

DAY

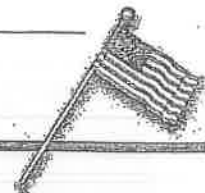


5<sup>th</sup> Grade

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## The American Revolution



Even before the Second Continental Congress approved the Declaration of Independence, a state of war existed between Great Britain and the American colonies. The first armed action took place in Lexington and Concord, Massachusetts, on April 19, 1775. British troops marched to Concord to destroy military supplies. The militia, known as Minutemen, were alerted, and they assembled in Lexington. Eight Minutemen were killed, and the British continued toward Concord. At the Concord Bridge, the British were turned away, and they began a retreat toward Boston. All along the road, the militia fired at the British and inflicted heavy casualties.

Ethan Allen and his Green Mountain Boys and Benedict Arnold surprised the British at Fort Ticonderoga on Lake Champlain with an attack on May 10, 1775. On June 17, 1775, at Breed's Hill (known as Bunker Hill) near Boston, colonial militia were able to hold off British troops for two charges, but had to retreat when they ran out of ammunition. The British lost 1,054 men to the colonists' 449 in this bloodiest battle of the Revolution. The British troops then moved to Nova Scotia.

On June 15, 1775, George Washington was appointed the commander in chief of the Continental Army. Arriving in Boston after the Battle of Breed's Hill, Washington gathered men and supplies, and early in 1776 placed the guns captured at Fort Ticonderoga on the heights overlooking Boston.

The war then shifted to New York City. Washington moved his men to Long Island and Manhattan Island. The British, commanded by General William Howe, landed 32,000 men including 9,000 German mercenaries (Hessians), on Long Island in July 1776. The inexperienced Continental Army was defeated on Long Island, Manhattan, and at White Plains, New York. However, the British failed to push their advantage, and Washington and his men were able to escape to New Jersey and across the Delaware River to Pennsylvania.

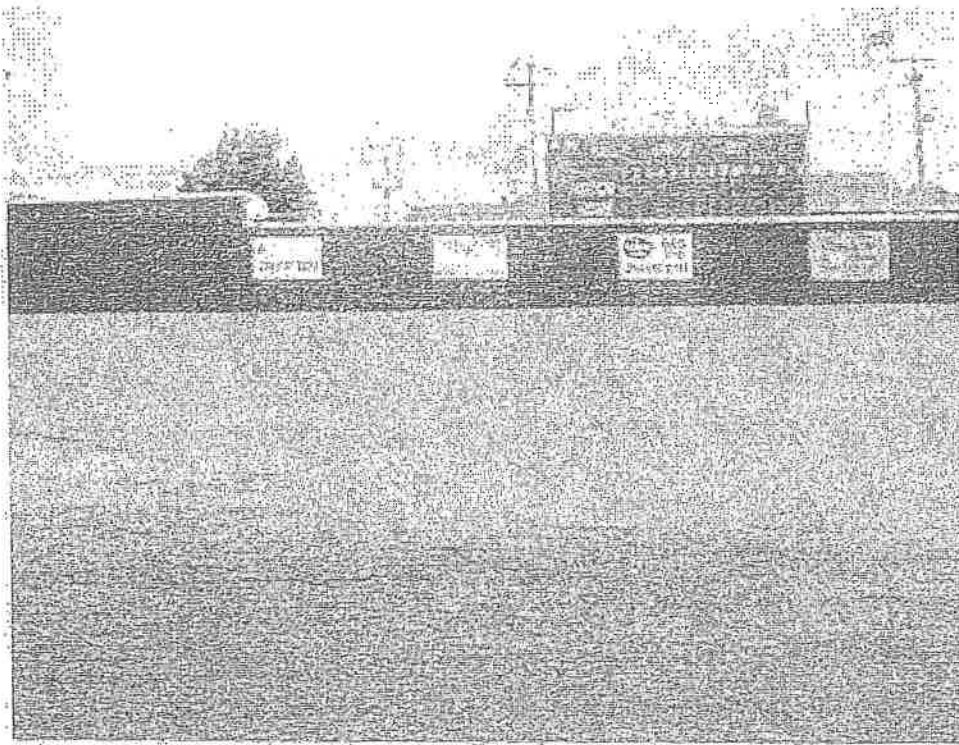
Before going into winter camp, Washington led his men across the Delaware River to attack a Hessian outpost at Trenton, New Jersey, on the morning of December 26, 1776. The Hessians were not expecting an attack on the day after Christmas. Over 900 Hessians were taken prisoner. Washington then moved around an army commanded by General Charles Cornwallis and attacked British troops near Princeton, New Jersey, on January 3, 1777. These victories greatly restored the patriots' hopes.

The battles fought at Saratoga, New York, on September 19 and October 17, 1777, resulted in the surrender of the British army commanded by General John Burgoyne to U.S. General Horatio Gates. After this victory, the French recognized the independence of the United States and agreed to form an alliance with the Americans against the British.

Fighting then shifted to the south with battles in Georgia, South Carolina, North Carolina, and Virginia. Greatly helped by the French Navy, American and French troops closed in on the British forces in Yorktown, Virginia, commanded by General Cornwallis. By late August 1781, French ships had blockaded Yorktown so that no British reinforcements could reach Cornwallis. By October, Washington's army and General Jean Rochambeau's French troops surrounded Cornwallis and bombarded the British with French artillery. General Cornwallis formally surrendered on October 17, 1781. This was the last significant battle of the war.

# Brothers

by ReadWorks



Joseph had run away.

Philip could tell his mother was worried by the way she paced up and down the kitchen floor, twisting her hair into knots, while speaking softly into the telephone. "I don't know where he went," she whispered. She shot Philip a sidelong look that seemed to say, "Don't worry," then smiled as if this was just a normal, routine phone call. "No, we didn't get into a fight. There wasn't..." She left the kitchen, glancing quickly at the clock. Philip was going to be late for school.

Philip pushed his cereal around the bowl with his spoon. Joseph hated living at home. "I'm an old soul," he would sing to their mother whenever she asked him to clean the dishes or put away his laundry. "I can't be tethered," he'd sing, until their mother would laugh. "Joseph," she'd say, exasperated.

Joseph was nearly six years older than Philip and was what their mother called "a troublemaker." Philip had a loose understanding of what it meant to be a "troublemaker." It was someone who stayed out past curfew, lied, ran away, and hung around with "a bad

crowd." Philip had met this crowd, and he didn't think they were bad at all. In fact, he liked Joseph's friends. Whenever they saw him, they shook his hand like he was a grown man and not somebody's kid brother.

Last summer, Philip broke his arm playing baseball. That wasn't exactly true, when Philip came to think of it, but it was what he had told Joseph's friends when they saw the cast on his arm. They had given him the nickname "Captain" after that, and Laura, Joseph's girlfriend, always asked him, "Have you been drafted yet?"

Philip hadn't wanted to play baseball at all that summer. He had wanted to join the swim team, but his father said swimming wasn't a sport. Philip knew better than to argue with his dad and so he agreed. He hadn't realized that his baseball coach had stuck him in the outfield because he was a bad player, and that the coach didn't expect anyone to hit a ball that far into the field.

After dinner one night, Philip heard his dad explain it to his mother. "Philip's the worst player on the team. They put him in the outfield so he doesn't mess it up for the rest of the team," he'd said. He didn't know Philip could hear him. Joseph, who was sitting next to Philip, had nudged him, then squeezed his shoulder. "Don't sweat it, kid," he had said. "There's always something better out there."

Philip had broken his arm the day a fly ball—the only one of the game—soared into the sky right above his head. Philip hadn't been paying attention to the game, but suddenly he heard everyone calling his name. He saw the small black dot blot out the sun, and he raised his left hand high into the air and shut his eyes. He felt the ball land heavily in his glove. He was surprised by its weight. His hand was sore.

He ran back toward the mound, proud for the first time all season that he had helped his team. He wasn't looking where he was going and didn't notice the small rock hidden in the green of the outfield until his foot caught against it. Suddenly, he was soaring into the air. And then, just as quickly, he came crashing down, his arm outstretched, snapping as it hit the ground.

He had cried, knowing that his father would be disappointed and that he wouldn't be able to swim again until next summer.

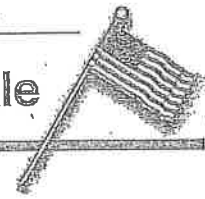
Joseph had taken him out for ice cream.

"You know, there's a lot more to life than baseball," Joseph had said. "Take me. I wasn't meant for some crummy two-star town."

