Name: _____ Date: _____

From the Sun to the Pedals

Reading level 8 (4th grade) · 517 words

"What is energy?" asked Priti, with her mouth full of toast, as she got ready to ride her bike. Mr. Dube was fixing a wheel next door, and he looked over the fence. "Let us go and find some," he said. "There is some in your toast."

"Food has energy stored inside it, and we call that chemical energy," said Mr. Dube. "Your body keeps it until you need it, and then you use it to run and play." Priti looked at her toast. It did not look like much, but it was full of stored energy.

Soon Priti was sitting on her bike at the top of the hill. "Up high, you are full of stored energy, too," called Mr. Dube. Priti pushed off and down she went. The stored energy turned into moving energy, and the bike went faster and faster.

At the bottom, Priti stopped pedaling and let the bike coast. It rolled and rolled, and the wind blew her hair back! "That speed is energy, too," called Mr. Dube. Priti squeezed the brakes, and the bike slowed down and stopped beside the gate.

Back at the fence, Mr. Dube handed Priti a rubber band, and she stretched it as far as it would go. "That is stored energy, too," he said. "It is just waiting." Priti let go, and the rubber band snapped across the yard.

"What about heat?" asked Priti. "Rub your hands together," said Mr. Dube. Priti rubbed them hard, and soon they felt warm. "Heat comes from tiny bits that are moving," he said. "When they move faster, there is more heat, so your rubbing made some."

"Now, where did the energy in your toast come from?" asked Mr. Dube. Priti thought about the bread, and the wheat that it was made from. "From a plant?" she said. "Yes!" said Mr. Dube. "Plants catch the energy in sunlight, and we get that energy in the food we eat."

"Your toast is a little bit of stored sunshine," said Mr. Dube. "The light has a long way to travel, because it takes about eight minutes to get here." Priti looked up, and the Sun felt warm on her face.

"So the energy was in the Sun," said Priti. "Then it went into a plant, and then into my toast, and then into me." "And then into your pedals," said Mr. Dube. "Where did the rest go?" Priti touched the brake. It was warm. "Some of it went into the brake!" she said.

"Even ice cream is stored energy," said Mr. Dube. "It is chemical energy, just like your toast." Priti laughed and said, "Then I should eat more ice cream!" Mr. Dube grinned and pointed at her bike, and he said, "Eat it first, and then ride."

Priti hopped back on her bike, and her legs felt warm. "Where did the Sun get its energy?" she

asked. "That is a very good one," said Mr. Dube. "For now, try this. Tomorrow, rub your hands, ride your bike and eat your toast, and then tell me where each bit of energy went."

Questions

1. What is stored in food that gives you energy?

A. Chemical energy
B. Sound
C. Cold

2. What happens to the stored energy when Priti rides down the hill?

A. It disappears
B. It goes back to the Sun
C. It turns into moving energy

3. Why did Mr. Dube say the toast was "a little bit of stored sunshine"?

A. Plants catch the Sun's energy, and food comes from plants
B. The toast was toasted in the Sun
C. The toast was shaped like the Sun

4. What does it mean to "coast" on a bike?

A. To pedal as hard as you can
B. To roll along without pedaling
C. To park by the gate

5. Why did Priti's hands feel warm when she rubbed them?

A. The air was hot
B. Her toast was still warm
C. Her rubbing made tiny bits move faster

Words to know

energy: power to work
stored: kept for later
chemical: stored in food
coast: roll without pedaling
heat: warmth

Answer key: From the Sun to the Pedals

1. A. Chemical energy
2. C. It turns into moving energy
3. A. Plants catch the Sun's energy, and food comes from plants
4. B. To roll along without pedaling
5. C. Her rubbing made tiny bits move faster