

Setting

Directions: Read each passage and look for clues that reveal the setting. Then explain your answer. Remember the setting is the time and place that a story happens.

Alex shut the lid to his laptop with a loud clap. Some of the people sitting at the tables near him looked up from their books and gave him annoyed looks. Alex realized that he had disturbed them and held up his hand apologetically. The librarian turned toward him and shushed him loudly, perhaps louder than the noise that he had made. Alex put the laptop in his bag and began walking toward the door. He held his head down low.

1. Where is this story taking place? _____

How do you know?

2. When is this story taking place? _____

How do you know?

Vance Powers grabbed the control stick. Up until now he had been a prisoner on this spaceship, but even the captain knew that Vance was the only one who could navigate through an asteroid belt. "Quick! Take these laser cuffs off!" The captain and the guard looked at one another hesitantly. *Boom!* The ship skidded off a large asteroid. "Now! Take the cuffs off! There's no time!" Vance shouted at the men. The captain gave the guard a slight nod. The guard waved the magnetic key over the laser cuffs on Vance's wrists. The cuffs powered down and fell off of Vance's wrists. Suddenly Vance had full control of his arms again. Vance tested the movement of his arms by disarming the guard and slapping the laser cuffs on him in one swift motion. Vance Powers was back.

3. Where is this story taking place? _____

How do you know?

4. When is this story taking place? _____

How do you know?

Sir Anders frowned at his squire, Toby. Toby looked back worriedly. He was eager to please Sir Anders but he didn't know how. "Well, Toby, do you want me to put the saddle on myself?" A bolt of realization struck Toby. He grabbed a saddle of the wall and began apologizing, "Why of course not, Sir Anders. What was I thinking?" Toby awkwardly tried to get the saddle on Sir Ander's white stallion. "Let me just grabbed the belt here and uh... Ah!" Toby was muttering to himself when Sir Ander's horse turned suddenly and knocked him into a pile of hay. Sir Anders could not help but to crack a slight smile at this scene. As Toby brushed off the hay, Sir Anders consoled him, "He knows that you're scared, Toby. Grab the bridle off of the wall, help me remove my armor, and I'll show you how it's done."

5. Where is this story taking place? _____

How do you know?

6. When is this story taking place? _____

How do you know?

The party stopped at a small brook. The woman who was leading the party whispered, "Ok, if anybody's thirsty, this be a good time to drink. We keep moving from here to the next station." This wind blew through the thick trees. A young boy in the back of the party looked up at an older man and asked, "Is we really gonna be free?" The old man sighed, as if he could not believe it himself. "You see that star up dere? Dat's the North Star. We keep following that, and Miss Tubman up dere," he said gesturing to the woman leading the party. He continued, "We'll be free alright." The boy smiled, and then something else occurred to him. He looked up at the old man and said, "Well, what if we run into dem slave catchers?" The old man scratched his head and said, "Don't let'em catch you."

7. Where is this story taking place? _____

How do you know?

8. When is this story taking place? _____

How do you know?

"I want Sugar Loops!" Tommy screamed at his mother. She shook her head in distress and then responded, "Look, Tommy. That's not how you ask for anything, and we've already gone over this. You can have Bran Flakes or Dry Os. No Sugar Loops." Tommy shook his head back and forth violently. He then laid down on floor and started kicking his feet and screaming. Clearly he did not accept this answer. Mom grabbed her phone out of her purse. "Tommy, if you stop this tantrum and get back in the cart, I'll let you watch Tatakai Fighting Warriors on my phone." Tommy looked up excitedly and began gathering himself off of the floor. Mom put the box of Sugar Loops back on the shelf and tossed the Dry Os into the cart.