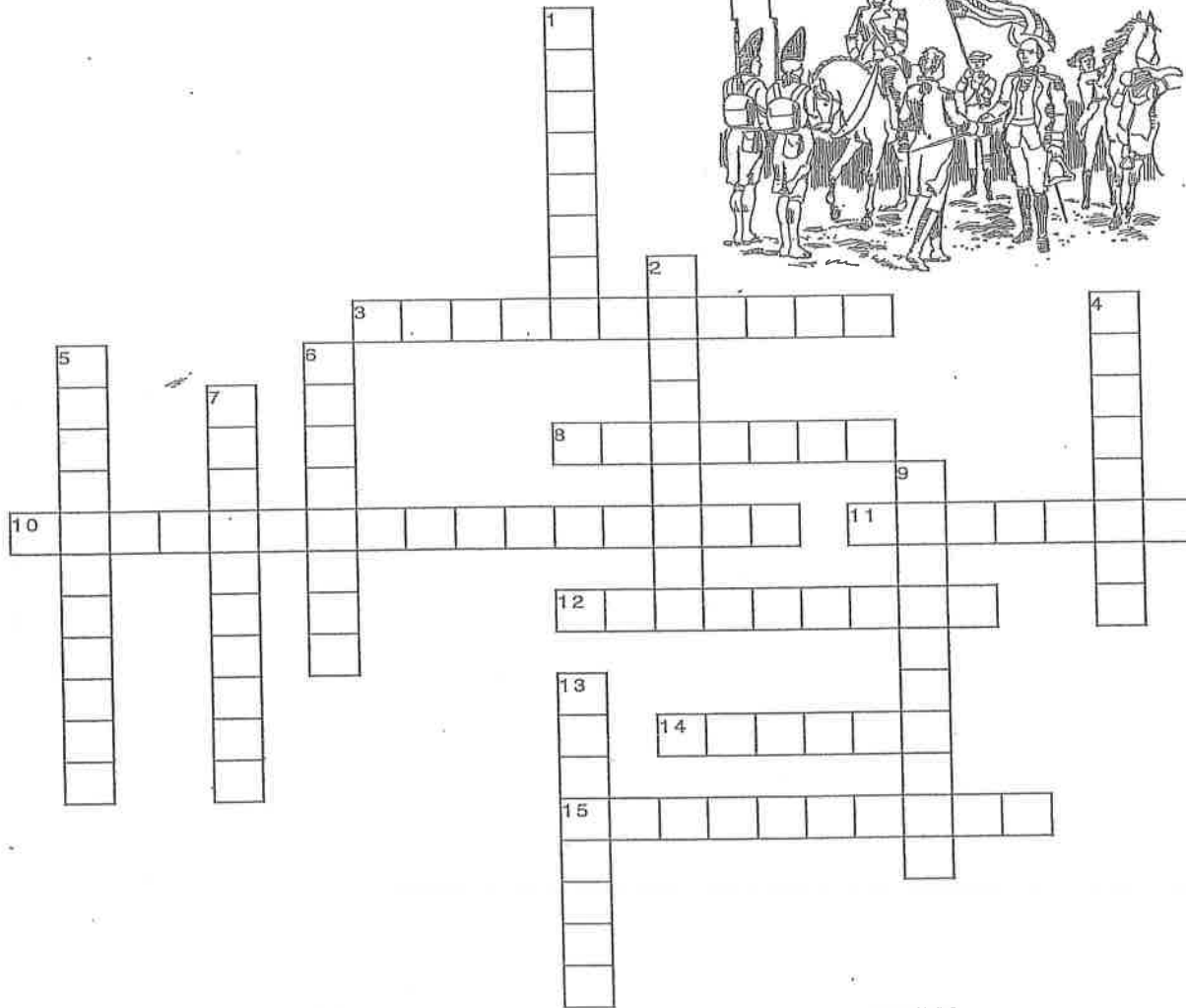
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# The American Revolution Crossword Puzzle



Use the clues below to complete the crossword puzzle.



### ACROSS

- 3. Benedict Arnold and Ethan Allen captured this fort on Lake Champlain.
- 8. The militia stopped the British troops at the \_\_\_\_\_ Bridge.
- 10. Commander in chief of the Continental Army (two words)
- 11. Washington attacked the Hessians camped in this New Jersey town on December 26, 1776.
- 12. What members of the Massachusetts militia were called
- 14. General Cornwallis' troops were bombarded with \_\_\_\_\_ artillery.
- 15. This general formally surrendered on October 17, 1781.

### DOWN

- 1. Site of the last significant battle of the American Revolution
- 2. Place where the first shots of the American Revolution were fired
- 4. Battle in New York that helped bring French support to the Americans
- 5. German soldiers, some of them Hessians, who were hired to fight for the British
- 6. River that Washington crossed in his retreat to Pennsylvania and his attack on Trenton
- 7. The Continental Army was defeated on \_\_\_\_\_, Manhattan, and at White Plains, New York.
- 9. Battle near Boston where the militia held off two of three British charges (two words)
- 13. French ships set up a \_\_\_\_\_ around Cornwallis' troops in Yorktown.

Name \_\_\_\_\_

## Add and Subtract Fractions

To add or subtract fractions with unlike denominators, you need to rename them as fractions with like denominators. You can do this by making a list of equivalent fractions.

Add:  $\frac{5}{12} + \frac{1}{8}$

Step 1 Write equivalent fractions for  $\frac{5}{12}$ :  $\frac{5}{12}, \frac{10}{24}, \frac{15}{36}, \frac{20}{48}$

Step 2 Write equivalent fractions for  $\frac{1}{8}$ :  $\frac{1}{8}, \frac{2}{16}, \frac{3}{24}$

Step 3 Rewrite the problem using the equivalent fractions.  
Then add.

$\frac{5}{12} + \frac{1}{8}$  becomes  $\frac{10}{24} + \frac{3}{24} = \frac{13}{24}$

Stop when you find two fractions with the same denominator.

Subtract:  $\frac{9}{10} - \frac{1}{2}$

Step 1 Write equivalent fractions for  $\frac{9}{10}$ :  $\frac{9}{10}, \frac{18}{20}, \frac{27}{30}, \frac{36}{40}$

Step 2 Write equivalent fractions for  $\frac{1}{2}$ :  $\frac{1}{2}, \frac{2}{4}, \frac{3}{6}, \frac{4}{8}, \frac{5}{10}$

Step 3 Rewrite the problem using the equivalent fractions.  
Then subtract.

$\frac{9}{10} - \frac{1}{2}$  becomes  $\frac{9}{10} - \frac{5}{10} = \frac{4}{10}$ . Written in simplest form,  $\frac{4}{10} = \frac{2}{5}$

Find the sum or difference. Write your answer in simplest form.

1.  $\frac{2}{9} + \frac{1}{3}$

2.  $\frac{1}{2} + \frac{2}{5}$

3.  $\frac{1}{4} + \frac{1}{6}$

4.  $\frac{1}{5} + \frac{3}{4}$

\_\_\_\_\_

5.  $\frac{7}{8} - \frac{1}{4}$

6.  $\frac{3}{4} - \frac{2}{3}$

7.  $\frac{9}{10} - \frac{4}{5}$

8.  $\frac{8}{9} - \frac{5}{6}$

\_\_\_\_\_



LCCE Multiplication Fact Fluency Assessment

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$\begin{array}{r} 2 \\ \times 1 \\ \hline \end{array}$	$\begin{array}{r} 0 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ \times 4 \\ \hline \end{array}$	<p>MY GOAL: <u>    </u> /66</p> <p>MY SCORE: <u>    </u> /66</p> <p>MY TIME: <u>    </u></p>						<p><b>MATH ROCKS</b></p>

# Rights and Responsibilities

Base your answers to the questions on the information in the chart below and on your knowledge of social studies.

Comparing the Rights and Responsibilities of U.S. Citizens

Rights	Responsibilities
<ul style="list-style-type: none"> <li>• right to worship as you wish</li> <li>• right to a free press</li> <li>• right to say what you think or feel</li> <li>• right to a speedy trial</li> </ul>	<ul style="list-style-type: none"> <li>• vote</li> <li>• jury duty</li> <li>• obey the law</li> <li>• pay taxes</li> </ul>

1. Choose a *right* in the chart that is protected by the Bill of Rights. Explain why the right that you chose is important.

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2. Choose a *responsibility* in the chart. Describe why it is important for citizens to meet the responsibility you chose.

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# Who Are Citizens of the United States?

**United States citizens need to study up on their country.**

Are you a master at math? A rock star at reading? What about civics? If you are like millions of Americans, your government know-how might be more of a "know-little."

