

Lewis County  
Schools

NTI Days 31-42

4<sup>th</sup> Grade

# NTI DAY 31

Name:

School:

Name \_\_\_\_\_

Date \_\_\_\_\_

# The Aspirations of Sonia Sotomayor



Sonia graduated high school with honors and applied to an Ivy League college on her guidance counselor's recommendation. Though she was unfamiliar with Princeton, she chose to attend this prestigious university with the help of a scholarship.

While studying at Princeton, she was unafraid to ask questions, even if they made her seem unknowledgeable. When describing her experience at the school, she said the university seemed like a different world. For example, when a friend commented that Sonia sounded like Alice, Sonia didn't understand the reference. Even though she knew it would make her appear to be uninformed, she asked her friend who this Alice was. Her friend kindly explained that she meant Alice, from the book *Alice in Wonderland*. At the time, Sonia had never heard of the story, but by asking the question, she learned more about Lewis Carroll's classic work of literature.

Much of her time at Princeton was filled with studying hard and adapting to her new environment. With the new surroundings came new ideas. Sonia had the ability to share her own ideas, shaped by her childhood upbringing, with people who did not look or sound like her.



The U.S. Supreme Court was established by the Constitution to provide a checks and balance to the President and to Congress. The Supreme Court interprets U.S. laws by way of court cases.

## Prosecuting Her Way to the Supreme Court

After becoming a lawyer in 1980, Sonia joined the District Attorney's office in Manhattan. Sonia worked as an Assistant District Attorney (ADA), interviewing victims and witnesses and evaluating the evidence surrounding crimes. As the ADA, she worked as a prosecutor, which is someone who brings cases against people who have broken the law. She worked as an ADA for four years, before joining the law firm Pavia & Harcourt in 1984.

Even while working for the private sector, she still did pro bono work, where she would represent people for free. Sonia served on the board of the Puerto Rican Legal Defense and Education Fund, the New York City Campaign Finance Board, and the State of New York Mortgage Agency. A few years after she joined the private firm, Senators Ted Kennedy and Daniel Patrick Moynihan noticed her pro

bono work and helped her get nominated as a judge.

There are many levels in the court system. President George H.W. Bush nominated her to become the youngest U.S. District Court judge for the Southern District of New York City in 1992. After she served in that position for five years, President Bill Clinton nominated her to become a judge in the U.S. Second Circuit Court of Appeals in 1997. While working in the court of appeals, Sonia began teaching law as an adjunct professor at New York University in 1998, and at Columbia Law School in 1999. Then, in 2009, President Barack Obama nominated Sonia Sotomayor to become a Supreme Court Justice.

## Supreme Ideas as a Judge

After all her work as a student, lawyer, and judge, she was prepared to make decisions on landmark cases. The Supreme Court makes decisions that can affect the whole country, since they settle disputes between the federal government and citizens, or handle controversial cases.

While the odds of a Latina who did not speak English well as a child becoming a Supreme Court Justice might have seemed unlikely in the past, Sonia's appointment changed that. She paved the way for other women to

Name \_\_\_\_\_

Date \_\_\_\_\_

# The Aspirations of Sonia Sotomayor



pursue their dreams, including aspiring to be in the highest court of the United States. No matter the obstacles she encountered, like language barriers, a health crisis, and the death of her father, Sonia continued to aspire to new heights and pave new pathways to her success. It was not with luck, but with hard work and perseverance that she reached the position she currently holds.

Who is Sonia Sotomayor?	What year was she born?
What experiences did Sonia have throughout her life?	
What is an important obstacle she overcame?  How did she overcome the obstacle?  How does this obstacle connect to why she is famous?	
What changes has Sotomayor made in the world that makes her influential?	

# Multiply

$$\begin{array}{r} 27 \\ \times 96 \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline 0 \end{array}$$

$$\begin{array}{r} 37 \\ \times 68 \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline 0 \end{array}$$

$$\begin{array}{r} 49 \\ \times 78 \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline 0 \end{array}$$

$$\begin{array}{r} 59 \\ \times 86 \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline 0 \end{array}$$

$$\begin{array}{r} 69 \\ \times 67 \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline 0 \end{array}$$

$$\begin{array}{r} 53 \\ \times 76 \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline 0 \end{array}$$

$$\begin{array}{r} 48 \\ \times 76 \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline 0 \end{array}$$

$$\begin{array}{r} 38 \\ \times 69 \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline 0 \end{array}$$

$$\begin{array}{r} 26 \\ \times 87 \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline 0 \end{array}$$

# Cause and Effect: Match Them!

Match the cause to the effect.

## Cause

## Effect

- |           |                                      |                                    |
|-----------|--------------------------------------|------------------------------------|
| 1. _____  | The car ran a red light.             | A. The horses were thirsty.        |
| 2. _____  | Ben stayed up late.                  | B. She fell down.                  |
| 3. _____  | The students were quiet in class.    | C. She was hungry at lunch.        |
| 4. _____  | It rained.                           | D. He was sleepy the next day.     |
| 5. _____  | Lydia skipped breakfast.             | E. It boiled over.                 |
| 6. _____  | It was very hot outside.             | F. Everyone laughed.               |
| 7. _____  | Lucy's shoes weren't tied.           | G. It sank.                        |
| 8. _____  | The boat had a leak.                 | H. Chris got wet.                  |
| 9. _____  | The puppy chased its tail.           | I. The teacher gave them a reward. |
| 10. _____ | There was too much water in the pot. | J. Another car hit it.             |

# NTI DAY 32

Name:

School:

# Electricity & Energy - Energy

by ReadWorks



*coal*

All life depends on energy. The Earth and our solar system get most of their energy from the sun. Without the sun, life on Earth would not exist. The sun shines on plants, giving them the energy they need to grow and thrive. Animals then eat the plants, which gives them energy, too. Energy is everywhere. It is all around us.

Energy comes from nature. Wind, sun, water, fire, and lightning are all sources of energy. In the United States, the most used sources of energy are fossil fuels such as coal and oil. The energy from fossil fuels gives us most of the electricity that lights and heats our homes. Oil also gives us the gasoline that runs our cars. Unfortunately, the burning of fossil fuels pollutes the air.

Scientists are working to develop new ways of providing energy without harming the Earth. Through advances in research of alternative energy sources, the world is slowly changing from using fossil fuels to using wind power, water power, and solar energy. Windmills are used to capture wind power. Dams help to harness the energy from water. Solar panels collect energy from the sun's rays and keep it stored for future use.



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

1. Energy on Earth comes from

- A. other planets.
- B. the sun.
- C. plants.
- D. the moon.

2. The passage describes the problem of fossil fuels causing pollution. What is a solution in the passage for this problem?

- A. using gasoline in cars
- B. using alternative energy sources
- C. making oil illegal
- D. promoting bicycle programs

3. All of the following have to do with new advances in energy *except*:

- A. wind power.
- B. water power.
- C. solar energy.
- D. lightning.

4. Read the following sentence: "The sun shines on plants, giving them the energy they need to grow and **thrive**."

The word **thrive** means

- A. wilt
- B. be born
- C. live well
- D. plant seeds.

5. This passage is mostly about

- A. where energy comes from and how it is used.
- B. how wind energy is different from fossil fuels.
- C. how plants use the sun's energy.
- D. how animals use energy from plants.

6. What sources of energy does the passage describe besides fossil fuels?

7. Based on the passage, why would the world be "slowly changing" from fossil fuels to other energy sources, rather than quickly changing?

8. The question below is an incomplete sentence. Choose the answer that best completes the sentence.

Scientists want to develop new ways of providing energy without harming the earth,  
\_\_\_\_\_ they are researching alternative energy sources.

- A. then
- B. but
- C. meanwhile
- D. so

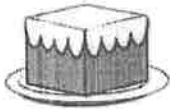
Name: \_\_\_\_\_

## Eyes Front! Idiom Practice

Idioms are sayings that have a figurative meaning that is different from its literal, or real, meaning. For example, "eyes front" means to pay attention, not move your eyes.

Below are images of the literal meaning of some common idioms. Write a sentence using the idiom and then explain the figurative meaning of the idiom.

