friction gravity

accelerate inquiry identity advantage

Finish each sentence using the vocabulary word provided.

Possible responses provided.

- 1. (friction) I use the brakes on my roller skates to create friction to slow me down.
- 2. (identity) The policeman asked me to show my ID card to prove my identity.
- 3. (thrilling) At the amusement park, the roller coaster was the most thrilling ride.
- 4. (advantage) The fact that the basketball player is very tall is an advantage for him and his team.
- (gravity) The apple fell from the tree because it was pulled down by gravity.
- 6. (accelerate) When traveling downhill, my skateboard tends to accelerate.
- 7. (inquiry) I used the Internet to find the answer to my inquiry.
- 8. (capabilities) My friend is good at math and English and he showed his capabilities when he got an 'A' on both exams.

Cause	→	Effect	
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Read the passage. Use the reread strategy to help you understand new facts or difficult explanations.

A Firehouse Lesson

Julie sat at a large table in the firehouse, struggling with her homework. Her older brother Charlie, a firefighter, sat watching television nearby.

"Why do I have to be here anyway? It's so noisy," Julie said.

"Mom isn't home, so it's better for you to be here with me," Charlie responded. "What are you working on?"

"Mrs. Krandle's science lesson, and it's very difficult," she said.

Charlie walked over to Julie and took a peek at her notebook.

"I remember this!" he said smiling. "Maybe I can help."

The Pull of Gravity

Charlie walked over to the fire pole, a metal pole which ran through a hole in the floor and connected the two levels of the firehouse.

"Using this pole allows us to get downstairs and to a fire faster than a staircase would," Charlie explained as he grabbed onto the pole and slid down to the first floor. Julie jumped up from her chair and looked down the hole at him.

"Gravity pulled me down here quickly," he yelled up to her. He walked back upstairs. "Gravity is the force that pulls objects toward each other."

"But how did you stop?" Julie asked.

"Friction," he answered. "Friction is a force that resists the sliding of one object over another. I pressed my hands, legs, and feet against the pole as I descended, creating friction and slowing me down enough to stop."

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A Ball in Motion

Charlie took another look in Julie's notebook. He called out to the firehouse's energetic dog named Wheels. Wheels came running.

"How cute!" Julie exclaimed.

Charlie took a ball from a table drawer and placed it on the floor.

"Let's try an experiment," Charlie said. "Take a look at this ball. Inertia means that an object at rest tends to stay at rest."

Seeing the ball was thrilling for Wheels. Charlie held up his hand to signal Wheels to stay in place.

"A force is something that moves, stops, or changes the motion of an object" he said. "Look what happens when I use force to move the ball." Charlie pushed the ball with his hand, and it rolled across the floor. "The ball keeps rolling. That's inertia again. It says an object in motion tends to stay in motion unless acted upon by an outside force."

Charlie called out to Wheels again. "Wheels, fetch the ball!"

Wheels eagerly ran to the ball and picked it up with his mouth.

"Did you see how quickly Wheels got to the ball?" Charlie asked. "That's called speed. Speed is the distance an object moves in a certain amount of time."

"Wheels definitely has a lot of speed," Julie said laughing.

"Thanks for your help, Charlie. There is a lot to learn in a firehouse. Maybe I'll even come back tomorrow."

"Mom is home tomorrow, you don't have to be here," Charlie said.

"Yes, I know, but I don't want you and Wheels to get too lonely," she said with a laugh.

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A. Reread the passage and answer the questions.

Possible responses provided.

1. What is the cause in the following sentence from the passage? Charlie pushed the ball with his hand, and it rolled across the floor.

Charlie pushed the ball with his hand.

2. What is the effect in the following sentence from the passage? Charlie pushed the ball with his hand, and it rolled across the floor.

It rolled across the floor.

3. What is one example of an effect in the section "The Pull of Gravity"? What is the cause of this effect?

An example of an effect is Charlie sliding down the pole. Gravity is the cause of this effect.

B. Work with a partner. Read the passage aloud. Pay attention to phrasing and rate. Stop after one minute. Fill out the chart.

