CCSD
CLARK COUNTY
SCHOOL DISTRICT

Student Learning Extension Opportunities

Grade 3-Grade 5

Directions: These learning activities are provided for practice opportunities. Refreshing your memory of the concepts learned and keeping your mind engaged will help you maintain the skills you have learned. These learning activities are designed to provide practice over the course of the week, so spread out the work. We look forward to seeing you back in class soon.

WEEK ONE

Reading and Writing (Science and Social Studies Integration):

Week 1, Day 1
- Read a book at your reading level for twenty minutes. Keep track of your daily reading on the reading log below.
- Read the text, "The Coriolis Effect."
- Complete the quiz and answer the comprehension questions.

Week 1, Day 2
- Read a book at your reading level for twenty minutes. Keep track of your daily reading on the reading log below.
- Read "Laws in Denver Have Changed to Allow Children to Sell Lemonade."
- Complete the quiz and answer the comprehension questions.

Week 1, Day 3
- Read a book at your reading level for twenty minutes. Keep track of your daily reading on the reading log below.
- Read "Physical Science Task 2: Toy Shed" and answer the questions.

Week 1, Day 4
- Read a book at your reading level for twenty minutes. Keep track of your daily reading on the reading log below.
- Read the text, "British Food Design Company Creates World's First Non-melting Frozen Pop."
- Complete the quiz and answer the comprehension questions.

Week 1, Day 5
- Read a book at your reading level for twenty minutes. Keep track of your daily reading on the reading log below.
- Read the text, "Diffusion of Food and Animals."
- Complete the diagram showing the origins and spread of plants and animals across the continents.
- Respond to the essay prompt.

Mathematics:

Week 1, Day 1
- Complete the appropriate grade-level worksheet(s) labeled *Grade 3, 4, or 5.*

Week 1, Day 2
- Complete the appropriate grade-level worksheet(s) labeled *Grade 3, 4, or 5.*

Week 1, Day 3
- Complete the appropriate grade-level worksheet(s) labeled *Grade 3, 4, or 5.*

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Student Learning Extension Opportunities

Grade 3-Grade 5

Week 1, Day 4
- Complete the appropriate grade-level worksheet(s) labeled *Grade 3, 4, or 5*.

Week 1, Day 5
- Complete the appropriate grade-level worksheet(s) labeled *Grade 3, 4, or 5*.

Reading Log

Keep track of your daily reading.

Beginning Page	Ending Page	Title

The Coriolis effect: what makes the wind blow east or west

By National Geographic Society, adapted by Newsela staff on 03.20.19
Word Count **663**
Level **710L**

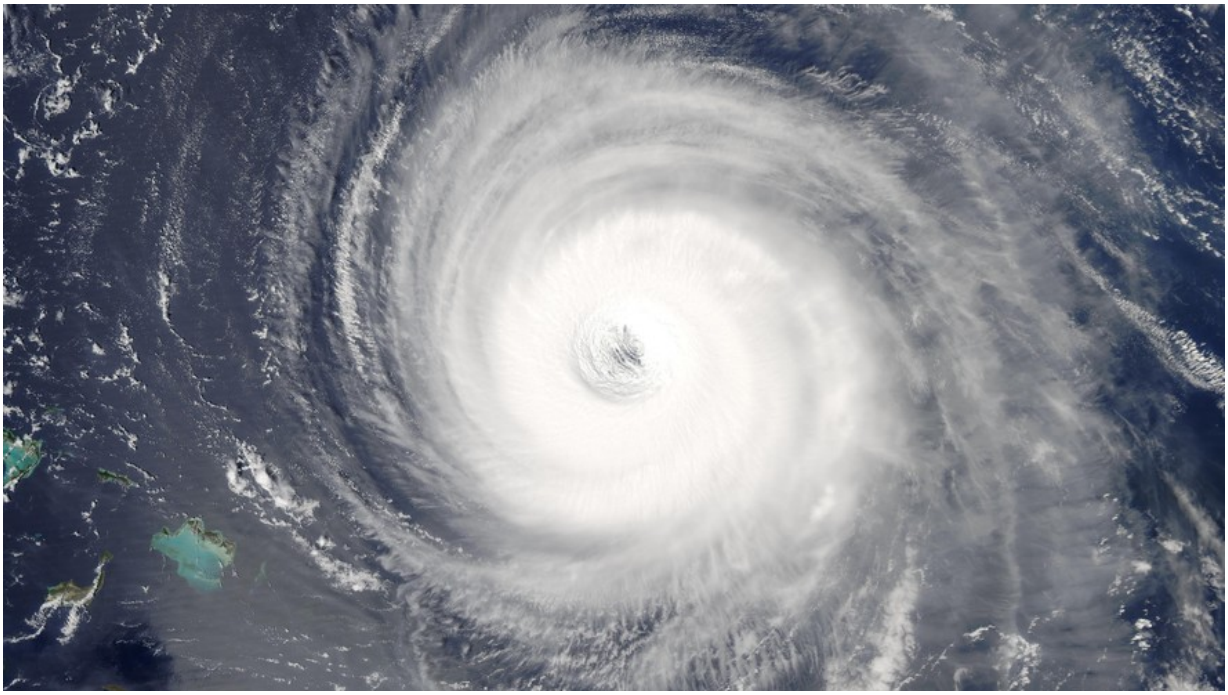


Image 1. The deflection associated with the Coriolis effect leads storms in the Northern Hemisphere (like Hurricane Isabel spinning above Puerto Rico here) to swirl counterclockwise. Image courtesy Jacques Descloitres, MODIS Land Rapid Response Team at NASA GSFC.

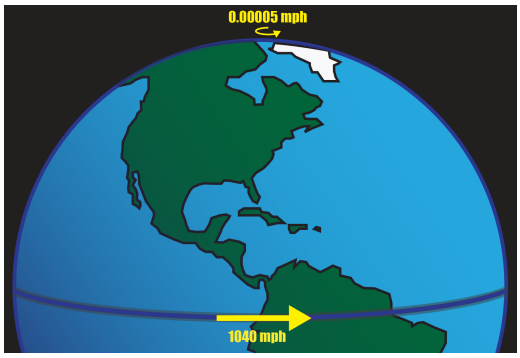
Imagine you have superhuman strength. You are standing at the equator, which is the imaginary line around the middle of Earth. You want to throw a ball at a friend, who is standing somewhere in North America. What's going to happen?

If you try throwing the ball straight at your friend, things won't go as planned. The ball will land slightly to your friend's right. The reason for this is the Coriolis effect.

The Coriolis effect is caused by our planet's rotation. Earth is constantly rotating, or spinning, from west to east. Every 24 hours, Earth makes a full rotation. Different points on Earth move at different speeds, though. Points near the equator rotate faster than points near the poles.

