Week #3 Fourth Grade Weekly Planner: May 4th - May 8th

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: "Volcanoes"** 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: "Volcanoes"** ☐ 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: "The Magic Glasses"** ☐ Read the text in "The Magic Glasses" ☐ 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**: Check My Progress pg. 721-722 **Tuesday:** ☐ **Math Facts 10 min:** Xtra Math or flash cards ☐ **My Math Book**: Ch. 11 Lesson 5 pg. 723-728	**Wednesday:** ☐ **Math Facts 10 min:** Xtra Math or flash cards ☐ **My Math Book**: Ch. 11 Lesson 6 pg. 729-734 **Thursday:** ☐ **Math Facts 10 min:** Xtra Math or flash cards ☐ **My Math Book**: Ch. 11 Lesson 7 pg. 735-740	**Friday:** ☐ **Math Facts 10 min:** Xtra Math or flash cards ☐ **My Math Book**: Check My Progress pg. 741-742 ***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:** *You're a paleontologist and found a new fossil. Describe it and where it came from.* ☐ **Tuesday's Prompt:** *You're a 49er coming to California for the Gold Rush. Describe your journey.*	☐ **Wednesday's Prompt:** *Write an opinion paragraph about your favorite activity you do outside. (sport, game, etc.)* ☐ **Thursday's Prompt:** *Write an informative paragraph about one of your teachers. (facts only)*	☐ **Friday's Prompt:** *Write a conversation you would like to have with your favorite celebrity.* **Parent initial _____ to verify daily writing**

SCIENCE **Science Studies Weekly**	***Read all articles for:*** ***Fry/Tito Week #4: Weather and Climate*** ***Greer Week #8: Our Body's Systems*** ***LaCourse Week #3: Soil*** **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 #31: Migration to California*** ***Greer Week #26: Compromise of 1850*** ***LaCourse Week #28: The Stagecoach, Pony Express and Telegraph*** **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**

A Garden of Geysers

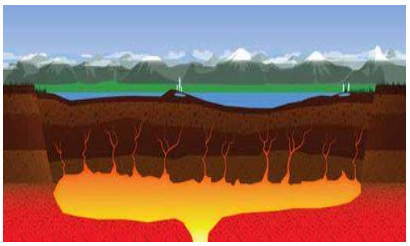
This text is excerpted from an original work of the Core Knowledge Foundation.

Old Faithful in Yellowstone National Park

Have you ever been to Yellowstone National Park? If so, you've stood over North America's largest hotspot. A great plume of magma rises from the mantle at this spot. It fills an enormous magma chamber beneath Earth's crust. In short, Yellowstone sits on top of one of the world's largest volcanoes. Geologists call it a supervolcano.

Heat from the magma beneath Yellowstone is what creates the park's hot springs and geysers. Geysers are hot springs that periodically erupt, like volcanoes of hot water. Geysers form when water drains down into openings in the ground above the magma chamber. Heat from the magma turns the water scalding hot. As the hot water rises back up through the openings, some of it turns to steam. This increases the pressure, forcing the mixture of steam and hot water to rush and bubble upward. When it reaches the surface, a hissing fountain of hot water and steam explodes out of the ground. Yellowstone's most famous geyser is called Old Faithful. It got its name because it erupts reliably more than a dozen times a day.

Magma itself hasn't erupted from the Yellowstone hotspot for hundreds of years. Could the Yellowstone supervolcano erupt again? It's possible, geologists say, but most doubt it will happen anytime soon.



Yellowstone National Park's geysers and hot springs are all created by the heat of the huge pool of magma below the ground.

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

Action at the Edge

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

If you wanted to see a lot of volcanoes, where would you look? Volcanoes form where there are cracks and weak spots in Earth's crust. You'll find those mostly along the boundaries of tectonic plates that are moving apart. Volcanoes are also common where two plates are slowly colliding and one plate is subducting under the other.

Most of the world's volcanoes form along the boundaries of tectonic plates. Volcanoes around the Ring of Fire are good examples of this.

The Pacific Plate is one of Earth's largest tectonic plates. It lies beneath the Pacific Ocean. Along its boundaries, the Pacific Plate is subducting under several other plates. Geologists call the places where this is happening subduction zones. Deep ocean trenches and many volcanoes have formed along subduction zones. This is because the edge of a subducting plate melts as it descends into Earth's hot mantle. Magma moves up through cracks in the crust and erupts to form volcanoes above the subduction zone.

More than 450 active volcanoes lie around the edges of the Pacific Plate. Those are just the ones on land! Many more rise up from the seafloor and are hidden beneath the ocean's surface. Together, all these volcanoes form what is called the Ring of Fire around much of the Pacific Ocean. It is one of the most volcanically active regions on Earth.

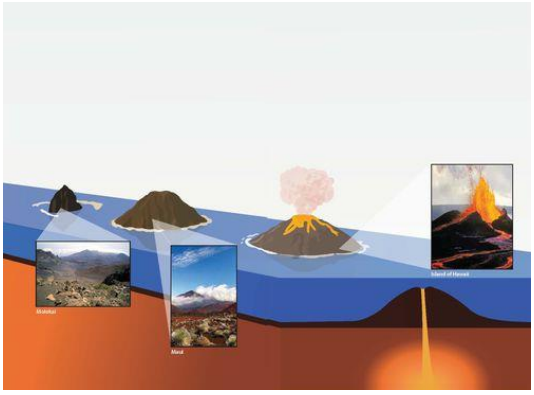
Book of Knowledge: Write 2 or 3 things you learned from the article. Use complete sentences!