Civics is the study of the rights and duties of citizens. A good citizen needs to know at least basic information about the nation, such as how the government is run. He or she also needs to know about the country's history and the problems and challenges facing the nation today.

However, studies have found that a lot of Americans don't know enough about the United States. In one study, only one in three Americans could name the three branches of U.S. government. In another, less than 4 percent of teens in Arizona could pass a U.S. citizenship test. That is a test people from other countries need to pass to become U.S. citizens.

Those findings could make Uncle Sam want to move to Canada! After all, if U.S. citizens don't know about their country, they can't help run it, said former U.S. Supreme Court Justice Sandra Day O'Connor. "We are [very lucky] to have a stable ... government," she told *WR News*. "But ... it is the citizens of our nation who must preserve our system of government, and we cannot forget that."

## Citizens Rule!

When the country's founders wrote the U.S. Constitution in 1787, they gave the power to the people! They thought U.S. citizens should have a say in how the nation is run.

One of the most important responsibilities Americans have is voting. U.S. citizens elect many of the people who run the country, from city officials to the U.S. president. Those elected officials make and enforce, or put into effect, laws that affect the whole country.

That's why it's so important that U.S. citizens get clued in on U.S. civics, according to Syd Golston. She was the president of the National Council for the Social Studies. "People who vote need to be informed [or educated] because they're really making the decisions," Golston told *WR News*.

## Civics in Motion

Some U.S. education experts say schools spend less time teaching civics now than they did in the past. "It used to be a subject that was taught ... so many minutes a day," says Margaret Branson. She is the associate director of the Center for Civic Education. "The teaching of civics and government has just dropped off dramatically."

O'Connor has tried to change that. She has spoken out in TV interviews, stressing the value of learning about the United States. She also works with Our Courts, a website that teaches people about U.S. civics.

Other star citizens have spoken out on Uncle Sam's behalf. Actor Richard Dreyfuss crafted a national plan for civics education. Former Supreme Court Justice David H. Souter stepped up U.S. civics talk in schools in his home state of New Hampshire.

## Use the News

But studying in school isn't the only way to become a civics know-it-all, Golston points out. "Read a newspaper, [and] watch the news with your parents," she suggests.

## Pop Quiz!

### Are you a U.S. civics smarty pants? Time to find out!

- (1) What was the purpose of the Declaration of Independence?
- (2) Name one of Abraham Lincoln's accomplishments.
- (3) What two groups make up the U.S. Congress?
- (4) In which state is the Statue of Liberty?
- (5) What did Susan B. Anthony fight for?
- (6) In which month do U.S. citizens vote for president?
- (7) Name one country that the United States fought in World War II.
- (8) What is Martin Luther King Jr. famous for?

Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. According to the passage, what is civics?

- A. Civics is reading newspapers and watching the news.
- B. Civics is studying to pass a citizenship test.
- C. Civics is the study of rights and duties of citizens.
- D. Civics is the voting process Americans must follow.

2. This text discusses the problem that most Americans do not have a lot of civics knowledge. What is one solution people have proposed to solve this problem?

- A. Ignore civics in schools.
- B. Make everyone read newspapers.
- C. Increase civics education in schools.
- D. Make everyone take a citizenship test.

3. People are coming up with different ways to increase civics knowledge.

Which evidence from the text supports this conclusion?

- A. "Some U.S. education experts say schools spend less time teaching civics now than they did in the past. 'It used to be a subject that was taught ... so many minutes a day,' says Margaret Branson."
- B. "Actor Richard Dreyfuss crafted a national plan for civics education. Former Supreme Court Justice David H. Souter stepped up U.S. civics talk in schools in his home state of New Hampshire."
- C. "When the country's founders wrote the U.S. Constitution in 1787, they gave the power to the people! They thought U.S. citizens should have a say in how the nation is run."
- D. "After all, if U.S. citizens don't know about their country, they can't help run it," said former U.S. Supreme Court Justice Sandra Day O'Connor."

4. Based on the text, what is likely about Sandra Day O'Connor?

- A. She thinks that the U.S. should change how people are elected.
- B. She thinks that kids should watch more TV and spend more time on the internet.
- C. She thinks civics is an important part of education for students.
- D. She thinks students do not need to know about civics.

5. What is this text mostly about?

- A. what Sandra Day O'Connor thinks about United States civics
- B. some solutions to the lack of civics knowledge in the United States
- C. some solutions to the election process in the United States
- D. how much time is spent on civics in United States classrooms

6. Read these sentences from the text.

"It used to be a subject that was taught ... so many minutes a day." [ . . . ] "The teaching of civics and government has just dropped off **dramatically** ."

As used in the text, what does the word "**dramatically**" mostly mean?

- A. a lot
- B. the same
- C. a little
- D. colorfully

7. Choose the answer that best completes the sentence.

United States citizens must have a civics education \_\_\_\_\_ they need to be informed in order to make important decisions when voting.

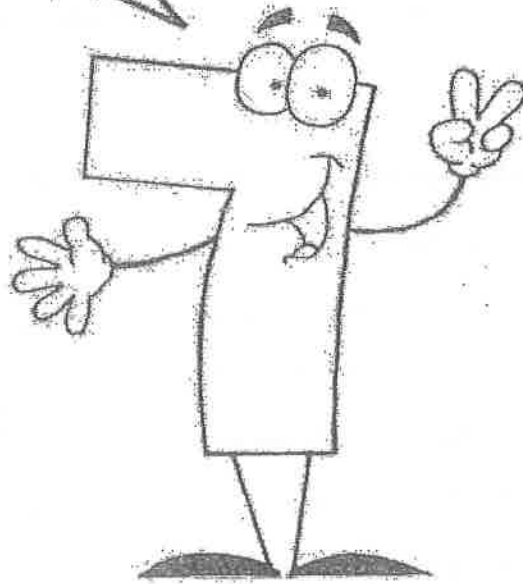
- A. but
- B. because
- C. though
- D. after

8. What are some ways the text recommends for learning more about civics?

9. Based on the text, what power does the Constitution give to United States citizens? Use evidence from the text to support your answer.

DAY

SEVEN



5<sup>th</sup> Grade



Name \_\_\_\_\_

Date \_\_\_\_\_

## More Economic Terms

There are a few more concepts you should understand about supply and demand and how they influence the economy.

**Consumption** is the way we use the goods we produce to satisfy our wants and needs.

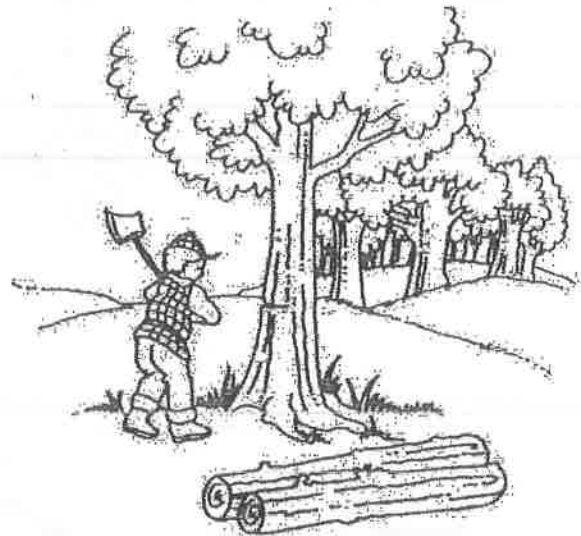
One group of people couldn't possibly produce all of the goods and services they use daily. Even if they could, the cost of doing so would be astronomical! Imagine if you had to grow the wheat, harvest it, mill it, transport it, and bake it all by yourself just to enjoy a slice of bread. So, instead, we rely on interdependence.

**Interdependence** is the way production and consumption of goods and services is divided among many different individuals and groups. Today we have farmers to grow the wheat, special machines to harvest it, mills to grind it into flour, and trucking companies to transport the flour to the bakers. Baking companies then bake it into bread, and truckers once again transport the bread to stores where it can be sold. Many other individuals are involved in producing the necessary machines, ingredients, and packaging. Duplication of effort and supplies is kept to a minimum. Each group specializes in one area of bread production. This division of labor saves time and money for all and keeps the price of bread down.

This system of interdependence requires some sort of exchange. We exchange money for the goods and services that we need. Mills pay farmers for the wheat, customers pay stores for the bread, and so on.

Put the following steps of production and consumption in the right order from 1-8.

- \_\_\_\_\_ Lumberjacks cut down trees.
- \_\_\_\_\_ Mill turns lumber into pulp.
- \_\_\_\_\_ Truckers transport trees to the mill.
- \_\_\_\_\_ Truckers transport pulp to the factory.
- \_\_\_\_\_ Consumers buy paper from the store.
- \_\_\_\_\_ Paper factory turns pulp into paper.
- \_\_\_\_\_ Tree farmers plant seedling trees.
- \_\_\_\_\_ Truckers transport paper to stores.