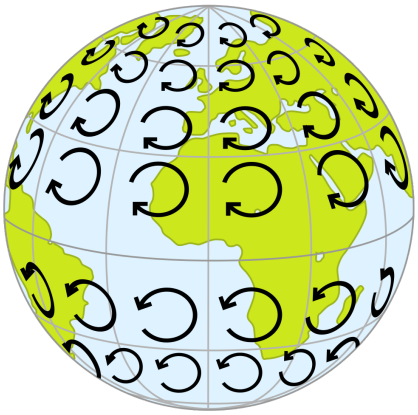
The equator divides the planet into two halves. These halves are called the Northern and Southern Hemispheres. Earth is wider at the Equator. So points along the equator have to cover a longer distance in order to make a full rotation in 24 hours. These points move at nearly 1,000 miles an hour. Near the poles, however, things are very different. Earth is rotating extremely slowly there.

This explains why the ball did not reach your friend. At the equator, you and the ball are already moving east at a certain speed. In North America, your friend is moving east more slowly. When you try throwing the ball, the ball is moving towards your friend at first. But it's also moving east more quickly than your friend is. So it will land to your friend's right.



Now let's pretend you're standing at the North Pole instead. Your friend is still waiting in North America. When you throw the ball to your friend, it will again land to your friend's right. This time, it's because he's moving faster than you are; he has moved ahead of the ball. No matter where you are in the Northern Hemisphere, the ball will always move east, or to the right.

In real life, the Coriolis effect has a large impact on the weather. In the Northern Hemisphere, it makes air currents bend to the right. In the Southern Hemisphere, it makes currents bend left.



Weather Patterns

Cyclones are shaped by the Coriolis effect. Cyclones are large air masses that rotate around a center. As they rotate, cyclones pull air into their center, or "eye." These air currents are pulled in from all directions. In the Northern Hemisphere, they bend to the right. This makes the cyclone rotate counterclockwise. In the Southern Hemisphere, currents bend to the left. This makes cyclones rotate clockwise.

The Coriolis effect also has an impact on regular winds. For example, as warm air rises near the Equator, it flows toward the poles. In the Northern Hemisphere, these warm air currents move to the right as they travel north. In other words, they bend east.

Impact On Human Activity

The Coriolis effect shapes airplane routes. As we have seen, wind directions are largely set by the Coriolis effect. For this reason, airplane pilots have to understand how the effect works when planning flight paths. The same is true for rockets.

The Coriolis Effect Closer To Home

Here's one last example of the Coriolis effect at work. You can actually try it without superhuman strength. Suppose you and a friend are throwing a ball at each other while on a merry-go-round. When the merry-go-round is still, throwing the ball is easy. When the merry-go-round is rotating, the ball won't reach your friend unless you throw it extra hard. Normally, the ball will curve to the right.

In reality, the ball is flying in a straight line. It's you and your friend who are moving out of its way while the merry-go-round is spinning.

URL: https://www.nationalgeographic.org/encyclopedia/coriolis-effect/

Quiz

1 Complete the sentence.

The Coriolis effect causes ____.

(A) the equator to spin around slower than the poles

(B) cyclones to rotate in a certain direction based on the hemisphere

(C) a ball to go slower when it is thrown from a merry-go-around

(D) the winds in the Northern Hemisphere to bend west

2 How do points on Earth travel at different speeds?

(A) Points on the equator have a longer distance to cover than points at the poles. As a result, the points on the equator have to move faster.

(B) Points on the equator have a shorter distance to cover than points at the poles. As a result, the points on the equator have to move faster.

(C) Points on the equator have a longer distance to cover than points at the poles. As a result, the points on the equator have to move slower.

(D) Points on the equator have a shorter distance to cover than points at the poles. As a result, the points on the equator have to move faster.

3 Read the following paragraph from the section “Weather Patterns."

The Coriolis effect also has an impact on regular winds. For example, as warm air rises near the equator, it flows toward the poles. In the Northern Hemisphere, these warm air currents move to the right as they travel north. In other words, they bend east.

Which word from the paragraph helps the reader to understand the meaning of "currents"?

(A) flows

(B) poles

(C) north

(D) bend

4 Read the following paragraph from the section "Impact On Human Activity."

The Coriolis effect shapes airplane routes. As we have seen, wind directions are largely set by the Coriolis effect. For this reason, airplane pilots have to understand how the effect works when planning flight paths. The same is true for rockets.

What does "shapes" refer to?

(A) the idea that the Coriolis effect helps planes fly longer

(B) the fact that the Coriolis effect often stops pilots from flying

(C) the concern that pilots have when they experience the Coriolis effect

(D) the influence that the Coriolis effect has on the routes taken by pilots

“The Coriolis Effect” Comprehension Questions

Answer the following questions, citing evidence from the text.

1) What happened at the beginning, middle, and end of the text?

2) Describe the Coriolis Effect in your own words.

Write a paragraph to explain how points on earth travel at different speeds. Remember to cite evidence from the text.

Laws in Denver have changed to allow children to sell lemonade

By Washington Post, adapted by Newsela staff on 09.24.19
Word Count **416**
Level **580L**

Anabelle Lockwood, 10, and her mom, Chanel Rene, at Anabelle's lemonade stand in Fountain Valley, California. The fifth-grader has been asked by Orange County health officials to get a license and a permit for her small business. Photo by: Mindy Schauer/Digital First Media/Orange County Register via Getty Images

It is considered a part of childhood to at some point set up a lemonade stand. Some of the stands are being shut down, though.

Sometimes the government says the kids need a permit. It is like a license that lets them have a business.

In 2018, Jennifer Knowles helped her kids start a lemonade stand. It was in Denver, Colorado. Her sons had been asking to have a stand.

They were 6 years old, 4 years old and 2 years old.

They set up in a park across the street from their house. The boys divided up jobs. Ben, the oldest, handled the money, charging a dollar for two cups. Jonathan, the youngest, got to taste the

lemonade as a job. William was the greeter. When two police officers came up, he ran toward them offering lemonade.

Police Officers Shut Down Kids' Stand

The officers were not there to buy lemonade, though. They told Knowles that someone had complained. The kids had to shut down their stand because they did not have permits.

They needed at least three permits. That would have cost about $300. Knowles said they packed up, went home and cried.

Then Knowles did some research. She learned of lemonade stands being shut down in other states. She talked to a local elected official, who agreed to help change the law in Denver.

A similar law went into effect in Texas. Other places are looking at new laws.

Country Time makes a lemonade mix. The company is helping children with a program called Legal-Ade. It pays fines and covers the cost of permits up to $300.

Lemonade Stands Are Winning

Adam Thierer works at George Mason University in Virginia. He said, "Lemonade stands are sort of like the American Dream." It is a chance for kids to start a small business, he said. All of a sudden, rules started to fight this, he said.

Thierer looked into the problem in 2018. He did not find many stands that were shut down.

