Name _____

A New Agency

During the 1960s, people grew concerned about the environment. This concern led to a huge Earth Day celebration in April of 1970. Politicians promised to find ways to improve water, land, and air quality. President Richard Nixon agreed to meet this new challenge. He proposed creating a new government department in late 1970. It was called the Environmental Protection Agency. Nixon said he hoped the EPA would "ensure the protection, development and enhancement of the total environment."

ImageShop/Corbis

The EPA proposed laws that reduced air pollution from car engines.

Answer the questions about the text.

1. **How can you tell that this text is narrative nonfiction?**

_____

_____

2. **Explain the cause and effect relationship between Earth Day and the creation of the EPA.**

_____

_____

3. **What facts about President Richard Nixon does the text give?**

_____

_____

4. **What primary source can you identify in this text?**

_____

Name _____

heart	swore	source	marsh	coarse
swear	chart	fare	force	flare
aboard	scorn	barge	harsh	course
squares	starch	thorn	scarce	sword

A. Write the spelling word that belongs with each set of words below.

1. circles, triangles, _____

2. blade, weapon, _____

3. rose, leaf, _____

4. diagram, graph, _____

5. dislike, belittle, _____

6. rare, limited, _____

7. flash, flame, _____

8. brain, lung, _____

9. cruel, bleak, _____

10. power, strength, _____

B. Write the spelling word that best completes each sentence.

11. Only sailors are allowed _____ the ship.

12. Many wetland animals live in the _____.

13. She _____ she would tell the truth at the trial.

14. You can use _____ to make clothes stiff.

15. He likes to _____ in and disturb my studying.

16. Do you _____ you will keep my secret?

17. I used _____ sandpaper to smooth the wood.

18. The _____ of the river is a small lake.

19. Taxi _____ from here to the airport is expensive.

20. The _____ of our trip takes us through Kansas.

Name _____

Evan used text evidence from two different sources to answer the question: *What did the main characters in* The Boy Who Invented TV *and "Time to Invent" experience that inspired them to invent something?*

The main characters in each text were inspired to invent by paying attention to their surroundings. In *The Boy Who Invented TV,* Philo was a curious, thoughtful boy who enjoyed science and admired people like Albert Einstein. As he got older, he had an idea after reading some magazines. Philo wanted to create a TV. He felt that such a machine could improve people's lives. One day, as he was plowing the potato fields, he became inspired by the rows of dirt in the fields. These rows gave him the idea about how he might create a TV.

In "Time to Invent," Lydia had a problem: she always overslept. She tried several times to wake up on her own. None of her ideas worked. Later on, she got inspired when she saw her mom's cell phone in a drawer. She grabbed a coffee can and placed the cell phone in it. When it vibrated in the can, it woke her up, but was quiet enough so that her mom wouldn't hear it. She finally created an invention that worked!

Reread the passage. Follow the directions below.

1. Evan used words with precise meaning. **Circle** the word that has a similar, but stronger meaning than the word *liked*.

2. **Draw a box** around the words and phrases in the second paragraph that show the order of events.

3. **Underline** the sentence with the *best* key detail in each paragraph that supports the main idea.

4. Combine these two sentences from the model. **Write** your answer on the lines:

   She tried several times to wake up on her own. None of her ideas worked.

_____

_____

Name _____

- Rewrite a run-on sentence as two separate sentences or as a **compound sentence**. To coordinate two closely related sentences without using a **conjunction**, use a **semicolon** (;).
- When you correct a run-on sentence, use a **comma** before *and, but,* and *or* if the subject in each independent clause is different.

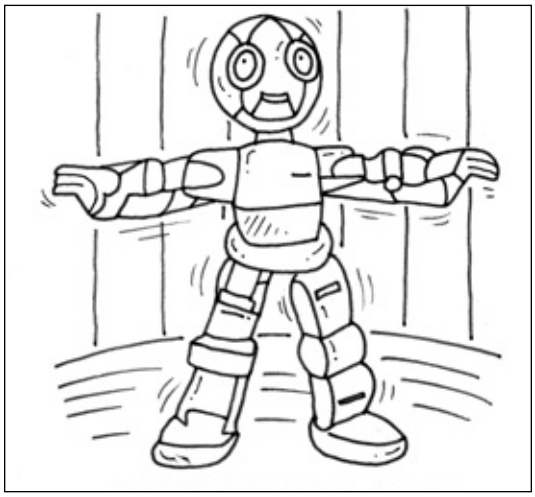
Proofread the paragraph. On the lines below, correct any run-on sentences or mistakes in punctuation.

My father drove up to the theater I stepped out of the car. Would it be a great show? Or would I forget all my lines? I had rehearsed every night, my sister had even helped with the hardest scenes. Would all that hard work pay off? Some people waited at the ticket booth others were going inside. My stomach felt like it was full of frogs but I headed to the stage door anyway. The cast was counting on me I couldn't let them down.

