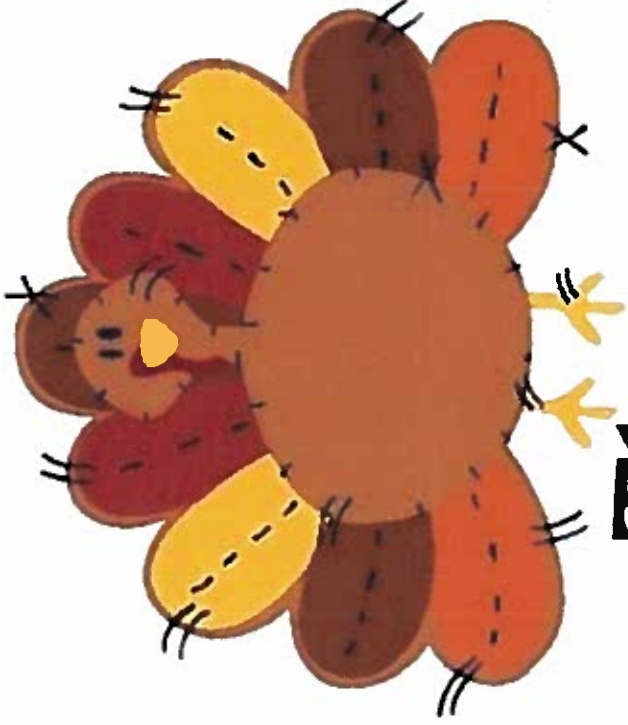


# Fourth Grade Vacation Packet



# Happy Thanksgiving

Name \_\_\_\_\_

**Math**

**You must show all of your  
work!**

Name \_\_\_\_\_

1. Kim wrote 57,604 in expanded form. Which number is **NOT** one of the numbers that Kim wrote?

- (A) 50,000
- (B) 7,000
- (C) 60
- (D) 4

2. The table shows the number of movie tickets sold during four weeks at the theater. How many more tickets were sold the first week than in the third and fourth weeks combined? Explain.

Movie Tickets Sold	
Week 1	221,671
Week 2	174,002
Week 3	98,653
Week 4	41,208

3. Complete the calculation using the numbers from the box. Use each number once.

$$\begin{array}{r} 2,563 \\ \times \quad 9 \\ \hline \end{array}$$
  
$$\begin{array}{r} \square \square \square \\ \times \quad 5 \square \square \\ \hline 4, \square \square \square \square \\ \square \square \square \square, 0 \square \square \square \\ \hline 2 \square \square, \square \square 6 \square \square \end{array}$$

0	1
2	3
4	5
7	8

4. The product of two factors is 6,300. If one of the factors is 9, what is the other factor? Explain.

5. The population of Groverdale is 553,000. The population of Tittlehook is 535,841. Alaina said the population of Groverdale is greater than the population of Tittlehook. Is Alaina correct? Construct a math argument to support your answer.

6. There were 131,413 season passes sold for an amusement park one year. The next year, 178,654 season passes were sold. The following year, 216,749 season passes were sold. How many season passes were sold during all three years?

- (A) 526,816 passes
- (B) 417,706 passes
- (C) 348,162 passes
- (D) 310,067 passes

7. Four friends want to book a three-night trail ride on horses. The guided trip costs \$962 per person, plus \$247 per person for the meal plan. Estimate the total cost of the trip. Explain.

8. Natalia is participating in a jump-a-thon to raise money for her school trip. She logs the number of times she jumps rope each day for one week. On the first day, Natalia jumps 234 times. Each day for the next 6 days, she increases her number by 41 jumps. If she earns \$2 for every jump, how much money does Natalia raise by the end of the week? Explain.

