

Shocking Truths about Electricity Teacher Key

My Prediction	The Correct Answer	Statement
True False	False	Electricity travels faster than the speed of light. Electricity travels at the speed of light – more than 186,000 miles per second!
True False	True	Electricity can be made from animal manure. Electricity can be made from wind, water, the sun, and even animal manure.
True False	False	Hydropower is the most common way electricity is made in the United States. Burning coal is the most common way electricity is made in the United States.
True False	True	Frog legs helped create the first battery. In 1780, an Italian professor of astronomy, Luigi Galvani, noticed that sparks from a machine in his lab made the legs of a dead frog twitch. He performed experiments in which he placed the frog on a metal table and made its leg jump by touching it with different pieces of metal. In 1800, when Alessandro Volta was inventing the first battery, he used his knowledge about a wet frog leg serving as a conductor of electricity!
True False	True	One power plant can produce enough electricity for 180,000 homes.
True False	False	Benjamin Franklin was the first person to discover electricity. Benjamin Franklin didn't discover electricity, but he did prove that lightning is a form of electrical energy.
True False	True	The power generated by walking on carpet is similar to that of a lightning strike. Both are types of static electricity. The big difference is the number of volts of electricity produced. You can generate about 3,000 volts by walking on carpet and 30,000 volts by taking off a sweater. Lightning strikes discharge 3 million volts.
True False	False	Electric current is measured by how fast it is traveling (miles/second). Electric energy is measured in amperes (amps). Electric potential energy is measured in volts.
True False	False	Electricity cannot travel through water. Water is a conductor of electricity, not an insulator.
True False	True	A spark of static electricity from walking on carpet measures about 3,000 volts. That's a lot!

Sources:

- Alliant Energy Kids: Fun Facts About Electricity
<http://www.alliantenergykids.com/EnergyBasics/AllAboutElectricity/000418>
- Discovery Education Curriculum Center: Electricity
<http://school.discoveryeducation.com/curriculumcenter/electricity/peakinterest.html>
- Science Kids: Electricity Facts
<http://www.sciencekids.co.nz/sciencefacts/electricity.html>