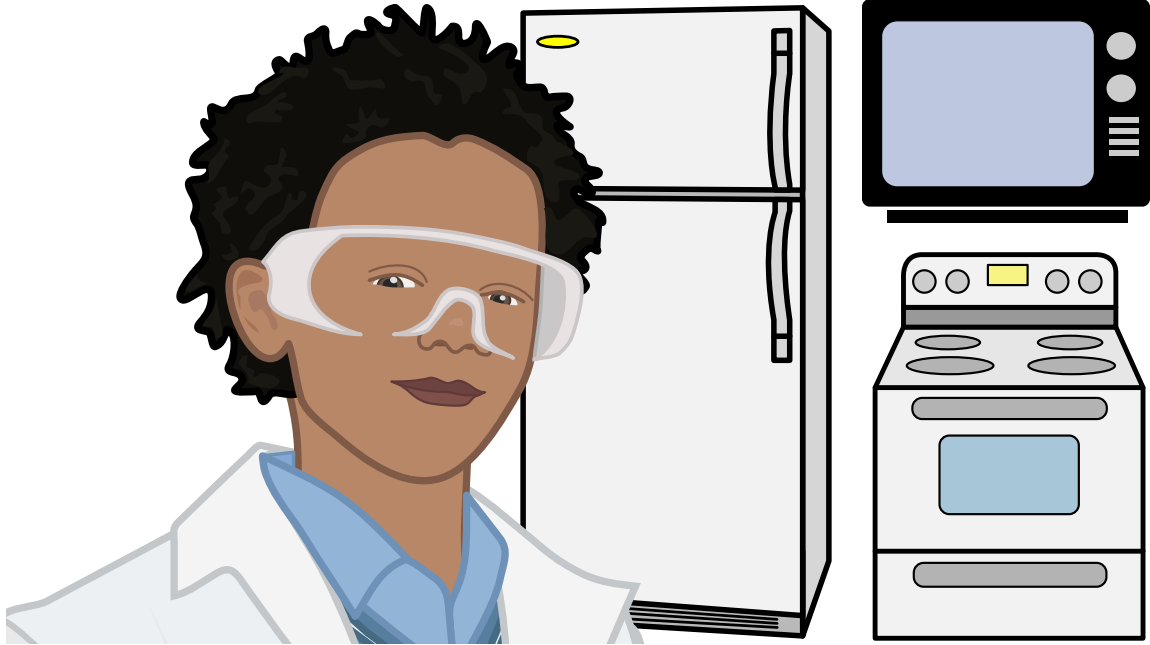


Simon Asks, “What Is Electricity?”