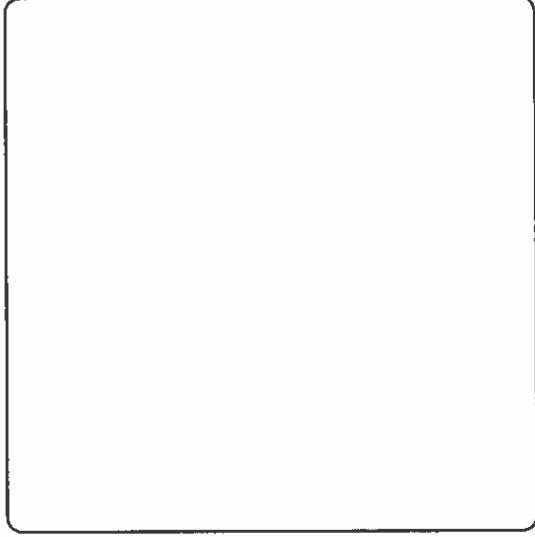
9. Which place value do you use to compare 437,812 and 432,729?

10. Ricardo subtracts 558 from 800 and writes the following:  
800 minus 500 is 300. Then I can subtract 60 more to get 240. But I should have only subtracted 58 more, so I'll add 2 back to my difference to get 242.

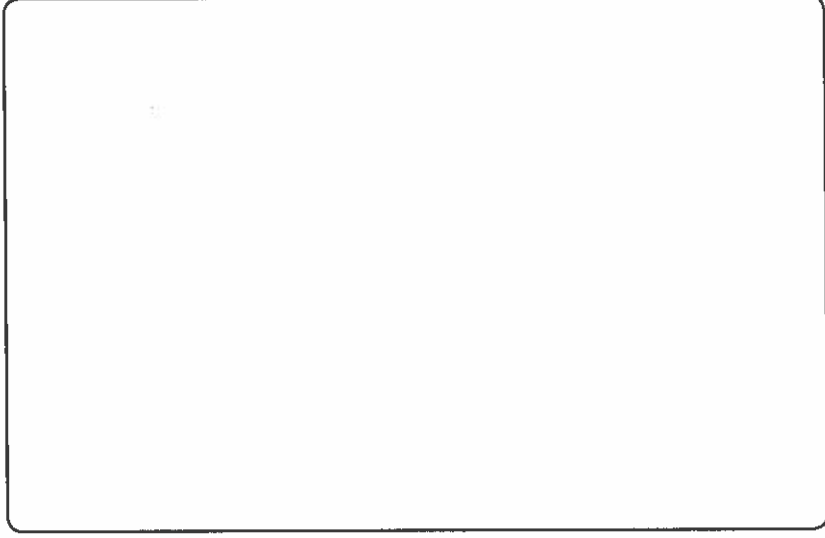
Which mental-math strategy did Ricardo use?

- (A) Breaking Apart
- (B) Compensation
- (C) Counting On
- (D) Commutative Property

11. A high school has 4 display cases for sports trophies and 2 display cases for academic trophies. Each sports display case can hold up to 65 trophies. Each academic display case can hold up to 88 trophies. How many trophies can the school display?



12. Over the summer, Marvin mows 33 lawns. He charges \$24 per lawn. Draw an area model to show how much Marvin earns mowing lawns.



13. Camille is walking across the country to raise money for veterans. Her goal is to walk 66,485 steps each day. So far today, she has walked 37,831 steps. How many more steps must Camille walk today?

- (A) 104,316 steps
- (B) 31,454 steps
- (C) 28,654 steps
- (D) 28,314 steps

14. Which of the following shows how to use the Distributive Property to find the product of  $4 \times 567$ ?

- (A)  $4 \times (500 + 60 + 7)$   
 $= 2,000 + 240 + 28 = 2,268$
- (B)  $4 \times (56 + 7) = 224 + 28 = 252$
- (C)  $567 \times 4 = 2,268$
- (D)  $4 \times (500 - 30 - 3)$   
 $= 2,000 - 120 - 12 = 1,868$

15. The longest ladder on the fire truck reaches 95 feet. A building has 20 stories, and each story is 18 feet high. What is the highest story that the ladder can reach?