Name \_\_\_\_\_

Date \_\_\_\_\_

### Case Study: The Lemonade Stand



Use the picture of the lemonade stand above to answer the following questions.

1. Is this business selling a good or a service?

2. List the resources used to produce the lemonade.

3. Are these resources scarce or plentiful?

4. Are these resources renewable or nonrenewable?

5. List the steps in the production of lemonade.

# Lesson

Day 7

*Read Carefully! You will read several stories about the life stages of tadpoles. As you read, think about what might happen next. Look to fill in the journal entries and think about what you already know.*

## Tadpole to FROG

### Day One

The eggs have hatched! The babies, called tadpoles, don't look anything like the frogs they will develop into. In fact, they look more like little fish or minnows than land creatures. But they aren't swimming around the pool very much right now because they are waiting for their gills to mature and for their muscles to become stronger.

### Day Five

The little tadpoles are swimming around in groups like schools of fish. I can see their gills clearly now as the tadpoles nibble on green water plants. Unlike the gills of a fish, the gills of a tadpole extend outside, along its body. Inside a tadpole's mouth are raspy surfaces that the tadpole uses like teeth to scrape tiny living things, such as algae and bacteria, from the undersides of plant leaves.

### Day Fifteen

The tadpoles are dark green and gray in color. Each has a rounded body and a long tail fin that helps it swim. A flap is starting to grow over each tadpole's gills. Soon the tadpoles will have to swim up to the surface to breathe.

### Day Thirty

Back legs are starting to grow on the tadpoles. I can just begin to see tiny nubs where the legs will develop.

### Day Thirty-five

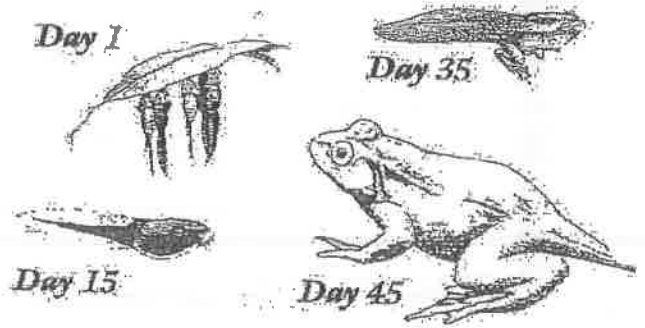
The tadpoles' back legs are fully developed, and each leg has three webbed toes. The tadpoles still have long tails for swimming, but now they also use their back legs to kick and push themselves along. And, I can see nubs where the front legs are starting to develop.

### Day Forty

The front legs have grown in, and it's funny to see the tadpoles standing on the bottom of the pool instead of swimming around in it. They have big mouths now and they look more like frogs than fish. They can eat dead insects, as well as plants. When they become adult frogs, they will eat only live insects. I notice that the tadpoles' tails are shrinking and fading back.

### Day Forty-five

The tails have almost disappeared. The gills are totally gone, and the lungs are fully developed. The tadpoles can leave the water and live on the land. Now they are no longer tadpoles—they are froglets, or young frogs.





When a flap grows over a tadpole's gills, what will the tadpole begin to do?

- (A) eat dead insects
- (B) kick its back feet to swim
- (C) swim to the surface to breathe
- (D) use its gills to swim in schools

If a tadpole is around the thirty-fifth day of its life, how will it get around?

- (A) It will walk on land.
- (B) It will swim around fast.
- (C) It will only be able to stay still.
- (D) It will only be able to stand on the bottom of a pool.

3. After day forty in a tadpole's life, what would most likely happen if the tadpole found a dead fly?

- (A) The tadpole would swim away from the fly.
- (B) The tadpole would eat the fly.
- (C) The tadpole would learn to fly.
- (D) The tadpole would take the fly onto land.

4. When the tadpoles described in the entries become adults, what will they probably prefer to eat?

- (A) algae and bacteria
- (B) water plants
- (C) tadpoles
- (D) live insects

5. Based on information in the journal, what do you think the froglets will do next?

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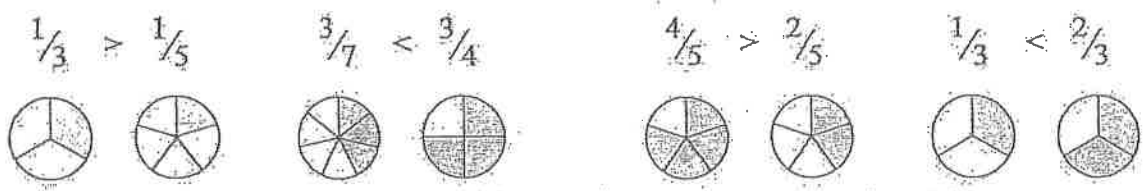
### Comparing Fractions

Name: \_\_\_\_\_

Use < or > to compare each fraction.

Anytime the numerator is the same, the number with the smaller denominator will be larger because it will have larger pieces.  
For example:

Anytime the denominator is the same, the number with the larger numerator will be larger because it will have more pieces.  
For example:



### Answers

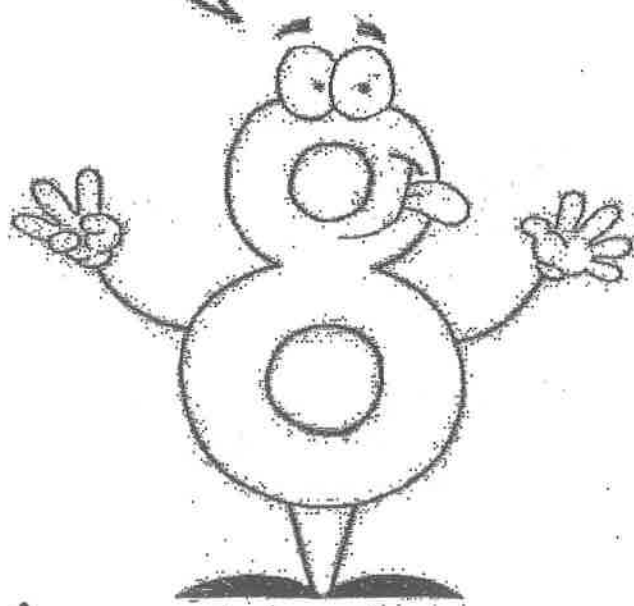
- Ex)          >
1.
  2.
  3.
  4.
  5.
  6.
  7.
  8.
  9.
  10.
  11.
  12.
  13.
  14.
  15.
  16.
  17.
  18.
  19.
  20.

- Ex)  $\frac{2}{4} > \frac{1}{4}$
- 1)  $\frac{1}{6} < \frac{2}{6}$
  - 2)  $\frac{2}{3} < \frac{2}{6}$
  - 3)  $\frac{2}{4} < \frac{2}{6}$
  - 4)  $\frac{1}{4} < \frac{3}{4}$
  - 5)  $\frac{2}{3} < \frac{1}{3}$
  - 6)  $\frac{2}{6} < \frac{2}{4}$
  - 7)  $\frac{7}{8} < \frac{6}{8}$
  - 8)  $\frac{6}{7} < \frac{4}{7}$
  - 9)  $\frac{4}{6} < \frac{1}{6}$
  - 10)  $\frac{1}{5} < \frac{1}{3}$
  - 11)  $\frac{5}{7} < \frac{5}{8}$
  - 12)  $\frac{1}{3} < \frac{1}{6}$
  - 13)  $\frac{3}{4} < \frac{3}{5}$
  - 14)  $\frac{3}{7} < \frac{6}{7}$
  - 15)  $\frac{2}{7} < \frac{1}{7}$
  - 16)  $\frac{1}{2} < \frac{1}{8}$
  - 17)  $\frac{2}{4} < \frac{2}{6}$
  - 18)  $\frac{5}{6} < \frac{5}{8}$
  - 19)  $\frac{1}{4} < \frac{2}{4}$
  - 20)  $\frac{6}{7} < \frac{1}{7}$



# DAY

EIGHT



5th Grade

**Money Flow**

Math

Solve each problem. Make a flowchart and work backward to help.