9. Where is this story taking place? _____

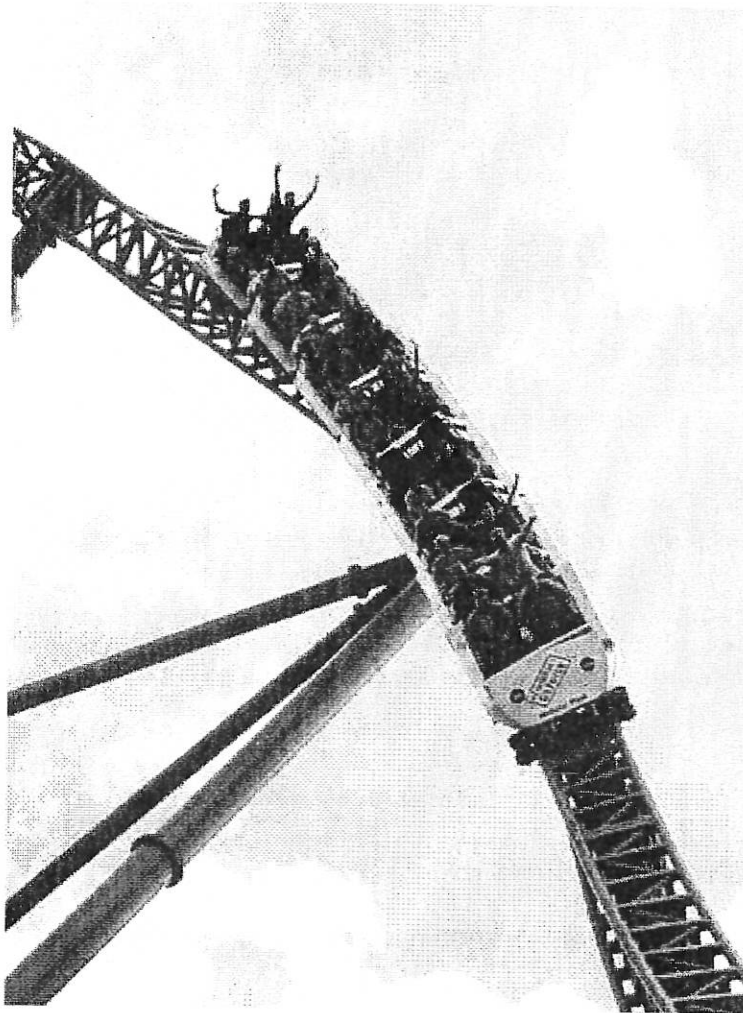
How do you know?

10. When is this story taking place? _____

How do you know?

Energy Screams

by ReadWorks



Part I
-DAY 7
Pg. 1/2

Click.....click.....click.

You're on a roller coaster.

It's climbing slowly up a hill.

All you see is the top of the hill and open sky.

"Ugh," you think to yourself.

Click...click...click.

You're 40 stories up.

With only a metal bar for safety.

CLICK, CLICK, CLICK!

You're at the very top of the hill.

Silence.

All you see is the bottom of the hill.

It's very far away.

You're scared.

"I want to go home."

WHOOOOOOOOOOOOOOOOOOOOSSSSSSSSSSSSSHHHHHHHHHH!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

You pick up speed as your stomach lifts up and out of its usual, happy place.

Halfway down the hill, you're already going 70 miles per hour. Your screams (if they can claw their way out of your mouth) are almost behind you by the time they leave your mouth.

You reach the bottom of the hill but immediately start to climb another big hill. Your stomach takes a second to feel alright again.

You drop again, and your intestines also take a stroll.

The bottom of this hill yields no breathing room as you realize you are about to go upside down.

A loop-the-loop.

Yes, your feet are now above your head and you're so disoriented you don't see what the loop-the-loop feeds into.

A corkscrew. Not only are you upside down again, but you're spinning at the same time.

The corkscrew feeds into a spiral, which pins you to the seat. It's a good thing because you're sideways.

"I waited in line for 50 minutes to be tortured?!"

When you come out of the spiral, you shoot straight back up and down a smaller hill.

This hill is child's play, but uh-oh, you can't see the bottom.

All you see is a black hole.

Lights flash.

People scream.

You scream.

AMEI
- DAY 7
Pg. 2/2

All the screams bounce around inside the dark, cramped tunnel.

It's loud.

It's scary.

More lights flash.

"Why am I here?!"

You see a light at the end of the tunnel. It's above you.

You shoot up and out of the tunnel.