- (A) 5<sup>th</sup> story
- (B) 6<sup>th</sup> story
- (C) 10<sup>th</sup> story
- (D) 18<sup>th</sup> story

16. Write three numbers that round to 38,000 when rounded to the nearest thousand.

17. Angela's model used 4 times as many blocks as Miranda's model. Miranda's model used 168 blocks. George's model used 592 blocks. Who used more blocks, Angela or George? Explain.

18. Lacey swims 23 laps in the pool for each of 16 days. How many laps did Lacey swim in all?

19. Miguel made \$6,743 in February and \$8,152 in March. Select all the choices that are good estimates for the total amount of money Miguel earned for both months by rounding by place values.

- \$16,000
- \$15,000
- \$14,900
- \$14,600
- \$14,890

**ELA**

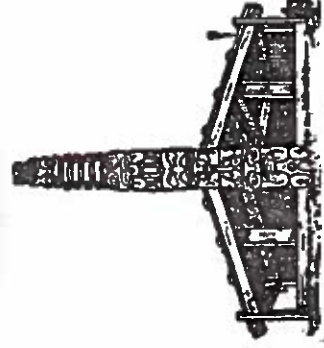
**Use RATE!**

# Lesson 4

In this lesson, you will read paired passages. You will answer questions about each passage and questions about both passages together.

Read this historical-fiction story. Then answer the questions about the story.

## ACROSS THE WATER



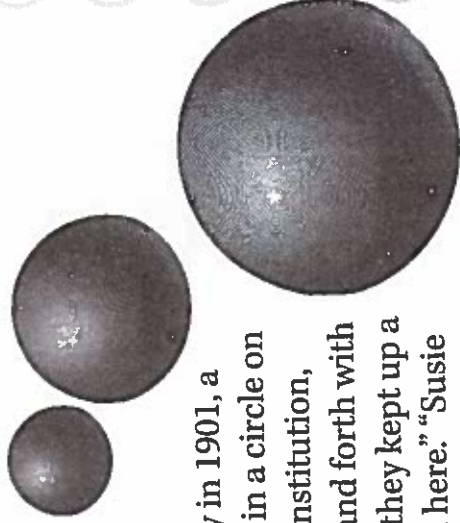
- 1 Canoe Boy stepped out of the longhouse. He turned to admire the totem pole that towered over the house. Someday, when he was a great chief, a carved pole like this one would stand at the entrance to his house. It would remind all that he belonged to the beaver clan of the eagle group. He would have a new name then too. His new name would reflect how he had brought honor to himself and his family.
- 2 For now, however, he was twelve-year-old Canoe Boy, and his job was to take care of his uncle's canoe. The canoe could carry thirty men as it sped over ocean waters. Sometimes the men went out in it to fish. Sometimes they paddled it to ceremonies in other Haida villages. Sometimes they went on long trading journeys. Though Canoe Boy took care of the canoe, he had yet to ride in it.
- 3 As he smoothed a scratched spot with a shell, his mind drifted to his dreams for a glorious future. A harsh voice interrupted his dream. "Boy, put some muscle into that." It was his uncle. Uncle was constantly teaching or correcting. Canoe Boy dropped the shell and then scrambled to pick it up. "Yes, Uncle," he murmured. As he rose from the sand, he glanced toward the sea. An amazing sight met his eyes. "Uncle," he shouted, pointing toward the water. In the distance, a ship, larger than any canoe he had ever seen, bobbed on the water. The most surprising thing was that above the ship billowed large white blankets.

