

ELECTRIC CURRENTS

It's common for electricity to move in a current. An **electric current** is formed when electricity moves in an orderly fashion from one place to another. When electricity is gathered in one place, it's **static electricity**. A lightning bolt is an example of an electric current – from the cloud to the ground. The cloud where the electricity gathers would be an example of static electricity.

Current electricity usually flows through a wire or some kind of **conductor**. When the electrons in the conductor move, they are powered by an energy source like a battery. Materials like copper or metal are great conductors – they allow electrons to move through them. Things like rubber or plastic make it a little harder for electrons to move – they are **insulators**.

For an electric current to happen, there must be a circuit. A **circuit** is a closed path through which the current flows – from one place to another.

Write the difference between static electricity and an electric current.

Find an example of an electric current that's not listed in the text. Remember, electricity must flow from one place to another.

Find a battery-powered device in your home and open up the battery compartment. Draw a picture of the inside of the compartment and label the conductor and the power source.



Copper is the most common conductor found in electronics. 80 percent of copper that has ever been mined is currently being used in the world's electric and electronic devices. That means the copper in your computer could be the same copper that was used in an ancient sculpture or tool!