Matt Krause is a Texas lawmaker who wrote his state's lemonade-stand bill. He said some people opposed his bill. They were worried about food safety. Mostly, though, people did not want a stand near them.

Thierer thinks the same thing. Some people do not want kids setting up a stand on their corner, he said.

Knowles and the lemonade stands are winning. After helping to change Denver's laws, she pushed for a state law. One was approved in April.

Quiz

1 Which question is answered in the section “Lemonade Stands Are Winning"?

(A) When did kids first begin making lemonade stands?

(B) When did states begin shutting down lemonade stands?

(C) When did Texas pass its lemonade-stand bill?

(D) When did Denver change its lemonade-stand laws?

2 Read the section "Police Officers Shut Down Kids' Stand."

Select the sentence from the section that explains how one company is helping kids with lemonade stands.

(A) She learned of lemonade stands being shut down in other states.

(B) Other places are looking at new laws.

(C) Country Time makes a lemonade mix.

(D) It pays fines and covers the cost of permits up to $300.

3 Read the selection from the section "Lemonade Stands Are Winning."

> *Matt Krause is a Texas lawmaker who wrote his state's lemonade-stand bill. He said some people opposed his bill. They were worried about food safety.*

What is the definition of "opposed" based on the context clues?

(A) agreed with

(B) were against

(C) helped to make

(D) got confused

4 Read the paragraph from the introduction [paragraphs 1-5].

> *Sometimes the government says the kids need a permit. It is like a license that lets them have a business.*

Fill in the blank. A "permit" is a ____.

(A) reason to shut down someone's business

(B) way for kids to learn about the government

(C) document that allows people to do something

(D) paper that lets people drive their cars

“Laws in Denver Have Changed to Allow Children to Sell Lemonade” Comprehension Questions

Answer the following questions, citing evidence from the text.

1) How did the children divide the jobs of running the lemonade stand?

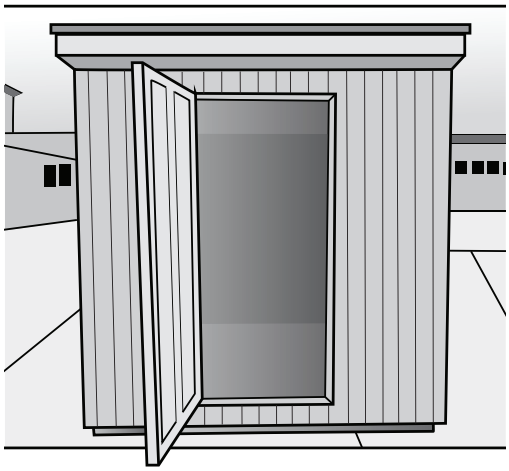
2) How are lemonade stands like the American Dream?

Write a paragraph detailing how lemonade stands are winning with the help of some laws in several states. Remember to cite evidence from the text.

PHYSICAL SCIENCE TASK 2

TOY SHED

Name _____



A family donated an old toy shed to the school to store recess toys like balls and hoops. The shed held all the equipment students used for recess, but the door would not stay shut. When it rained, the equipment near the door got wet.

1. What is the problem that needs to be solved for the toy shed?

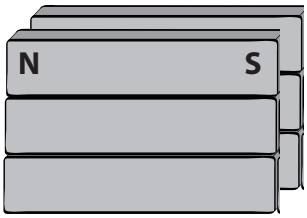
2. What is the **criterion** for a successful solution to this problem?

3. What might be some of the **constraints** that the students will need to think about in order to find a successful solution?

PHYSICAL SCIENCE TASK 2
TOY SHED

Name _____

4. One of the teachers says she has six bar magnets that the students can use for this project. Explain how the students might use the magnets and the force of magnetism to solve the problem.



(Use the space below the lines to draw a diagram showing your solution to the problem.)

British food design company creates world's first non-melting frozen pop

By Smithsonian.com, adapted by Newsela staff on 09.10.18
Word Count **678**
Level **830L**

Can a popsicle be made to last longer before it turns into a melty mess? A British design firm says yes. Photo by: iStock/Getty Images

Fall will officially start later this month. It's still hot in several places, though.

Many people like to eat popsicles when it's hot. However, you'd better eat it indoors, or you might end up with more of it melted down your sleeve than in your mouth.

Another idea is to try the world's first non-melting "ice lolly." That is the British term for "popsicle." The non-melting version was invented by the food design company Bompas & Parr in the United Kingdom.

Sam Bompas, the company's co-founder, says it has taken over a year to get the pop just right. It involved speaking to a group of science experts. Some of the scientists' ideas were not safe for food, he says. Balancing the ingredients is even more important than in a regular recipe so you can get the best flavor and product, he says.

Fruit Fibers Make Pops Last Longer

The key to the popsicles' heat tolerance is fruit fibers in the pop. The fibers lower the pops' ability to transfer heat. The result is that they melt more slowly than ordinary frozen treats. Bompas & Parr say the pops last hours longer than regular popsicles at the same temperature.

The popsicle idea came from pykrete, a frozen material made from sawdust and wood pieces in ice. Pykrete was created by British inventor Geoffrey Pyke. It is much stronger than regular ice and melts much more slowly.

The History Of Pykrete

Pyke saw pykrete as a perfect material for building huge boats during World War II. It would save on steel, he said, which was in high demand due to the war. Pykrete could be made more cheaply. British leader Winston Churchill liked the idea. The building of a secret model pykrete boat began on a lake in Alberta, Canada. The project went above its planned cost and was shut down.

Pykrete is still around. It occasionally pops up on TV shows like "MythBusters." The show's stars used it to build a boat, which fell apart in less than half an hour.

Wartime Ice Cream Stories

Pykrete is not the only interesting story in the history of frozen treats. The history of ice cream is a tale of creativity. Some of these stories are tied to wartime. During World War II, some pilots poured ice cream ingredients into their planes' parts. Then they flew to high altitudes to freeze the mixture. As the treat was too icy at first, they rigged small propellers to churn the ice cream as it flew. The name of the project was Operation Freeze.

Then, in 1945, the U.S. Navy spent $1 million turning a boat into a "floating ice cream parlor." The ship sailed around the Pacific Ocean supplying sailors with their favorite treat. Later, during the Korean War, the government made a statement insisting that soldiers get ice cream at least three times a week.

Frozen Treats Featured In Museum Exhibit

Bompas & Parr is introducing its non-melting popsicles at "SCOOP: A Wonderful Ice Cream World," an exhibit of the British Museum of Food. The exhibit shows the science and history of ice cream and other frozen desserts.

Visitors can walk through an ice cream "cloud" and see a collection of ice cream equipment. They will also have the chance to taste historically inspired flavors like cucumber. Guests also can experience ice creams of the future. There are fizzy and glow-in-the-dark versions.