### 1. piece of cake



sentence: \_\_\_\_\_

meaning: \_\_\_\_\_

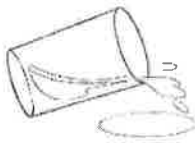
### 2. raining cats and dogs



sentence: \_\_\_\_\_

meaning: \_\_\_\_\_

### 3. cry over spilt milk



sentence: \_\_\_\_\_

meaning: \_\_\_\_\_

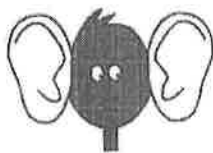
### 4. Feeling blue



sentence: \_\_\_\_\_

meaning: \_\_\_\_\_

### 5. all ears



sentence: \_\_\_\_\_

meaning: \_\_\_\_\_

# Multiply

$$\begin{array}{r} 53 \\ \times 12 \\ \hline \end{array}$$

$$\begin{array}{r} + \phantom{00} 0 \\ \hline \end{array}$$

$$\begin{array}{r} 43 \\ \times 21 \\ \hline \end{array}$$

$$\begin{array}{r} + \phantom{00} 0 \\ \hline \end{array}$$

$$\begin{array}{r} 62 \\ \times 31 \\ \hline \end{array}$$

$$\begin{array}{r} + \phantom{00} 0 \\ \hline \end{array}$$

$$\begin{array}{r} 42 \\ \times 13 \\ \hline \end{array}$$

$$\begin{array}{r} + \phantom{00} 0 \\ \hline \end{array}$$

$$\begin{array}{r} 62 \\ \times 14 \\ \hline \end{array}$$

$$\begin{array}{r} + \phantom{00} 0 \\ \hline \end{array}$$

$$\begin{array}{r} 42 \\ \times 41 \\ \hline \end{array}$$

$$\begin{array}{r} + \phantom{00} 0 \\ \hline \end{array}$$

$$\begin{array}{r} 61 \\ \times 23 \\ \hline \end{array}$$

$$\begin{array}{r} + \phantom{00} 0 \\ \hline \end{array}$$

$$\begin{array}{r} 41 \\ \times 32 \\ \hline \end{array}$$

$$\begin{array}{r} + \phantom{00} 0 \\ \hline \end{array}$$

$$\begin{array}{r} 51 \\ \times 42 \\ \hline \end{array}$$

$$\begin{array}{r} + \phantom{00} 0 \\ \hline \end{array}$$

# NTI DAY 33

Name:

School:

## Free Transfer

by ReadWorks



The faster a given object is moving, the more energy it possesses. This kind of energy is called "kinetic energy," from the Greek word *kinesis*, meaning motion. The faster a given object is moving, the greater its kinetic energy.

Imagine you're trying to hit a target with a bow and arrow. If you just throw the arrow with your hand, it won't go very fast, and even if your aim is good, the arrow won't penetrate the target -it'll just bounce off!

But if you use the bow, you can shoot the arrow much faster. The faster the arrow is going, the more kinetic energy it has. Kinetic energy is what allows the arrow to puncture the target.

Energy can never be created or destroyed, only transferred-moved from place to place. One way energy is moved from place to place is by moving objects.

Imagine hitting a tee ball with a bat. When you hit the ball with the bat, energy is transferred from the bat to the ball. If you swing the bat slowly, the ball won't go very far when you hit it. But if you swing the bat faster, it will have more kinetic energy. That energy will be transferred

to the ball, and the ball will go much farther.

Energy can also be transferred through sound. Try high-fiving your friend *very slowly*. You probably won't make very much sound. If you high-five at the normal speed, your hands each have more kinetic energy, and you'll make a nice *smack*. What you're hearing is energy turned into sound. The same thing happens when you hit a drum, or pluck the strings of a guitar.

Energy can also be transferred through light. Light from the sun makes your body feel warmer. Plants use energy from light and grow bigger and make oxygen.

Energy can also be transferred through electricity. This kind of energy can be used for almost anything. But remember: Energy cannot be created. Energy in the form of electricity has to be transferred from another kind of energy. Wind power uses a machine called a turbine that turns the energy of the wind into electricity. Coal, oil, and gas power burn different kinds of material, creating heat that gets turned into electricity. Solar power generates electricity from the sun's light-although not as easily as a plant.

Day 33

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

1. According to the passage, energy

- A. can be destroyed
- B. can be created
- C. can be moved from place to place
- D. is not kinetic

2. What does the author list in the passage?

- A. the different ways energy can be transferred
- B. the different theories about energy transfer
- C. the different types of energy
- D. the problems with transferring energy through electricity

3. Energy can be transferred through light. What evidence from the text supports this statement?

- A. A turbine changes wind energy into electricity.
- B. Burning gas creates heat.
- C. Light from the sun makes your body feel warmer.
- D. Energy is transferred when coal is burned.

4. If drummers are playing their drums loudly, what can be concluded about how their hands are moving?

- A. They must be moving slowly when they hit the drum.
- B. They must be moving quickly when they hit the drum.
- C. They must be tapping the drum softly.
- D. They must be resting on the drum.

5. What is this passage mainly about?

- A. what happens when you swing a baseball bat quickly
- B. how energy makes sound
- C. different ways energy is transferred
- D. different ways electricity is produced



# Adding Punctuation

Help Henry the Hiker add the correct punctuation, including , commas, periods and question marks, to his journal entry.

Today on my first hike I saw many animals such as squirrels deer and birds, I wonder if I will see anymore tomorrow. I plan to hike up to Mount Happy. In order to get there I must first cross the river go through the woods and pass the tall tree. Tomorrow is a new day and I should have plenty of time to have fun I really look forward to setting up my tent. I brought marshmallows graham crackers and chocolate for my favorite snack smores. Should I get firewood now or later. For now I'll just rest and enjoy the sunset.



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

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

## Word Problems in Winter: Multi-Step Mixed Operations



**Directions: Solve. Be sure to show your work!**

1. On Saturday, 4 groups of people went to the restaurant at the ski resort. Each group had 5 people in it. Everyone ordered a cup of hot chocolate. Rebecca, Malaki, and Jeffrey each ordered an extra cup of hot chocolate. How many cups of hot chocolate did the people drink that day?

2. On the snow day, 8 kids from the neighborhood gathered to build snowmen. The kids used two buttons as the eyes on each snowman. 7 more kids joined to make snowmen and used buttons for the eyes, too. How many buttons were used to make the snowmen?

3. The 9 boys in Mr. Ackerman's class went outside for recess. They wore their gloves. Isaiah and Michael each lost a glove while outside. How many gloves did the boys bring back into the classroom?

4. The Jerico family went ice skating on the frozen lake. The 2 parents and 4 children each had ice skates. They brought an extra pair of ice skates in case anyone else wanted to join them. How many ice skates did the family bring?

5. It snowed 3 inches each day for a week. By the next Monday, 6 inches had melted away. How many inches of snow were still on the ground?

6. Sheena baked 112 cookies. She kept 16 cookies at home for her family and shared the rest evenly with her 8 friends. How many cookies did each friend get?

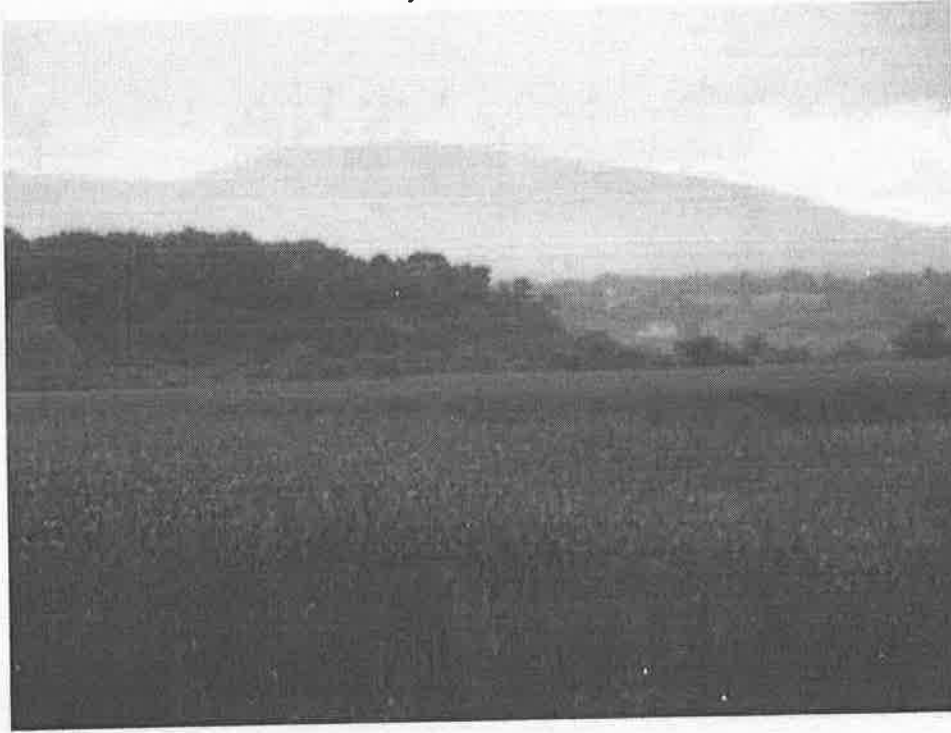
# NTI DAY 34

Name:

School:

## A Plant Puzzle

by Josh Adler



Living things like plants, animals, and people need energy to survive and grow. People eat food for energy, but most plants use energy that they get from sunlight.

When you look at plants such as a tree, flower, or grass, what do you see?

You might notice their stems, trunks, branches, leaves, roots, or flowers, but how do they grow? What are they made from? How did the plant make those parts?

Life is a puzzle in many ways. People don't all agree on how life started or why it exists. Yet a simple way of thinking about how plants grow is to think of the plant itself as a piece of a larger puzzle.