- Madison and Jim paid \$21.08 for one large pizza, 2 salads with the same price, and 2 drinks with the same price. The pizza cost \$11.70, which was 3 times as much as the cost of one salad. They also used a coupon for \$2 off their purchase. What was the cost of one drink?  
\_\_\_\_\_
- Carla bought a digital camera that cost \$91.98. She also bought 2 identical memory cards and a camera case. The camera cost 6 times as much as the case. She paid \$127.35, including sales tax of \$6.06. What was the cost of each memory card?  
\_\_\_\_\_
- Lia, Phil, and Cam collect a total of \$200.30 for a holiday fundraiser. Phil collects \$12.80 more than Lia. Cam collects 3 times as much as Lia. How much does each person collect?  
\_\_\_\_\_
- While on vacation, Craig bought a pair of sunglasses for \$15.98, a hat for \$7.99, 5 postcards, and a beach towel. The beach towel cost \$0.50 more than half the price of the sunglasses. Craig gave the cashier \$40 and got \$3.59 in change. Each postcard cost the same. How much did each postcard cost?  
\_\_\_\_\_
- Stretch Your Thinking** Draw a flowchart for a money problem similar to the ones in Exercises 1–4. Then write a word problem that can be solved by using your flowchart and working backward.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# Maps

by ReadWorks



People use maps for many different purposes. There are maps that show demographics—the different groups of people that live in a certain area; where every fruit tree in a particular area is located; where all the vending machines are. There are even maps that show great places to walk your dog.

Many areas around the world have maps that show their transportation systems. A lot of people use these maps every day to get to where they want to go. Sometimes, though, you can make your own map of a place in your head. You can do this by noticing certain markers and cues. For instance, say you had just moved to a new city and wanted to get to the grocery store. The grocery store's location could be described in terms of its longitude and latitude, street address, and even sea level. But the information you're after is where it is located in relation to your new home. Once you have this information, you can establish a route to get there.



Take note of the landmarks near you and on the way to your destination. One way to remember you're on the correct route might be to note, for example, that when you're headed south, toward the store, the local library is on your left. That means the library is on the east side of the street. Let's imagine you notice a house with a bright red door two blocks from the store. In the future, when you're on your way to the store, you'll be able to tell you're almost there when you see the house with the red door. You keep walking. There's a hat shop one block from the grocery store. Another landmark! If you were to go home and draw yourself a map of the area, you might include each of these landmarks.

Cues like these help us orient ourselves in the world around us when we don't have access to maps, or are getting used to an unfamiliar environment. This route, the route to the grocery store, is now part of your internal map. When you're walking around town, riding your bike or in a car, you're absorbing data about where things are located in relation to each other. If you think about it, there are probably lots of places you can remember how to get to, by heart. Those internal maps contribute to your knowledge of the world around you. When you think of the city or town where you grew up, don't you think of routes and pathways you've traveled habitually?

When we explore new places, we often make connections between various point As and point Bs through personal association. But since we can't build these personal maps in every town and city in the world, we get to know some places by looking at maps. Knowing how to read a map and practicing reading maps of lots of different places are excellent ways to expand your knowledge of the world.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. How do people use maps that show the transportation systems of areas?

- A. to find buried treasure
- B. to get to where they want to go
- C. to learn about mountains and rivers
- D. to find their way around a building

2. What does the author describe in this passage?

- A. how to get to the grocery store
- B. how to ride a bike
- C. how you can use a map
- D. how you can find a pathway

3. Read the following sentences: "There are maps that show demographics-the different groups of people that live in a certain area; where every fruit tree in a particular area is located; where all the vending machines are. There are even maps that show great places to walk your dog."

What can be concluded about maps based on this information?

- A. Maps can only show one location.
- B. Maps are not very helpful.
- C. There are different types of maps.
- D. There is only one kind of map.

4. Read the following sentences: "There's a hat shop one block from the grocery store. Another landmark! If you were to go home and draw yourself a map of the area, you might include each of these landmarks. Cues like these help us orient ourselves in the world around us when we don't have access to maps, or are getting used to an unfamiliar environment."

Based on this evidence, why is remembering landmarks helpful?

- A. They help you find a location when you have access to maps.
  - B. They help you find a location even if you don't have access to maps.
  - C. They help you find locations on different maps.
  - D. They will always help you find different hat shops in an area.
5. What is this passage mainly about?
- A. how to find the local grocery store
  - B. how maps help us find our way
  - C. how to remember unfamiliar landmarks
  - D. how latitude and longitude can help us
6. Read the following sentences: "When you think of the city or town where you grew up, don't you think of routes and pathways you've traveled **habitually**?"

As used in the passage, what does "**habitually**" mean?

- A. obsessively
- B. often
- C. quickly
- D. infrequently

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

When we look at a map of a new area, such as a transportation map, we can figure out where we're going. \_\_\_\_\_, as we explore the world, we make new internal maps of landmarks and important places.

- A. Finally
- B. Additionally
- C. Unfortunately
- D. Actually

8. Why does the author think it's important to know how to read a map, and practice reading maps of lots of different places?

9. According to the author of this passage, what is one strategy you can use to get to know a new neighborhood?

10. Explain what an internal map is and how it is different from other types of maps. Use information from the passage to support your answer.





Name: \_\_\_\_\_ Class: \_\_\_\_\_

## NTI Day 8

1.  $4,826 \div 24 = ?$

R

5.NBT.6

2.  $2,560 \div 30 = ?$

R

5.NBT.6

3.  $5,214 \div 25 = ?$

R

5.NBT.6

4. Solve.

$4,384 \times 7 =$

5.NBT.5

5. Solve.

$$38 \times 52 =$$

5.NBT.5

6. Solve.

$$37 \times 4 =$$

5.NBT.5

7. Solve  $18 \div 4$ .

R

5.NBT.6

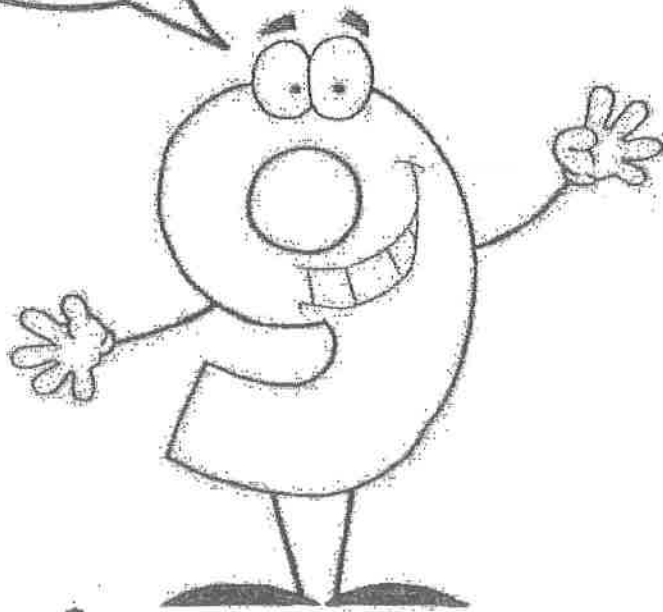
8. Solve.

$$2,527 \times 5 =$$

5.NBT.5

# DAY

NINE



5<sup>th</sup> Grade

Name \_\_\_\_\_

Read the story. Then, answer the questions.

## The U.S. Government

The U.S. government has three branches: executive, legislative, and judicial. The president and cabinet of advisors make up the executive branch. The president is elected by the people, but chooses the cabinet, subject to Senate approval. The Senate and House of Representatives make up the U.S. Congress in the legislative branch. Each U.S. state has two senators. Senators' six-year terms are staggered so that only one-third are elected every two years. Each state also has a number of representatives based on the state's population in a census taken every 10 years. The House of Representatives has 435 members. All representatives serve two-year terms and are elected at the same time. The third branch of the U.S. government is the judicial branch, which consists of courts of law throughout the nation. The highest court is the Supreme Court, which has nine justices. At the time of election for new justices, the president nominates the justices and the Senate approves the nominated justices.

1. What is the main idea of this story?
  - a. The Senate approves the president's cabinet choices.
  - b. The president and members of Congress are elected.
  - c. The U.S. government has three branches.

2. Which offices make up the executive branch?

---

3. Which groups make up the U.S. Congress?

---

4. How is the number of senators in each state different from the number of representatives?

---

---

5. How are the Supreme Court justices chosen?

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---

# What's Your United States I.Q.?



People who want to become citizens of the United States take a test to show their knowledge of American history and government. The test includes questions similar to the ones below. How many of them can you answer? Circle the correct circle.