Name _____

Robot Creator

Tomotaka Takahashi lives and works in Japan. As a boy, he enjoyed reading comic books about robots, and he liked to build interesting devices. Now he builds robots that he hopes people will use in everyday life. Tomotaka does not want his robots to look like machines. He envisions them as friendly devices that look like people. He gives his robots extra movements to help them walk and move smoothly. People are captivated by Tomotaka's amazing robots.



Tomotaka's friendly looking robots walk and move like humans.

Answer the questions about the text.

1. **How do you know that this is biographical text?**

_____

_____

2. **Identify three facts about Tomotaka Takahashi that are included in the text.**

_____

_____

3. **What words and phrases introduce information about different times in Tomotaka's life?**

_____

_____

4. **How does the illustration help you understand more about the robots that Tomotaka creates?**

_____

_____

Name _____

A. Read the draft model. Use the questions that follow the draft to help you think about how you can use time-order signal words to show the sequence of events.

Draft Model

Chen began preparing for the race. He ate a good breakfast. He did his stretching exercises. He got dressed. He left the house, determined to win.

1. What time-order signal words could be added to show what Chen did first?

2. What other signal words could be added to make the sequence of events clearer?

3. What word or words could be added to the final sentence to give the text a sense of closure?

B. Now revise the draft by adding time-order signal words to help readers better understand the sequence of events.

Name _____

- When you correct a run-on sentence, use a comma before *and, but,* or *or* if the subject in each independent clause is different.
- To coordinate two closely related sentences without using a conjunction, use a **semicolon** (;).

Correct each run-on sentence. Use commas and semicolons where needed.

1. There is a concert this weekend we want to go.

_____

2. It's our favorite band we have to see them!

_____

3. Will you buy the tickets should I pick them up?

_____

4. We want seats in the front row they are sold out.

_____

5. Our seats are in the back we'll have a great time anyway.

_____

Name _____

- A **run-on sentence** joins together two or more sentences that should be written separately.
- You can correct a run-on sentence by rewriting it as a compound sentence.

Correct each run-on sentence below by writing it as a compound sentence.

1. The official waves the flag the race begins!

_____

2. The driver pushes the gas pedal the car zooms forward.

_____

3. She speeds around the curve she doesn't lose control.

_____

4. The other racers chase her their cars can't catch up.

_____

5. The race is soon over she wins another trophy.

_____

Name _____

Read each passage below. Underline the context clues that help you figure out the meaning of each word in bold. Write the word's meaning on the line. Then write your own sentence that uses the word in the same way.

1. Georgia O'Keeffe thought of herself as an artist. By 1928, the **rest** of the world did, too.

_____

_____

2. New York City and her family's summer home had been the source of ideas for almost ten years. Now those ideas were drying up. O'Keeffe felt like she needed a **change** of scenery.

_____

_____

3. She had visited New Mexico in 1917 with her sister. The wide open **space** had thrilled her.

_____

_____

4. She spent hours just watching the sky change. The clear **light** made her feel as if she could see for the first time.

_____

_____

5. It was the start of a pattern she would keep up for almost twenty years. Each **spring**, she traveled to New Mexico to paint.

_____

_____

Name _____

A. Read the draft model. Use the questions that follow the draft to help you think about what strong words you can add.

Draft Model

As I was working outside, I found a bird's nest in our tree. It had baby birds in it. I could hear them. The mother bird came back and fed the babies.

1. What vivid sensory details could describe the trees, nest, and birds?
2. What strong words and phrases could be substituted for "working outside," "found," and "came back"?
3. What words and phrases would show, rather than tell, what happened? What details would help the reader picture what is being described?

B. Now revise the draft by adding strong words that will help readers better visualize the encounter with the birds.

Name _____

- A **simple sentence** expresses one complete thought.
- A **compound sentence** contains two simple sentences joined by a comma and a conjunction.
- A **conjunction** joins words or groups of words. The words *and, but,* and *or* are conjunctions.

Write whether each sentence below is *simple* or *compound*. Circle each conjunction.

1. The dog barked, and I woke up instantly. _____

2. Something was tapping on my window. _____

3. Was the noise real, or was I still dreaming? _____

4. A bright light flashed, and I ducked under the covers. _____

5. The dog ran down into the basement. _____

6. I called the dog, but he wouldn't come back. _____

7. My parents heard me and came into my room. _____

8. They both seemed calm, or I would have kept hiding. _____

9. There were strong winds, and a power line had snapped. _____

10. That explained both the tapping and the bright light. _____

Name _____

Sofia used text evidence from *Camping with the President* and "A Walk with Teddy" to answer the question: *How did Theodore Roosevelt's experiences in the wilderness shape his ideas about the preservation of land and animals?*

Theodore Roosevelt believed that exploring nature firsthand was an important way to learn about land, plants, and animals. His experiences in the wilderness helped him understand the value of protecting trees, birds, and the rest of nature. In *Camping with the President*, John Muir tells Roosevelt about the surrounding sequoia trees that are nearly two thousand years old. Muir says that the sequoias grow only on the western slopes of the Sierra Nevada. It infuriates Roosevelt to learn that these rare, giant trees are cut down for fence posts.