Hotspots

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

While many volcanoes form along plate boundaries, not all of them do. Some occur in places that geologists call hotspots. A hotspot is a very hot region deep within the mantle. A huge magma chamber forms beneath Earth's crust at a hotspot. Magma periodically erupts from the chamber through cracks in the crust.

Geologists have identified dozens of hotspots worldwide. Some are beneath continental crust. Others are beneath oceanic crust. Hotspots underneath oceanic crust have formed many islands. The process begins when magma erupting from a hotspot forms a volcano on the seafloor. With repeated eruptions, the volcano grows taller and taller over time. Eventually the top of the volcano may rise above the ocean's surface and form an island.



Several miles to the southeast of Hawaii, there is an underwater volcano called Loihi. Scientists estimate its top will reach the sea surface in tens of thousands of years.

Over a very long period of time, ocean hotspots may form chains of islands. This is because hotspots remain in the same place while tectonic plates slowly keep moving. The Hawaiian Islands, for example, were formed by a hotspot located beneath the middle of the Pacific Plate. The island of Kauai formed about 5 million years ago. It began as an undersea volcano, then grew tall enough to rise above the water. As the Pacific Plate inched its way northwest, however, Kauai moved along with it. At some point, the island was no longer directly above the hotspot. A new underwater volcano began forming on the seafloor. This volcano grew to form the island of Oahu. Next came the island of Molokai, then Maui, and finally the island of Hawaii. Hawaii currently lies over the hotspot, which is why it has so many active volcanoes. Eventually, Hawaii will drift away from the hotspot and a new island will begin to form.

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

Earth's Fiery Volcanoes

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

Imagine seeing new land form right before your eyes. You can do just that on the island of Hawaii in the Hawaiian Island chain. There, the Kilauea volcano has been erupting continuously since 1983. At times, red-hot lava shoots out of the crater at the volcano's top. More often, lava oozes out of cracks on the volcano's sides. As the lava flows downhill, it cools and hardens into volcanic rock. When lava flows all the way to the ocean, it cools to form rock along the shore. This adds new land to the island, making it a little bigger than it was before.

Erupting volcanoes are dramatic natural events. They can be a creative force, adding new land—even whole islands—to our planet. They also bring minerals from deep inside the earth to the surface. However, volcanoes can be dangerous and destructive. Large volcanic eruptions can flatten entire forests. They can fill the air with poisonous gases and hot, choking ash. They can release rivers of lava that burn and bury everything in their path. Erupting volcanoes can also trigger earthquakes, tsunamis, and landslides.

Erupting volcanoes can even change the weather all around the world. In the spring of 1815, a volcano called Tambora erupted in Indonesia. It was the largest volcanic eruption in recorded history. Tambora's eruption blasted enormous amounts of ash high into the atmosphere. In the months that followed, winds distributed the ash around the globe. The fine ash particles in the air blocked some of the sunlight reaching Earth's surface. Less sunlight meant less warmth. Because of Tambora, the weather was much colder than normal in 1816. There were hard frosts in New England all summer long. A foot of snow fell in eastern Canada in June. Weeks of cold rain killed most of the crops in Europe. Many people called 1816 "the year without a summer."

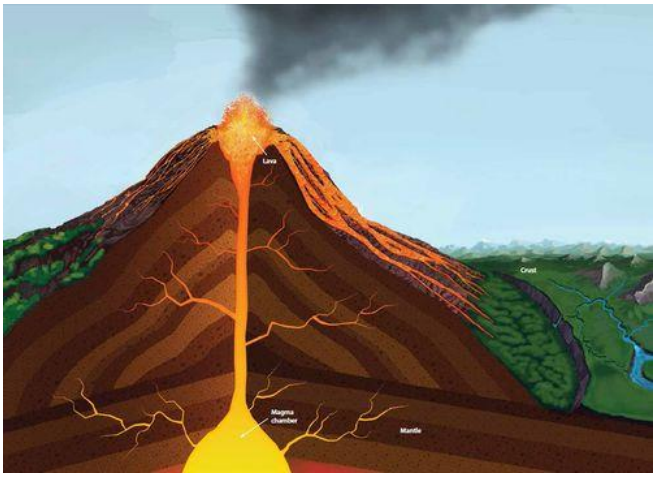
Book of Knowledge: Write 2 or 3 things you learned from the article. Use complete sentences!

What Is a Volcano?

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

A volcano is a hill or mountain that forms over a crack in Earth's crust from which lava erupts. The crack leads down to a chamber, or huge space, filled with magma, which comes from the mantle. Tremendous pressure and heat in the mantle force magma in the chamber upward through the crack. If the pressure is great enough, magma erupts on the surface as lava.

Some volcanic eruptions are relatively calm and quiet whereas others are sudden and violent. Each time lava erupts, a new layer of rock forms, making the volcano bigger and bigger. Many volcanoes gradually become high, cone-shaped mountains. Mount Vesuvius in Italy and Mount Fuji in Japan are good examples of volcanoes with this distinctive shape.



Vesuvius and Fuji have something else in common. They are active volcanoes. An active volcano is one that has erupted in the past 10,000 years and is likely to erupt again. When an active volcano hasn't erupted in a long time, it is considered a dormant volcano. Extinct volcanoes are those that have not erupted for at least 10,000 years.

