



Name _____

Date _____

STATIC ELECTRICITY

Have you ever seen your hair sticking straight up in the air all by itself? Or how about the last time you dragged your foot across the floor and got a shock? This was probably static electricity. But how does static electricity work?

Everything is made up of atoms. Particles called electrons are part of every atom. These electrons have an electric charge. This charge is negative and is the cause of electricity.

Static electricity isn't really static at all. It involves electrons that move from one place to another. Static electricity is different because it doesn't flow from one place to another in a current like most electricity.

Electrons move from one object to another by vigorous rubbing or brushing. There is an electric field around each object. The field affects objects and produces unlike charges in them. The unlike charges are attracted to each other. Sometimes static electricity makes a popping sound.

STORY QUESTIONS

1. Which of the following statements is true but not found in the reading passage?
 - a. This charge is negative and is the cause of electricity.
 - b. Static electricity is more common in the dry, winter air.
 - c. Sometimes static electricity makes a popping sound.
 - d. Static electricity gets its name because it involves electrons that move from one place to another.
2. Which of the following statements can you infer after reading the passage?
 - a. Static electricity does not last long, but ends quickly.
 - b. Static electricity is very dangerous.
 - c. Scientists still do not know how static electricity works.
 - d. Static electricity only happens to certain people.
3. There is an electric _____ around each object.
 - a. charge
 - b. span
 - c. shortage
 - d. field
4. The purpose of the third paragraph is to . . .
 - a. inform the reader about how static electricity begins.
 - b. inform the reader about how static electricity works.
 - c. inform the reader on how best to prevent static electricity.



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VOLCANOES

What is a volcano? Volcanoes are mountains, but they aren't typical mountains. Volcanoes are formed when magma (hot, liquid rock) rises up from beneath and leaks into the Earth's crust, or surface level. It forms a pool beneath the surface called a magma chamber. As this pool gets bigger, it swells the earth on top of it upwards and outwards.

The term *volcano* comes from Vulcan, the Roman god of fire and metalworking. It was originally believed that smoke and fire from volcanoes was evidence that Vulcan was doing his metalwork inside of them. A small island was named Vulcano because of its many volcanoes.

Volcanoes erupt when the pressure of the magma beneath the surface becomes too great for the rock above it to contain. At this point, the magma breaks through the surface—sometimes in a great explosion—at which point it is called lava.

The temperature inside a volcano is very hot. Scientists say it can get as hot as 2,120 degrees Fahrenheit. Molten rock turns an orange-yellow color when it reaches 900 degrees. When it cools to 630 degrees, the color becomes dark to bright cherry red.

STORY QUESTIONS

1. What does the word *evidence* mean as used in the passage?
 - a. argument
 - b. proof
 - c. instruction
 - d. plan
2. What does a volcanic eruption depend on?
 - a. It depends on the amount of air pressure around the volcano.
 - b. It depends on the amount of past action from the volcano.
 - c. It depends on the pressure of the magma against the surface above it.
 - d. It depends on how many years it has been since it last erupted.
3. Which paragraph helps answer the previous question?
 - a. first paragraph
 - b. fourth paragraph
 - c. second paragraph
 - d. third paragraph
4. Which of the following statements is a fact about volcanoes?
 - a. Volcanoes are made from erosion.
 - b. Volcanoes are mountains.
 - c. Volcanoes have a vent which is connected to molten rock.
 - d. The temperature inside a volcano is warm.



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THE RAIN FOREST

One of the most talked about places in the world is the rain forest. This amazing ecosystem has more species and plants than all the other ecosystems in the world combined. There are more than 10 million species. Scientists say that there are even species that haven't been identified yet.

The rain forest is a lush and green place. It is called the rain forest because it rains a lot. It may begin raining at a moment's notice. Constant thunderstorms lead to a lot of flooding and very wet soil. It is also a very hot and humid place. The climate remains the same all the time. This consistency in climate creates a stable environment for many plants and animals. The largest rain forests can be found in the African Congo, the Amazon Basin in South America, and Southern Asia.

There is a lot of concern about the amount of rain forest that is being destroyed. Animals and plant species become extinct when their environment is destroyed. Scientists say that over 500 square miles of the rain forest is destroyed every minute. That's a lot of destruction!

Why is the rain forest being destroyed? There are many different reasons. One of the reasons is so that farmers can make fields to grow plants. The rain forest is also chopped down to use the wood for things like furniture. Organizations have been set up to try and keep people from cutting down any more rain forests.

STORY QUESTIONS

1. Which of the following statements is contained in the passage about the rain forest?
 - a. Scientists use the rain forest to study plant and animal species.
 - b. The rain forest has been around for millions of years.
 - c. Money has been raised to save the rain forest.
 - d. The climate of the rain forest remains constant.
2. Which paragraph helps you answer the previous question?
 - a. second paragraph
 - b. first paragraph
 - c. fourth paragraph
 - d. third paragraph
3. Without the rain, what would probably happen to the rain forest?
 - a. It could not withstand the sun's ultraviolet rays.
 - b. There would be no weather patterns.
 - c. There would be more destruction of the rain forest.
 - d. It would dry up and some plants and animals could not survive.