This is just the latest food science creation from Bompas & Parr. It is known for wild products. The company has made everything from food molds of architectural wonders to flavored fireworks.

New Pops May One Day Be Sold At Store Near You

The non-melting pops can be made in any flavor. At the exhibit, Bompas & Parr will have an apple variety. If the early models are a success with visitors, the company hopes to make them to sell in supermarkets.

The popsicles taste like regular ice pops, Bompas says. However, due to the fruit, "you could describe them as a tad more chewy."

Quiz

1 Read the section "Fruit Fibers Makes Pops Last Longer."

Which sentence from the section shows why it takes so long for the new popsicle to melt?

(A) The key to the popsicles' heat tolerance is fruit fibers in the pop.

(B) Bompas & Parr say the pops last hours longer than regular popsicles at the same temperature.

(C) The popsicle idea came from pykrete, a frozen material made from sawdust and wood pieces in ice.

(D) It is much stronger than regular ice and melts much more slowly.

2 Why did Operation Freeze occur? How do you know

(A) Pilots in World War II had the idea to make ice cream in the air; During World War II, some pilots poured ice cream ingredients into their planes' parts.

(B) Pilots in World War II accidentally made ice cream while they were flying; As the treat was too icy at first, they rigged small propellers to churn the ice cream as it flew.

(C) The U.S. Navy had money to spend on a boat that gave out ice cream to sailors; Then, in 1945, the U.S. Navy spent $1 million turning a boat into a "floating ice cream parlor."

(D) The U.S. Navy wanted to cheer up sailors during the Korean War; Later, during the Korean War, the government made a statement insisting that soldiers get ice cream at least three times a week.

3 This article is mostly organized using problem and solution.

Why do you think the author chose to organize the article this way?

(A) to describe the role that popsicles played in cheering up soldiers during wartime

(B) to explain the reasons why more people prefer non-melting popsicles to regular popsicles

(C) to provide examples of the different types of creations made by Bompas & Parr

(D) to highlight how one company came up with a way to make popsicles melt more slowly

4 If this article were organized in chronological order, which section would come FIRST?

(A) Introduction [paragraphs 1-4]

(B) "The History Of Pykrete"

(C) "Frozen Treats Featured In Museum Exhibit"

(D) "New Pops May One Day Be Sold At Store Near You"

"British Food Design Company Creates World's First Non-melting Frozen Pop" Comprehension Questions

Answer the following questions, citing evidence from the text.

1) Why is the development of this new popsicle challenging?

2) What is the Pykrete story?

Write a paragraph to answer the following question: If you could create any new ice cream flavor or type of ice cream, what would it be and why?

NAME: _____ DATE: _____

The Diffusion of Food and Animals

When Christopher Columbus landed in the Caribbean islands in the year 1492, he set in motion a chain of events that would transform the world in dramatic ways. Before this time, the people, plants, and animals of the Americas had been largely isolated from the rest of the world for thousands of years. As a result, many of the foods and animals common in Europe, Asia, and Africa were unknown in the Americas; and many of the foods and animals common in the Americas were unknown in Europe, Asia, and Africa. But with the start of European contact in the Americas, this isolation came to an end. The resulting transfer of peoples, plants, and animals between these long separated hemispheres is called the Columbian Exchange.

Let's take a look at some of the things that were exchanged during this period.

Corn

About 6,000 years ago, corn grew wild in parts of present-day Mexico as a type of grass. Eventually, people in the Americas began to cultivate and farm corn, turning it from this type of grass into the hardy vegetable it is today. Many Mesoamerican civilizations, such as the Maya and Aztec, raised corn as their staple crop. By the 1400s, corn cultivation had even spread well into North America. These days, corn is found all over the world.

Potatoes

Thousands of years ago, potatoes grew wild in the Andes Mountains of South America. Over time, people in what is now Bolivia and Peru began to farm these potatoes. The potatoes were an important food source for the civilizations like the Inca that emerged in this part of South America. Potatoes did not reach North America until the early 1600s, after European explorers were already establishing settlements. By this time, potatoes were also making their way to Europe. At first, many Europeans did not like potatoes. They thought potatoes were ugly; and they worried that they might be dangerous to eat. But the potato

was well suited to the cool climate of Europe. And, eventually Europeans began to trust potatoes and grew them for food.

Bananas

Scientists believe that people first started to farm bananas in Southeast Asia thousands of years ago. From there, bananas spread to ancient India, Arabia, Greece, and Rome. Europeans brought bananas to the Americas soon after European contact. The warm climate of the Caribbean islands, Central America, and Southern Mexico proved a perfect environment for this tropical fruit. For a long time the bananas stayed largely in these warm areas because the delicate fruit was difficult to transport. But with the development of new technologies making transportation faster in the nineteenth and twentieth centuries, bananas reached markets around the world. Now it is hard to imagine a world without bananas.

Coffee

Coffee bean bushes grew wild in present-day Ethiopia thousands of years ago. For a long time, people consumed coffee beans as a medicine. Then about 700 years ago, people in Arabia started to brew coffee beans to make a strong drink. With the expansion of Islam across North Africa, the Middle East, and into Europe, coffee drinking was introduced to the world. By the 1600s, coffee houses existed throughout Austria, Italy, France, and many other countries. It was likely around this time that coffee beans were brought to the Americas. The cool highland environments of Guatemala, highland Brazil and Columbia proved ideal for growing coffee. These days, much of the world's best coffee is grown the Americas.

Guinea pigs

People in present-day Peru began to breed guinea pigs about 3,000 years ago. They bred this animal mostly for food. Later, guinea pigs became a major food source for the Inca, who lived in the Andes Mountains. During the 1600s, people brought guinea pigs to Europe. In Europe, however, these animals were not usually eaten. Instead, Europeans made guinea pigs pets. Later, scientists used guinea pigs as subjects for experiments. In fact, the term *guinea pig* has come to mean a person or thing used as the subject of a test or experiment.

Cattle

In Europe and Asia, people bred cattle for thousands of years. Cattle were extremely valuable because they were strong enough to pull wagons and heavy plows, and therefore aided in large-scale agriculture. Cattle were also useful for their milk, which many people relied on for daily nutrition. Finally, if necessary, cattle could be slaughtered and eaten as food. In the Americas, there was no cattle. As a result, large-scale agriculture as was common in Europe didn't exist in the Americas. On his second voyage to the Americas, Columbus brought cattle to the island of Santo Domingo. From there, cattle were sent to mainland North and South America. Further north, the English brought their own breeds of domesticated cattle to New England in 1624.