The first president of the United States was:  
 (A) Abraham Lincoln     (B) Benjamin Franklin     (C) George Washington

The main writer of the Declaration of Independence was:  
 (A) Benjamin Franklin     (B) Thomas Jefferson     (C) Paul Revere

An amendment \_\_\_\_\_ the Constitution.  
 (A) changes     (B) does away with     (C) disagrees with

The branch of government that makes our laws is the \_\_\_\_\_ branch.  
 (A) executive     (B) judicial     (C) legislative

The Bill of Rights is part of the:  
 (A) Declaration of Independence  
 (B) Constitution  
 (C) Emancipation Proclamation

The Bill of Rights guarantees all Americans the freedom of:  
 (A) speech     (B) religion     (C) both speech and religion

The term for a Supreme Court justice is:  
 (A) 10 years     (B) life     (C) four years, then reelection

The \_\_\_\_\_ branch has the power to veto.  
 (A) executive     (B) legislative     (C) judicial

The Constitution was signed in:  
 (A) 1776     (B) 1783     (C) 1787

Which of these documents was written first?  
 (A) Emancipation Proclamation  
 (B) Declaration of Independence  
 (C) Constitution

How many justices are there on the Supreme Court?  
 (A) nine     (B) eleven     (C) five

How many senators are there from each state?  
 (A) one     (B) two     (C) four



30) **Box:** On the back of this page, write a question that you think all Americans should be able to answer. Include the answer.

# Lesson

Read this article about a plant that poses a threat. As you read, think about the information that is directly stated as well as what you already know. This will help you find out information that is not directly stated.



Many invaders of places on Earth look nothing like aliens in science fiction. But they are plenty scary. They drive out other living things that would naturally thrive in the place. Some are creatures, like the brown tree snake, that destroy other animals by devouring them or spoiling their environment. Others are insects, like the scarlet lily beetle, that attack plants. But some of the worst invaders are plants themselves. In the United States, purple loosestrife is on the list of the most dangerous. It's no ordinary weed or pest plant. It's been called a "deadly threat."

## ~~THE PURPLE PLAGUE~~

A loosestrife plant can grow to a height of 6 to 10 feet. It sends up strong stalks covered with reddish purple flowers. Each flower has 5 to 6 petals and a seedpod. The flowers bloom from July to September. You may have seen loosestrife growing in bright masses on riverbanks or carpeting watery meadows. If the plant were not so dangerous, you might say it was just plain beautiful.

## ~~A "Deadly Threat"~~

A single loosestrife plant produces up to 200,000 seeds. The seeds are spread by water, wind, animals, boats, and people. The roots are nearly impossible to destroy. Loosestrife not only thrives in wetland areas; it can survive under two feet of water. Harsh climates don't kill it, and it has no natural enemies. The result is that loosestrife spreads wherever it can. In 10 years, it can crowd out 90 percent of native wetland plants. Native animals like turtles, muskrats, ducks, and other birds depend on the other plants for food and habitat. What happens to them? The animals are forced out, too.



## ~~How Did It Get Here?~~

Loosestrife seeds first arrived in North America on ships. They came accidentally from Europe, in ships' ballast. Ballast is a heavy load of something, such as river stones, used to keep a ship steady in rough water. Loosestrife seeds also came purposely from Europe. Loosestrife was considered a garden herb. People used it in medicines and flower arrangements. By the 1830s the plant had spread throughout the East. Now it is thriving in most, if not all, of the 50 states.

## ~~WHAT CAN BE DONE?~~

There is not much that people can do alone to stop loosestrife and other invader plants once they have begun taking over an area. But each state has groups that work together to control plant pests and invaders. And individuals *can* do one important thing. They can avoid planting them!



Day 9

1. From the article, you can figure out that the title "Dangerous Invader" refers to

- (A) a wetland area.
- (B) a watery meadow.
- (C) the purple loosestrife plant.
- (D) a muskrat.

3. Details in the paragraph A "Beautiful Killer" suggest that loosestrife

- (A) is destructive to other plants as well as animals.
- (B) hurts other plants but has no effect on animals.
- (C) can be crowded out by other plants.
- (D) can be drowned in deep water.

2. The paragraph with the heading The "Purple Plague" says, "If the plant were not so dangerous, you might say it was just plain beautiful." This means that

- (A) loosestrife is not beautiful.
- (B) loosestrife is not dangerous.
- (C) loosestrife is dangerous only because it looks beautiful.
- (D) loosestrife is beautiful, so it can be hard to remember that it is dangerous.

4. A hundred years ago, why did people probably want to grow loosestrife in their gardens?

- (A) They wanted to drive out the native plants and animals.
- (B) They wanted to plant their own meadows.
- (C) They thought loosestrife was beautiful and useful.
- (D) They were conducting scientific experiments.

5. The article says that loosestrife seeds first came to North America on ships that used river stones as ballast. From what the article says about where loosestrife grows, how might the seeds have gotten in with the river stones?

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Name \_\_\_\_\_

## Mixed Number Sums and Differences

Write equivalent fractions and then find the sum or difference. Write the answer in simplest form. Write the letter of the exercise above its sum or difference at the bottom of the page to answer the riddle. Two have been done for you.

A.  $1\frac{1}{3} + 2\frac{1}{4} =$  \_\_\_\_\_

E.  $5\frac{9}{10} - 3\frac{2}{5} =$   $2\frac{1}{2}$

E.  $8\frac{5}{8} - 7\frac{1}{2} =$  \_\_\_\_\_

N.  $4\frac{3}{4} - 3\frac{1}{4} =$  \_\_\_\_\_

O.  $1\frac{3}{4} + 1\frac{7}{8} =$  \_\_\_\_\_

R.  $2\frac{1}{6} + 1\frac{7}{12} =$  \_\_\_\_\_

R.  $1\frac{9}{10} + 1\frac{4}{15} =$   $3\frac{1}{6}$

S.  $6\frac{5}{6} - 4\frac{3}{8} =$  \_\_\_\_\_

U.  $8\frac{5}{6} - 6\frac{4}{9} =$  \_\_\_\_\_

V.  $7\frac{1}{2} - 6\frac{1}{5} =$  \_\_\_\_\_

X.  $1\frac{1}{6} + 1\frac{8}{9} =$  \_\_\_\_\_

What do you call a scared dinosaur?

$\frac{3}{12}$   $\frac{1}{2}$  **E**  $\frac{2}{2}$   $\frac{3}{4}$   $\frac{3}{10}$   $\frac{3}{8}$   $\frac{7}{18}$   $\frac{11}{24}$  **R**  $\frac{1}{6}$   $\frac{1}{8}$   $\frac{1}{18}$