Each plant is a part of its unique environment. Different environments could be oceans, forests, deserts, or cities. Each environment also has its own climate, which is partially based on how much sun and rain an area receives every year.

Since only certain plants grow in hot, cool, wet, or dry climates, each environment is made up of different types of plant life. A desert may grow palm trees and cacti, while a forest may \_\_\_\_\_

grow tall pines or oak trees.

In order for a plant to grow, it needs three very important puzzle pieces: water, carbon dioxide, and light. Plants use their roots to take in water from the ground. They use their leaves to take in sunlight and carbon dioxide from the air.

Plants use these three puzzle pieces to make their own food in a process called photosynthesis. Using the energy from the sun, plants convert water and carbon dioxide into sugar. This sugar feeds the plant's growth from a seedling into an adult. In the process, the plant releases oxygen into the air.

Another important piece to the growth of many plants is soil. Using their roots, plants take in nutrients from the soil that help them grow. Giving a plant a spot in clean soil is important to make sure it doesn't absorb anything harmful from the dirt.

Plants make their food from carbon dioxide, water and light. They use this food to grow stems, trunks, roots, branches, leaves, and flowers. Now when you look at a tree, flower, or even a blade of grass, you can see all the pieces of the plant and how the entire puzzle fits together.

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

1. Where do plants get their energy from?

- A. the moon
- B. sunlight
- C. their stem
- D. their roots

2. What does the passage describe?

- A. how plants make food using light, water, and carbon dioxide
- B. how plants make food using *only* water and light
- C. how plants make food using oxygen, sugar, and soil
- D. how plants make food using sugar, light, and water

3. The climate determines which plants can grow in a particular environment.

What evidence from the passage best supports this conclusion?

- A. "Each plant is a part of its unique environment. Different environments could be oceans, forests, deserts, or cities."
- B. "Each environment also has its own climate, which is partially based on how much sun and rain an area receives every year."
- C. "A desert may grow palm trees and cacti, while a forest may grow tall pines or oak trees."
- D. "Since only certain plants grow in hot, cool, wet, or dry climates, each environment is made up of different types of plant life."

4. What would happen to a plant if it grew in polluted soil?

- A. The plant would grow faster than in clean soil.
- B. The plant would grow the same as in clean soil.
- C. The plant would not be healthy and could die.
- D. The plant would absorb more nutrients from the soil.

5. What is this passage mostly about?

- A. how plants grow
- B. sunlight and water
- C. energy sources
- D. nutrients in soil

6. Read the following sentences: "Using their roots, plants take in nutrients from the soil that help them grow. Giving a plant a spot in clean soil is important to make sure it doesn't **absorb** anything harmful from the dirt."

As used in the passage, what does "**absorb**" most nearly mean?

- A. use something
- B. take something in
- C. go under something
- D. put something out

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

Different environments have different plants. \_\_\_\_\_, deserts have cacti and rainforests have ferns.

- A. However
- B. Finally
- C. Meanwhile
- D. For example

8. With what process does a plant make its own food?

9. What are the three puzzle pieces that a plant needs to grow?

10. Explain whether plants could make their own food without sunlight.

Day 34



## Long Division with remainders within 1-100

### Grade 4 Division Worksheet

Find the quotient with remainder:

1.  $5 \overline{)98}$

2.  $9 \overline{)58}$

3.  $7 \overline{)93}$

4.  $4 \overline{)38}$

5.  $2 \overline{)68}$

6.  $7 \overline{)87}$

7.  $4 \overline{)57}$

8.  $8 \overline{)20}$

9.  $2 \overline{)72}$

10.  $4 \overline{)55}$

11.  $5 \overline{)99}$

12.  $7 \overline{)82}$



# NTI DAY 35

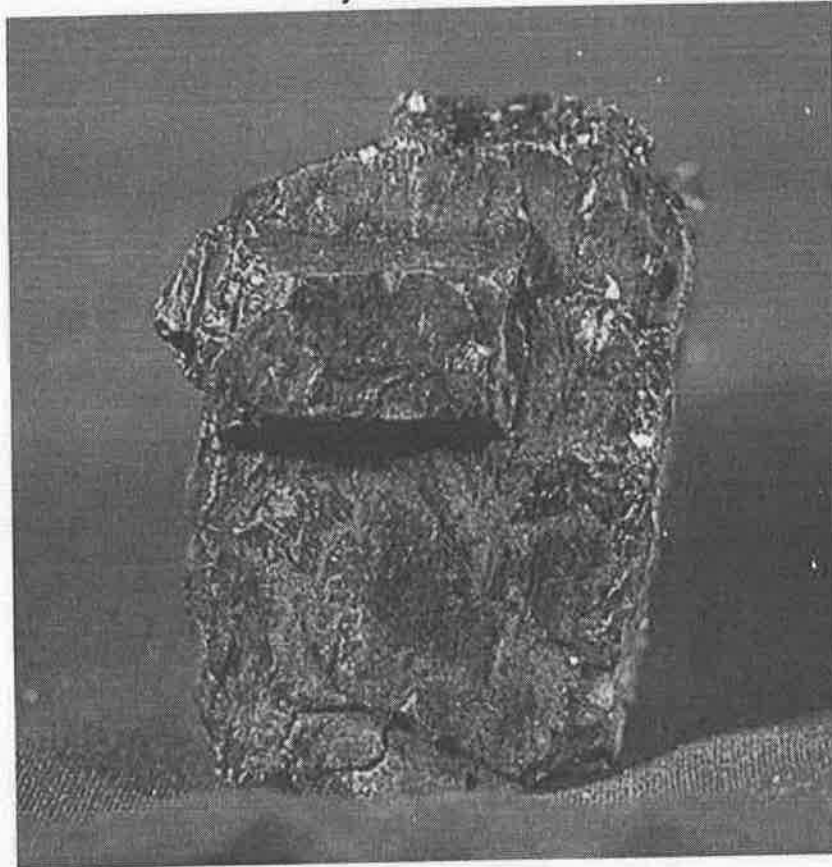
Name:

School:

Day 35

## Electricity & Energy - Energy

by ReadWorks



*coal*

All life depends on energy. The Earth and our solar system get most of their energy from the sun. Without the sun, life on Earth would not exist. The sun shines on plants, giving them the energy they need to grow and thrive. Animals then eat the plants, which gives them energy, too. Energy is everywhere. It is all around us.

Energy comes from nature. Wind, sun, water, fire, and lightning are all sources of energy. In the United States, the most used sources of energy are fossil fuels such as coal and oil. The energy from fossil fuels gives us most of the electricity that lights and heats our homes. Oil also gives us the gasoline that runs our cars. Unfortunately, the burning of fossil fuels pollutes the air.

Scientists are working to develop new ways of providing energy without harming the Earth. Through advances in research of alternative energy sources, the world is slowly changing from using fossil fuels to using wind power, water power, and solar energy. Windmills are used to capture wind power. Dams help to harness the energy from water. Solar panels collect energy from the sun's rays and keep it stored for future use.

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

Day 35

1. Energy on Earth comes from

- A. other planets.
- B. the sun.
- C. plants.
- D. the moon.

2. The passage describes the problem of fossil fuels causing pollution. What is a solution in the passage for this problem?

- A. using gasoline in cars
- B. using alternative energy sources
- C. making oil illegal
- D. promoting bicycle programs

3. All of the following have to do with new advances in energy *except*:

- A. wind power.
- B. water power.
- C. solar energy.
- D. lightning.

4. Read the following sentence: "The sun shines on plants, giving them the energy they need to grow and **thrive**."

The word **thrive** means

- A. wilt
- B. be born
- C. live well
- D. plant seeds.

Day 35

5. This passage is mostly about

- A. where energy comes from and how it is used.
- B. how wind energy is different from fossil fuels.
- C. how plants use the sun's energy.
- D. how animals use energy from plants.

6. What sources of energy does the passage describe besides fossil fuels?

7. Based on the passage, why would the world be "slowly changing" from fossil fuels to other energy sources, rather than quickly changing?

8. The question below is an incomplete sentence. Choose the answer that best completes the sentence.

Scientists want to develop new ways of providing energy without harming the earth,  
\_\_\_\_\_ they are researching alternative energy sources.