In "A Walk with Teddy," Theodore Roosevelt describes birds he encountered on a nature walk in England. He points out that he could never fully appreciate the musical sound of the blackbird by reading about it in books. Observing these birds in the wilderness helped him understand their actions.

Theodore Roosevelt's experiences with nature made him realize that land and animals needed to be protected. He established national forests, national parks, and a number of bird reservations, and these places still protect wildlife today. Roosevelt was a true conservationist.

Reread the passage. Follow the directions below.

1. **Circle** the sentence in which Sofia introduces the main idea of her response.
2. **Draw a box** around the sentence that uses two kinds of sensory language to support the main idea.
3. **Underline** the supporting detail that explains why Theodore Roosevelt was angry.
4. **Write** the compound sentence that Sofia uses in her writing.

_____

_____

Name _____

Enrichment
9-7

Math Bake Too

Gwen and Roy are going to prepare some foods for the school bake sale. They have 5 cups of flour and 4 cups of sugar. Use the chart to answer the questions.

Item	Sugar	Flour	Servings
Oatmeal cookies	$\frac{1}{3}$ c	$\frac{3}{4}$ c	10
Pound cake	$\frac{1}{2}$ c	$\frac{2}{3}$ c	12
Pumpkin bread	$\frac{1}{2}$ c	$\frac{3}{4}$ c	4
Apple cobbler	$\frac{1}{4}$ c	$\frac{2}{3}$ c	6

1. How many servings of pumpkin bread can Gwen and Roy make with the amount of flour and sugar they have? Explain your answer.

2. Which item would be best for Gwen and Roy to make if they want to make the greatest number of servings possible? How many servings could they make? Explain how you know.

3. Gwen and Roy want to bring enough food to the bake sale for at least 40 servings. What are some different combinations of baked goods they could bring?

Name _____

Enrichment
9-6

A Fraction Operation

Fill in the empty boxes in the puzzles below so that all rows are true number sentences. Remember the order of operations: multiply and divide from left to right, then add and subtract from left to right.

Write +, −, ×, or ÷ in each empty box.

1.

$4\frac{1}{2}$		2		$\frac{1}{3}$	=	3

2.

$\frac{1}{4}$		$\frac{1}{8}$		$\frac{1}{2}$	=	$\frac{1}{2}$

3.

2		$\frac{1}{4}$		$1\frac{1}{2}$	=	$9\frac{1}{2}$

4.

$6\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{32}$	=	$1\frac{17}{32}$

5.

$3\frac{1}{4}$		$7\frac{2}{3}$		$9\frac{5}{12}$	=	$1\frac{1}{2}$

6.

$\frac{1}{2}$		3		$1\frac{2}{3}$	=	$1\frac{5}{6}$

7.

$\frac{7}{11}$		$2\frac{1}{2}$		$2\frac{7}{22}$	=	$3\frac{10}{11}$

8.

7		$\frac{1}{3}$		$3\frac{1}{7}$	=	66

9.

$4\frac{7}{8}$		$2\frac{1}{4}$		3	=	$7\frac{31}{32}$

10.

$\frac{1}{4}$		8		7	=	$7\frac{1}{32}$

Name _____

Enrichment
9-4

Cookie Math

Charlie is baking cookies to bring to a party.
The ingredients for one large batch of cookies are below.

Molasses Cookies (makes 90 cookies)

3 cups flour

1 teaspoon baking soda

1 teaspoon cinnamon

1 teaspoon ginger

1 cup light brown sugar

$\frac{3}{4}$ cup butter

1 egg

$\frac{1}{4}$ cup molasses

1. Charlie makes a batch of 90 cookies and divides it into smaller batches. If there is $\frac{1}{3}$ cup of flour in each small batch, how many batches did he divide his cookies into?

_____

2. Charlie makes another batch of 90 cookies and divides it into smaller batches so that there is $\frac{1}{4}$ cup of light brown sugar in each small batch. How many small batches did Charlie divide his cookies into?

_____

3. Charlie made a third batch of 90 cookies and divided them into smaller batches with $\frac{1}{2}$ cup of flour in each small batch. How many cookies are in each small batch? Explain.

_____

_____

_____

_____

_____

Name _____

Partitioning Thermal Energy

Did You Know? To compare the thermal energies of two samples, you need to consider both the temperature and the number of particles. Partitioning 1 cup of water into 4 equal parts will make 4 portions that have the same number of particles. Each portion will have the same thermal energy, and each portion will have $\frac{1}{4}$ of the thermal energy of the original cup of water.