You hear brakes activate, and you slow to a stop.

The ride is over.

You're alive.

You're back where you first got into this death trap and see a hungry line of people salivating over your seat.

"You can have it."

The amusement park tries to sell pictures of you screaming your head off.

"You can have them."

You need to sit down.

In a chair that doesn't move.

After surviving a roller coaster, most riders would say they just had a thrilling ride. Some would mention how scary it was. Some wouldn't say anything as they focused on racing back to the end of the line, ready to wait 50 minutes for another chance to feel like their stomach was in their mouth.

But how many riders would mention the great application of potential energy to generate a massive amount of kinetic energy with the sole intention of delivering an exhilarating two-minute roller coaster ride?

Very few, and yet, that's all a roller coaster is.

As you go up and down, you and the roller coaster are just experiencing changes in potential energy and kinetic energy.

As you click up the first big hill, you are moving forward and have a certain amount of kinetic energy. As you climb, you are also building potential energy. The higher you go, the greater your potential energy. If the roller coaster never went down the hill and just stayed up there, your potential energy would still be there, but it would never be converted to kinetic energy.

Ann I
- Day 7
Pg. 3/4

Don't worry. Almost all roller coaster designers build a track that brings you back down.

At the top of the first and tallest hill, your potential energy is at its highest it will ever be on this ride. As you begin to descend, your potential energy decreases until it's all gone at the bottom of the hill.

At the bottom of the first hill, your kinetic energy is at its highest point. You're going as fast as you'll ever go on this roller coaster ride.

To ensure the fun keeps going, the roller coaster's designers put in the second hill. If the first hill were the ride's only one, the fun would be over sooner. Without going back up another hill to increase potential energy again, this gravity-driven roller coaster could still do a few things with its remaining kinetic energy, but just not as much. One of the marvels of a well-designed roller coaster is its ability to harness the energy built with the first hill as long as possible. The second hill picks up where the first one left off and builds potential energy on the way up, and converts that to kinetic energy on the way down.

The loop-the-loop works the same way in that the highest point of the loop is where the roller coaster's potential energy is at its highest. On the way down and out of the loop-the-loop, it converts into kinetic energy and rolls onto the next stomach-churning thrill.

That last hill with the dark tunnel-bottom is a segment of the roller coaster designed to extract one last scream, but to also burn off some kinetic energy. The fact that you are looking up at the exit of the tunnel means you've hit the bottom of that hill. Once you're past the bottom, the roller coaster is fighting gravity to go up and therefore decreasing in kinetic energy. This helps lower the power and energy to slow the roller coaster to a smoother stop.

Some people love roller coasters. Others loathe them. Wherever you fall on the roller coaster love/loathe spectrum, it is this mix of potential energy and kinetic energy that affects your feelings toward roller coaster rides. Whether the roller coaster is made out of metal or wood, or you're sitting, standing, or lying on your stomach, the roller coaster is still delivering that mix.

Different materials or where you're sitting on the roller coaster do actually affect how you experience the potential energy and kinetic energy. Roller coaster tracks made of steel, as opposed to wood, can create less friction and therefore offer a smoother ride. This means that the potential and kinetic energies created are delivered more efficiently to the roller coaster and ultimately, to you. Where you are sitting in the roller coaster can affect your ride as well. If you're sitting in the back, you will feel weightless. If you're sitting in the front, you will see everything that's designed to make you scared, like the first big drop.

All of the rides at amusement parks have a mix of potential energy and kinetic energy. It's just that with roller coasters, the extreme heights and speeds make the energies extremely apparent and unforgettable.

Make sure you're healthy enough to ride a roller coaster. Some people's bodies aren't fit to experience a roller coaster and that's fine. If you can ride a roller coaster, try to enjoy it!

