



Name: _____ Date: _____

Wind Farm

1 John woke up at 7:00 a.m. on Saturday morning. He could not sleep anymore because he was excited that his mom was going to take him to the Alta Wind Energy Center. His teacher had told him that it was the biggest wind farm on Earth, and now he was going to get to see it for himself.



2 “Why do they call it a farm?” he asked his mom.

3 “Well, a farm is a place where you raise things,” his mom said. “Usually, you raise chickens or corn or something you can eat. But at Alta, they raise wind.”

4 “But you cannot eat wind,” John said.

5 “That is true,” his mom said with a laugh. “But you can use it for energy.”

6 “Energy? I thought you got energy from the socket in the wall,” he said.

7 “Most of the time, you do,” she said. “But, that energy has to come from somewhere. It has to be made. Sometimes it is made with coal. Miners will dig up the coal and send it to a power plant. Then workers will burn the coal to heat water and make steam. That steam will cause a big fan to turn around a magnet and electrify a wire. Then the electricity can flow along the wire from the power plant to homes and buildings.”

8 “So, why do we need a wind farm?” John asked.

9 “Well,” his mom said, “burning coal works well, but it also produces a lot of pollution. Wind farms are a way of making energy with less pollution.”



- 10 At that moment, the wind farm came into view. The land was flat, and there were huge white **turbines**, or fans, as far as the eye could see.
- 11 “How do they work?” John asked.
- 12 “First, the wind turns the fan blades,” his mom said. “Then the blades turn a shaft that is connected to a generator that turns around a magnet to electrify a wire. It’s pretty much the same as a coal plant, but instead of burning coal to turn the fan, you just use the wind. That way there is no pollution.”
- 13 “Why are there so many?” John asked.
- 14 “Each one can only make enough electricity for about 250 homes,” she said. “But when you put them all together, you get enough energy to power half a million homes.”
- 15 “That is a lot!” John said.
- 16 “It sure is,” said his mom, as they continued to drive past one turbine after another.



- 1 What is the main idea of this passage?
 - A. Wind farms are dangerous.
 - B. Wind farms are a way to create electricity with less pollution.
 - C. Farms grow many things.
 - D. Coal cannot be used to create energy.

- 2 What's wrong with coal-burning power plants, according to John's mom?
 - A. They don't work.
 - B. They give people jobs.
 - C. They create pollution
 - D. It is hard to grow coal.

- 3 What is another way of saying turbine (tenth paragraph)?
 - A. Tire
 - B. Fan
 - C. Turn
 - D. Wire



Reading Science

4 What causes the turbine to turn?

- A.** Coal
- B.** A generator
- C.** Wind
- D.** Electricity

5 Why are there so many turbines?

- A.** They look cool.
- B.** They break down a lot.
- C.** They help each other turn.
- D.** You need a lot of them to produce enough electricity