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

The Magic Glasses (ReadWorks)

Violet had always worn glasses, for as long as she could remember. Being ten years old, it was possible she'd been wearing them for ten years. Maybe she was born with glasses!

Violet couldn't see things that were far away from her, but she also had trouble reading. Her eyesight was very poor.

Sometimes, while she was doing her homework in study hall, her glasses would slide down to the tip of her nose. Once, they even fell off her face and landed on the floor.

"Violet, what's going on?" her teacher, Mrs. Shellsworth, asked when she saw Violet crawling on the floor once with her hands stretched out.

"I can't find my glasses," replied Violet, shyly. The rest of the students looked up from their books and started to laugh.

When Violet found the brown specs behind her desk, she quickly put them back onto her face. But they wouldn't stay on; they were broken.

Not wanting to draw any more attention to herself, Violet held her glasses onto her face with her index finger and pretended to read.

That night, she told her mother what had happened.

"We're going to have to get you new glasses," she said, sternly. Violet's mother was a doctor, and she worked long hours. When she came home, she was often too tired to do much of anything other than watch television with Violet. Her father didn't live with her. He'd moved out of the house when Violet was just a little girl. She visited her father on weekends, though. He lived in a nearby town and always took her to baseball games in the summer.

But it wasn't summer yet. Violet still had three months left of school, and that meant three more months of being made fun of because of her silly loose glasses.

Violet hated her glasses.

The day after her glasses had fallen to the floor, Violet's mother took her to the eye doctor. They did all sorts of tests to see whether she needed a new prescription. After the tests, which showed that her eyes had gotten worse since the last time she'd been there, it was time to pick out new glasses frames.

Violet looked at the shiny glass case that was almost as tall as she was. There were boring brown frames and simple black frames. But there were also some pink and blue frames, and even some sparkly yellow frames.

"Mom, can I get those?" Violet said, pointing to the sparkly yellow frames.

"No, you cannot. Those glasses are not appropriate for school," said her mother tersely.

"But…" said Violet.

"No 'buts.' You will get these frames right here," said her mother, pointing to some round gray glasses that Violet hadn't even noticed.

Violet was sad, but there was no use arguing with her mother. She was stuck with the gray frames.

Still, Violet wasn't about to put them on right away. She decided to pout, instead, all the way home.

The next day was a Saturday. It was raining hard, and Violet wouldn't have gone outside if her father weren't coming to take her to the movies.

"You all ready, Bug?" her dad asked, when he came to pick her up. He always called her Bug. "Where are your glasses?" he asked, when he saw her squinting up at him.

“I got new ones,” said Violet. Worried that her father wouldn’t like them, she’d put them in her backpack and was going to wear them in the dark theater where she knew no one could see them.

“Well, where are they?” he said.

Violet, not wanting to cause a scene, reached into her bag and put the round gray frames onto her face. She didn’t like them and was hoping maybe she could convince her dad to buy her new ones.

On the way to the movie theater, she noticed something very strange while peering through her new glasses. Way in the distance, a small bird was smiling at her. Flapping its wings and smiling.

That can’t be right, she thought. Then she looked around and noticed that other birds were making faces as well. A pigeon in a tree almost a mile away looked as if it had smelled something strange; its beak was twisted to the side as if in disgust. Then, on the sidewalk near a park they were approaching, she could see a squirrel sneeze, rub its nose, then move its lips as if to say, “Excuse me!”

Immediately, she pulled the glasses off of her face, in shock.

“What’s wrong?” asked her father.

But Violet didn’t want to say what she had seen. Were animals supposed to be so animated? Were these magical glasses?

She didn’t know, but one thing was for sure: she’d never seen such things before in her life, and she wanted to see more.

Slowly, she put the glasses back on. They were almost at the movie theater, so she made sure to look at as many trees as possible in search of more squirrels, more birds, and more little creatures.

Pushing her face up against the car window to her right, she started to stare intently and noticed a man walking his dog. The man was walking slowly, playing with his cell phone while his white poodle was pulling hard on its leash. Violet started to focus on the poodle, and she could have sworn she saw the pet roll its eyes and shake its head.

“Hurry up!” she said loudly, as her car went by the man with the cell phone. “Your dog is getting bored!”

“Excuse me?” said her father. “Who are you yelling at?”

“Oh, nothing,” said Violet. Her new glasses were her little secret, for now. And she couldn’t wait to explore the world through a new set of eyes!

Comprehension Questions

1. Violet visits the eye doctor after her glasses break. What happens when she visits the eye doctor?

A. She refuses to do eye tests.

B. She breaks her new pair of glasses.

C. The doctor gives her medicine for her eyes.

D. She gets a new pair of glasses.

2. When in the story does Violet want to wear her glasses?

A. at the beginning of the story

B. in the middle of the story

C. at the end of the story

D. at the beginning and the end of the story

3. Violet hated her old glasses. What sentence from the story provides a clue about why Violet feels this way?

A. “Violet couldn’t see things that were far away from her, but she also had trouble reading.”

B. “Violet still had three months left of school, and that meant three more months of being made fun of because of her silly loose glasses.”