- A. then
- B. but
- C. meanwhile
- D. so

# Multiply

Day 35

$$\begin{array}{r} 97 \\ \times 16 \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline 0 \end{array}$$

$$\begin{array}{r} 87 \\ \times 28 \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline 0 \end{array}$$

$$\begin{array}{r} 79 \\ \times 38 \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline 0 \end{array}$$

$$\begin{array}{r} 69 \\ \times 46 \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline 0 \end{array}$$

$$\begin{array}{r} 59 \\ \times 95 \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline 0 \end{array}$$

$$\begin{array}{r} 43 \\ \times 67 \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline 0 \end{array}$$

$$\begin{array}{r} 38 \\ \times 76 \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline 0 \end{array}$$

$$\begin{array}{r} 28 \\ \times 39 \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline 0 \end{array}$$

$$\begin{array}{r} 16 \\ \times 97 \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline 0 \end{array}$$

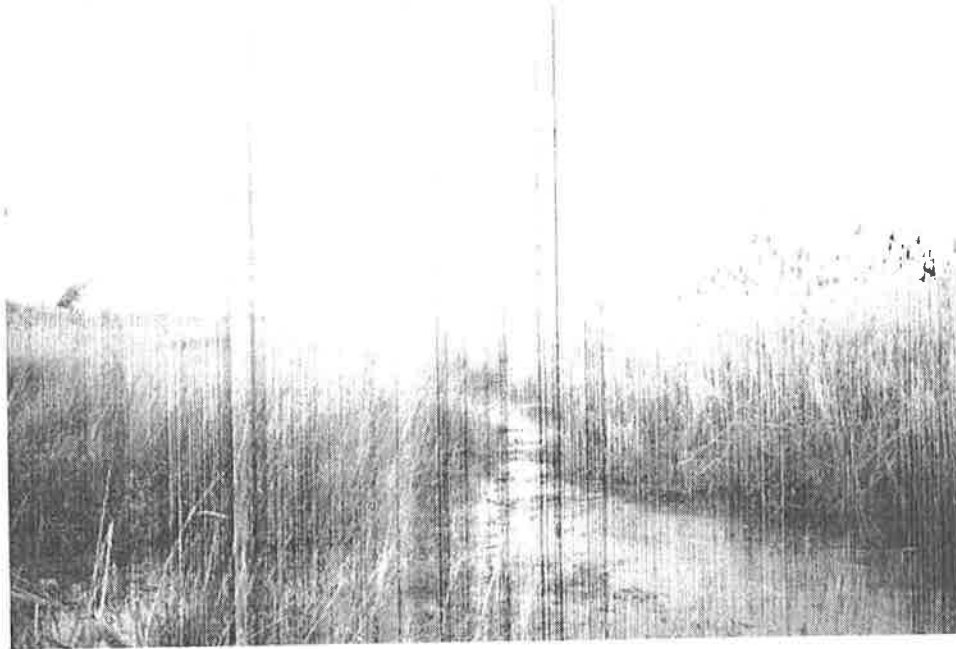
# NTI DAY 30

Name:

School:

# The Meadowlands

by ReadWorks



*The Meadowlands in New Jersey*

When they described the swamp at the end of Schuyler Avenue, the adults in Sarah's life seemed confused. Whenever she asked about it, Sarah's dad would chuckle.

"You'd better stay away from the Meadowlands," her father said.

Sarah's sixth grade teacher, Mr. Morrison, said only parts of the Meadowlands are swamps. He explained to the class that the Meadowlands are precious wetlands, one of the last places near New York City where birds migrating from Florida could stop and rest.

"The Meadowlands once had a lot of garbage dumps, which polluted the water pretty badly," Mr. Morrison said. "But most of the dumps are closed now. And the habitat for wild birds is recovering."

From her yard in the winter, the Meadowlands was as her dad described: brown, dead-looking weeds with Doritos bags lying at the water's edge. By springtime, however, the reeds turned green and flowers grew along the shoreline.

So which one is it, Sarah wondered. Is the Meadowlands a big, ugly, dangerous swamp? Or is it a beautiful oasis of birds and flowers? Despite her dad's warnings to stay away, Sarah

wanted to see for herself. She went under the porch and dragged out her dad's old fiberglass canoe. She threw the paddle and an old pink life jacket into the boat and dragged it across the yard, down Schuyler Avenue to the edge of the swamp.

Whatever it was, she saw now, the Meadowlands was big. Sarah always thought of it as the swamp at the end of her street. Now she realized that the wetlands actually stretched to the north and south, and she couldn't see either end. Directly across the water, the skyscrapers of Manhattan seemed to line the opposite shore, even though they were actually twelve miles away.

Sarah could feel the fear in her throat. But she didn't want to drag the canoe back up the hill. She zipped the life vest up to her neck, pushed the boat into the water and jumped in.

Past the reeds, she found herself paddling in a shallow pond surrounded by muddy islands. She saw ducks, swallows, yellow flowers, purple flowers, white egrets. A blue heron, disturbed by the splashes of Sarah's paddle, jumped into the air, uncurled its long wings and flapped away.

"This is all so beautiful!" Sarah thought.

The canoe slowed down, as if caught by invisible hands. Sarah looked down and saw the boat was scraping along the muddy bottom. Clouds of brown mud rose to the surface with every paddle stroke, and inside each cloud little bubbles of gas burst when they hit the surface. It smelled like a combination of old paint and rotting food. Sarah nearly threw up.

Soon she was stuck. She tried paddling backward to free the canoe from the mud, but each stroke released an overwhelming gas smell. She started to cry.

Just then something heavy and dark crashed through the weeds in front of the canoe.

A hand pulled the reeds apart, and out poked the head of Sarah's dad.

"Sarah! What are you doing out here?" he called.

Sarah tried to explain, but all she could do was cry.

"Well, it's a good thing you dragged the canoe-you left a trail in the gravel a mile wide," her dad said. "Here, take this rope."

He threw a yellow plastic rope, and after a few tries, Sarah grabbed it. Her dad pulled, and the boat skidded over the mud to shore.



Sarah worried that her father would be furious. But when he offered his hand to help her out of the boat, he laughed.

"I did the same foolish thing when I was your age," he said. "Did I ever show you the otter den?"

Sarah wiped tears from her cheek and shook her head no.

"Well, c'mon. I'll show you," her dad said. "The swamps can be pretty disgusting, but there's some beautiful stuff in here. You just have to know where to look."

Day 36

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

1. The adults in Sarah's life seem confused about what?
  - A. New York City
  - B. garbage dumps
  - C. birds and wildlife
  - D. the Meadowlands
  
2. Sarah takes her dad's canoe to explore the Meadowlands. What motivates Sarah's actions?
  - A. She wants to know if the Meadowlands are an ugly swamp or a beautiful oasis.
  - B. She wants to prove that her dad is wrong about the danger of the Meadowlands.
  - C. She wants to study the Meadowlands to complete a class project.
  - D. She wants to show her dad that she is brave and adventurous by exploring on her own.
  
3. There are different, contrasting opinions about the Meadowlands. What evidence from the story best supports this statement?
  - A. Sarah doesn't know what the Meadowlands are really like, so she decides to go and see for herself.
  - B. The Meadowlands used to be polluted by garbage dumps, but now the Meadowlands are recovering.
  - C. Some say the Meadowlands are a dangerous swamp; other say they are a precious habitat for birds.
  - D. Sarah's father warns her not to go to the Meadowlands, but Sarah ignores his warnings and visits them anyway.
  
4. Based on the story, what can you conclude about the Meadowlands?
  - A. The Meadowlands are dangerous and should be left alone.
  - B. The Meadowlands can be both beautiful and disgusting.
  - C. The Meadowlands are always a beautiful and flowering oasis.
  - D. The Meadowlands are still too polluted for animals to live there.

Day 36



## Long division by single digit (no remainder)

### Grade 4 Division Worksheet

Find the quotient.

1.

$$4 \overline{)932}$$

2.

$$8 \overline{)168}$$

3.

$$7 \overline{)777}$$

4.

$$9 \overline{)360}$$

5.

$$6 \overline{)828}$$

6.

$$3 \overline{)363}$$

7.

$$9 \overline{)243}$$

8.

$$5 \overline{)355}$$

9.

$$2 \overline{)782}$$

# NTI DAY 37

Name:

School:

Multiplication Word Problems Three  
Math Worksheet 2

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

Tammy went to the store 2 times last month. She buys 58 Skittles each time she goes to the store. How many Skittles did Tammy buy last month?

Each apple costs \$40.00. How much do 2 apples cost?

Angela went to the store 52 times last month. She buys 3 peanuts each time she goes to the store. How many peanuts did Angela buy last month?

Cheryl went to the store 3 times last month. She buys 90 blocks each time she goes to the store. How many blocks did Cheryl buy last month?

Brandon has 2 boxes of stickers. Each box holds 57 stickers. How many stickers does Brandon have?

Day 37

## Standard RI.2

### Our World Today

---

Traveling today is different from years ago. Cars, buses, trucks, or vans move us quickly where we want to go. People travel by subways. Subways are trains that run mostly under the ground. Other people travel in planes. They can move us from one part of the world to another in only one day. Astronauts travel to the moon in space shuttles. Shuttles travel faster than planes or cars.

Communication has become very fast as well. People can use cell phones and computers to deliver messages instantly. Televisions and radios broadcast the news that is happening right now. We no longer have to wait months to receive information from other parts of the world.

1. What is the main idea of the passage?
2. What are details or examples that support the main idea?

### Hospital Technology

One new machine being used in hospitals today is called a video remote interpreter, or VRI. It is a machine that helps people who are deaf. This machine connects to people outside the hospital that can help the deaf person communicate with the doctors and the nurses who may not know sign language.