My Notes



- 4 His uncle and the other men of the village readied two canoes to go greet the newcomers. They filled the canoes with trade goods. Who knew what the strangers might want? Canoe Boy was astonished when his uncle invited him to come in the canoe. "You were the first to see this wonder," said his uncle. "It is only right that you be among the first to welcome the strangers."
- 5 Aboard the *Santiago*, twelve-year-old Juan Manuel, the captain's cabin boy, watched the huge canoes approach. Ever since the ship had left Mexico in January of 1774 to sail north up the coast, he had wondered when they would see new people. Now that it was happening, he was both excited and scared. How would these people react to them? Sometimes native people had not welcomed the Spanish. He would soon find out. The canoes had come alongside the ship.
- 6 Canoe Boy boarded the ship along with the other Haida. He could not take his eyes from the three tall poles and the white blankets attached to them. As he stared, Juan Manuel came up beside him. "You like our sails?" he asked. Canoe Boy turned and shrugged his shoulders, to communicate that he didn't understand.
- 7 Then Juan Manuel pointed at the white blankets. "Sails," he said. Canoe Boy repeated the word. Juan led him over to one of the masts and let him touch the canvas sail. Then he showed Canoe Boy how the sails were attached to the mast. As they were exploring together, an older sailor approached. He shoved Juan and snarled at him, "You're not here to give tours, boy. Go to your work."
- 8 Canoe Boy gave his new friend a warm smile. Without words, the smile said, "Why do older men like to boss us around?" Juan smiled back and held out his hand in friendship. Canoe Boy offered his hand back. Then the two parted.
- 9 The Haida men were gathering up their trade goods when Canoe Boy joined them. As they left the ship, he knew that he would never forget this day or the friendly boy who had given him his first knowledge of sails. In fact, in the years to come, Canoe Boy would be the first to urge other Haida men to build masts for their canoes. The new style of canoe would allow the Haida to travel even farther than they already had. It would also let them hunt whales in the deep ocean. With this contribution, Canoe Boy would bring honor to himself and his family. His new name would be Wind Bringer.

## Playing Ball with Buzzy



- 1 On a crisp November day in 1901, a group of boys and girls stood in a circle on the lawn of Boston's Perkins Institution, kicking a large red ball back and forth with great energy. As they kicked, they kept up a steady stream of chatter. "I'm here." "Susie over here." "Tommy here." With their words, they let one another know where to aim the ball, for none of them could see anything.
- 2 Hearing the ball whiz toward her, Laura kicked with all her might, aiming it toward the sound of Tommy's voice. The ball traveled a few feet before thudding against a body that should not have been there. "Who's that?" cried Laura in alarm.
- 3 Sadie, one of the older girls, ran up, shouting, "It's Buzzy, the new deaf-blind student. He can't hear you, so he didn't know he was walking into a game. The only sound he can make is a buzz. That's why his family calls him Buzzy. Anyhow, you all need to come inside now for study time." Taking Buzzy by the hand, Sadie led the group toward the building where they lived and had classes.
- 4 As they walked, the group chatted and teased one another, but Laura ran up to Sadie. "What's he doing here?" she asked. "He'll never learn anything if he can't hear and he can't talk."
- 5 The older girl spoke sharply. "Helen Keller can't hear or talk, and she learned something here, didn't she? She's gone on to college now, and they say she is doing very well. Buzzy has already learned to finger spell some words, and he is curious about everything. One of my teachers says that curiosity is the most important tool a student can have. Buzzy is very lively too. He loves to be active."

- 6 “Well, just keep him away from our games,” said Laura, “or he might get hurt.” As she spoke, Buzzy, sensing her presence next to him, slipped his small hand into her larger one. The hand felt like a small warm animal seeking the safety of its den. Laura felt confused. She wanted nothing to do with this “problem,” as she saw him, but Buzzy reminded her of her little brother, Daniel. Before she had come to Perkins, Laura had watched over Daniel and been his teacher. Buzzy seemed to be about the same size as Daniel, and Laura missed Daniel.
- 7 During study time, Laura worked on her math problems, but half her mind was occupied with Buzzy. Sadie had said that Buzzy liked to be active. He would probably love to play ball with them, but how could he join the game without being able to hear the whiz of the ball?
- 8 As Laura was packing up her books, Sadie led Buzzy over to her table. “Buzzy wants to spell something in your hand,” she said. Laura stuck out her hand, and Buzzy spelled, “Play ball.” Without even thinking, Laura spelled back, “Yes.” Now how was she going to manage that?
- 9 The next morning, Laura woke with a plan in mind. Before class time, she found a length of rope. She asked Sadie to bring Buzzy outside at play time. When they arrived, Laura put Buzzy’s hand on her lips. She made a buzzing sound. Then she put Buzzy’s hand on his lips. He made the sound. She spelled into his hand, “Keep doing that hard.” That way, the others would know where he was. Then Laura tied the rope around Buzzy’s waist and took one end in her hand. Then she spelled in Buzzy’s hand, “When I pull, kick.” Laura explained the plan to the group. They must shout Buzzy’s name when they were going to pass the ball to him. She would pull on the rope to let him know the ball was coming.
- 10 Buzzy learned quickly. Soon he was passing the ball with great speed, and the new challenge made the game more interesting for everyone else. When it was time to go inside, Laura untied the rope and took Buzzy’s hand, but he pulled it back and instead took her hand and held it palm up. Then, holding her larger hand in his small one, he spelled “fun” three times. Laura spelled back “yes,” three times, and hand-in-hand, they walked to the school.

