



Name _____

Date _____

Warm-Up 8

BRAIN POWER

In 2001, Matt Nagle was a 25-year-old football star. Then one night he had a bad accident that resulted in his spinal cord being cut.

Matt was paralyzed from the neck down. He could not do anything alone. Matt couldn't even breathe by himself. Doctors kept working to make better equipment for people like Matt to stay alive. Science labs kept doing research to try and find answers. They were trying to make machines to help paralyzed patients. A company who does research on brains was searching for ways to use brain waves. They chose Matt as the first person to try a new technology. They wanted to do an experiment that used machines to carry out instructions from inside the brain.

In June 2004, the doctors implanted a chip into Matt's brain. This chip could run machines with his thoughts. Matt could send simple messages to a computer with this chip. He could change channels on the TV. Matt could play computer games and turn lights on and off. All of these things he could do just by thinking about them.

Matt worked for months to get the messages to move from his brain to the computer. It was very hard. The technology was difficult. The doctors were worried that the chip might injure Matt's body. They also worried that it might hurt his brain and his thinking. Matt wanted to fight to get better. Matt kept fighting in hopes of trying to help make things better for other people like himself.

STORY QUESTIONS

1. "Implanted a chip into Matt's brain" means . . .
 - a. planted a flower in his brain.
 - b. placed a computer chip into his brain.
 - c. added cookies to his brain.
 - d. placed tortilla chips in his brain.
2. What did the doctors worry would happen when they put the chip into Matt's brain?
 - a. There would be damage to his mind and to his body.
 - b. He would get cancer.
 - c. He would start singing and dancing.
 - d. He would start swimming and golfing.
3. What can Matt use his mind to do?
 - a. type letters, dial the phone, and play cards
 - b. run, jump, and dance
 - c. turn lights on and off, switch TV channels, and play computer games
 - d. play football
4. From reading this passage, we can guess that Matt was a person who . . .
 - a. didn't like to do hard things.
 - b. was a show off.
 - c. never gave up.
 - d. yelled a lot.



Name _____

Date _____

SOFT T-REX

In 2005, there was an unusual discovery found in Montana. Twenty-four different kinds of dinosaurs were uncovered in this one place. One kind was different than all of the others. Most dinosaurs that are discovered are just bones. This dinosaur still had soft tissue. It had cells and blood vessels. This was not known when the dinosaur was first discovered. A scientist discovered it when she examined it in the lab.

Before this discovery, scientists never thought that tissue in bones could survive more than 100,000 years. The scientists tested the bones. They found that they were 68 million years old. This was the oldest dinosaur ever discovered with tissue.

This type of tissue is found in bones of birds when they are ready to make eggshells. It contains calcium. It is found when birds are ready to lay eggs. The scientists realized they had found a female dinosaur. This dinosaur had laid eggs. The eggs from this dinosaur were very much like bird eggs today.

STORY QUESTIONS

1. An **antonym** for the word *unusual* would be . . .
 - a. regular.
 - b. strange.
 - c. odd.
 - d. bizarre.
2. Why was this dinosaur so important?
 - a. It had to be taken out with a helicopter.
 - b. It was the biggest dinosaur ever discovered.
 - c. It was the first dinosaur over 100,000 years old with soft tissue.
 - d. It was in the middle of a lot of other dinosaurs.
3. What did the bone have inside?
 - a. a bone that is long, thin, and yellow
 - b. a bone that cannot be broken
 - c. a material that has calcium inside
 - d. dinosaur babies
4. Why was this discovery so important?
 - a. It showed that this dinosaur laid eggs like our modern day birds.
 - b. It showed that this dinosaur laid eggs like our modern day crocodiles.
 - c. It showed that this dinosaur laid eggs like our modern day squirrels.
 - d. It showed that dinosaurs didn't lay eggs.



Name _____

Date _____

NEW PLANET?

On January 8, 2005, three scientists were studying the solar system. They were surprised to see something new in the sky. It was large and bright. Even people who studied the stars for fun were able to see it. These people are called amateur astronomers.

The object was much bigger than Pluto. Its orbit, or path, around the sun was different from the other planets. People started asking questions. Was it a planet or not? No one knew for sure. Everyone had his or her own opinion.

Michael A. Brown, one of the three scientists, believed it was a planet because of its size and distance. A man named Alan Boss did not agree. Alan is a theorist, a person who studies guesses. He believes that if we call it a "planet," we are not being fair to the bigger planets in the solar system.

Michael Brown has continued to collect information on the bright object. He feels sure it is a planet. He is trying to find out about how big it is. He wants to know how much it weighs. He wants to know what it is made of.

Michael has made up a name for the planet. However, he is keeping the name a secret. He won't tell until it is known if it is really a planet or just another bright light in the sky.

STORY QUESTIONS

1. What is an *amateur astronomer*?
 - a. a person who likes stars, ice cream, and cookies
 - b. a person who has a college degree in astronomy
 - c. a person who studies the stars and the sky for fun
 - d. a person who sits on his porch to catch snowflakes
2. A *theorist* is someone who . . .
 - a. enjoys talking about stars.
 - b. chats with friends about things they do not know.
 - c. studies guesses to find out if they are true.
 - d. studies the stars.
3. Why hasn't Michael told everyone the name he wishes to give the planet?
 - a. It hasn't been proven yet that it is a planet.
 - b. He might change the name.
 - c. He is too embarrassed.
 - d. He wants someone else to name it now.
4. Why were amateur scientists able to see this new object in the sky?
 - a. It cut off the sun for 10 minutes.
 - b. They knew it was coming.
 - c. They had read science fiction novels about it.
 - d. It was very bright and large.