1 Alex heats 4 pints of water to make soup. Each half of a pint is one serving. How many servings in all does he make?

Use multiplication to check your answer.

2 Mr. Ryan is heating up a 26-ounce can of soup for his four children. How much will each child get? Show your work.

3 **Extension** On a cold day, Mr. Martelli makes hot chocolate for his daughter and her 4 friends. He has 3 cups of hot chocolate, and wants each serving to be half of a cup. Does he have enough hot chocolate to have a serving for himself? Explain. Use multiplication to check your answer.

Name _____

Enrichment
8-7

Paper Patterns

The art teacher is measuring paper for various crafts. He must record the length, width, and area (length multiplied by width) for each sheet of paper. Fill in the missing areas for each sheet of paper.

1.

A.

$8\frac{1}{2}$ in. Area = _____ $4\frac{1}{2}$ in.

B.

$8\frac{1}{2}$ in. Area = _____ 9 in.

C.

$8\frac{1}{2}$ in. Area = _____ $13\frac{1}{2}$ in.

2.

A.

$16\frac{1}{4}$ in. ← Area = _____ $1\frac{1}{4}$ in.

B.

$2\frac{1}{2}$ in. Area = _____ $20\frac{1}{2}$ in.

C.

$\frac{3}{4}$ in. Area = _____ 5 in.

3.

A.

$2\frac{1}{2}$ in. Area = _____ $2\frac{1}{2}$ in.

B.

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

C.

$7\frac{1}{2}$ in. Area = _____ $7\frac{1}{2}$ in.

Name _____

Enrichment
8-6

Township Grids

In the early territories of the United States, public land was surveyed and divided into 6 mile by 6 mile grids called townships. Each 1 mile by 1 mile section of the grid was numbered according to the following diagram. Section number 16 was designated for public schools. Sometimes these tracts of land were given to soldiers as payment for their service. These 36 square mile plots of land are still in place today.

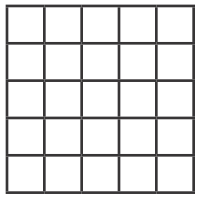
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Source: Public Land Survey System

1. If Isaac Robbins was granted all of the land in Section 6, how many square miles was he granted?

_____

Section 6



2. Isaac wanted to use a $\frac{1}{2}$ mile by $\frac{1}{4}$ mile piece of Section 6 for farming. How many square miles would Isaac farm? _____

3. Isaac's five sons will inherit Section 6. Draw a diagram using a 5×5 grid to show how much one son will inherit if the land is divided equally. Find the square mileage inherited by each son.

4. Is there another way for Isaac's five sons to each have the same area of land? Explain.

_____

_____

_____

5. Draw another possible way for Isaac's sons to each have an equal section of Section 6.

6. Why does it seem reasonable to place the public school in Section 16?

_____

_____

Name_____

Problem-Solving Reading Activity
8-5

Fruit Facts

Use the mat to find the data you need and solve the problems.

1. Amy has enough strawberries to make one smoothie from the recipe. She finds that $\frac{1}{2}$ of her strawberries are not ripe enough to be used. What fraction of a cup of ripe strawberries does Amy have?

_____

2. Some grapes were dried to make raisins. They now only have $\frac{1}{6}$ as much water as they had as grapes. What fraction of these raisins is water?

_____

3. The amount of citrus fruits produced in California is about $\frac{1}{2}$ the amount produced in Florida. About what fraction of the nation's citrus fruits are produced in California?

_____

4. Benjamin buys some strawberries. He sets aside $\frac{4}{5}$ of them for a party. He uses $\frac{1}{2}$ of these strawberries to make smoothies for the party. What fraction of all his strawberries does Benjamin use to make smoothies?

_____

5. Joe makes $\frac{2}{3}$ of the smoothie recipe. How much juice does he use?

_____

Name _____

Banquet Preparations

Did You Know? When you mix sugar and water, the physical properties of the sugar and the water do not change. Instead, they form a mixture. A mixture contains two or more substances that are not chemically combined. Sugar, for example, is soluble in water. This means that it dissolves when mixed with water. But you can evaporate the water from the mixture and a small pile of sugar remains. Solubility is only one physical property that can describe a substance. Other physical properties include shape, color, state of matter (liquid, gas, solid), density, odor, and boiling and melting points. You can separate the ingredients of a mixture because substances in a mixture maintain their physical properties.

Banquet Tickets Sold	
Students	$\frac{5}{12}$
Teachers	$\frac{1}{4}$
Parents	?

A cooking class is preparing all the food and beverages for an awards banquet. Your job is to monitor all the preparations.

