (pt)	4 quarts (qt) = 1 gallon (gal)

Math in My World
Watch Tutor

Example 1

Marcus has a 2-gallon container of laundry detergent. How many quarts of laundry detergent does he have? How many pints of laundry detergent does he have?

1 Find the number of quarts that are in 2 gallons.

Since quarts are smaller than gallons, multiply. Multiply by 4 because there are 4 quarts in each gallon.

$2 \times 4 =$ _____

So, there are _____ quarts in 2 gallons.

2 Find the number of pints that are in 8 quarts.

Multiply 8 by 2 because there are 2 pints in each quart.

$8 \times 2 =$ _____

So, there are _____ pints in 8 quarts.

Marcus has _____ quarts, or _____ pints, of laundry detergent.

Online Content at **connectED.mcgraw-hill.com**

Example 2 🖵 Tutor

Complete. $4\frac{1}{2}$ quarts = ▇ pints

Helpful Hint

When converting measures, there will be more smaller units than larger units.

1 **Convert the whole number.**

There are 2 pints in one quart.

Since pints are smaller than quarts, multiply. $4 \times 2 = $ _____

2 **Convert the fraction.**

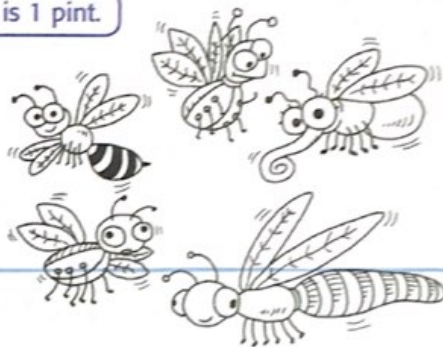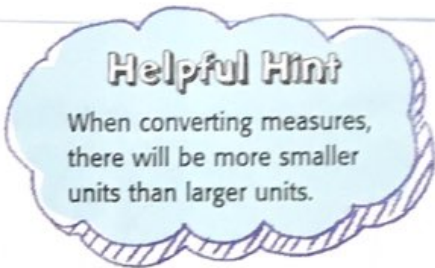Multiply. $\frac{1}{2} \times 2 = $ _____ ⟵ Half of 2 pints is 1 pint.

3 **Add the parts.**

$8 + 1 = $ _____

So, $4\frac{1}{2}$ quarts = _____ pints.

Guided Practice ✓ Check

Complete.

1. 10 qt = _____ pt **2.** $3\frac{1}{2}$ c = _____ fl oz **3.** 5 qt = _____ pt

Complete each conversion table.

4.

pints (pt)	cups (c)	(pt, c)
1		(1, 2)
2		
3		
4		

Talk MATH

Explain how to convert 6 pints to cups.

5.

gallons (gal)	quarts (qt)	(gal, qt)
2		
4		
6		
8		

Name
....

Independent Practice

Complete each conversion table.

6.

quarts (qt)	pints (pt)	(qt, pt)
1		
2		
3		
4		

7.

pints (pt)	cups (c)	(pt, c)
5		
7		
9		
11		

Algebra Find each unknown number.

8. $8 c = \blacksquare$ fl oz

$\blacksquare =$ _____

9. $6\frac{1}{2}$ gal $= \blacksquare$ qt

$\blacksquare =$ _____

10. $\blacksquare$ qt $= 5$ gal

$\blacksquare =$ _____

11. $5\frac{1}{2} c = \blacksquare$ fl oz

$\blacksquare =$ _____

12. $\blacksquare c = 15$ pt

$\blacksquare =$ _____

13. $16 c = \blacksquare$ fl oz

$\blacksquare =$ _____

Compare. Use >, <, or =.

14. 4 qt $\bigcirc$ 10 pt

15. 10 gal $\bigcirc$ 1,280 fl oz

16. 1 qt $\bigcirc$ 2 c

17. 1 gal $\bigcirc$ 16 c

18. 5 qt $\bigcirc$ 25 c

19. 12 fl oz $\bigcirc$ 2 c

20. How many times greater is the capacity of one gallon than one quart? _____

21. How many times greater is the capacity of one cup than one fluid ounce? _____

Problem Solving

22. Lucia is making 2 gallons of soup. How many cups of soup is Lucia making?

_____

23. Mathematical **PRACTICE** ⑤ **Use Math Tools** Tomas is buying a 2-cup container of liquid dish soap. How many fluid ounces of dish soap is he buying?

_____

24. Danielle is using 2 quarts of water in a recipe. How many cups of water is she using?

_____

25. Karen is buying 4 gallons of orange juice. How many quarts of orange juice is she buying?

_____

HOT Problems

26. Mathematical **PRACTICE** ③ **Which One Doesn't Belong?** Circle the measurement that does not belong with the other three. Explain your reasoning.

| 4 pints | 2 quarts | 8 cups | 1 gallon |

_____

27. ❓ **Building on the Essential Question** How are gallons and fluid ounces related?

_____

_____

_____

MY Homework

Lesson 4

Convert Customary Units of Capacity

Homework Helper

eHelp

Need help? connectED.mcgraw-hill.com

Chip needs 1 quart of cream for his ice cream recipe. He has 3 cups of cream. Is that enough for his recipe?

First, convert quarts to pints.

1 quart = 2 pints

Next, convert pints to cups.

$$2 \quad \times \quad 2 \quad = \quad 4 \text{ cups}$$

number of pints

number of cups in each pint

Conversion Table Customary Units of Capacity	
1 cup (c) = 8 fluid ounces (fl oz)
2 cups (c) = 1 pint (pt)
2 pints (pt) = 1 quart (qt)
4 quarts (qt) = 1 gallon (gal)

Chip has 3 cups of cream, but he needs 4 cups. He does not have enough cream for the recipe.

Practice

Convert units to complete each equation.

1. 9 pt = _____ c

2. 4 qt = _____ pt

3. 3 c = _____ fl oz

4. $9\frac{1}{2}$ gal = _____ qt

5. $5\frac{1}{2}$ pt = _____ c

6. 6 gal = _____ qt