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

**Use "Across the Water" to answer question 1.**

1. Tell three things that you can conclude about Canoe Boy. What are his dreams? What does he respect? Does he have a creative mind? Use details from the story to support your response.

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**Use "Playing Ball with Buzzy" to answer question 2.**

2. Tell how Laura's feelings about Buzzy change during the story. Use details from the story to support your response.

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## Science

**You must answer the  
guiding questions and use in  
complete sentences.**

PS 2.1c

- Water is recycled by natural processes on Earth.
- evaporation: changing of water (liquid) into water vapor (gas)
  - condensation: changing of water vapor (gas) into water (liquid)
  - precipitation: rain, sleet, snow, hail
  - runoff: water flowing on Earth's surface
  - groundwater: water that moves downward into the ground

Through natural processes, water moves constantly from the ground, to the sky, into the ground, along the ground, and back into the sky.

Water vapor is water in its gas form.

Evaporation is the changing of water (liquid) into water vapor (gas).

Condensation is the changing of water vapor (gas) into water (liquid).

Runoff is water flowing on Earth's surface.

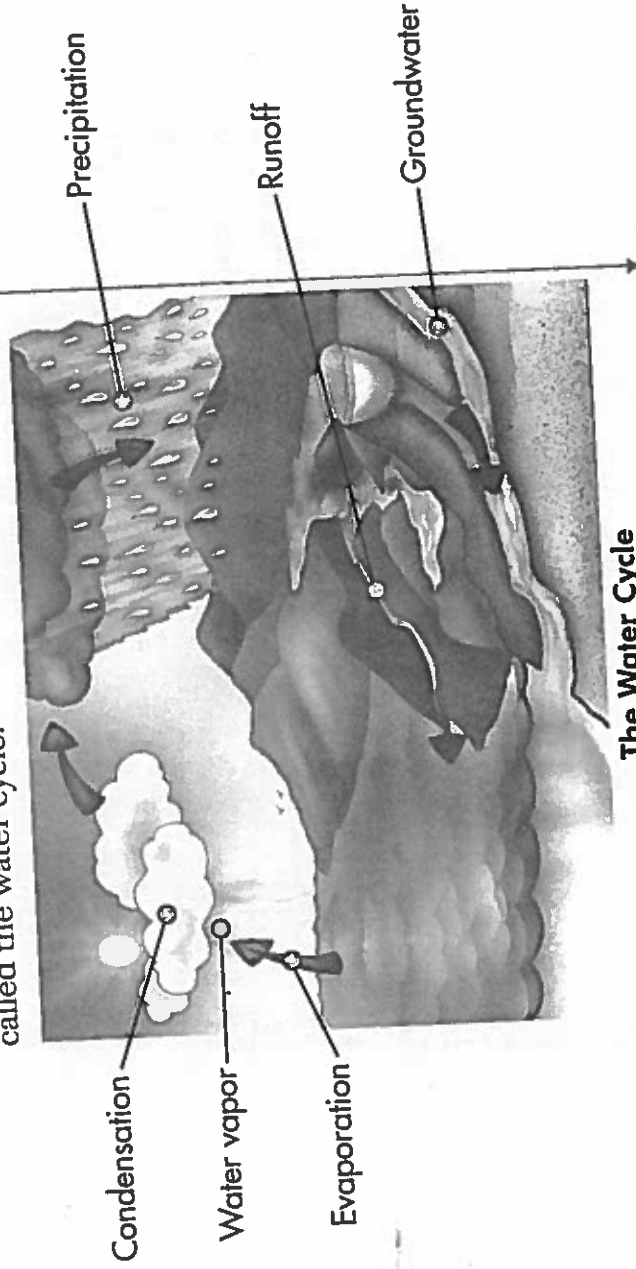
Groundwater is water that moves downward into the ground.