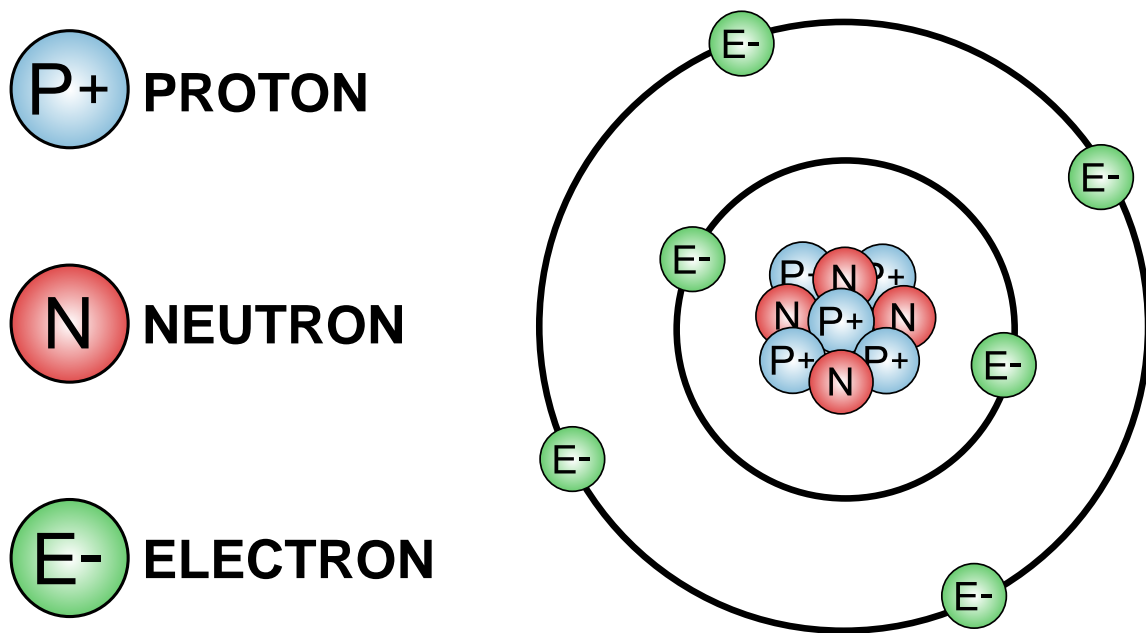
Level J/K



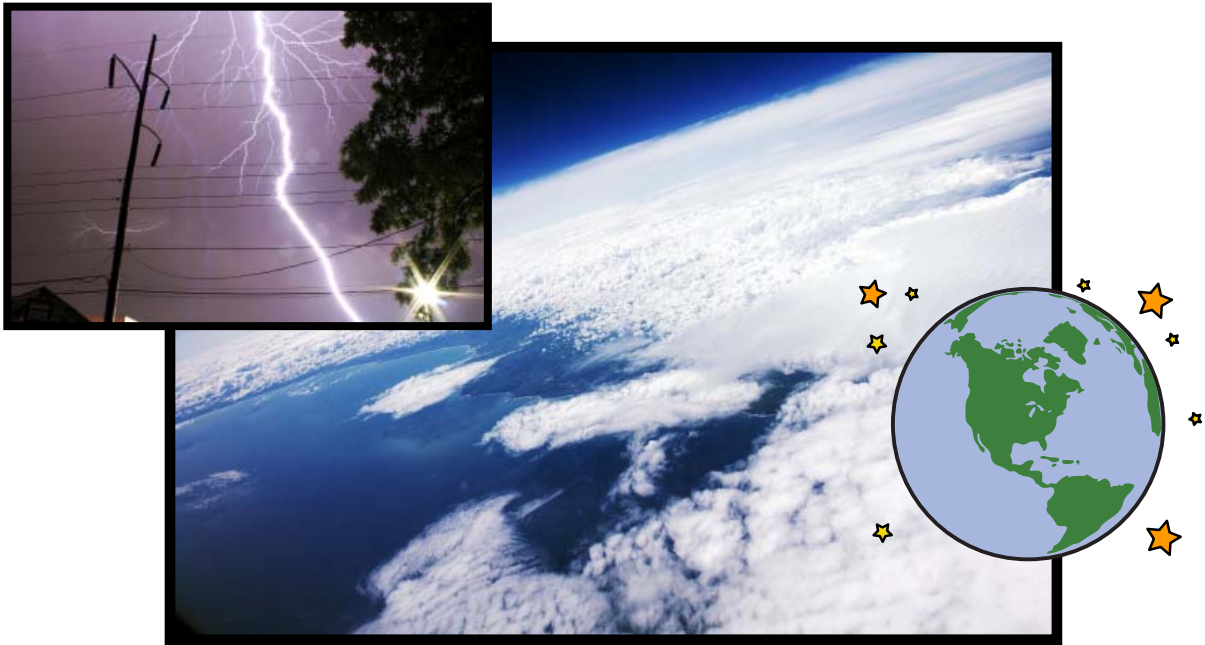
Written and Illustrated by Travis Schaeffer



Simon wants to learn about electricity. He knows his TV needs electricity. The stove and refrigerator in his kitchen need electricity. The lights in his house need electricity. What is electricity?



To learn about electricity, Simon needs to learn about **atoms**. Everything is made of atoms. Atoms have **protons**, **neutrons** and **electrons**. Protons and neutrons are in the center of an atom. Electrons move around them. The protons and electrons make an electrical charge. Electricity is the flow of electrical charges.



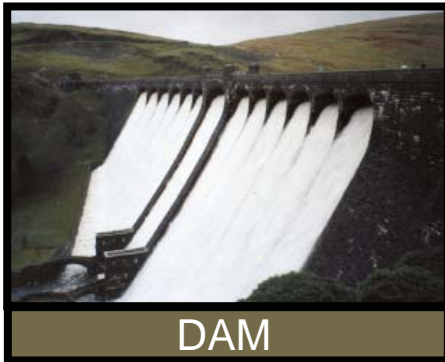
Simon is not sure he understands electrons and electrical charges. But he is glad scientists have learned how to make electrical charges into electricity. Electricity is on Earth and in space. Electrons are in stars and on all planets. The Earth's atmosphere makes electrical charges called lightning.