Name: _____ Date: _____

Ann I
- Day 7
QUESTION
0 1/2

1. How does the passage define a roller coaster?

- A. the application of kinetic energy to generate massive amounts of potential energy in order to create an exciting experience
- B. an amusement park ride that does not rely on gravity
- C. a thrilling ride that almost everyone enjoys
- D. the application of potential energy to generate massive amounts of kinetic energy in order to create an exciting experience

2. What does the author describe in the passage?

- A. a merry-go-round ride
- B. potential and kinetic energy in a roller coaster ride
- C. the rising popularity of amusement parks
- D. famous roller coasters around the world

3. Read the following sections from the passage:

"At the top of the first and tallest hill, your potential energy is at its highest it will ever be on this ride. As you begin to descend, your potential energy decreases until it's all gone at the bottom of the hill."

"At the bottom of the first hill, your kinetic energy is at its highest point. You're going as fast as you'll ever go on this roller coaster ride."

Based on this evidence, what conclusion can be made?

- A. A roller coaster is fastest at the front of the train.
- B. The shorter the hill the roller coaster climbs, the greater its kinetic energy.
- C. Potential energy is converted to kinetic energy as the roller coaster goes down the hill.
- D. No conclusion can be made from this evidence.

4. Why is it necessary for a roller coaster to go up a hill?

- A. The potential energy of the roller coaster increases as the coaster goes up a hill and can be converted to kinetic energy. This kinetic energy allows the coaster to do different things.
- B. The kinetic energy of the roller coaster increases as the coaster goes up a hill and can be converted to potential energy. This potential energy allows the coaster to do different things.
- C. The kinetic energy and potential energy increase as the coaster goes up a hill. This increase in kinetic and potential energy allows the coaster to do different things.
- D. The kinetic energy and potential energy decrease as the coaster goes up a hill. This decrease in kinetic and potential energy allows the coaster to do different things.

5. What is this passage mostly about?

- A. a day at an amusement park
- B. a boy who hates roller coasters
- C. how to build a roller coaster
- D. how roller coasters use potential and kinetic energy

6. In the first section of the passage, what does the author use to create a sense of momentum and to mimic the motions of a roller coaster?

- A. the author's internal monologue
- B. short sentences and active verbs
- C. different images of roller coasters
- D. long, run-on sentences

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

All of the rides at an amusement park have a mix of potential and kinetic energy, _____ the energies are most noticeable on roller coasters due to their extreme heights and speeds.

- A. finally
- B. thus
- C. although
- D. certainly

8. Where is the kinetic energy of a roller coaster at its highest?

9. Why do roller coaster designers include a second hill on the ride? What would happen to the ride if there were only one hill?

10. Explain how potential energy converts to kinetic energy in the loop-the-loop section of the roller coaster. Make sure to note when the potential energy of the coaster is at its lowest in the loop-the-loop and when the kinetic energy of the coaster is at its highest.

Am I
- DAY 7
QUESTIONS
6 - 2/2

Day 7 AMI Packet

Writing

Finish rough draft of your free write. It should be one page, Times New Roman and double-spaced.

Social Studies

Close read the article, "Roman Emperors" for How does the text say it?

2- How does the text say it?

_____ I put a hashtag(#) beside the structures of the text. (paragraphs, pictures with captions, headings, bold or italicized words, bullets/numbers, quotes, sidebars, details in parentheses...)