1 Karyn has 360 strawberries. She covers $\frac{4}{9}$ of the strawberries with melted chocolate. She uses another $\frac{1}{3}$ of the strawberries for a fruit salad. The rest of the strawberries are for pie filling. How many strawberries will become pie filling? Show your work.

2 To make the award banner, the class uses $\frac{5}{7}$ of a 42-yard-long piece of satin. How many yards will they use?

3 **Extension** So far, the class has sold 216 tickets to the banquet. The portion of tickets sold, so far, to students, teachers, and parents is shown in the table. How many banquet tickets have parents bought so far? Show your work.

Name _____

Pack Ice

Did You Know? The Arctic polar ice cap forms as sea water freezes. If you break off a piece of the ice and melt it, however, you will have fresh water. How does this happen? When saltwater freezes, the water molecules form a crystal structure that essentially locks out any salt molecules. The water also expands as it freezes. So, frozen water is less dense than liquid water. That's why icebergs float!

Density	grams per cubic centimeter g/cu. cm	kilograms per cubic meter kg/cu. m
ice	≈0.92	≈920
water	1.0	1,000

$$\text{Density} = \frac{\text{Mass}}{\text{Volume}}$$

In the Arctic, scientists are packing ice core samples in special boxes to send to laboratories.

1. Nija must divide a 7.8-kilogram sample of ice into 12 equal portions. What is the mass of each of the 12 samples?

2. A sample of unknown origin has a volume of 0.3 cubic meter and a mass of 275.4 kilograms. What is the density of the sample in kg/cu. m? Show your work.

3. Marco forgot to label the volume for 3 ice core samples. The mass of 1 full box is 18.6 g; the other 2 boxes are 9.1 g each. What is the volume, in cubic centimeters, of the 3 samples? (Hint: Use the formula Volume $= \frac{\text{Mass}}{\text{Density}}$ to solve the problem.)

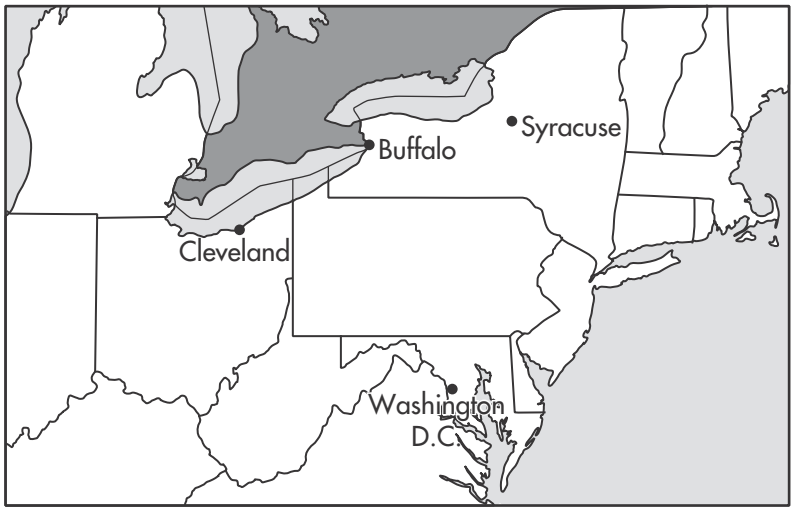
4. **EXTENSION** Yuri and Wyatt have a 230-kilogram sample of pack ice that has a volume of 0.25 cubic meter. Is the density of this sample equal to the density of ice provided in the table? Explain.

Name_____

Problem Solving
Reading Activity
6-5

Big Snow Days

In some climates, clouds produce snow. Some cities get several feet of snow each winter. Sometimes, they get that much snow in a single month.



Solve each problem. If needed, round answers to the nearest hundredth.

1. The snowiest February in Cleveland, OH, was in 1993. In the 28 days of that month, they received 39.1 inches of snow. How much snow did they average each day?

_____

2. In January of 2004, scientists recorded 78.1 inches of snow in Syracuse, NY. There are 31 days in January. About how much snow did Syracuse average each day of that month?

_____

3. On December 28, 2001, Buffalo, NY, received 26.2 inches of snow. In that 24-hour period, how much snow did Buffalo average each hour?

_____

4. On February 5th and 6th of 2010, Washington, D.C. was covered with 27.5 inches of snow. Matt's city received 0.22 inch less than this in the 31 days of December last year. How much snow did Matt's city average each day during December?

_____

Name_____

Problem-Solving Reading Activity
6-1

Rain in the Western Cities

Use the information in the table to solve each problem.

Average rainfall in the first 100 days of the year	
Seattle, WA	321.9 mm
Portland, OR	420.8 mm
San Francisco, CA	327.6 mm
San Diego, CA	162.6 mm

1. Find the average rainfall per day for Portland.

_____

2. Find the average rainfall per day for Seattle.

_____

3. For the next 100 days of the year, the average rainfall for San Diego increased by 18.1 mm. What was the average rainfall per day for San Diego during these 100 days?