Long ago, **Benjamin Franklin** flew a kite with a metal point during a storm. Lightning struck the kite and traveled through the string to a key by his hand. Franklin touched the key and there was a spark! He proved lightning was electricity! Benjamin Franklin's experiment helped scientists learn about electricity.



Scientists learned how to make electricity for our work, school and home. A **power station** uses machines with moving parts to change energy into electrical power. These machines are called **generators**. The electrical power moves through power lines. Electricity gives us power to turn on a light bulb, TV and many other things.



DAM

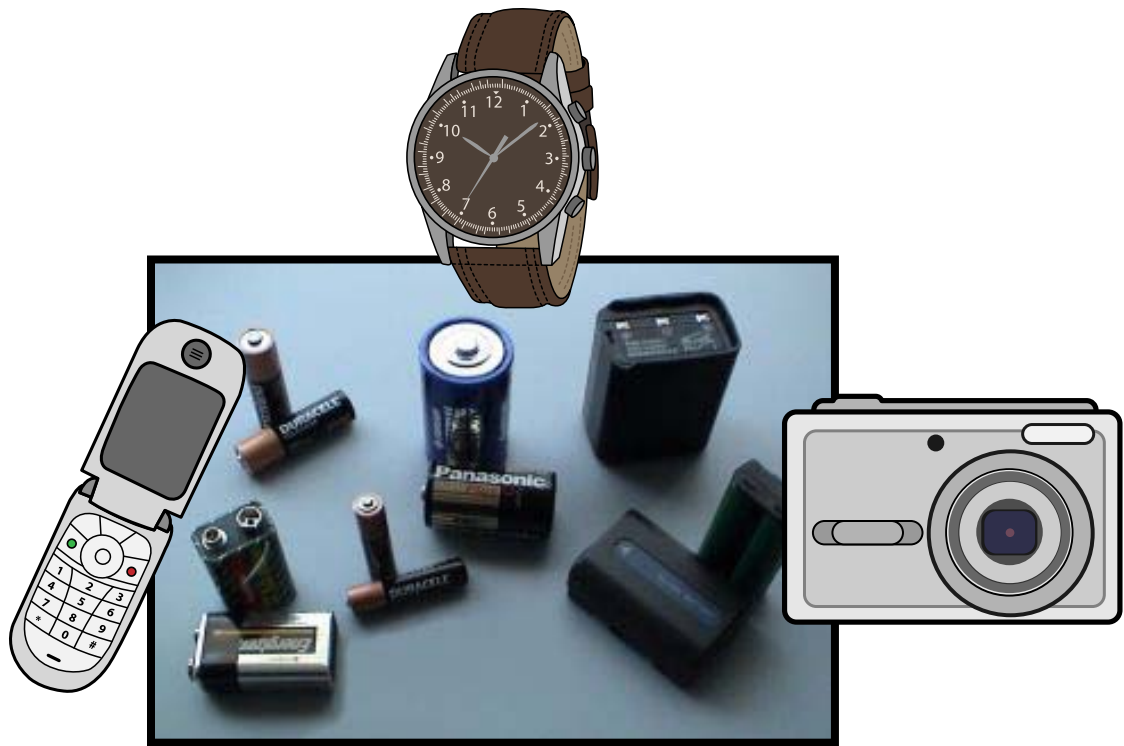


WINDMILLS

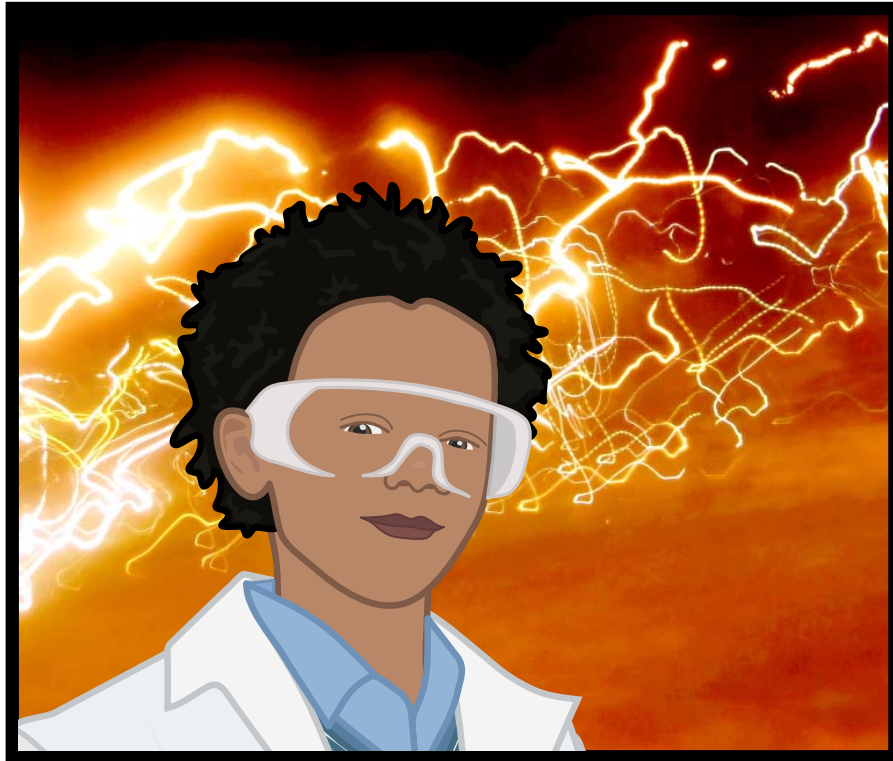


SOLAR PANELS

Water, wind and sunlight all can be used to make electricity! Dams change energy from moving water into electricity. Large windmills change energy from wind into electricity. Solar panels collect energy from sunlight and change it into electricity. These are all ways to change natural energy into electricity.



Electricity can be made, moved and stored. An **electrical battery** is a way to hold electricity. Batteries can be used to power many things like cell phones, watches, cameras and much more. Cars even use a battery. Without electrical energy a car would not start.



Simon has learned about electricity.

Simon looks around his house. He sees many things that use electricity. Can you find all the things that need electricity in your classroom?

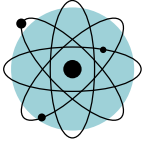


Simon Asks, "What Is Electricity?"