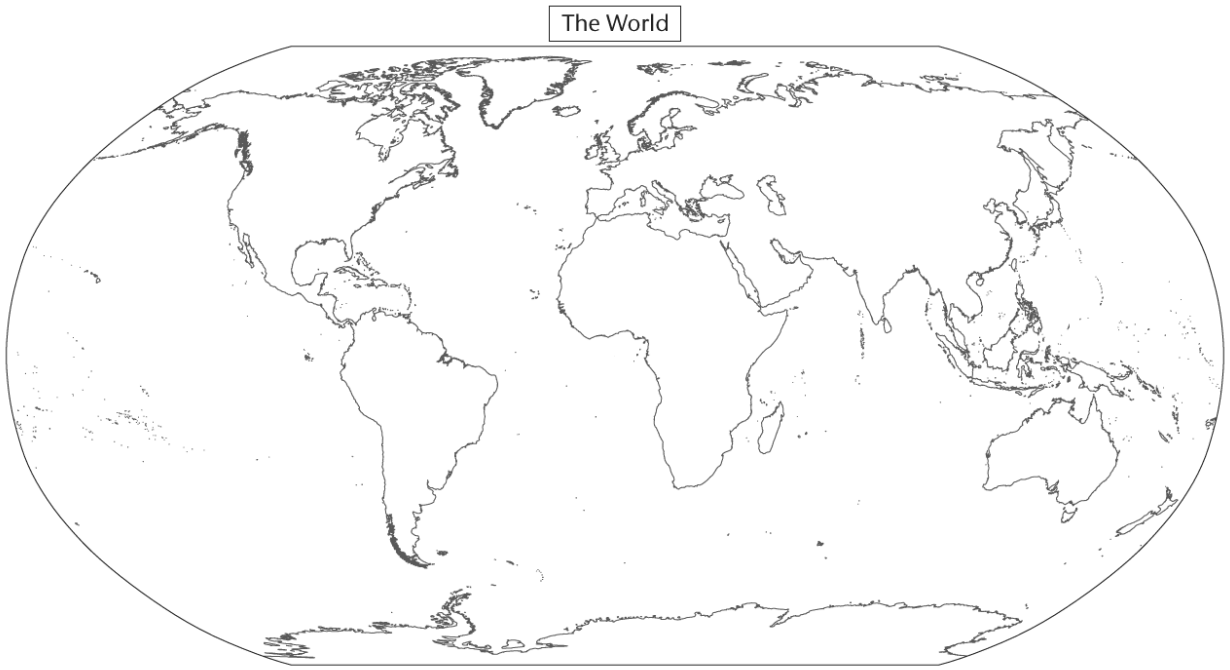
Horses

Researchers have uncovered evidence that shows that horses likely originated in the Americas and spread to other parts of the world. However, for some unknown reason, horses disappeared from the Americas, leaving only Eurasian breeds. It is almost impossible to overstate the value of the horse for civilizations in Europe and Asia. The horse was used for work, war, and transportation. Not surprisingly, the horse was one of the first animals Europeans brought to the Americas.

Instructions

Using what you have learned from the reading and the simple map below, create a diagram showing the origins and spread of plants and animals across the continents. Use arrows and other symbols to show how and where these plants and animals moved. Then, answer the essay question that follows.

Diagram



Essay

Imagine a world where the Columbian Exchange had not occurred. How might the world be different? Explain your answer using details from the reading and your diagram.

Grade 3, Week 1, Day1

Adding – Regrouping Units column

1. $\begin{array}{r} 36 \\ +25 \\ \hline \end{array}$

2. $\begin{array}{r} 87 \\ +34 \\ \hline \end{array}$

3. $\begin{array}{r} 34 \\ +18 \\ \hline \end{array}$

4. $\begin{array}{r} 39 \\ +23 \\ \hline \end{array}$

5. $\begin{array}{r} 244 \\ +336 \\ \hline \end{array}$

6. $\begin{array}{r} 258 \\ +225 \\ \hline \end{array}$

7. $\begin{array}{r} 623 \\ +149 \\ \hline \end{array}$

8. $\begin{array}{r} 548 \\ +232 \\ \hline \end{array}$

Grade 3, Week 1, Day1

Subtracting – Regrouping Units Column

1. $\begin{array}{r} 56 \\ -27 \\ \hline \end{array}$

2. $\begin{array}{r} 41 \\ -32 \\ \hline \end{array}$

3. $\begin{array}{r} 12 \\ -\ \ 7 \\ \hline \end{array}$

4. $\begin{array}{r} 31 \\ -13 \\ \hline \end{array}$

5. $\begin{array}{r} 795 \\ -536 \\ \hline \end{array}$

6. $\begin{array}{r} 653 \\ -245 \\ \hline \end{array}$

7. $\begin{array}{r} 894 \\ -175 \\ \hline \end{array}$

8. $\begin{array}{r} 662 \\ -234 \\ \hline \end{array}$

Subtracting – Regrouping Units Column

1. 56 − 28

2. 61 − 33

3. 54 − 17

4. 51 − 14

5. 874 − 536

6. 662 − 245

7. 893 − 175

8. 792 − 238

Name _____

Adding – Regrouping Units, Tens & Hundreds

1.
$$\begin{array}{r} 462 \\ 358 \\ +\ 253 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 871 \\ +345 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 346 \\ +285 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 382 \\ 327 \\ +231 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 241 \\ 444 \\ +396 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 252 \\ 323 \\ +285 \\ \hline \end{array}$$

Name _____

Adding – Regrouping Units, Tens & Hundreds

1.
$$\begin{array}{r} 562 \\ +\,243 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 693 \\ 497 \\ +\,323 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 466 \\ 329 \\ +\,172 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 347 \\ 124 \\ +\,281 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 359 \\ +\,582 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 298 \\ 413 \\ +\,241 \\ \hline \end{array}$$

Subtracting – Regrouping Tens Column

1. 568 − 276

2. 418 − 327

3. 128 − 75

4. 312 − 131

5. 728 − 536

6. 638 − 245

7. 867 − 175

8. 627 − 234

Subtracting – Regrouping Tens Column

1. $\begin{array}{r} 463 \\ -276 \\ \hline \end{array}$

2. $\begin{array}{r} 429 \\ -357 \\ \hline \end{array}$

3. $\begin{array}{r} 338 \\ -175 \\ \hline \end{array}$

4. $\begin{array}{r} 615 \\ -131 \\ \hline \end{array}$

5. $\begin{array}{r} 728 \\ -539 \\ \hline \end{array}$

6. $\begin{array}{r} 387 \\ -245 \\ \hline \end{array}$

7. $\begin{array}{r} 857 \\ -185 \\ \hline \end{array}$

8. $\begin{array}{r} 624 \\ -264 \\ \hline \end{array}$

Name: _____ Date: _____

NVACS: Domain 3.NBT.2

Fluently Add and Subtract within 1000

Use strategies and algorithms based on place value, properties or operations and/or the relationship between addition and subtraction

Practice for 3rd Grade

Solve. Show your work and explain your thinking.