_____

4. There are 10 millimeters in 1 centimeter. What is Portland's average rainfall per day measured in centimeters?

_____

Name _____

Enrichment
6-2

Currency Conversion

Different currencies are used around the world. The Yen (¥) is the currency used in Japan. This table shows the currency exchange rates for the Yen on the first business day of October of each year.

Date	Yen (¥) Exchange Rate per U.S. Dollar ($)
October 1, 2008	106.06
October 1, 2009	89.73
October 1, 2010	83.30
October 1, 2011	76.60
October 1, 2012	78.91
October 1, 2013	97.82
October 1, 2014	107.95
October 1, 2015	120.14
October 1, 2016	103.48

Source: U.S. Federal Reserve

Estimate to find the value of money in U.S. Dollars for each value in Yen.

1. 210 ¥ in 2008 _____

2. 480 ¥ in 2015 _____

3. 270 ¥ in 2009 _____

4. 300 ¥ in 2011 _____

5. 600 ¥ in 2013 _____

6. 240 ¥ in 2012 _____

7. 640 ¥ in 2010 _____

8. Which is a better value for your money, 800 ¥ in 2010 or 800 ¥ in 2016? Explain your answer using estimation.

_____

_____

Causes of the American Revolution

Before the American Revolutionary War the original thirteen states of the United States of America were colonies of Great Britain. Great Britain was a monarchy, that is, it was ruled by a king or queen. Great Britain was also at the head of an empire called the British Empire similar to the ancient Roman Empire. An empire is a group of nations, territories, or peoples ruled by a single authority. The thirteen American colonies were part of the British Empire and were ruled by the King of England and the British Parliament located far away across the Atlantic Ocean. The royal governor of each colony was appointed by the king and was loyal to the king. The governor did not represent the colonists.

Remember too that in the 1600s when the colonies were originally founded, some of the colonies belonged to other countries. For example, New York was first settled by the Dutch and the city of New York was called New Amsterdam. The Dutch brought in settlers from Germany, Ireland and France. Great Britain took the colony with warships in 1664 and named it New York. So, all the colonists in North America were not necessarily loyal British subjects.

Before the Revolutionary War, the French and Indian War was fought between Great Britain and France for control over lands in North America, especially lands west of the existing British colonies. This conflict lasted from 1754 until 1763. This war between two major European powers caused the Seven Years' War in Europe. During this time of wars, it was in the best interest of the British Empire to defend the colonies. After the wars ended, Britain had gained control over most of North America east of the Mississippi River.

Britain had invested heavily in defending the colonies and now wanted to show authority over them by imposing heavy taxes. As a result, the colonists formed what were called committees of correspondence. These lead to the establishment of Provincial Congresses in the colonies, their first independent governments. These provincial governments of the thirteen colonies joined together in the First Continental Congress in 1774. In response, the British government sent troops, dissolved the local governments, and enacted more taxes and rules. The first skirmishes of the Revolutionary War began in 1775 and the Declaration of Independence was written in 1776.

Name: _____ **Date:** _____

Multiple Choice Questions

Circle the correct answer.

1. Before the American Revolution Great Britain was

    a. A monarchy
    b. A democracy
    c. An oligarchy
    d. A republic

2. The New York colony was originally settled by the

    a. British
    b. Dutch
    c. Both a. and b. above
    d. None of the above

3. The French and Indian War was fought

    a. Between French soldiers and Indian warriors
    b. French soldiers and Dutch settlers
    c. In Europe
    d. None of the above

4. After the Seven Years' War ended

    a. France still owned Canada
    b. Britain controlled the lands east of the Mississippi River
    c. Both a. and b. above
    d. None of the above

5. A main cause of the American Revolution was

    a. Britain took control of New Amsterdam
    b. France gained control of lands east of the Mississippi River
    c. Great Britain imposed heavy taxes on the colonies
    d. The colonists lost the French and Indian War

6. The First Continental Congress

    a. Was formed by Great Britain
    b. Was endorsed by Great Britain
    c. Included British royal governors
    d. None of the above

Name: _____ **Date:** _____

Short Answer Questions

1. Explain what an empire is and how it is formed.

2. Do some research and describe the British Empire as it existed before the American Revolution.

3. Do some research and list the countries and territories that are part of the British Empire today.

4. Explain some reasons why colonists in North American who were part of the British Empire were not necessarily loyal British citizens.

5. Do some research and explain how the French and Indian War got its name.

6. During colonial times there weren't any means of fast communications like there are today. Do some research and explain the importance of the committees of correspondence in the beginning of the American Revolution.

7. If you lived in colonial America, would you have remained loyal to Great Britain or joined in the revolution? Explain your answer.