Another machine is being made for people with bad burns. This machine will be set up next to the hospital bed. It will be close to, but not touching, the patient. This is important because people with burns are often in a lot of pain. It hurts them even more to have the burns touched. Usually a doctor or nurse needs to take a sample of the burn. They need to get a part of part of the skin from the burn. They do this so they can test for infection. Getting the sample is painful for the patient. This machine will be able to test a burn for infection by using the air around the burn. It will not touch the skin of the patient.

1. What is the main idea?
2. What are two points that support the main idea?

Day 37

## The Importance of Light

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

Light is important for many reasons. Light and heat energy from the sun warms Earth. Without the light and heat energy from the sun, Earth would be freezing cold. In addition, the sun's light is needed for plants to grow. Also, without light, there would be no colors. Can you think of another reason that light is important?

Try to imagine a world in which there is no light- no sun, no stars, no candles, and no light bulbs. What would be different? If you just said that it would be dark, you are only partly right. What else would change? Without light, you would not be able to see anything! A world without light is almost impossible to imagine.



*Here is a scene with lots of light*

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

Day 37

1. Without the light and heat energy from the sun, how would Earth feel?
2. Without light, how would plants be affected?
3. Without light, how would what you see be affected?
4. What is the main idea of this text?
5. Look closely at the text. Which sentence from the text that most closely states the main idea of the text?



# NTI DAY 38

Name:

School:

## Its or it's

### Grade 4 Punctuation Worksheet

Circle the correct word.

**“its”** shows possession.

**“it’s”** replaces it is.

1. ( Its / **It's** ) time to go to bed now.
2. I love your house. ( Its / It's ) very beautiful.
3. The dog lost ( its / it's ) toy at the park.
4. The pizza? ( Its / It's ) on its way now.
5. She thinks ( its / it's ) her dad's birthday, but ( its / it's ) tomorrow.
6. ( Its / It's ) a sad movie, but I didn't cry.
7. Your cat is adorable. What is ( its / it's ) name?
8. My dog and ( its / it's ) puppies love to chew on bones.
9. He believes ( its / it's ) strange to drink orange juice for dinner.
10. ( Its / It's ) crazy that we never knew we were neighbors.
11. I lost my phone and ( its / it's ) charger last week.
12. The baby and ( its / it's ) blanket were gently placed in the crib.



Day 38

Round Each Number to the Nearest Thousand  
Math Worksheet 1



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

Round Each Number to the Nearest Thousand

575 =                     1,000                    

696 = \_\_\_\_\_

8,481 = \_\_\_\_\_

377,789 = \_\_\_\_\_

284 = \_\_\_\_\_

9,448 = \_\_\_\_\_

342,293 = \_\_\_\_\_

392,285 = \_\_\_\_\_

1,516 = \_\_\_\_\_

712,596 = \_\_\_\_\_

787,838 = \_\_\_\_\_

482 = \_\_\_\_\_

549 = \_\_\_\_\_

147,146 = \_\_\_\_\_

7,332 = \_\_\_\_\_

6,420 = \_\_\_\_\_

Day 38

# Sensing the World Around Us

by ReadWorks



• We can smell the turkey's aroma, but it probably also tastes great!

**SIGHT**

## THE FIVE SENSES

(Did you name all five?)

**HEARING**

All animals have sense receptors, which are organs that receive information from the outside world. We human beings perceive our environment through our five senses: vision, hearing, smell, taste, and touch.

Our bodies are covered with skin tissue. Our skin receptors deliver messages to our brains when our skin comes into contact with different surfaces. These receptors allow us to feel things like pain, temperature, pressure, and vibrations. If you stick your bare hand into the snow, for instance, your sense receptors will signal the thing you have just touched is cold! *Very cold!* If you take a walk across the beach on a particularly sunny day without sandals on, your sense receptors may tell you that it is hot! *Very hot!* Once your brain has processed this information, it can store the information and use it later on. The next time you go to the beach, you'll likely remember how much the sand can heat up and bring your flip-flops along with you.

Pain is pretty unpleasant when it happens, but think about it this way: pain protects us. When we sense pain, we know that we should stop whatever it is we're doing because it hurts. If

you rest your hand on the stove while it's turned on, the pain will alert you to move away. Our sense receptors allow us to detect pain and tell our brains about injuries to our bodies. Memories of painful experiences help us avoid these experiences in the future. In other words, the information collected by our receptors can guide our future actions. Beware of the stove, or get burned again!

What kinds of receptors allow us to see the world? The sense receptors involved in vision are called "photoreceptors." Other animals have different types of photoreceptors, but humans have only two kinds: rods and cones. Our rods and cones are located in the retina, the back part of the eye. Our rods are sensitive to changes in light, shape, and movement. They help our eyes adjust to the dark. When you stumble to the bathroom in the middle of the night and, after a few moments, are able to see the door well enough not to bump right into it, those are your rods at work. Our cones allow us to perceive color. They operate best in bright light, which is why it's hard for us to make out colors when the lights are out. Some people are "color blind," which means that they have difficulty distinguishing certain colors from others, like red from green. This is because they're missing a type of cone in the retina, or because a particular cone is weak.

Olfactory receptors are the ones that receive smells, whether the scent of freshly baked cookies or day-old garbage. All that we smell is the result of receptors in our noses—about seven centimeters up our noses, actually!—detecting chemicals in the air and informing our brains. When you have a cold, the chemical molecules have a hard time reaching the receptors in your stuffed-up nose, which is why you have trouble smelling. Human beings have about forty million olfactory receptors, which are covered with small hairs called "cilia." A dog like the German shepherd has about two billion olfactory receptors. That's why police officers often use dogs to sniff out whatever it is they're looking for; their sense of smell is much better developed than ours!

Did you know that, of all our senses, smell is the one most closely related to memories and emotions? When you smell an object that you've smelled before, it will often bring to mind memories associated with that object. Also, a lot of times we think we are tasting food when really we are mainly smelling it. Our olfactory receptors send signals to the brain while we're eating, and the brain registers this information as a part of "taste."

Receptors in the ear, called "auditory receptors" or "hair cells," are responsible for our hearing. Sound waves enter through our outer ear and cause the eardrum to vibrate. The three bones in our middle ear pass these vibrations on to the cochlea. The cochlea is a snail-shaped structure in the inner ear that is filled with a special fluid. When the vibrations move the hair cells (our receptors) on the cochlea, they send signals to the brain. Another fun fact:

the canals in our inner ear are responsible for balance. So the next time you're hopping up and down on one leg, remember that you have your ears to thank!

Humans enjoy five different types of taste: sweet, sour, salty, bitter and umami (savory or meatiness). Any other taste you can think of is made up of a combination of these. A human has approximately 10,000 taste buds. Each taste bud has 50 to 150 receptors. These receptor cells, or gustatory cells, only live for about two weeks and are then replaced by new ones. Your taste buds lie on your tongue, the back of the roof of your mouth and the back of your throat. Not all animals have the same receptors as we do. You'll notice, if you ever try and reward your cat with something sugary, your pet doesn't have much interest in candy. That's because cats can't taste sweets.

Certain animals sense their outside environment in incredible ways. Butterflies have taste receptors on their feet. A rabbit's tongue contains 17,000 taste buds. Crickets hear using a thin membrane on their front legs. The box jellyfish has twenty-four eyes. Elephants can hear (and make) very low-frequency sounds that we humans can't. Whether you taste with your feet or your tongue, hear with your legs or your ears, all of us animals need sense receptors. Without them, we wouldn't know as much about the world around us.

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

Day 38

1. What kinds of receptors allow people to see the world?

- A. auditory receptors
- B. olfactory receptors
- C. photoreceptors
- D. skin receptors

2. What does the author describe in this passage?

- A. how our senses work
- B. how to train a dog
- C. how police officers catch thieves
- D. how to be safe in the kitchen

3. If you rest your hand on the stove while it's turned on, the pain will alert you to move away. Our sense receptors allow us to detect pain and tell our brains about injuries to our bodies. Memories of painful experiences help us avoid these experiences in the future.

Based on this evidence, what conclusion can be made?

- A. We need to try to forget our painful memories.
- B. We can't always trust our sense receptors.
- C. The brain is an important sense receptor.
- D. Pain is unpleasant, but it can protect us.

4. Based on information in the text, how do memories form?

- A. Olfactory receptors process and store information provided by the brain.
- B. Photoreceptors process and store information provided by the brain.
- C. Sense receptors process and store information provided by the brain.
- D. The brain processes and stores information provided by sense receptors.

Day 38

5. What is this passage mainly about?

- A. the benefits of blindness
- B. the habits of animals
- C. the five senses
- D. the five tastes

6. Read the sentence: "**Olfactory** receptors are the ones that receive smells, whether the scent of freshly baked cookies or day-old garbage."