Guided Questions

**Directions** Read the following information.

What would happen if all the water on Earth stayed in the oceans? How would the land get water to grow plants? What would land animals drink? Fortunately, water moves around. Precipitation that falls to Earth is not new water. The same water is constantly recycled through the Earth and the air. The Sun's energy powers what is called the water cycle.



The Water Cycle

**Guided Questions**

How are water vapor and evaporation related?

What is condensation?

What is the difference between groundwater and runoff?

Water exists in three states: gas, liquid, and solid. The Sun heats liquid water on Earth, causing **evaporation**, turning it into invisible **water vapor**. Water vapor rises high above the Earth where temperatures are lower. There, **condensation** takes place. The lower temperatures turn the water vapor back into tiny drops of liquid water. These tiny drops form clouds. Rain, snow, hail, or sleet fall to Earth from the clouds. Because wind moves clouds and storms around, the water often falls in a different place from where it evaporated. If the water vapor freezes, it falls as snow. If rain freezes on the way down, it falls as sleet. When pieces of ice form in the clouds from rain or snow, they fall as hail.

Once water lands on Earth, it does not stay in one place. Much of it evaporates right away from the ground or puddles. The rest of the water soaks into the ground as **groundwater**, or runs along the ground as **runoff**. **Runoff** carries water to rivers, which flow many miles and empty into the oceans. Groundwater also moves slowly toward the rivers and oceans. Water is stored for a time in the ground and in rivers, lakes, oceans, and as ice. Then the heat of the Sun causes it to evaporate, and the cycle starts again.

Because of the water cycle, the land is watered and plants can grow. Water moves from place to place, so people and animals can use water from springs, streams, rivers, and lakes. Humans can dig wells and use the groundwater too.

**Directions** For each question, write your answer in the space provided.

1. How are groundwater and runoff alike?

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2. What causes condensation of water vapor?

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3. How are snow and sleet different?

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4. What causes evaporation of water?

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5. If evaporation is happening all the time, why don't the oceans dry up?

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6. What would happen to Earth's water if wind did not move air, clouds, and storms?

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**Directions:** For each question, write your answer in the space provided. Base your answers to questions 7 through 12 on the drawing below.



The Water Cycle

- 7 What part of the water cycle is shown by the arrows pointing up?
 

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- 8 What part of the water cycle is taking place in the clouds?
 

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- 9 What movement is shown by the arrows running on Earth's surface?
 

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- 10 What movement is shown by the arrows under Earth's surface?
 

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- 11 Where will the groundwater and runoff end up?
 

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- 12 What might explain the fact that water is rising in one area and falling in another?
 

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**Directions (13–18):** Each question is followed by four choices. Decide which choice is the best answer. Circle the letter of the answer you have chosen.

- 13** What is the constant movement of water from the ground, to the sky, and back again called?
- A rain
  - B snow
  - C water cycle
  - D rain clouds
- 14** Water falling from the sky as rain or sleet is called
- A water cycle
  - B precipitation
  - C snow
  - D hail
- 15** Heavy rain and runoff can
- A cause erosion
  - B cause flooding
  - C fill reservoirs
  - D all of the above
- 16** High clouds are made of
- A water vapor
  - B tiny bits of frozen water vapor
  - C tiny drops of liquid water
  - D all of the above
- 17** What must happen before condensation can take place?
- A Water vapor must be high in the sky.
  - B The temperature must rise.
  - C Precipitation must take place.
  - D The Sun must heat the water.
- 18** A few land areas are lower than sea level. What would you expect to happen to rain that falls on land below sea level?
- A It would run off to the ocean.
  - B It would run off to a river.
  - C It would soak into the ground.
  - D It would form a new river.