C. “It was raining hard, and Violet wouldn’t have gone outside if her father weren’t coming to take her to the movies.”

D. “Violet started to focus on the poodle, and she could have sworn she saw the pet roll its eyes and shake its head.”

4. How does Violet feel about her glasses at the end of the story?

A. angry C. upset

B. excited D. sad

C. **5.** What is this story mainly about?

A. a girl whose feelings about wearing glasses change after she gets a new pair that lets her see facial expressions on animals

B. a girl who goes on a trip to the eye doctor with her mother and gets upset when she is not allowed to choose new glasses with sparkly yellow frames

C. a pair of glasses that slide down to the tip of a girl’s nose and finally break after falling off her face

D. a pair of glasses that a girl has to hold against her face after she finds them lying broken on the floor behind her desk

6. Read the following sentences: “Violet had always worn glasses, for as long as she could remember. Being ten years old, it was possible she’d been wearing them for ten years. **Maybe she was born with glasses!**”

Why does the author write, **“Maybe she was born with glasses!”**

A. The author is making a joke to show readers how long Violet feels like she has been wearing glasses.
B. The author is describing what Violet felt like on the day that she was born to show readers how unhappy she is.
C. The author is including a detail to help readers understand what it would be like to have the name “Violet.”
D. The author is providing a summary of all the events in the story to help readers keep track of them.

7. Choose the answer that best completes the sentence below.

Violet puts on her new glasses _____ her dad asks where they are.

A. after
B. although
C. before
D. like

8. What is the first strange thing Violet notices after she puts on her new glasses?

9. At the end of the story, Violet cannot wait to explore the world through a new set of eyes. What does the author mean by “a new set of eyes”?

10. Why is Violet excited to explore the world through a new set of eyes?

Check My Progress

Vocabulary Check

Circle the word(s) that completes each sentence.

1. Foot, cup, and gallon are all units in the (**customary system** **capacity**).
2. There are 2 (**quarts** **cups**) in a pint.
3. In order to (**convert** **pint**) yards to feet, multiply the number of yards by 3.
4. Quart and gallon are units of (**capacity** **yards**).
5. There are 5,280 feet in 1 (**yard** **mile**).

Draw lines to match the measurements that are equal.

6. 1 **foot**	• 16 **quarts**
7. 32 **fluid ounces**	• 12 **inches**
8. 4 **gallons**	• 2 **pints**

Concept Check

Complete each conversion table.

9.

yards (yd)	feet (ft)	(yd, ft)
1		
3		
5		
7		

10.

quarts (qt)	cups (c)	(qt, c)
2		
3		
4		
5		

Problem Solving

11. Mateo is making 2 gallons of fruit punch. How many pints of fruit punch is he making?

_____

12. Gwenith has 3 gallons of milk. How many quarts of milk does she have?

_____

13. Boa constrictors can grow to 13 feet long. How many inches is this?

_____

My Work!

Test Practice

14. Which of the following holds about 1 quart of water?

Ⓐ 

Ⓑ 

Ⓒ 

Ⓓ 

Name .....

Measurement and Data
4.MD.1, 4.MD.2
CCSS

Customary Units of Weight

Lesson 5
ESSENTIAL QUESTION
Why do we convert measurements?

The **weight** of an object is how heavy it is. The customary units of weight are ounce (oz), pound (lb), and ton (T).

1 ounce (oz) **1 pound (lb)** **1 ton (T)**

Math in My World

Watch Tutor

Example 1

Suzie's father bought some sugar for their favorite recipe. Which is a more reasonable unit to use for the weight of a bag of sugar, ounces or pounds?

A small packet of sugar would be weighed in ounces.

A bag of sugar is much larger and would be weighed in pounds.

So, _____ is a reasonable unit to use for the weight of a bag of sugar.

Example 2

Which is the most reasonable estimate for the weight of a leaf: 1 ounce, 1 pound, 1 ton, or 10 tons?

Compare the weight of a leaf to the weight of objects that you know.

A leaf weighs less than a pineapple or 1 pound.

Objects that weigh less than 1 pound are weighed in ounces. The only option that contains ounces is 1 ounce.

So, a leaf weighs about _____.

Guided Practice

Choose the best estimate for the weight of each object.

1. paper airplane

Ⓐ 4 ounces
Ⓑ 40 ounces
Ⓒ 4 pounds
Ⓓ 4 tons

2. helicopter

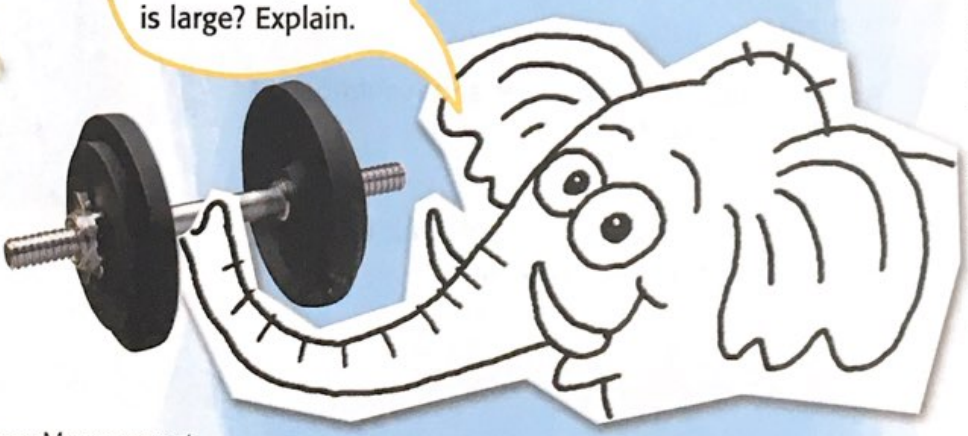
Ⓕ 5 ounces
Ⓖ 500 ounces
Ⓗ 5 tons
Ⓘ 500 tons

3. rabbit

Ⓐ 4 ounces
Ⓑ 4 pounds
Ⓒ 40 pounds
Ⓓ 4 tons

Talk MATH

Does an object that is small always weigh less than an object that is large? Explain.