Name: \_\_\_\_\_ Class: \_\_\_\_\_

## 5th Grade NTI Day 9

1. Solve the following problem.

$$81.4 + 13.42 =$$

5.NBT.7

2. Find the product.

$$6.0 \times 7.99 =$$

5.NBT.7

3. Solve the following problem.

$$60.5 + 2.75 + 31.25 =$$

5.NBT.7

4. Solve the following problem.

$$57.54 - 35.28 =$$

5.NBT.7

5. Solve the following problem.

$$11.60 \div 2.9 =$$

5.NBT.7

6. Find the product.

$$15.9 \times 20.7 =$$

5.NBT.7

7. Solve the following problem.

$$66.36 - 23.18 =$$

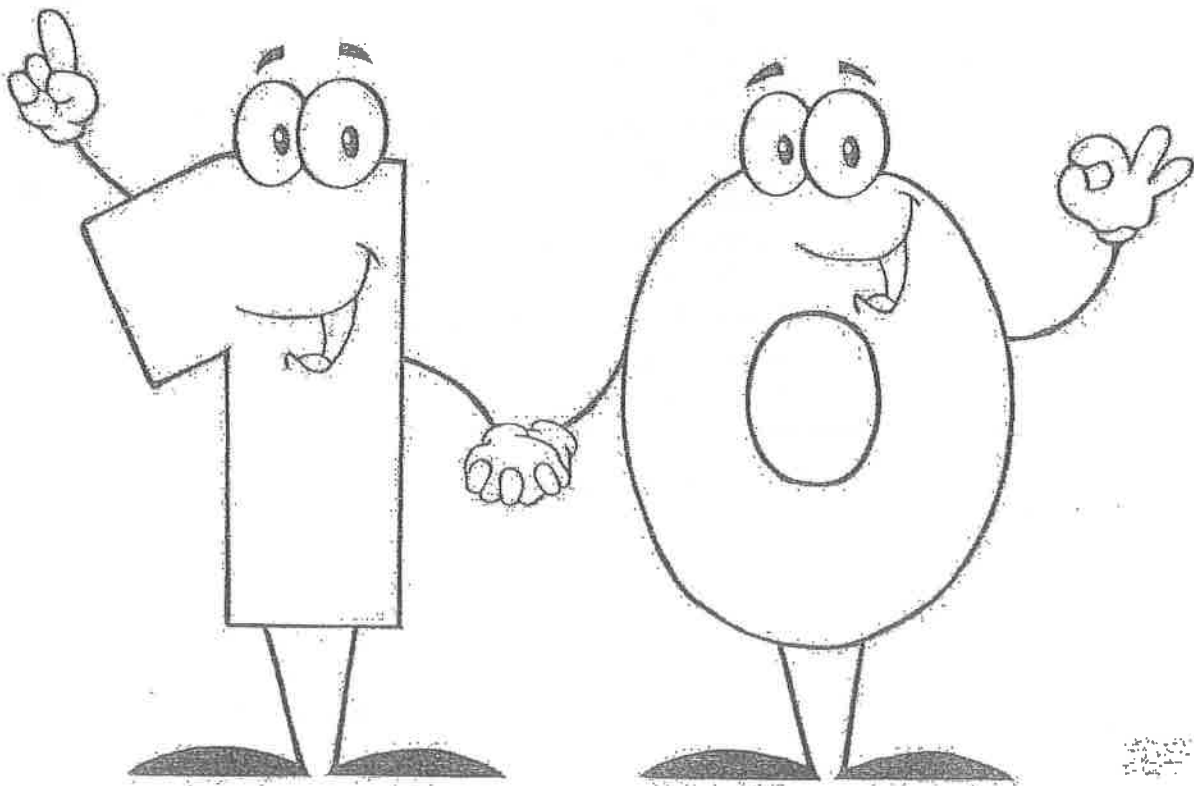
5.NBT.7

8. Solve the following problem.

$$58.4 - 7.19 =$$

5.NBT.7

# DAY



5<sup>th</sup> Grade

July 10



# A Physical Map: North America

## Introducing the Map

Discuss with students that physical maps show the natural landforms and waterways on Earth's surface. Share the following information with students as they look at the physical map of North America.

North America has the following main land regions:

- The Coast Ranges extend from Alaska to Mexico. Familiar mountain ranges in this area are the Alaska Range, Olympic Mountains, the Cascade Range, and the Sierra Nevada Range.
- Deserts lie between the mountain ranges. They are the Great Basin, Mojave, and the Sonoran Deserts. The Chihuahuan Desert extends from southern New Mexico and Texas into Mexico.
- The Rocky Mountains run from Alaska to New Mexico, and extend southward into Mexico. In Mexico, they are called the Sierra Madres.
- The Interior Plains cover much of central Canada and the North-Central region of the United States. The driest western part is called the Great Plains.
- The Canadian Shield is a large area of ancient rock that covers most of eastern Canada.
- The Appalachian Mountains extend from Quebec to Alabama. Some familiar mountains in this range are the White Mountains, Green Mountains, and the Catskill Mountains.
- Coastal lowlands stretch along the Atlantic Ocean and the Gulf of Mexico.
- Central America is an isthmus that connects the southern part of North America to South America.
- Most of the islands in the Caribbean Sea were formed by volcanoes.

Also, discuss the major waterways that are labeled on the map. Due to the wide variety of physical features in North America, only major ones were included.

## Introducing Vocabulary

**Canadian Shield** a U-shaped region of ancient rock that curves around the Hudson Bay; southern part of shield is thick with forests and northern part is tundra

**desert** a dry region with little or no rainfall

**Greater Antilles** an island group of the West Indies including Cuba, Jamaica, Hispaniola (Dominican Republic and Haiti), and Puerto Rico (U.S.)

**gulf** a large area of ocean that is partly surrounded by land

**isthmus** a narrow strip of land having water on each side and connecting two larger bodies of land

**Lesser Antilles** an island group of the West Indies including eight countries and eight dependencies

**mountain range** a group or chain of mountains

**physical map** a map that shows natural landforms and waterways on Earth's surface

**plains** a large flat area of land

## ANSWER KEY

### Monday

1. Any four of the following: deserts, islands, mountains, peninsulas, plains, and shield
2. Any four of the following: bays, gulfs, lakes, oceans, rivers or seas

### Tuesday

1. Rocky Mountains; Canada, United States, and Mexico (Sierra Madres are an extension of the Rockies.)
2. Atlantic, Arctic, and Pacific Oceans; Beaufort, Bering, Labrador, and Caribbean Seas; Labrador and Caribbean Seas

### Wednesday

1. Missouri River and Mississippi River
2. Interior Plains and Great Plains

### Thursday

1. Greater and Lesser Antilles
2. Gulf of Alaska, Gulf of California, Gulf of Mexico, and Gulf of St. Lawrence; Gulf of Mexico and Gulf of St. Lawrence

### Friday

1. peninsula; Mexico
2. Canadian Shield

### Challenge

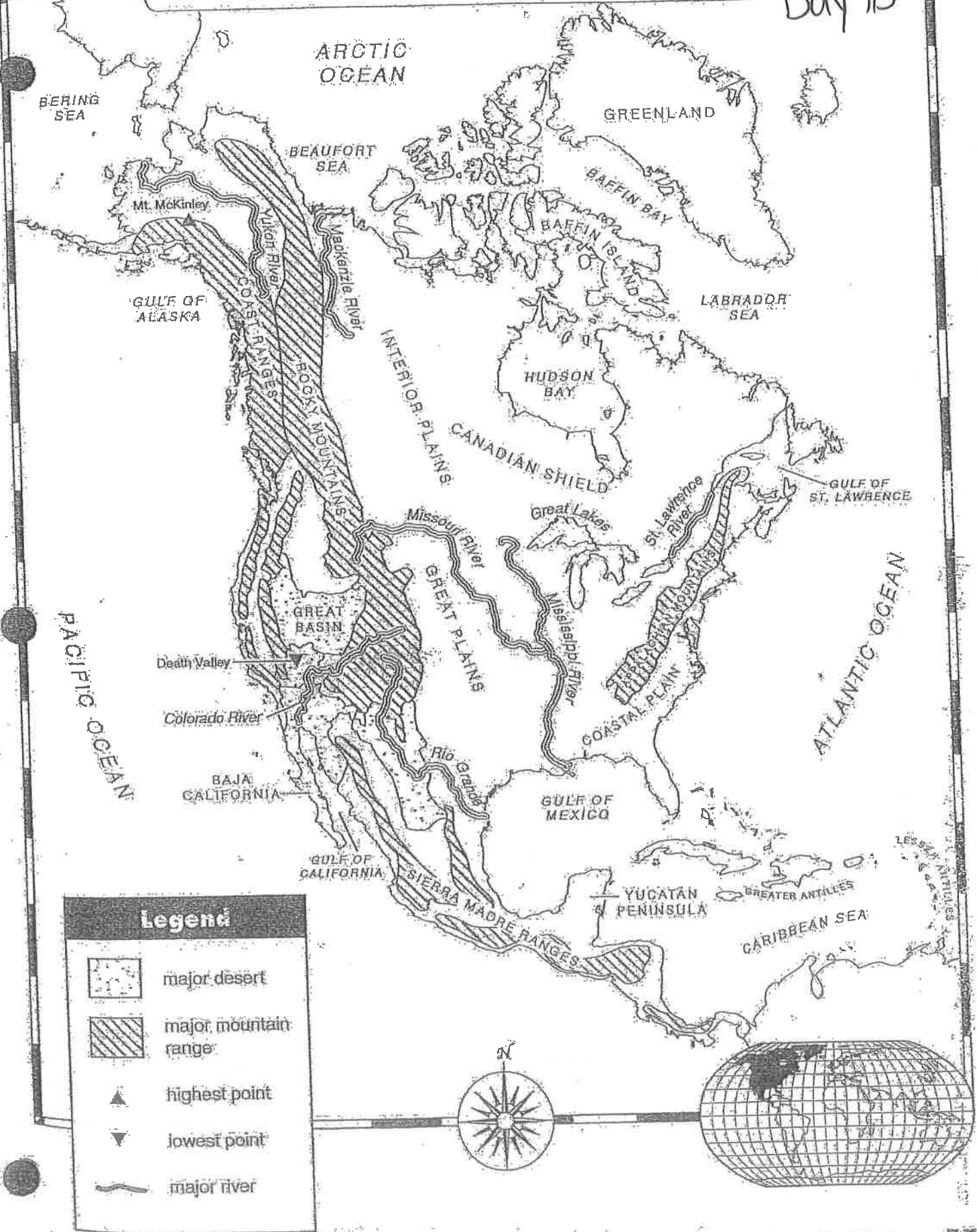
Lake Erie, Lake Huron, Lake Michigan, Lake Ontario, and Lake Superior

Mt. McKinley 20,320 feet (6,194 m); Death Valley 282 feet (86 m) below sea level






Name \_\_\_\_\_

# A Physical Map: North America

Day 10



### Legend

-  major desert
-  major mountain range
-  highest point
-  lowest point
-  major river





## A Physical Map: North America

### Monday

1. Name four kinds of landforms that are shown on the map.

---

2. Name four kinds of waterways that are shown on the map.

---

### Tuesday

1. Which mountain range is the largest in North America? It extends through which three countries in North America?

---

2. Name the labeled oceans and seas that border North America. Which seas flow into the Atlantic Ocean?

---

### Wednesday

1. Which two rivers in the U.S. make up the longest river system in North America?

---

2. Which labeled landforms cover most of central Canada and the central United States?

---



# A Physical Map: North America

WEEK 13

## Thursday

1. Which two groups of islands are located in the Caribbean Sea?

---

2. Name the labeled gulfs. Which one is the largest, and which one is connected by water to one of the Great Lakes?

---

---

---

## Friday

1. What kind of landform is Baja California? Is it located in Mexico or the United States?

---

2. Which U-shaped region of ancient rock curves around the Hudson Bay?

---

## Challenge

On the map page, label the names of the five Great Lakes. Also, write the elevations for Mt. McKinley, the highest point, and Death Valley, the lowest point, on the map. Use a reference physical map to find the elevations.