The Boston Massacre

It's the evening of March 5, 1770 in Boston in the British colony of Massachusetts. British soldiers are changing the guard at the Customs House where British taxes are levied and collected. A confrontation occurs between colonists and the soldiers, shots are fired, and three colonists are dead on the spot; two more die the next day. This event is called the Boston Massacre and it's easy to say that it was a cause of the American Revolution. What really happened and why?

Great Britain had spent huge sums of money waging the French and Indian War (1754-1763) in North America to gain control of more land. At the same time the British were fighting the related Seven Years' War in Europe. When the wars ended in 1763 Great Britain needed money and passed the Townsend Acts which heavily taxed everyday imported items like glass, paper and tea in the colonies. When these taxes caused unrest among the colonists, in 1768 Great Britain sent troops to Boston to maintain control and protect the tax collectors who levied customs duties on imported products. These soldiers could be assigned to live in private homes with the colonists. There was one British soldier in Boston for every four residents. Boston was an occupied city and tensions were high between soldiers and residents. There were frequent riots.

The Boston Massacre began with a nighttime confrontation between a youth and a soldier in front of the Customs House. A crowd gathered and grew larger when church bells were rung to get the attention of more men. The British soldier summoned help as well. Soon 400 men of Boston were throwing ice and snowballs at the soldiers defending the Customs House, daring them to fire their muskets into the crowd. Reports say that the officer in charge called out, "Don't fire!" In the confusion, shots were fired anyway.

The British immediately removed the troops from Boston and repealed the Townsend Acts in April 1770 except for the tax on tea. The officer in charge and nine soldiers were brought to trial about eight months later. Two soldiers were found guilty of manslaughter and all the others were acquitted. Boston remained quiet for several years. The Boston Massacre was later used as a rallying point by patriots who favored independence.

Name: _____ **Date:** _____

Multiple Choice Questions

Circle the correct answer.

1. In order to get money from the colonies Great Britain taxed

    a. Income
    b. Land
    c. Imported items
    d. Farm products

2. When the citizens of Boston protested against the heavy taxes Great Britain

    a. Raised the taxes higher
    b. Sent troops to Boston
    c. Both a. and b. above
    d. None of the above

3. One way that Bostonians protested was

    a. Riots in the streets
    b. Snipers
    c. Guerilla attacks
    d. All of the above

4. Where in town did the Boston Massacre occur?

    a. On the commons
    b. Along the Charles River
    c. At the courthouse
    d. None of the above

5. How many Boston citizens died as a result of the Boston Massacre?

    a. 3
    b. 5
    c. 7
    d. 9

6. One result of the Boston Massacre was

    a. Soldiers were withdrawn from Boston
    b. Soldiers were brought to trial
    c. It was later used to promote the cause of American independence
    d. All of the above

Name: _____ Date: _____

Short Answer Questions

1. What is a massacre? Is the Boston Massacre an accurate name for what happened? Explain your answer.

2. Do some research and list the imported products that were subject to taxation by the British Townsend Acts.

3. Do some research on the Third Amendment to the U.S. Constitution. Does your knowledge about the history of the Boston Massacre help you to understand this amendment better? Explain why or why not.

4. What are custom duties and do they still exist today? If you don't know the answer, look it up.

5. What is propaganda? Was the Boston Massacre later used as propaganda?

6. Find a picture of Paul Revere's painting of "The Bloody Massacre perpetrated in King Street" as he called the event. List at least three inaccuracies in his painting based on the historical facts.

7. Why do you think that the British did not repeal the import tax on tea when the other parts of the Townsend Act were repealed?

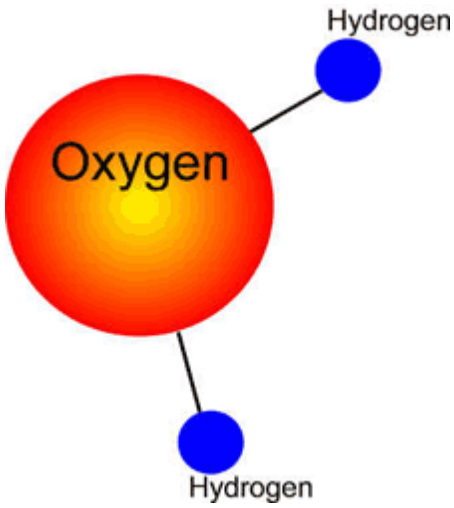
H – Two – Oh: What Is Water?

Water is the building block of life and the second most important thing to humans like you and me. We need air, water, and food to survive. Water found on the Earth and scientists have discovered that it even exists on other planets. Does this mean there may be life on other planets? Maybe, no one is sure yet. Maybe you will be the scientist to make that discovery!

The molecule of water is made of two hydrogen atoms and one oxygen atom. (That is why water is called H2O: Two hydrogen (H), and one oxygen (O).) Heating these three atoms at high temperatures makes them combine and form water. When the Earth was created, the extreme heat on the planet created most of the water that is on Earth today. If you think about it, your glass of water could be the same water that floated down the Nile River in ancient Egypt!