Name _____

CCSS

Independent Practice

Choose the best estimate for the weight of each object.

4.

Ⓐ 1 ounce
Ⓑ 11 ounces
Ⓒ 1 pound
Ⓓ 1 ton

5.

Ⓕ 20 ounces
Ⓖ 20 pounds
Ⓗ 200 pounds
Ⓘ 20 tons

6.

Ⓐ 4 ounces
Ⓑ 4 pounds
Ⓒ 400 pounds
Ⓓ 4 tons

7.

Ⓕ 3 ounces
Ⓖ 3 pounds
Ⓗ 300 pounds
Ⓘ 3 tons

8.

Ⓐ 2 ounces
Ⓑ 2 pounds
Ⓒ 20 pounds
Ⓓ 2 tons

9.

Ⓕ 18 ounces
Ⓖ 18 pounds
Ⓗ 180 pounds
Ⓘ 1 ton

10. Is it more reasonable to say that a pair of shoes weighs 1 ounce, 1 pound, or 1 ton?

_____

11. Is it more reasonable to say that a pencil weighs 2 ounces, 2 pounds, or 2 tons?

_____

Problem Solving

My Work!

Mathematical PRACTICE 6

12. Be Precise Which is most reasonable for the weight of two thoroughbred horses: 1 ounce, 1 pound, or 1 ton? Explain.

13. Using your answer from Exercise 12, what is a reasonable estimate for the weight of four thoroughbred horses? Explain.

14. Using your answer from Exercise 12, is it reasonable to say that a herd of eight thoroughbred horses weighs 2 tons? Explain.

HOT Problems

Mathematical PRACTICE 5

15. Use Math Tools Estimate the weight of three objects in your desk. Order the objects from greatest to least weight.

16. Building on the Essential Question How do you estimate weight?

Name .....

Measurement and Data
4.MD.1, 4.MD.2
CCSS

MY Homework

Lesson 5
Customary Units of Weight

Homework Helper

eHelp

Need help? connectED.mcgraw-hill.com

Which is the best estimate for the weight of Ellie's little dog: 5 ounces, 5 pounds, or 5 tons?

You know that objects that weigh less than 1 pound are measured in ounces. It is not likely that the dog weighs less than 1 pound. Objects that are quite heavy are weighed in tons. The dog is not extremely heavy.

So, the best estimate for the weight of Ellie's dog is 5 pounds.

Practice

Choose the best estimate for the weight of each object.

1.

Ⓐ 6 ounces
Ⓑ 6 pounds
Ⓒ 60 pounds
Ⓓ 6 tons

2.

Ⓕ 70 pounds
Ⓖ 7 pounds
Ⓗ 70 ounces
Ⓘ 7 ounces

3.

Ⓐ 20 tons
Ⓑ 200 pounds
Ⓒ 20 pounds
Ⓓ 2,000 ounces

4.

Ⓕ 8 ounces
Ⓖ 80 ounces
Ⓗ 8 pounds
Ⓘ 80 pounds

Draw lines to match each object to its reasonable weight.

5. textbook	• 2 ounces
6. whale	• 40 tons
7. golf ball	• 1 pound
8. car	• 5 pounds
9. can of soup	• 1.5 tons

Problem Solving

Mathematical PRACTICE 1 **10. Check for Reasonableness** Jesse claims that his goldfish weighs about 4 pounds. Is Jesse's claim reasonable? Explain.

_____

11. Tasha claims that her skateboard weighs about 3 pounds. Is Tasha's claim reasonable? Explain.

_____

Vocabulary Check

12. Write a definition for the term weight.

_____

_____

13. Order the units of weight from *greatest* to *least*: pound (lb), ounce (oz), ton (T).

_____

Test Practice

14. Which animal's weight is closest to 1 pound?

Ⓐ an ant Ⓒ a mosquito

Ⓑ a lion Ⓓ a robin

Name _____

Measurement and Data
4.MD.1, 4.MD.2
CCSS

Convert Customary Units of Weight

Lesson 6

ESSENTIAL QUESTION
Why do we convert measurements?

Recall that to convert from a larger unit to a smaller unit, multiply.

1 pound (lb) = 16 ounces (oz)

Multiply by 16.

Math in My World

Watch Tutor

Example 1

Leigh needs to buy 4 pounds of vegetable burger patties. The table shows the number of ounces in each package of patties. How many packages will Leigh need to buy?

Vegetable Burger Patties	
Packages	Number of Ounces
1	32
2	64
3	96
4	128

Convert 4 pounds to ounces.

Because pounds are larger than ounces, multiply.

There are 16 ounces in a pound, so multiply 4 by 16.

$4 \times 16 =$ _____

4 pounds = _____ ounces

So, Leigh will need to buy _____ package(s).

$$\begin{array}{r} \square \\ 16 \\ \times\ 4 \\ \hline \square\square \end{array}$$

A ton is a very heavy unit of measurement. There are 2,000 pounds in 1 ton.