	Words Read	-	Number of Errors	=	Words Correct Score
First Read		_		=	
Second Read		_		=	

Science in a Soda Bottle

"You look bored. I know something fun you can make," Mom said.

"What?" I asked.

"I'll show you. You need an empty soft drink bottle and a catsup packet," Mom said as she got the supplies. "Put the packet in the bottle and fill the bottle all the way to the top with water. Then close the bottle."

When she picked up the bottle and squeezed it, the packet sank!



Answer the questions about the text.

1. How do you know this is narrative nonfiction?

It tells a story about a real-life topic that includes facts and examples.

2. What text features does the text include?

heading, illustration, and speech bubble

3. What is the heading? How could it be better?

"Science in a Soda Bottle"; Possible response: It could be better if it told more about the topic.

4. What information do the illustration and speech bubble give you?

The illustration shows you what the girl and her mom are making. The speech bubble tells you what is happening in the bottle.

Ν	a	m	Δ

Read each sentence below. Underline the context clues in the sentence that help you define each word in bold. Then, in your own words, write the definition of the word. Possible responses provided.

1. Charlie walked over to the **fire pole**, a metal pole which ran through a hole in the floor and connected the two levels of the firehouse.

a metal pole between floors

2. Inertia means that an object at rest tends to stay at rest.

a law of motion

3. "A force is something that moves, stops, or changes the motion of an object," he said.

something that affects an object

4. Speed is the distance an object moves in a certain amount of time.

how fast something goes

5. Gravity is the force that pulls objects toward each other.

Earth's pull on us

Name .		
1401116		

A. Read each sentence. Underline the word with the long i vowel sound. Then sort the words by their long *i* spellings in the chart below.

- **1.** Which of these is a prime number?
- 2. Make a slight turn at the next street.
- 3. She was minding the baby for you.

Long i spelled i	Long <i>i</i> spelled <i>i</i> _e	Long <i>i</i> spelled <i>igh</i>
4. minding	5. prime	6. slight

B. Write the correct -es and -ed forms for each verb ending in y.

Verb	+ es	+ ed
1 . cry	cries	cried
2. fry	fries	fried
3. apply	applies	applied
4. deny	denies	denied
5. worry	worries	worried

Write a topic sentence: _

Evidence is details and examples from a text that support a writer's ideas. The student who wrote the paragraph below cited evidence that shows how the author used headings to tell the reader what each section will be about. **Topic** In "A Firehouse Lesson," the author uses headings sentence to explain what each section of each text will be about. For example, the first heading in the text is "The Pull of Gravity." The heading lets the reader know that topic **Evidence** will be about gravity. The second heading is "A Ball in Motion." The heading tells the reader that this section Concluding will be about motion. The author's use of headings helps statement

Write a paragraph about the text you have chosen. Show how the author uses headings to tell the reader what each section is about. Cite evidence from the text. Remember to include a strong concluding statement and to use clauses correctly.

the reader to know what to expect in each section of text.

Cite	e evidence from the text: Answers will vary but should include a topic
	sentence, evidence from the text, and a concluding statement. Details
	and examples from the text should support the writer's analysis of how
	the author uses headings to tell the reader what each section is about.
	Answers should include a strong concluding statement and the correct
	use of clauses.
End	d with a concluding statement:

A. Read the draft model. Use the questions that follow the draft to help you think about how you can write an event sequence that unfolds naturally.

Draft Model

We went to a dairy farm. We saw a farmer milk a cow. He showed us how he turns milk into butter. We learned how cheese is made from milk.

- **1.** When did the writer go to the dairy farm?
- 2. What did the writer do first?
- 3. What time-order word would tell when the farmer showed the writer how he turns milk into butter?
- 4. What time-order word would tell when the writer learned how cheese is made from milk?
- B. Now revise the draft by adding time-order words that help readers better understand the writer's trip to the dairy farm.

Answers will vary but should include time-order words that tell when the writer went to the farm and the order in which the events occurred.		