_____ I put a box around all domain-specific vocabulary words.

_____ I defined at least 5 of the domain-specific vocabulary words.

Name : _____

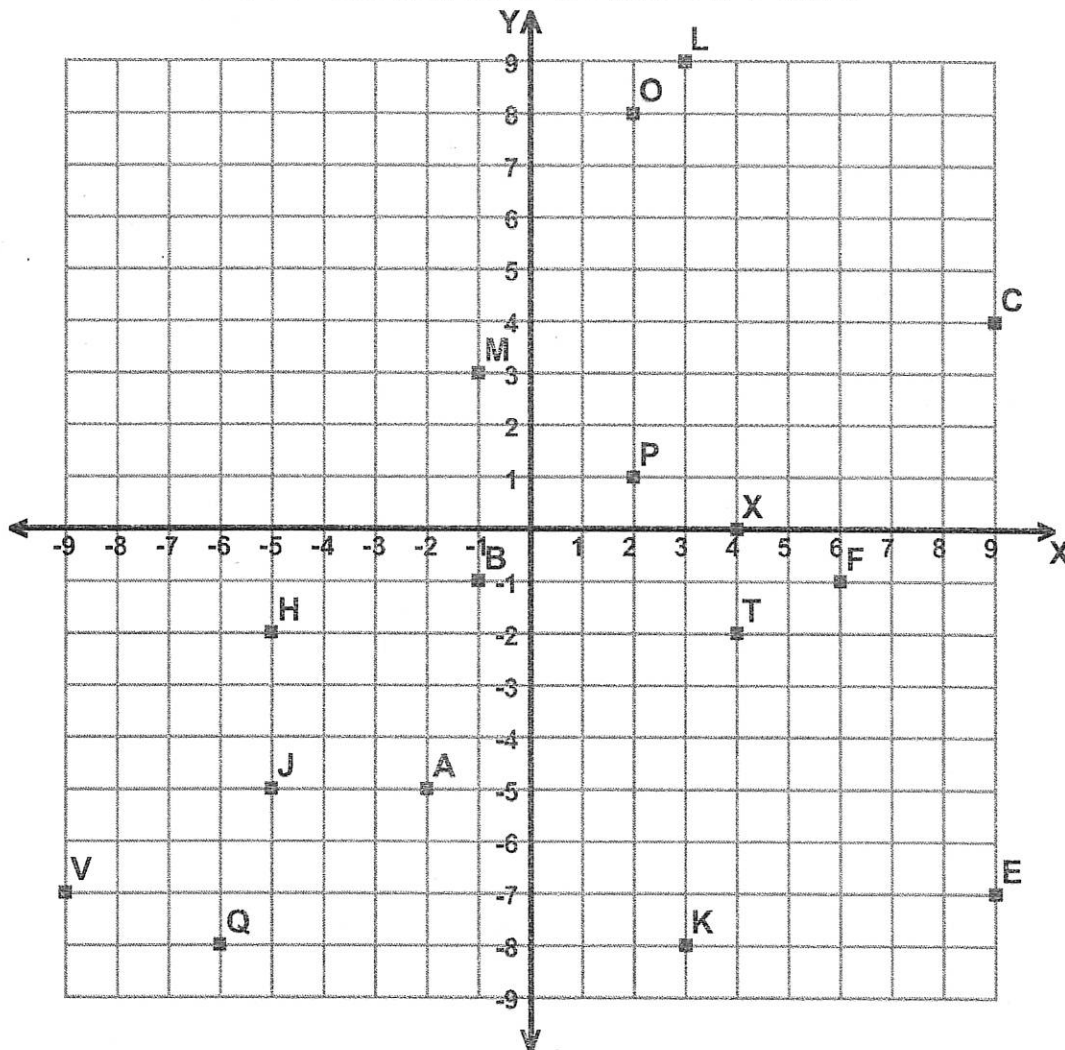
Score : _____

Teacher : Emison (math)

Date : _____

AMI day 7

Four Quadrant Ordered Pairs



Tell what point is located at each ordered pair.

- | | | | |
|---------------------|---------------------|---------------------|---------------------|
| 1) $(-1, +3)$ _____ | 3) $(+2, +8)$ _____ | 5) $(-5, -5)$ _____ | 7) $(+9, +4)$ _____ |
| 2) $(-2, -5)$ _____ | 4) $(+3, +9)$ _____ | 6) $(-9, -7)$ _____ | 8) $(+9, -7)$ _____ |

Write the ordered pair for each given point.

- | | | | |
|-------------|-------------|-------------|-------------|
| 9) B _____ | 11) Q _____ | 13) H _____ | 15) P _____ |
| 10) T _____ | 12) F _____ | 14) X _____ | 16) K _____ |

Plot the following points on the coordinate grid.

- | | | | |
|------------------|------------------|------------------|------------------|
| 17) I $(-6, -3)$ | 19) N $(-7, -9)$ | 21) S $(+7, -3)$ | 23) Z $(-6, -5)$ |
| 18) U $(+6, -4)$ | 20) D $(+6, -7)$ | 22) R $(-6, +1)$ | 24) G $(+3, +3)$ |