Lesson 27  
Types of Energy**PS 4.1a**

Energy exists in various forms: heat, electric, sound, chemical, mechanical, light.

**PS 4.1b**

Electricity travels in a closed circuit.

**PS 4.1f**

Heat can be released in many ways, for example, by burning, rubbing (friction), or combining one substance with another.

**PS 4.1g**

Interactions with forms of energy can be either helpful or harmful.

Using different forms of energy can be helpful or harmful.

Work is done when something moves and energy is transferred.

Energy is the ability to do work.

To vibrate is to move back and forth rapidly.

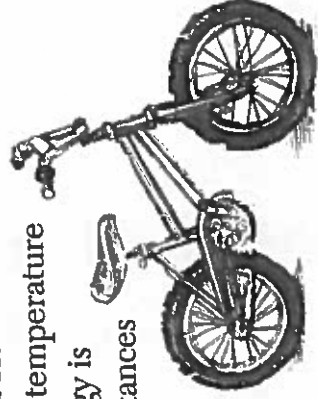
A circuit is a path like a circle.

Guided  
Instruction

**Directions** Read the following information.

If you do not have **energy**, you would not be able to move. In science, energy is the ability to do **work** and work only happens when something moves. In other words, if you were reading a book, you would not be doing any work. If you were running, you would be doing work. Energy moves too. Heat energy moves from hot things to cold things. When you hold a cup of hot cocoa, the heat moves from the cup to your hands. So, when energy moves, work is being done too.

Energy exists in several forms. Heat is the energy that raises the temperature of matter. Chemical energy is the energy stored in substances such as food, gasoline, wood, or the tip of a match. Light energy moves out from objects such as the Sun or a light bulb. Sound is energy created when objects **vibrate**, causing movement in the air.



Mechanical energy is involved with moving matter. If a rolling marble strikes another, mechanical energy makes the second marble move.

## Guided Questions

How are energy and work related?

What do scientists mean when they use the term **work**?

Are you working when you ride a bike?

What does an object do when it **vibrates**?

**Guided Questions**

What is a circuit?

Electric energy powers appliances such as a radio or light bulb. It travels in a closed **circuit**. Electric energy that leaves a source, such as an electric plant, must come back to its source after doing work. For example, if it comes from a source and goes to a light bulb, it must go back to that source after it lights the bulb. Otherwise, it cannot light the bulb.

Heat can be released in many ways. For example, you can burn wood, releasing heat from its chemical energy. Rubbing your hands together makes them feel warmer. Sometimes mixing one substance with another will make the mixture warm.

Releasing and using energy can be helpful or harmful. Sunlight gives energy to all living things, but it can burn your skin. Burning wood can help you keep warm or cook food, but fires can destroy forests and homes. Electric energy can make a radio work, but it can hurt or kill living things if too much of it travels through their bodies. Using gasoline can take people where they want to go, but it can pollute the air.

**Directions** For each question, write your answer in the space provided.

1. If you were pushing very hard against a brick wall, would you be doing work? Explain your answer.

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2. Is work being done when water freezes into ice? Explain your answer.

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3. What form of energy does an object create when it vibrates?

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4. In what type of circuit does electricity travel when it does work?

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5. Give an example of how energy can be harmful, and one of how it can be helpful.

Harmful: \_\_\_\_\_

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Helpful: \_\_\_\_\_

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6. What is one type of energy that reaches Earth from the Sun?

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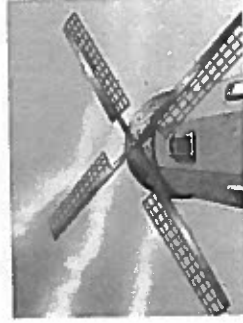
Apply the  
New-York State  
Learning Standards  
to the State Test

Directions: Use the pictures to answer questions 7 through 11.



7 What type of energy is in the picture of the musicians?

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8 What type of energy do you see in the picture of the windmill?

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