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

- A. connected to the act of storing garbage
- B. connected to the act of baking cookies
- C. connected to the sense of smell
- D. connected to the sense of taste

7. Sound waves enter through our outer ear and cause the eardrum to vibrate. \_\_\_\_\_, the three bones in our middle ear pass these vibrations on to the cochlea.

Choose the answer that best completes the sentence below.

- A. Previously
- B. Then
- C. Obviously
- D. Meanwhile

8. Why do police officers use dogs to sniff out whatever it is they're looking for?

9. Should a cat be rewarded with a sugary treat? Why or why not? Use evidence from the story to support your answer.

10. Human beings see, smell, taste, and hear in ways that are different from other animals. What evidence from the text supports this conclusion?



# NTI DAY 39

Name:

School:

## Contractions

### Grade 4 Punctuation Worksheet

Write the two words that form these contractions.

1. isn't            is                  not
2. aren't      \_\_\_\_\_
3. can't      \_\_\_\_\_
4. they're      \_\_\_\_\_
5. don't      \_\_\_\_\_
6. could've      \_\_\_\_\_
7. didn't      \_\_\_\_\_
8. doesn't      \_\_\_\_\_
9. couldn't      \_\_\_\_\_
10. hasn't      \_\_\_\_\_
11. haven't      \_\_\_\_\_
12. he's      \_\_\_\_\_

Some words can be joined together by replacing one letter (or more) with an **apostrophe**.



Day 39

Round Each Number to the Nearest Thousand  
Math Worksheet 3



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

### Round Each Number to the Nearest Thousand

$829,588 = \underline{\hspace{2cm} 830,000 \hspace{2cm}}$

$932 = \underline{\hspace{4cm}}$

$2,031 = \underline{\hspace{4cm}}$

$1,714 = \underline{\hspace{4cm}}$

$553,832 = \underline{\hspace{4cm}}$

$433 = \underline{\hspace{4cm}}$

$363,353 = \underline{\hspace{4cm}}$

$878 = \underline{\hspace{4cm}}$

$241 = \underline{\hspace{4cm}}$

$264 = \underline{\hspace{4cm}}$

$808,513 = \underline{\hspace{4cm}}$

$111 = \underline{\hspace{4cm}}$

$860,401 = \underline{\hspace{4cm}}$

$856 = \underline{\hspace{4cm}}$

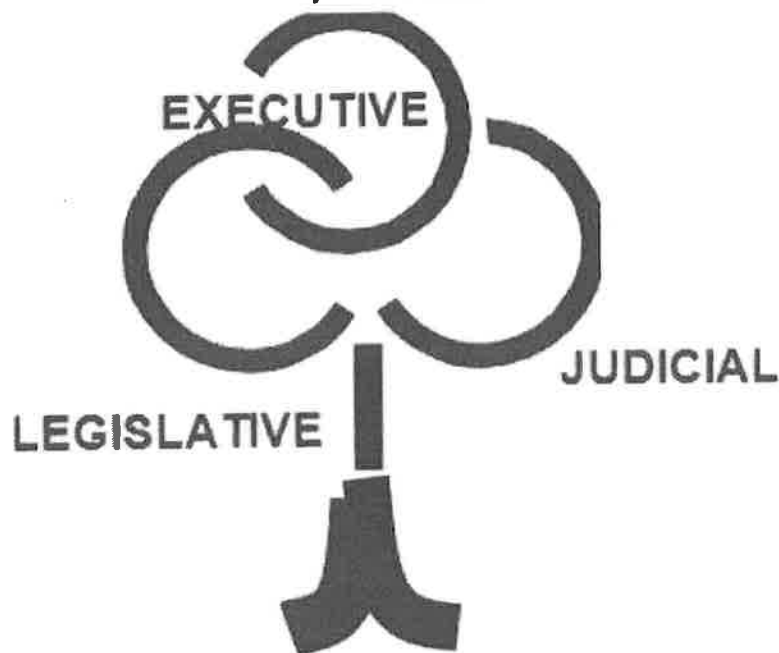
$646,480 = \underline{\hspace{4cm}}$

$126 = \underline{\hspace{4cm}}$

# American Government - The Branches of Government

Day 39

by ReadWorks



Think of the United States government as a tree. What is the thickest part of a tree? The trunk. In our government, the people are the trunk. What are the branches?

The Constitution establishes three branches of government. These branches are the legislative branch, the executive branch, and the judicial branch. Each branch has only the power given to it in the Constitution. This separation is to make sure that no one part of government ever becomes too strong. Think of the tree again. What would happen if one branch of a tree were huge and the others were just little twigs? The whole tree could topple!

To make sure that our government does not fall apart, power is carefully balanced between the branches of government. Each branch of government has a way to curb, or "check," the power of the other two branches. For example, imagine the President does not agree with a law passed by Congress. He can veto it so it never goes into effect. If the law passes, and takes away someone's rights, the Supreme Court can rule it is illegal. The legislative, executive, and judicial branches all check up on each other in different ways.

These two important principles are called "separation of power" and "checks and balances." Together, they help make sure the government works properly and that no one government group, or government official, becomes too powerful.

Day 39

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

1. What established the three branches of U.S. government?

- A. the president
- B. the Constitution
- C. the king of England
- D. the Supreme Court

2. This passage uses an analogy of a tree to

- A. show that government is a part of nature, too.
- B. help the reader understand the parts of government.
- C. show the reader how cases reach the Supreme Court.
- D. explain how government has roots and grows.

3. Based on this passage, what can prevent the legislative branch from passing a law that nobody else likes?

- A. The Supreme Court has to give approval to all laws first.
- B. The legislative branch cannot pass laws, only the President can.
- C. The President could veto that law so it wouldn't take effect.
- D. The judicial branch would elect a brand new legislative branch.

4. Read the following sentence: "If the law passes, and takes away someone's rights, the Supreme Court can **rule** it is illegal."

In this sentence the word **rule** means

- A. to measure
- B. to hate
- C. to decide
- D. to suggest

5. The passage "The Branches of Government" is mostly about

Day 39

- A. trees that are important to the United States
- B. famous moments in the history of U.S. government
- C. the role and history of the Supreme Court
- D. different parts of government and how they work together

6. What are the three branches of the United States government?

7. Describe a specific situation where the principle of checks and balances could be used for the good of the people.

8. The question below is an incomplete sentence. Choose the answer that best completes the sentence.

There are checks and balances in the United States government, and \_\_\_\_\_ no one person can become too powerful.

- A. previously
- B. as a result
- C. after
- D. on the other hand

# NTI DAY 40

Name:

School:

Day 40

Two by Two Digit  
Multiplication

Name \_\_\_\_\_

$$\begin{array}{r} 75 \\ \times 34 \\ \hline \end{array}$$

$$\begin{array}{r} 22 \\ \times 36 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ \times 23 \\ \hline \end{array}$$

$$\begin{array}{r} 56 \\ \times 21 \\ \hline \end{array}$$

$$\begin{array}{r} 86 \\ \times 35 \\ \hline \end{array}$$

$$\begin{array}{r} 41 \\ \times 34 \\ \hline \end{array}$$

$$\begin{array}{r} 56 \\ \times 36 \\ \hline \end{array}$$

$$\begin{array}{r} 48 \\ \times 31 \\ \hline \end{array}$$

$$\begin{array}{r} 19 \\ \times 25 \\ \hline \end{array}$$

$$\begin{array}{r} 26 \\ \times 33 \\ \hline \end{array}$$

$$\begin{array}{r} 33 \\ \times 32 \\ \hline \end{array}$$

$$\begin{array}{r} 43 \\ \times 60 \\ \hline \end{array}$$



# Trees Save the Earth

Day 40

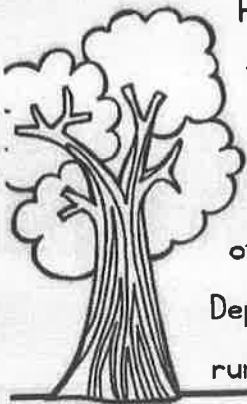
Carbon dioxide (CO<sub>2</sub>) is a gas that occurs naturally. When humans exhale, for example, carbon dioxide is released. However, there is an excess of carbon dioxide in the atmosphere from burning fossil fuels, like coal and oil. That contributes to holes in the ozone layer and global warming.

Trees are like the lungs of the Earth. Similar to how lungs deliver oxygen to the bloodstream, trees release oxygen to the air, which they produce after transforming the carbon dioxide they take in for energy. The trouble is, there is now more CO<sub>2</sub> produced than the trees can absorb. Not only have pollution levels risen, but so has the number of trees being removed from land. Land is cleared of trees when new neighborhoods, businesses, and roads are built. There are more trees being cut down than are being planted each year.

Planting trees in the community will help the environment. Not only do trees reduce CO<sub>2</sub> in the atmosphere, but they also absorb other pollutants, and even odors, too. Trees are a natural air purifier.