1. 476 + 339 =_____
2. 145 + 337 =_____
3. 362 + 490 =_____
4. 205+ 662 =_____
5. 113 + 421 =_____
6. 904 -219 =_____
7. 872 – 402 =_____
8. 768 -569 =_____
9. 726 -331 =_____
10. 991 – 703 =_____

Name:

Solve the word problems and write the equation to show the solution. After you complete the samples make up your own stories and change the numbers.

Subtraction Change Unknown	
Mikey had 16 leaves. Some of her leaves blew away. Now she has 7 leaves left. How many of her leaves blew away?	Sara had 99 goldfish. She gave some away. Now she has 32 goldfish left. How many goldfish did Sara give away?
320 children wore their Halloween costumes to school. Some of the children took their costumes off at recess. There were 210 children left wearing costumes. How many children took their costumes off at recess?	There were 42 cookies on a plate. Dad ate some of the cookies. Now there are 29 cookies left on the plate. How many cookies did Dad eat?

Subtraction Result Unknown	
Jessica had 14 toy cars. She lost 11 of the cars. How many cars does she have left?	Melissa had 78 pumpkin seeds. She gave 23 of them to her brother. How many pumpkin seeds does Melissa have left?
There were 156 ornaments on the tree. 120 of the ornaments fell off the tree. How many ornaments are left on the tree?	Dan has 386 papers in his desk. He threw away 17 of them. How many papers does Dan have left in his desk?

Subtraction Start Unknown	
A clown had some balloons. 56 of the balloons floated away. Now the clown has 45 balloons left. How many balloons did the clown have to start with?	Mrs. Lake had some pencils. She lost 24 of them. Now she has 6 left. How many pencils did Mrs. Lake have to begin with?
Ryan had some trick-or-treat candy. He gave 123 pieces of candy to his sister. Now Ryan has 100 pieces of candy left. How many pieces of candy did Ryan have to begin with?	Ashley had some guppies. She gave 28 guppies to Timmy. Now Ashley has 12 guppies left. How many guppies did Ashley have to start with?

Grade 3, Week 1, Day 5

1. There were 87 red fish and 802 blue fish. How many more blue fish were there than red fish?

2. There were 454 striped pens and 323 green pens. How many more striped pens were there than green pens?

3. James has 56 toy cars and and 92 toy bears. How many more bears does James have than cars?

Name: _____ Date: _____

NVACS: Domain: Numbers and Base Ten 3.NBT.2

Addition and Subtraction to 1000

Constructed Response Assessment for 3rd Grade

The fisherman's log tells how many fish they catch each day. Use this log to solve the problems below.

Day	Monday	Tuesday	Wednesday	Thursday
Count	276	230	239	257

A. How many fish did the fisherman catch on Monday and Wednesday? Show your work and explain your thinking.

B. The fisherman's weekly goal is to catch 1,000 fish. Did he meet his goal? How far over or under is he from his goal? Show your work and explain your thinking.

Grade 4, Week 1, Day 1

Solve the equations using both the Stacked Expanded Notation strategy and the algorithm. (4th Grade, 4.NBT)

Equation	Expanded Notation	Algorithm
125 + 175	100 + 20 + 5 + 100 + 70 + 5 200 + 90 + 10 200 + 100 = 300	1 1 1 2 5 + 1 7 5 3 0 0
386 + 226		
1673 + 891		
7924 + 1837		
15,652 + 9699		

Grade 4, Week 1, Day 2

Name_____ **Date**_____

4.NBT.A.1 Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division.

1. Ozzie wrote two numbers: 46, 788 and 34,289. In which number is the value of the 4 greater? How do you know? Explain your answer using numbers, pictures, or words.

2. Eliza and Sarah both have eraser collections. Eliza's collection has 11,643 and Sarah's collection has 11,463. Who has the greater number of erasers in their collection? How do you know? Explain why your answer is correct using numbers, pictures, or words.

3. Write the largest number you can with these digits: 6 4 9 3 8.

   ____ ____ ____ ____ ____

   What is the value of the digit that you placed first in your number?

Grade 4, Week 1, Day 2

4. Compare these two numbers:

42,893 **and** 64,090

What is the value of the 4 in the first number?

What is the value of the 4 in the second number?

How many times greater is the 4 in the first number than the 4 in the second number? Explain your answer.

5. Look at this number → 22,556

If the number was to increase 10 times, what would the number be? How do you know? Explain your answer using numbers, pictures, and/or words.

Write the value of the underlined numbers:

6. 1,<u>8</u>44 _____
7. 2<u>3</u>,675 _____
8. <u>7</u>1,213 _____
9. 9,5<u>0</u>0 _____
10. <u>1</u>33,642 _____

Grade 4, Week 1, Day 3

NVACS: Operations, Addition, Subtraction, Rounding (4.NBT)

Donald Duck took his nephews, Huey, Duey and Louie to the pumpkin patch. The boys each picked out a pumpkin they thought would make a good jack-o-lantern. After hollowing out their pumpkins they counted how many seeds were inside each.

Nephew	**Pumpkin Seeds**
Huey	1,935
Duey	2,016
Louie	1,787

A. How many seeds did all three nephews find combined?

B. How many more seeds did Duey have than Huey?

C. How many more seeds did Duey have than Louie?

D. Round your answer from part "**A**" to the nearest **hundred** to tell *about* how many seeds the boys all had together.

Grade 4, Week 1, Day 4

Name_____**Date**_____

4.NBT.A.2 /.3 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons./ Use place value understanding to round multi-digit whole numbers to any place.

Use the data in the chart below to answer the questions:

School Populations

	Boys	Girls
Hidden Valley	312	257
Red Mesa	188	209

1. Write the entire population of Hidden Valley in expanded form:

_____

2. Write the entire population of Red Mesa in expanded form:

_____

3. Round each school's enrollment for *Boys* to the nearest ten:

   Hidden Valley _____ Red Mesa _____

4. Round each school's enrollment for *Girls* to the nearest hundred:

5. Hidden Valley _____ Red Mesa _____

6. The Principal of Hidden Valley needs to order school tee shirts for all the students. She rounds the total population to the nearest hundred. How many shirts will she order? _____

Grade 4, Week 1, Day 4

7. The Principal of Red Mesa needs to order school tee shirts for all the students. He rounds the total population to the nearest hundred. How many shirts will he order? _____

Compare the numbers below and write <, >, or =

8. 312_____257

9. 188_____209

10. Six hundred eighteen_____618

Grade 4, Week 1, Day 5

Name _____Date_____

4.NBT.1

Answer the following questions.