Example 2

Tutor

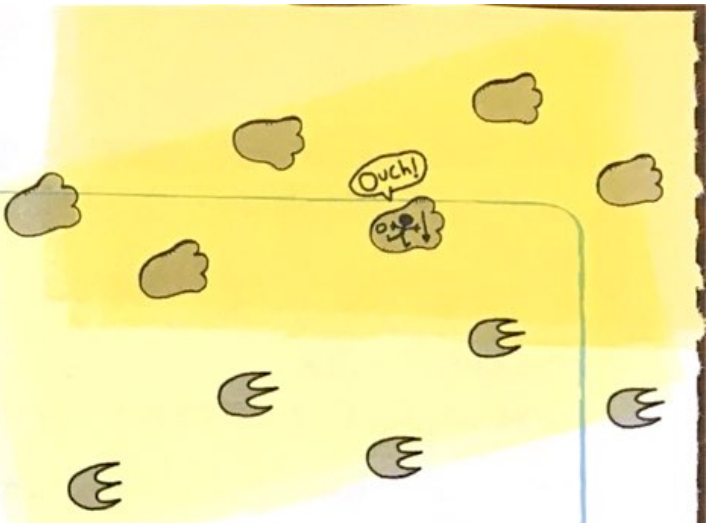
Use the table to find how many pounds a Stegosaurus weighed.

Dinosaur Weights	
Dinosaur	Weight (tons)
Allosaurus	2
Megalosaurus	1
Stegosaurus	3
Supersaurus	60
Tyrannosaurus	8

To find the weight of a Stegosaurus in pounds, multiply the number of tons by 2,000.

$3 \times 2{,}000 =$ _____

So, a Stegosaurus weighed _____ pounds.



Helpful Hint

$3 \times 2 = 6$
$3 \times 20 = 60$
$3 \times 200 = 600$
So, $3 \times 2{,}000 = 6{,}000$.

Guided Practice

Check

Complete each conversion table.

1.

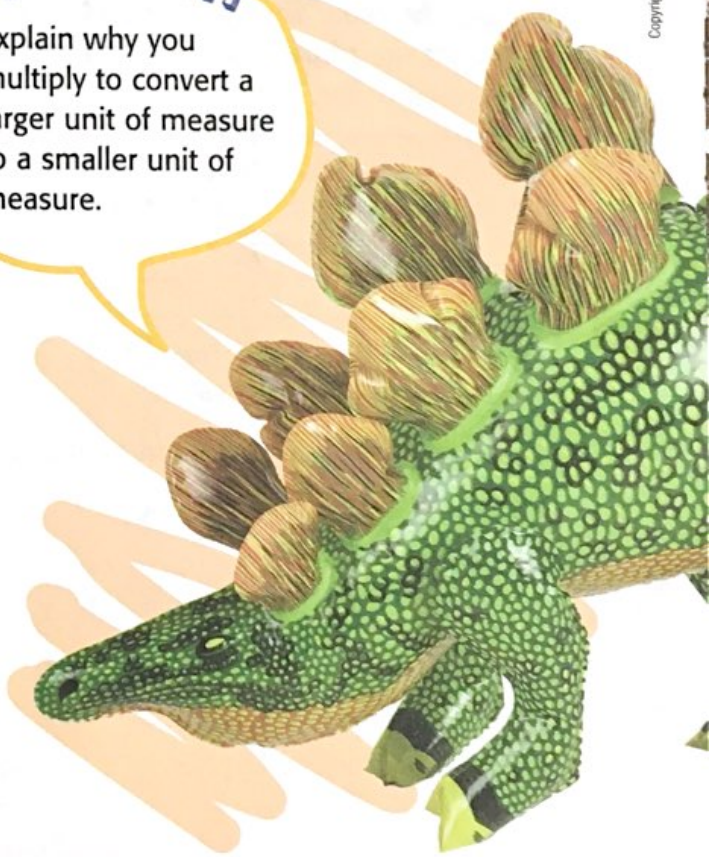
pounds (lb)	ounces (oz)	(lb, oz)
2		(2, 32)
3		
4		
5		

2.

tons (T)	pounds (lb)	(T, lb)
2		
4		
6		
8		

Talk MATH

Explain why you multiply to convert a larger unit of measure to a smaller unit of measure.



Name _____

CCSS

Independent Practice

Complete each conversion table.

3.

pounds (lb)	ounces (oz)	(lb, oz)
6		
8		
10		
12		

4.

tons (T)	pounds (lb)	(T, lb)
2		
3		
5		
7		

Algebra **Find each unknown number.**

5. 3 T = ■ lb

■ = _____

6. ■ oz = 2 lb

■ = _____

7. ■ lb = 6 T

■ = _____

8. $4\frac{1}{2}$ lb = ■ oz

■ = _____

9. ■ oz = 10 lb

■ = _____

10. 4 T = ■ lb

■ = _____

11. 5 lb = ■ oz

■ = _____

12. ■ lb = 3 T

■ = _____

13. ■ oz = $11\frac{1}{4}$ lb

■ = _____

14. Circle the table that represents the correct relationship between pounds and ounces.

Pounds	1	2	3	4
Ounces	16	32	48	64

Pounds	1	2	3	4
Ounces	16	24	32	40

Pounds	1	2	3	4
Ounces	8	16	24	32

Pounds	16	32	48	64
Ounces	1	2	3	4

Problem Solving

Baby animals weigh different amounts at birth.

