ELEMENTARY SCHOOL

EDUCATIONAL WORKBOOK

Includes: Physics, Math, Observation, and Creative Thinking



PHYSICS

1. Forces on the Giant Dipper Roller Coaster

The Giant Dipper roller coaster speeds up as it goes downhill and slows down as it climbs uphill.

What force pulls the roller coaster down the hill?

A) Gravity

B) Friction

- C) Magnetism
- D) Wind

2. Stored Energy

At the top of the Giant Dipper hill, what type of energy is at its highest?

- A) Kinetic energy (energy of motion)
- B) Potential energy (stored energy)
- C) Thermal energy (heat energy)
- D) Electrical energy

3. Dream Wheel Energy

What happens when the Dream Wheel stops at the top for passengers to get on and off?

- A) It loses all energy
- B) It has stored potential energy
- C) It stops using gravity
- D) It doesn't use energy anymore

4. Tendency of an object & state of motion

When a roller coaster stops suddenly, why do riders feel like they are pushed forward?

- A) Gravity pulls them forward
- B) Friction pushes them forward
- C) Their bodies want to keep moving (inertia)
- D) the air pushes them

MATH

1. Sharing Cotton Candy

You buy a bag of cotton candy for \$6 and split it equally with 3 friends. How much does each person pay? Answer:_____

2. Beach Boardwalk Length

The Boardwalk is about .5 mile long. If you walk the Boardwalk 5 times, how many miles have you walked? A) 5 miles B) 2.5 miles

C) 2 miles

D) 10 miles

3 Ride Wait Times

You wait 7 minutes for the Giant Dipper and 5 minutes for the Dream Wheel. If you then wait 10 minutes for the Log Ride, how much time do you spend waiting altogether?

Bonus Question!

From question 3, if you start at 1:00 PM, and each ride is one minute long, what time is it when you finish all the rides?

1. The Looff Carousel has brightly painted horses

How many different colors can you find in a picture of a carousel horse? List or draw them.

2. Beach Observation

Describe what you might find on the beach next to the Boardwalk. Use your senses: What can you see, hear, feel, smell, or taste? Write at least 5 examples.

CREATIVE

1. Create a Menu

Pretend you're running a snack shop at the Boardwalk. List 5 foods or drinks you would sell and their prices. Add up the total cost if a costumer buys two items.

2. Map it Out

Draw a simple map of the Boardwalk. Include the Casino Arcade, at least 3 rides, the beach, and 2 food loactions.

3. Draw Your Favorite Ride.

Look at the rides at the Boardwalk. Pick your favorite and draw a picture of it. Write one sentence about why you like it.

4. Design Your Own Ride

Invent a new ride for the Boardwalk. Draw it and describe how its works. What is its name? What makes it exciting?

Bonus Question! Visit the Boardwalk Historium (2nd floor in Neptune's Kingdom) and list 1 fact you learned.

BINGO CARD

Locate Marini's Taffy-Wrapping Machine. Where was it?	What colors are on the Dream Wheel?	What is the minimum height requirement for Pirate Ship?
Which restaurant is inside the Casino Arcade?	What is the tallest ride at the Boardwalk? How tall is it?	What two flags are on top of the Giant Dipper?
How many Seahorses are on top of the Carousel? What color are they?	Where can you buy a Giant Donut? How much does it cost?	Find a National Historic Landmark on the Boardwalk. What is it?