1. Circle all the numbers that have a 7 that is ten times greater than the 7 in the number 42,768.

   a. 26,578 b. 37,989 c. 87,544 d. 86,573

2. Circle all the numbers that have a 5 that is ten times greater than the 5 in the number 22,458.

   b. 36,548 b. 65,225 c. 17,548 d. 29,577

3. The 9 in the number 19,245 is ten times greater than the 9 in which numbers? Circle all that apply.

   c. 18,947 b. 41,292 c. 43,549 d. 58,924

4. Circle all the numbers that have a 2 that is ten times greater than the 2 in the number 42,458.

   d. 25,678 b. 91,232 c. 23,813 d. 29,876

5. The 4 in the number 23,455 is ten times greater than the 4 in which numbers? Circle all that apply.

   e. 75,842 b. 54,292 c. 45,141 d. 23,429

6. Explain how the 4 in the number 1,546 is different than the 4 in the number in 2,984.

7. Sarah worked at a restaurant all summer and made $1,658.

   Which of the following expression or expressions is equivalent to the value of the 6 in Sarah's quantity? Circle all that apply. Using models, numbers and words, prove one of the answers.

   600 x 10 6,000 x 10 6 x 100 60 x 10 600 ÷ 10 6,000 ÷ 10

8. Look at these two boys' numbers:

Bryson's number	Dylan's number
23,476	39,745

Circle true or false for the following statements.

A. The 7 in Bryson's number has 10 times the value of the 7 in Dylan's number. **True** **False**

B. The 4 in Bryson's number has 10 times the value of the 4 in Dylan's number. **True** **False**

C. The 3 in Dylan's number has 10 times the value of the 3 in Bryson's number. **True** **False**

Choose a true statement and use numbers, models, and words to show how you know it is true.

9. Sydney wrote the number 24,529. Maddy also wrote a five-digit number that has only one 4 in it. The 4 in Maddy's number is worth 10 times more as the 4 in Sydney's number. Write three different numbers that Sydney could have written.

_____ _____ _____

Circle one of the numbers you wrote above. Use models, numbers, or words to show how you know that the 4 in that number is worth ten times as much as the 4 in Sydney's number.

Grade 5, Week 1, Day 1

Name: Date:

Solve the word problems and write the equation to show the solution. After you complete the samples make up your own stories and change the numbers.

Multiplication	
Farmer Ted has 10 hens. There are 6 eggs under each hen. How many eggs are there altogether?	Tommy has 4 packages of Baseball cards. There are 7 cards in each package. How many cards does Tommy have altogether?
Mrs. Lake has 4 boxes of candy. There are 10 pieces of candy in each box. How many pieces of candy does she have now?	Our classroom has 6 jars. There are 8 butterflies in each jar. How many butter flies are in our room altogether?

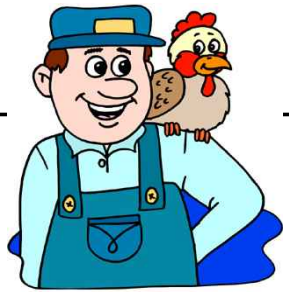
Partitive Division	
Mrs. Bell has 20 stickers. She gives them to 10 children, so that they each have the same amount. How many stickers did each child get?	Mom has 12 marshmallows. She puts the marshmallows on 4 sticks, to roast. How many marshmallows are on each stick?
Karen has 16 caterpillars. She puts the caterpillars into 4 jars, with the same number of caterpillars in each jar. How many caterpillars are in each jar?	Megan has 15 cookies. She puts the cookies into 5 bags, with the same number of cookies in each bag. How many cookies are in each bag?

Measurement Division	
The hens laid 20 eggs. There are 4 eggs under each hen. How many nests are there in the hen-house?	Room 124 is going on a hayride. There are 27 kids in the class. 9 kids can fit on a wagon. How many wagons must they take?
Karen has 18 Gummy Worms. She puts 3 in each Halloween treat bag. How many bags will she fill?	Meagan has 15 cookies. She puts 3 cookies in each bag. How many bags can she fill?

Grade 5, Week 1, Day 2

Name: _____

Multiple-Step Problems



a. Uncle Ben has 440 chickens on his farm. 39 are roosters and the rest are hens. 15 of his hens do not lay eggs. The rest lay eggs. How many egg-laying hens does Uncle Ben have on his farm?

_____

b. Aunt May milks her Holstein cows twice a day. This morning she got 365 gallons of milk. This evening she got 380 gallons. She sold 612 gallons to the local ice cream factory. How many gallon of milk does she have left?

_____

c. Mr. Parker has 982 pounds of grain. He feeds 240 pounds to his pigs and 460 to his cows. How much grain does he have left?

_____

d. Peter has four horses. Each one eats 4 pounds of oats, twice a day. How many pounds of oats does he need to feed his horses for 3 days?

_____

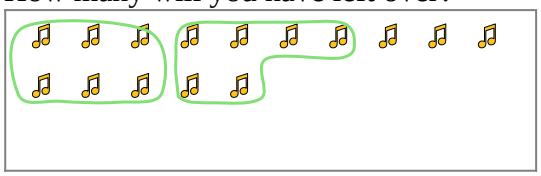
Visual Division

Name:

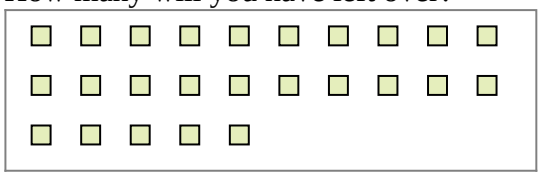
Answers

Use the shapes provided to answer the questions.

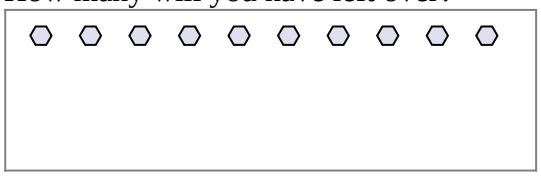
Ex) There are 15 shapes below. How many groups of 6 can you make with them? How many will you have left over?



1) There are 25 shapes below. How many groups of 4 can you make with them? How many will you have left over?

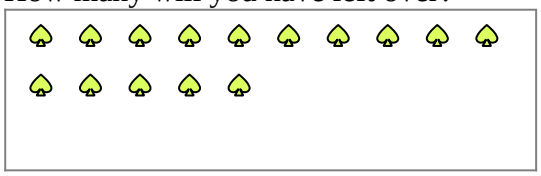


2) There are 10 shapes below. How many groups of 4 can you make with them? How many will you have left over?



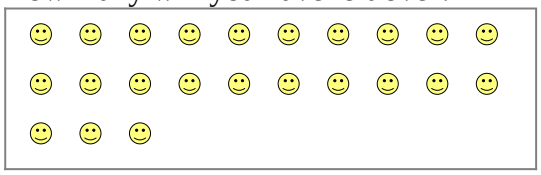
3) There are 16 shapes below. How many groups of 4 can you make with them? How many will you have left over?

4) There are 15 shapes below. How many groups of 3 can you make with them? How many will you have left over?