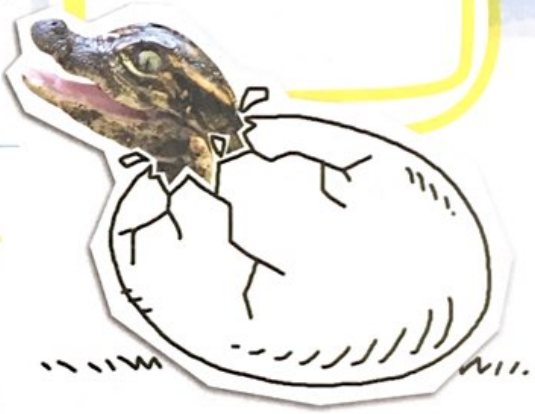
Animal	Birth Weight
Alligator	2 ounces
Giraffe	100–150 pounds
Giant panda	3–5 ounces
Walrus	100–160 pounds

15. What is the least weight of a baby giraffe in ounces?

16. What is the greatest weight of a baby walrus in ounces?

17. Mathematical PRACTICE 4 **Model Math** If a baby walrus weighs 100 pounds, how many more ounces does it weigh than a baby alligator?

My Work!



HOT Problems

18. Mathematical PRACTICE 1 **Plan Your Solution** Tiffany weighed 7 pounds 12 ounces when she was born. Her weight doubled after four months. How much did Tiffany weigh after four months?

19. **Building on the Essential Question** How can I convert measurements of weight?

Name .....

Measurement and Data
4.MD.1, 4.MD.2
CCSS

MY Homework

Lesson 6
Convert Customary Units of Weight

Homework Helper

eHelp

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The world's heaviest apple weighed 65 ounces. Did this apple weigh more than 4 pounds?

To answer this question, you need to convert one unit of weight to match the other.

Convert pounds to ounces.

To convert from a larger unit to a smaller unit, you need to multiply.

4 pounds × 16 ounces = 64 ounces

Since 65 > 64, the 65-ounce apple did weigh more than 4 pounds.

Helpful Hint

1 pound (lb) = 16 ounces (oz)

2,000 pounds (lb) = 1 ton (T)

Use the conversion table to check.

65 ounces is between 4 and 5 pounds.

pounds (lb)	ounces (oz)	(lb, oz)
4	64	(4, 64)
5	80	(5, 80)
6	96	(6, 96)
7	112	(7, 112)

Practice

Convert units to complete each equation.

1. 3 lb = _____ oz

2. 3 T = _____ lb

3. _____ oz = 10 lb

4. 9 T = _____ lb

Convert units to complete each equation.

5. $\frac{1}{2}$ ton = _____ pounds

6. $\frac{1}{4}$ pound = _____ ounces

Complete each conversion table.

7.

pounds (lb)	ounces (oz)	(lb, oz)
5		
7		
9		
11		

8.

tons (T)	pounds (lb)	(T, lb)
4		
8		
12		
16		

Problem Solving

9. Kylie bought a bunch of grapes that weighed 2 pounds and 9 ounces. How much did the grapes weigh in ounces only?

_____

10. Brent's pick-up truck can carry $\frac{1}{5}$ ton. Nina's pick-up truck can carry 500 pounds. Whose pick-up truck can carry more weight? Explain.

_____

_____

_____

11. Mathematical PRACTICE 2 **Use Number Sense** Charlotte's family bought a 2-pound block of cheese. There is $\frac{1}{4}$ of the block of cheese left. How many ounces of cheese has Charlotte's family eaten?

_____

Test Practice

12. Which weight is equal to 3 tons?

Ⓐ 2,000 pounds Ⓒ 5,000 pounds

Ⓑ 3,000 pounds Ⓓ 6,000 pounds

Name _____

Measurement and Data
4.MD.1, 4.MD.2
CCSS

Convert Units of Time

Lesson 7

ESSENTIAL QUESTION
Why do we convert measurements?

The steps that you use to convert units of length, weight, and capacity can be used to convert units of time.

Math in My World

Watch Tutor

Example 1

Cooper watched a butterfly in his garden for 5 minutes. How many seconds did he watch the butterfly?

1 minute = 60 seconds

To convert larger units of time to smaller units of time, multiply.

Helpful Hint
5 × 6 = 30
5 × 60 = 300

5 × 60 = _____

So, Cooper watched a butterfly for _____ seconds.

Key Concept Units of Time

1 minute (min) = 60 **seconds** (s)
1 hour (h) = 60 min
1 day (d) = 24 h
1 week (wk) = 7 d
1 year (y) = 52 wk = 12 months (mo)

Example 2

Tutor

Audrey is going to watch a movie at the movie theater. The movie starts at 3:30 P.M. and ends at 5:37 P.M. How long is the movie in minutes?

Find the time interval, or the length of time from the start of the movie to the end of the movie.

The time interval between 3:30 and 5:37 is _____ hours and 7 minutes.

Count the whole hours.
From 3:30 to 5:30 is 2 hours.

Count the remaining minutes.
From 5:30 to 5:37 is 7 minutes.

Since 1 hour = 60 minutes, multiply 60 by 2.

$60 \times 2 =$ _____ $120 + 7 =$ _____

So, the movie is _____ minutes long.

Guided Practice

Check

Complete each conversion table.