Water comes in three forms – solid, liquid, and gas. Liquid is the form that we think of first when we think about water. We think about the water that we drink, wash up with, and swim in. We think about fresh water in ponds and lakes and salt water in the ocean.

Next we think about solid water in the form of ice. But did you know there's another solid form of water? In the winter, water droplets freeze in crystal patterns on your window. This is called frost, and is another form of solid water. Can you think of another form of solid water we see in winter? It's snow! While snow melts back to liquid form quickly, when it's really cold, you can shape it into snowballs or even a snowman of solid water.



The final form of water is gas. Ever put your face up to a window and blown hot air on it? The cloudy circle that appears on the window is condensation – that is, the water from inside your mouth goes into gas form, sticks to the window, and returns to liquid form. Take a look around your world today and see if you can find all three forms of water – solid, liquid, and gas.

Name:_____ Date: _____

Multiple Choice Questions - H – Two – Oh: What Is Water?

Circle the correct answer.

1) Humans need three basics to survive:
   a) air, food, cell phone
   b) food, water, house
   c) air, water, food
   d) house, water, air

2) A molecule of water is created from these atoms:
   a) One hydrogen, one oxygen
   b) Two hydrogen, one oxygen
   c) One hydrogen, two oxygen
   d) Two hydrogen, two oxygen

3) What is the abbreviation for water?
   a) HO
   b) H2O
   c) HO2
   d) H2O2

4) What is needed to combine the atoms to make water?
   a) heat
   b) cold
   c) ice
   d) air

5) Which of the following is NOT a form of water?
   a) liquid
   b) solid
   c) cold
   d) gas

6) If you blow hot air on a window, what happens?
   a) It makes ice.
   b) It makes condensation.
   c) It makes frost.
   d) It makes snow.

Name:_____ Date: _____

Short Answer Questions - H – Two – Oh: What Is Water?

1) What three things do humans need to survive?

2) If water is on other planets, what might that mean?

3) Describe how water is created.

4) How old is most of the water on the Earth?

5) What are the three forms of water?

6) Give an example of each of the three forms of water.

7) What form of water is steam?

Why Does Ice Float on Water?

The water molecule comes in three forms – solid, liquid, and gas. It seems strange that ice, a solid form of water, would float on the top of liquid water. Ice floats due to its density and molecular structure. That's why even the biggest blocks of ice, known as icebergs, can float in arctic waters without sinking to the bottom.

Water's molecule is known as H_2O because it contains two hydrogen atoms and one oxygen atom. The two hydrogen atoms stick to the oxygen atom, but push away from each other, creating a triangular shaped molecule. In ice, the molecules squish very close to one another, but still leave lots of empty space between them. That is, even though ice feels solid, it's really full of tiny holes.

Every molecule in the world has a density. Density describes how many molecules are squished into the same amount of space. Because frozen water is less dense than liquid water, the frozen water will not sink. Water's triangular molecule shape, combined with it's lower density allow it to float. Compared to liquid water, ice has a lower density and a bigger volume. That is, it is lighter and bigger than the same amount of liquid water.

What about icebergs? They're much larger than ice cubes – how do they float in the ocean? Well, the same principles apply. Ice, no matter how big, will always float in water. Also, because the ocean is salt water, it has an even higher density than regular water. This makes it even easier for icebergs to float across the ocean. But beware if you are captaining a ship one day – not all of the iceberg floats on top of the water. The majority of an iceberg actually is below the surface of the water, and only the tip is still floating on the surface.

Name:_____ Date: _____

Multiple Choice Questions – Why Does Ice Float on Water?

Circle the correct answer.

1) What forms does water come in?
   a) water, solid
   b) liquid, gas
   c) liquid, water, solid
   d) liquid, solid, gas

2) A molecule of water is created from these atoms:
   a) One hydrogen, one oxygen
   b) Two hydrogen, one oxygen
   c) One hydrogen, two oxygen
   d) Two hydrogen, two oxygen

3) What is the abbreviation for water?
   a) HO
   b) H_2O
   c) HO_2
   d) H_2O_2

4) What shape is the water molecule?
   a) triangle
   b) square
   c) rectangle
   d) hexagon

5) Which is the highest density?
   a) steam
   b) water
   c) ocean water
   d) ice

6) Which is the lowest density?
   a) steam
   b) water
   c) ocean water
   d) ice

Name:_____ Date: _____

Short Answer Questions - Why Does Ice Float on Water?

1) What is the water molecule made from?

2) What three forms does water come in?

3) What are the two reasons why ice floats?

4) Is ice totally solid? Why or why not?

5) Ice has a _____ density and _____ volume compared to liquid water.

6) Why is it easier for ice to float in salt water?

7) Why do you think an iceberg is partially under the water?