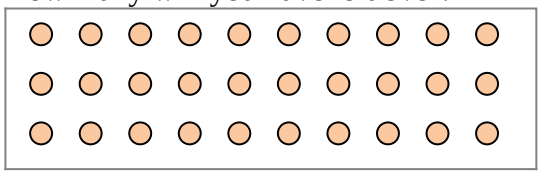


5) There are 14 shapes below. How many groups of 5 can you make with them? How many will you have left over?

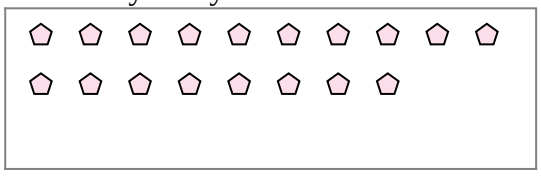
6) There are 23 shapes below. How many groups of 6 can you make with them? How many will you have left over?



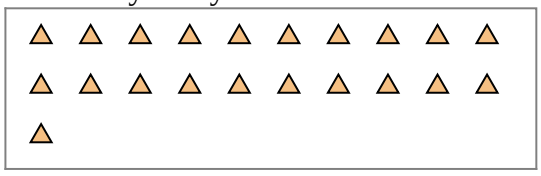
7) There are 30 shapes below. How many groups of 2 can you make with them? How many will you have left over?



8) There are 18 shapes below. How many groups of 8 can you make with them? How many will you have left over?



9) There are 21 shapes below. How many groups of 2 can you make with them? How many will you have left over?



Ex. 2

Ex. 3

1a. _____

1b. _____

2a. _____

2b. _____

3a. _____

3b. _____

4a. _____

4b. _____

5a. _____

5b. _____

6a. _____

6b. _____

7a. _____

7b. _____

8a. _____

8b. _____

9a. _____

9b. _____

1-10	94	89	83	78	72	67	61	56	50	44
11-18	39	33	28	22	17	11	6	0		

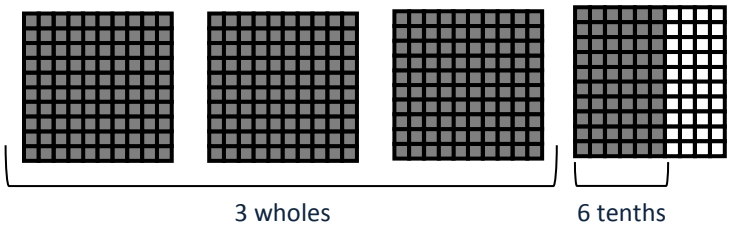
Grade 5, Week 1, Day 4

Name _____ Date _____

5.NBT.A.4

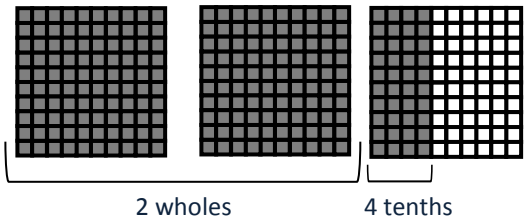
Round each decimal to the nearest whole number.

Example: 3.6



Since there are 5 or more tenths, we would round the 3 in the ones place up to: 4

Example: 2.4



Since there are less than 5 tenths, we would round down by keeping the 2 in the ones place the same: 2

1. 5.8	2. 12.3	3. 7.6
4. 11.9	5. 14.3	6. 8.7
7. 8.1	8. 3.8	9. 7.2
10. 4.6	11. 17.9	12. 5.4

13. Choose one problem above and prove your answer on the back of this paper.

14. Choose another problem above and prove your answer on the back of this paper.

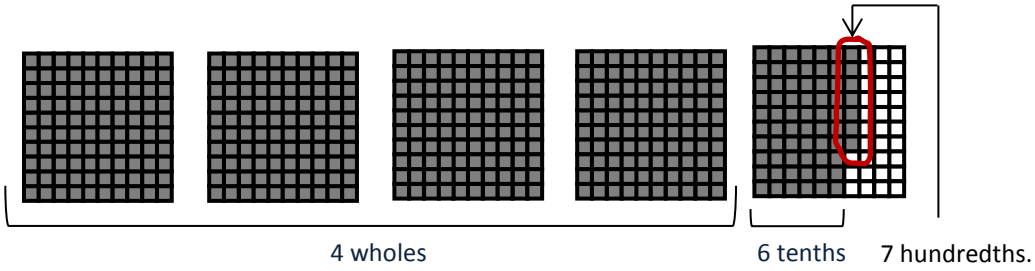
Grade 5, Week 1, Day 4

Name _____ Date _____

5.NBT.A.4

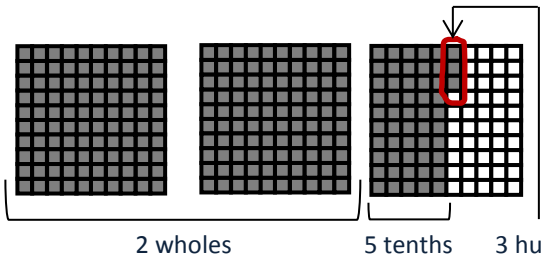
Round each decimal to the nearest tenth.

Example: 4.67



Since there are 5 or more hundredths, we would round the 6 in the tenths place up to: 4.7

Example: 2.53



Since there are less than 5 hundredths, we would round down by keeping the 5 in the tenths place the same: 2.5

1. 7.82	2. 12.58	3. 5.65
4. 1.91	5. 5.36	6. 4.45
7. 8.18	8. 13.84	9. 3.89
10. 6.86	11. 7.93	12. 15.41

13. Choose one problem above and prove your answer on the back of this paper.

14. Choose another problem above and prove your answer on the back of this paper.

Grade 5, Week 1, Day 5

Name_____**Date**_____

Using four 4's, attempt to create problems that will equal 1-12.
Remember to use the correct order of operations to solve your problems: Parentheses, exponents, multiply or divide, add or subtract.

Example solution: 4(4) – 4 – 4 = __

1 = _____ 2 = _____ 3 = _____

4 = _____ 5 = _____ 6 = _____

7 = _____ 8 = _____ 9 = _____

10 = _____ 11 = _____ 12 = _____

Match the equation with the written description.

Twice a number decreased by twenty-nine, is seven.	$32 = 2a + 7$	The quotient of two numbers is equal to the sum of those
If five is increased by the product of three and x, the result is 26.	$5 + 3x = 26$	The difference between two numbers is seven.
Five times a number y increased by 3, is 23.	$x - y = 7$	Thirty-two is twice a number increased by seven.
The product of two numbers is twenty five.	$5y + 3 = 23$	If a number r is added to three times y the result is thirty-six.
The quotient of sixteen and x is 8.	$2t - 29 = 7$	
	$16 \div x = 8$	
	$xy = 25$	
	$x \div y = x + y$	
	$3y + r = 36$	