1.

minutes (min)	seconds (s)	(min, s)
1		(1, 60)
2		
3		
4		

2.

hours (h)	days (d)	(h, d)
	1	
	2	
	3	
	4	

3.

years (y)	weeks (wk)	(y, wk)
1		
2		
3		
4		

Talk MATH

What operation would you use to find the number of minutes in 2 hours? Explain.

Name _____

CCSS

Independent Practice

Complete each conversion table.

4.

days (d)	weeks (wk)	(d, wk)
	2	
	4	
	6	
	8	

5.

hours (h)	minutes (min)	(h, min)
3		
4		
5		
6		

6.

years (y)	months (mo)	(y, mo)
1		
3		
5		
7		

7.

weeks (wk)	years (y)	(wk, y)
	5	
	10	
	15	
	20	

Compare. Use <, >, or =.

8. 5 min ◯ 250 s **9.** 36 mo ◯ 4 y **10.** 300 s ◯ 1 h

11. How many times greater is one minute than one second? _____

12. How many times greater is one hour than one minute? _____

13. How many times greater is one week than one day? _____

14. How many minutes are in the time interval from 1:22 P.M. to 5:44 P.M.? _____

15. How many minutes are in the time interval from 7:09 A.M. to 10:36 A.M.? _____

Real World Problem Solving

16. Aubrey played on the playground for $2\frac{1}{2}$ hours. How many minutes did she play?

17. Alex had to rent the pavilion at the park for a minimum of 3 hours. How many minutes is that?

18. Mathematical PRACTICE 5 **Use Math Tools** Justin painted his fence from 8:00 A.M. to 11:47 A.M. For how many minutes did he paint the fence?

19. It took Aiden 20 minutes to walk to school. It took Callie 900 seconds to walk to school. Who took less time to walk to school?

My Work!

HOT Problems

20. Mathematical PRACTICE 3 **Find the Error** Sadie wrote the following on the board. Find and correct her mistake.

2 years = 24 weeks

21. **Building on the Essential Question** How does multiplication relate to time conversions?

Name .....

Measurement and Data
4.MD.1, 4.MD.2
CCSS

MY Homework

Lesson 7
Convert Units of Time

Homework Helper

eHelp

Need help? connectED.mcgraw-hill.com

Chloe is celebrating her 3rd birthday. How many weeks old is she?

To convert a larger unit (years) to a smaller unit (weeks), you need to multiply.

$$\begin{array}{r} 52 \\ \times\ 3 \\ \hline 156 \end{array}$$

52 ← weeks in a year

× 3 ← Chloe's age in years

So, Chloe is 156 weeks old.

Conversion Chart Units of Time
1 minute (min) = 60 seconds (s)
1 hour (h) = 60 min
1 day (d) = 24 h
1 week (wk) = 7 d
1 year (y) = 52 wk = 12 months (mo)

Practice

Convert units to complete each equation.

1. 3 minutes = _____ seconds

2. 5 weeks = _____ days

3. _____ months = 5 years

4. _____ minutes = 6 hours

5. 4 days = _____ hours

6. _____ weeks = 8 years

7. $1\frac{1}{2}$ days = _____ hours

8. $3\frac{2}{7}$ weeks = _____ days

9. _____ months = $4\frac{3}{4}$ years

10. _____ minutes = 6 hours and 42 minutes

Complete each conversion table.

11.

weeks (wk)	days (d)	(wk, d)
2		
4		
6		
8		

12.

minutes (min)	hours (h)	(min, h)
	9	
	7	
	5	
	3	

Problem Solving

13. Emma is $9\frac{1}{4}$ years old. How many months old is Emma?

_____

Mathematical PRACTICE 4 **14. Model Math** Vincent is watching a movie that lasts 1 hour and 37 minutes. He has watched 52 minutes so far. How many minutes are left in the movie?

_____

15. Lexie started her homework at 4:30 P.M. She finished at 5:05 P.M. How many seconds did it take her to finish her homework?

_____

Vocabulary Check

Vocab

16. How many seconds are in 1 minute? _____

Test Practice

17. Cameron's book log shows that he read a total of $4\frac{1}{4}$ hours last month. How many minutes is that?

Ⓐ 240 minutes Ⓒ 255 minutes

Ⓑ 250 minutes Ⓓ 270 minutes

Check My Progress

Vocabulary Check

1. Choose a vocabulary word to complete each sentence.

ounce **pound** **second**
ton **weight**

A rhinoceros weighs about 2 _____.

A mouse weighs about 1 _____.

A squirrel weighs about 3 _____.

The _____ of an object describes how heavy it is.

There are 60 _____ in a minute.

Concept Check

Complete each conversion table.

2.

ounces (oz)	pounds (lb)	(oz, lb)
	1	
	3	
	5	
	7	

3.

hours (h)	minutes (min)	(h, min)
2		
4		
6		
8		

Problem Solving

4. Is it more reasonable to say that a pen weighs 2 ounces, 2 pounds, or 2 tons?

5. A hippopotamus eats 100 pounds of food a day. How many days would it take the hippo to eat 1 ton of food?

6. An ostrich egg weighs 64 ounces. Is the weight of the ostrich egg greater than 5 pounds? Explain.

7. Jordan spent 3 hours at a local farm. How many minutes did he spend at the farm?

My Work!

Test Practice

8. Which is the most reasonable estimate for the weight of a bowling ball?

Ⓐ 8 tons

Ⓑ 80 pounds

Ⓒ 8 pounds

Ⓓ 8 ounces