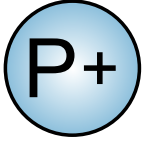


<p>move</p>	<p>center</p>	<p>Simon</p>	<p>electricity / charge</p>	<p>atom</p>	<p>proton</p>	<p>neutron</p>
<p>make</p>	<p>natural</p>	<p>electron</p>	<p>scientist</p>	<p>Earth</p>	<p>space</p>	<p>atmosphere</p>
<p>change</p>		<p>lightning</p>	<p>Benjamin Franklin</p>	<p>kite</p>	<p>power station</p>	<p>machine / generator</p>
<p>collect</p>		<p>power lines</p>	<p>house</p>	<p>energy</p>	<p>water</p>	<p>wind</p>
<p>hold</p>		<p>sunlight</p>	<p>dam</p>	<p>solar panel</p>	<p>windmill</p>	<p>battery</p>

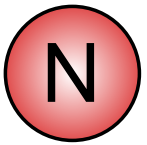
Glossary



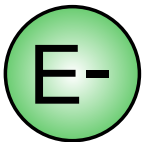
atom - a basic unit of a chemical element



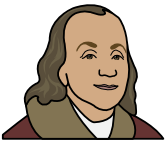
proton - positive electrical charge



neutron - no electrical charge



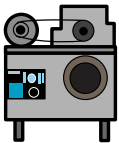
electron - negative electrical charge



Benjamin Franklin - statesman, scientist and inventor of the United States in the 1700s



power station - a station that makes electrical power

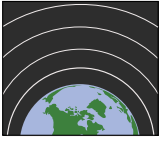


generator - a machine with moving parts that makes electricity

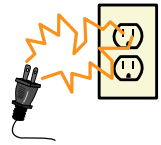


electrical battery - stores electricity

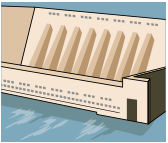
Other Words To Know



atmosphere - gases surrounding a planet



electricity - energy with charged particles



dam - uses water to make electricity



solar panel - uses sunlight to make electricity



windmill - uses wind to make electricity

Index for Photographs

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