They can also help conserve energy. Trees help block wind in the winter, which can lower heating costs. Trees also provide shade when it's hot, which can help keep homes cooler in the summer. Providing more shade to streets and buildings can also reduce the temperature of an entire city! When the sun shines all day on roofs and asphalt, these surfaces can be 50-90 degrees hotter than the air. In a large city, this can raise the air temperature up to 5 degrees hotter than surrounding areas! This shade is also important for protecting people from the ultra-violet rays of the sun that cause skin cancer.

Trees don't just help filter the air. They also help to purify water. The branches and leaves help rain fall more slowly to the ground, which allows the water to soak into the soil. The roots take the water in and clean it, then the tree releases it through transpiration. Transpiration is the process where plants slowly release water vapor from their leaves. Trees help prevent stormwater, full of pollutants, from flowing swiftly to lakes and oceans. The United States Department of Agriculture has reported that 100 mature trees can reduce runoff by up to 100,000 gallons!



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



Use both texts to answer the following questions.

1. What is a synonym for the words **filter** and **purify** in the article, **Trees Save the Earth**?

- a. clean
- b. contaminate
- c. soil
- d. water

2. Paragraph 3 from **Trees Save the Earth** fits best with which paragraph in **Environment Protection**?

- a. paragraph 1
- b. paragraph 2
- c. paragraph 3

3. How are the ideas in **Environment Protection** **mostly** organized?

- a. in chronological order to tell how the Earth has changed
- b. through compare and contrast of clean air and pollution
- c. with descriptions that tell about how trees help the Earth
- d. as a problem/solution to show how to protect the environment

4. What is NOT true about the Earth according to **Environment Protection**?

- a. There is more pollution because of more people using resources.
- b. The ozone layer is being affected by pollution.
- c. Glaciers are melting, so there is no need to conserve water.
- d. There are less resources because of a growing population.

5. In **Trees Save the Earth**, what is the **effect** of more CO<sub>2</sub> in the air?

- a. Trees absorb the CO<sub>2</sub> and release oxygen into the air.
- b. Pollution levels have risen.
- c. There are less trees because land is being cleared.
- d. Power plants creating electricity produce more CO<sub>2</sub>.

6. Which idea in **Environment Protection** provides a way to reduce dangerous chemicals that pollute the air?

- a. Use washable bags rather than plastic throw-aways.
- b. Take public transportation or carpool.
- c. Take shorter showers.
- d. Write on both sides of your paper.

7. How do trees help purify water in **Trees Save the Earth**?

- a. They release oxygen into the air.
- b. Trees are a natural air purifier.
- c. They help conserve energy.
- d. The roots take in the water from the soil and release it through transpiration.

# NTI DAY 41

Name:

School:

## Quotation marks

Grade 4 Punctuation Worksheet

Quotation marks go around spoken words and their punctuation.

Add quotation marks and commas to the sentences as needed



1. Where is my dog? asked Brandon.

\_\_\_\_\_

2. Mrs. Jolly said We are having a party on Saturday. Hope you can make it!

\_\_\_\_\_

3. First explained my grandpa we will need to clean up the garage.

\_\_\_\_\_

4. If you go to the store, please buy me some oranges and apples said Natalie.

\_\_\_\_\_

5. Oh no! My pen spilled ink all over my shirt! cried David.

\_\_\_\_\_

6. I cannot believe said mom that you didn't remember my birthday.

\_\_\_\_\_

7. Katie said My brother just threw all of my homework into the sink.

\_\_\_\_\_

8. Read the book tonight. We can talk about it tomorrow said my friend, Stacy.

\_\_\_\_\_

Name \_\_\_\_\_

Date \_\_\_\_\_



## ROUNDING TO THE NEAREST 1000 SHEET 2

Follow these simple steps to round a number to the nearest 100:

- if the number is already a multiple of 1000, don't change it!
- if the hundreds digit is less than 5 then the number is rounded down. Simply change the lower value digits to zero.
- if the hundreds digit is 5 or more, the number is rounded up. Simply add one to the thousands digit and change the lower value digits to zero.

### Examples

2873 is rounded **up** to 3000 because the hundreds digit is 8.

6438 is rounded **down** to 6000 because the hundreds digit is 4.

8000 is unchanged because it is already a multiple of 1000.

1552 is rounded **up** to 2000 because the hundreds digit is 5.

*Round these numbers to the nearest 1000*

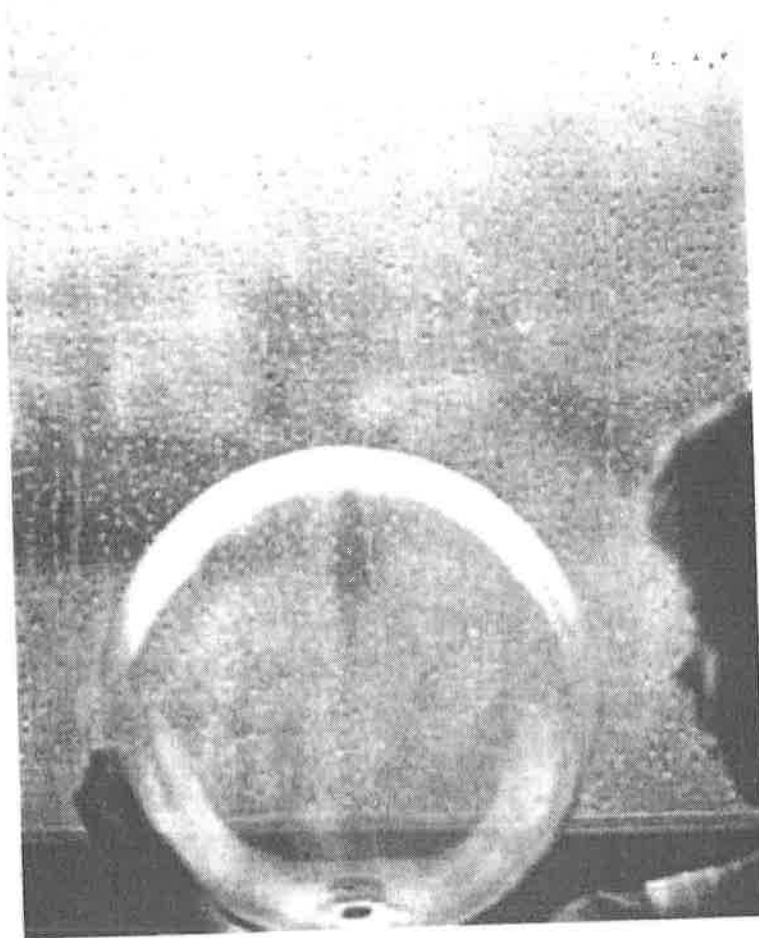
- |          |         |          |         |          |         |
|----------|---------|----------|---------|----------|---------|
| 1) 1278  | → _____ | 2) 2824  | → _____ | 3) 4436  | → _____ |
| 4) 608   | → _____ | 5) 7391  | → _____ | 6) 2750  | → _____ |
| 7) 8574  | → _____ | 8) 6843  | → _____ | 9) 9078  | → _____ |
| 10) 5167 | → _____ | 11) 6084 | → _____ | 12) 1651 | → _____ |
| 13) 487  | → _____ | 14) 8817 | → _____ | 15) 9308 | → _____ |
| 16) 8293 | → _____ | 17) 3557 | → _____ | 18) 4485 | → _____ |
| 19) 3391 | → _____ | 20) 9054 | → _____ | 21) 8729 | → _____ |
| 22) 6000 | → _____ | 23) 7502 | → _____ | 24) 9814 | → _____ |



# What Happens When It Rains?

by Vinnie Rotondaro (Adapted by ReadWorks)

Day 41



The next time you see storm clouds coming towards you, stop what you're doing and look outside.

Try to spot some dirt. If you're in a city, look for a patch of soil on the sidewalk. If you're in a smaller town, look at your backyard. And if you're in the countryside, just look anywhere. Right now, the dirt is probably dry.

Soon you can see the lightning. You can hear the thunder. Pretty soon, the rain starts. You hear it hitting the leaves, the ground, and the roof above your head. The storm cloud comes closer. The rain falls harder. Now, look back at that dirt.

The dirt is turning into mud. If you can't see the dirt well, wait until the rain stops, then go outside. Stick your finger into it. It's wet and squishy. It's moving all around. It's mud.

Day 41

Before it rains, a patch of soil in the city might be bumpy. It may have chunks of dry soil. But after a few minutes of rain, it will turn into mud. It'll become less bumpy and more flat. Your backyard in a small town might have a hole in the ground before it rains. If it rains hard enough, that hole might get filled up with water and soil. And out in the countryside, where there's dirt everywhere, the rain can cause even bigger changes. Over a long time, it can make the whole landscape change. It can wear down mountains, or fill up deep valleys with rocks and soil.

There's a name for the way these kinds of changes happen. The name is erosion. Erosion is when wind or water breaks rocks and soil into smaller and smaller pieces, and then moves the rocks and soil to other places.