# 7 Black Holes

by Henry and Melissa Billings

Scientists can't see them, but they are pretty certain they exist somewhere out in deep space. They are black holes, the fantastic mystery of outer space.

**I**t was a star vastly larger than our own sun. For hundreds of years this giant star burned brightly in its corner of the universe. Then, at the end of its life span, a bizarre thing happened. The dying star began to collapse in on itself. While the star was in its death throes, all the matter that made up the star was squeezed together into a smaller and smaller area. Soon the star measured no more than a mile across. Its matter was so tightly packed that a chunk of it the size of a small marble weighed as much as a mountain.

As the dead star continued to fall into itself, it brought with it every bit of matter in the area. Every speck of dust, every stray atom, was dragged into it. The star had become a black hole. A black hole is a small area of matter so dense that not even a light beam can escape the pull of its gravity.

Since no light can leave black holes, there is no way for us to see them. They are invisible. We know of their existence because of the strange things that happen around them. Light that is traveling through space just vanishes.

Just how wild is a black hole? Let's take a look at gravity. A common expression related to gravity is, "What goes up must come down." When someone throws a ball into the air, it must return to Earth. This happens because Earth attracts the ball, or pulls it toward itself. A flowerpot that is knocked off a third-story ledge will always hit the sidewalk. It is only the great thrust of giant rockets that allows the space shuttle to escape the pull of Earth's gravity.

On a planet with double or triple Earth's gravity, objects would act quite differently, because the pull, or attraction, would be much stronger. A ball thrown into the air would not go very high, and it would plunge quickly back to the surface of the planet. A falling flowerpot would be a lethal weapon. It would kill any luckless pedestrian who might happen to get hit by it. Rockets far more powerful than those used on Earth would be needed to break away from the pull of the planet's gravity.

Beams of light, however, would have no trouble at all escaping from this planet. Even if the force of gravity were increased to a million times that of Earth, light beams would still not be affected. Humans on such a world, though, would be crushed flatter than their own shadows.

Only if the amount of gravity were many billions of times stronger than Earth's would light beams bend back to the surface. That is the case with a black hole. It is hard to imagine just how dense and heavy black hole matter is. A penny made from black hole matter would rip through your pocket and plunge through the earth with the greatest of ease. When it emerged on the other side, it would hover in the air for a moment and then plunge back through the earth.

Black holes are the most bizarre objects in the universe. Nothing ever leaves a black hole. No light leaves it. No physical objects leave it. Once something enters a black hole, it is there forever. Black holes are like permanent detention halls in the sky. If a travel agent were to arrange a flight to a black

hole, it would have to be a one-way trip. As the scientist Robert Jastrow said, "It is almost as though the material inside the black hole no longer belongs to our universe."

Suppose, just for the sake of amusement, that you happened to drop into a black hole. What would happen to you? Think of going feet first. Your feet would be pulled down faster than your ears. As a result, you would be drawn into a very thin strand of matter. Then the individual atoms in your body would be pulled apart.

Were you to survive the trip, however, some scientists believe that you would emerge in the fourth dimension. You would be in a totally different universe. The point where matter exits from this universe and goes into the next is referred to as a white hole. Many scientists believe that there are at least five black holes in our section of the universe. But, then, no one really knows for sure. Our knowledge of black holes is based only on informed guesswork. ■

✓ Enter your reading time below. Then look up your reading speed on the Words-per-Minute table on page 130.

Reading Time: \_\_\_\_\_

Reading Speed \_\_\_\_\_

Enter your reading speed on the Reading Speed graph on page 131.

### Comprehension

Put an **X** in the box next to the correct answer for each question or statement. Do not look back at the selection.

1. Gravity in a black hole is
- a. so great that even light can't escape.
  - b. twice that of Earth.
  - c. 100 times that of Earth.

2. A black hole is best described as a
- a. small area of dense matter located in outer space.
  - b. huge area in outer space containing loose dust particles and stray atoms.
  - c. large hole in outer space opening into the fourth dimension.
3. We cannot see black holes because they are
- a. too far away to be seen through telescopes.
  - b. invisible, since no light can leave them.
  - c. hidden behind other stars.
4. Black hole matter the size of a marble
- a. would sink several feet into the ground.
  - b. would need a large crane to lift it.
  - c. weighs as much as a mountain.
5. On a planet with double Earth's gravity, a ball thrown into the air would fall back to the planet's surface
- a. in about the same time it would on Earth.
  - b. more slowly than it would on Earth.
  - c. more quickly than it would on Earth.
6. What is a white hole?
- a. the point where matter exits from this universe into the next.
  - b. the bottom of a black hole.
  - c. a hole similar to a black hole except that it allows light to escape.
7. Scientists believe that in our section of the universe there are at least
- a. ten black holes.
  - b. five black holes.
  - c. two black holes.

8. Scientists' knowledge of black holes is based on

- a. proven facts.
- b. informed guesswork.
- c. exploration by space satellites.

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\_\_\_\_\_ Number of correct answers  
Enter this number on the Comprehension graph on page 132.

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### Critical Thinking

Put an **X** in the box next to the best answer for each question or statement. You may look back at the selection if you'd like.

1. The authors use the first sentence of the selection to:
  - a. inform you that our sun is a star.
  - b. compare a star to our own sun.
  - c. tell you the size of our sun.
2. Which of the following statements best expresses the main idea of the selection?
  - a. No one has actually seen a black hole because no light can escape from one.
  - b. Black holes are strange, extremely dense objects, whose existence scientists can only guess about.
  - c. Outer space is filled with strange and wonderful phenomena that scientists do not fully understand.
3. Based on what you read, you can conclude that
  - a. light is the last thing affected by the pull of gravity.
  - b. one day Earth will become a black hole.
  - c. scientists now have a complete understanding of black holes.

4. From the selection, you can predict that if a spaceship suddenly encountered a black hole in outer space the passengers would

- a. enter a totally different universe.
- b. be lost forever in space.
- c. be killed instantly.

5. A black hole results from

- a. a collision of two giant asteroids.
- b. the death of a giant star.
- c. the explosion of a sun like our own.

6. Which of the following is a statement of opinion rather than fact?

- a. Our knowledge of black holes is based on informed guesswork.
- b. It is only the great thrust of giant rockets that allows the space shuttle to escape the pull of Earth's gravity.
- c. Black holes are the most bizarre objects in the universe.

7. What causes a ball thrown into the air to fall back to the ground?

- a. A black hole pulls the object back to Earth.
- b. A white hole pulls the object back to Earth.
- c. Gravity pulls the object back to Earth.

8. Which of the following best describes what scientists consider black holes to be?

- a. a deadly threat
- b. a mystery
- c. bizarre objects

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\_\_\_\_\_ Number of correct answers  
Enter this number on the Critical Thinking graph on page 133.

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Name \_\_\_\_\_

## A Chain of Products

Find the product.

1.  $5.4 \times 3.2$

\_\_\_\_\_

2. Multiply the product in Exercise 1 by 1.5.

\_\_\_\_\_

3. Multiply the product in Exercise 2 by 0.5.

\_\_\_\_\_

4. Multiply the product in Exercise 3 by 2.5.


\_\_\_\_\_

5. Multiply the product in Exercise 4 by 9.4.

\_\_\_\_\_

6. Multiply the product in Exercise 5 by 3.2.

\_\_\_\_\_

7.  Which exercise has a product that is less than the product in the exercise just before it? **Explain.**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