Erosion isn't the only thing that happens when it rains. Rain also helps out living things. Every living thing on the planet needs water to survive. In fact, many animals rely on the rain for their drinking water.

Some birds rely on the rain to make puddles for them to drink. But birds also need the rain for their food. Have you ever noticed that when it rains and the ground gets muddy, earthworms come out? Earthworms like being wet. They stay deep down in the ground when it's not raining because it is wetter down there. The soil you can see on the surface is normally too dry for them. But when it rains, earthworms come up through the mud and water. They move around to another spot. That's when you can see them on the surface. And that's also when the birds fly down to eat the worms!

Rain affects the earth. Many animals rely on it, and it helps change the surface of the earth. Maybe the next time it rains, you can spot a bird flying down to get some worms. Or maybe, after years of rainstorms, you can see a change in the landscape from the rain.

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

Day 41

1. What does every living thing on the planet need to survive?

- A. erosion
- B. mud
- C. water
- D. thunder

2. The writer explains different effects of rain. How does rain help cause erosion of the ground?

- A. Earthworms start to come out of the ground when the ground gets muddy after it rains.
- B. Heavy rain fills up bird nests.
- C. Rain helps break down soil and rocks into small pieces that are then moved to another location.
- D. Soil may be dry before a rainfall.

3. Rain is important to birds, earthworms, and humans.

What evidence from the text best supports this conclusion?

- A. Birds rely on the rain to make puddles for drinking water.
- B. Before it rains, a flower bed or tree bed might be filled with clumps of dry soil.
- C. Over a very long time, mountains can wear down and ravines can fill up with rocks and soil.
- D. Every living thing on the planet needs water to survive.

4. What would happen to birds if it didn't rain for a long time?

- A. Birds would be scared of bursts of thunder.
- B. Birds would stop flying altogether.
- C. Birds would likely be thirsty and hungry.
- D. Earthworms would start eating birds.



Day 41

5. What is this passage mostly about?

- A. how holes in the ground fill up with soil when it rains
- B. why birds like rainwater
- C. how rain affects the landscape and animals of the environment
- D. how to find mud in a flower-bed

6. Read the following sentence: "Before it rains, a flower bed or tree bed might be bumpy and **craggy**, with clumps of dry soil."

The word "**craggy**" most nearly means

- A. smooth
- B. uneven
- C. wet
- D. soft

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

\_\_\_\_\_ we might not be able to play outside when it rains, rain is a good thing.

- A. Although
- B. On the other hand
- C. Finally
- D. For example

8. Without rain, animals would not survive.

Use evidence from the passage to support this statement.

9. How can erosion change a landscape over time?

10. After a rainstorm we can see how water is important to the landscape and the animals that live there. Describe some ways the water left by the rain impacts the landscape and animals.

# NTI DAY 42

Name:

School:

You did it!





# Speed problems

How long will it take a bike rider to travel 36 mi at a constant speed of 9 miles per hour?	$\begin{array}{r} 4 \text{ hours} \\ 9 \overline{)36} \end{array}$
If a car traveled 150 mi at a constant speed in 5 hours, at what speed was it traveling?	$\begin{array}{r} 30 \text{ mph} \\ 5 \overline{)150} \end{array}$
If a bus travels for 5 hours at 40 mph, how far does it travel?	$5 \times 40 = 200 \text{ mi}$

A car travels along a road at a steady speed of 60 mph. How far will it travel in 6 hours?



A train covers a distance of 480 mi in 8 hours. If it travels at a constant speed, how fast is it traveling?

John walks at a steady speed of 3 mph. How long will it take him to travel 24 miles?



A car travels at a constant speed of 65 mph. How far will it have traveled in 4 hours?

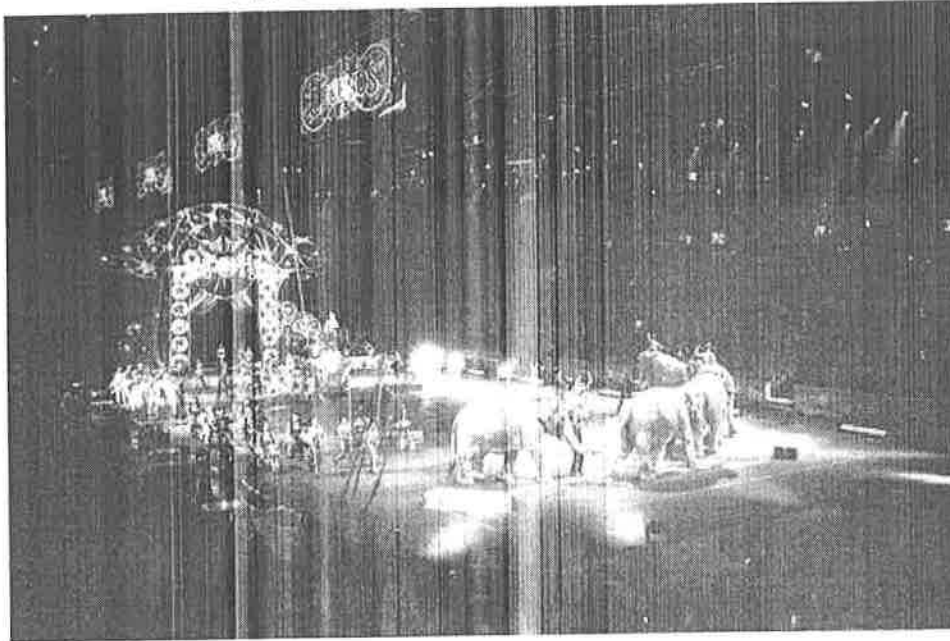
Melanie completes a long distance run at an average speed of 6 mph. If it takes her 3 hours, how far did she run?

Sarah cycles 30 mi to her grandmother's house at a steady speed of 10 mph. If she leaves home at 2:00 P.M., what time will she arrive?



Day 42

## The Science of Fun!



Bello Nock recently raced up a thin wire on a motorcycle. He drove the motorcycle high over thousands of spectators' heads. He's a clown with the Ringling Bros. and Barnum & Bailey circus.

To the spectators below, Bello's stunt looked dangerous - and it was. But Bello knew a secret. He was using science to help keep himself safe.

### Circus Science

Bello began performing circus stunts when he was nine years old. He walked on a thin wire that was stretched nine feet off the ground.

To stay on a wire without falling, Bello needs to keep his center of gravity low. An object's center of gravity is usually located in the middle of the object. That is where the object's weight is centered.

By crouching and keeping low, Bello keeps his center of gravity low. The lower his center of gravity, the harder it is for Bello to fall.

Bello often carries a heavy metal stick when he performs. The stick bends downward, lowering his center of gravity.

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## Moving On

Bello also uses Newton's first law of motion when he performs. That law is named for Isaac Newton. He was a scientist who lived about 275 years ago.

Newton's first law of motion says that a moving object will keep moving unless an outside force acts on it. (The law also says that an object at rest will stay that way unless an outside force acts on it.) Bello uses that law when he rides his *miniature*, or tiny, bike.

As Bello speeds along on his tiny bike, he sometimes has to stop before slamming into a wall. To stop, Bello uses the bike's brakes. The brakes create *friction* between the bike's tires and the ground. The friction is an outside force that slows the bike.

Friction also changes the bike's motion into heat energy. You could say that Bello's act is really hot!

To see how friction works, rub your hands together as fast as you can. When you rub your hands together, they should start to feel warm. Friction between your hands changes into heat energy.

Bello always puts on a high-energy show. "I always want to capture the attention of children," he said. He captures their attention with science.

Day 42

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

1. According to the text, what does friction do with the motion of the bike?

- A. Friction changes the motion into heat energy.
- B. Friction helps keep the bike's center of gravity low.
- C. Friction means that Bello can rub his hands together while he rides.
- D. Friction makes Bello less likely to fall off the bike.

2. Which of the following does the author describe first in the text?

- A. The author describes Bello's life as a clown in the circus.
- B. The author describes Bello's decision to use Newton's first law of motion.
- C. The author describes Bello's high-energy show as a tightrope walker.
- D. The author describes Bello's circus act of riding a motorcycle on a wire.

3. Read these sentences from the text.

To stay on a wire without falling, Bello needs to keep his center of gravity low. An object's center of gravity is usually located in the middle of the object. That is where the object's weight is centered.

By crouching and keeping low, Bello keeps his center of gravity low. The lower his center of gravity, the harder it is for Bello to fall.

Based on this information from the text, what is one way you could keep your center of gravity low?

- A. standing on your tippy toes while walking around
- B. squatting down closer to the ground
- C. doing ten jumping jacks and five cartwheels
- D. standing on one foot and raising your arms

4. What can be inferred from the text?

- A. Bello is a very inexperienced clown, and this inexperience shows in his act.
- B. Bello only knows how to ride a motorcycle, not a bicycle.
- C. The children in the audience at the circus may not understand the science behind Bello's act.
- D. Bello will probably stop performing as a circus clown soon because it is too dangerous.