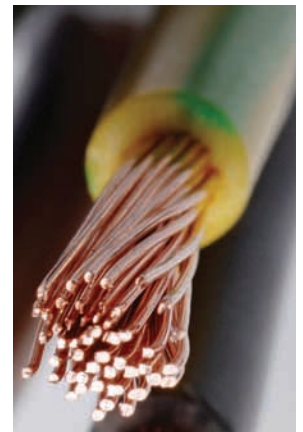


Electricity and Magnetism



Contents

<i>Preview the Book</i>	2
What Is Electricity?	3
Electric Charge	4
Static Electricity	5
Current Electricity	7
Electric Circuits	8
<i>Compare and Contrast</i>	10
How Are Electricity and Magnetism Related? ..	11
Magnets	12
Electromagnets	13
<i>How to Read Charts</i>	14
How Do We Get Electricity?	15
Generators	16
Energy Resources	17
<i>Main Idea and Details</i>	20
How Do We Use Electricity?	21
Using Electricity	22
Electric Motors	22
Glossary	24



Glossary

atom (AT-uhm) a tiny building block of matter **(4)**

circuit (SUR-kit) a path for current electricity **(8)**

conductor (kuhn-DUHK-tur) a material through which current electricity passes easily **(7)**

current electricity (KUR-uhnt i-lek-TRIS-i-tee) the steady flow of electric charge; electric current **(7)**

electric charge (i-LEK-trik CHAHRJ) a property of matter; charge can be positive or negative **(4)**

electricity (i-lek-TRIS-i-tee) a form of energy produced by the movement of electrons; electric energy **(4)**

electric motor (i-LEK-trik MOH-tur) a device that changes electric energy to kinetic energy **(22)**

electromagnet (i-lek-troh-MAG-nit) a temporary magnet made when electric current flows through a wire coil wrapped around an iron or steel core **(13)**

fossil fuel (FOS-uhl FYOO-uhl) a fuel that formed over millions of years from the buried remains of plants and animals; coal, oil, and natural gas **(17)**

generator (JEN-ur-ay-tur) a device that uses motion to produce electric current **(16)**

insulator (IN-suh-lay-tur) a material through which current electricity does not pass easily **(7)**

magnet (MAG-nit) an object that attracts the metals iron, cobalt, and nickel **(12)**

magnetic field (mag-NET-ik FEELD) the area around a magnet where the force of the magnet acts **(12)**

magnetism (MAG-nuh-tiz-uhm) the force of a magnet that attracts the metals iron, cobalt, and nickel **(12)**

nonrenewable resource (non-ri-NOO-uh-buhl REE-sors) an energy resource that cannot be replaced easily once it is used up **(17)**

parallel circuit (PAIR-uh-lel SUR-kit) a circuit that has more than one path for electric current to follow **(9)**

renewable resource (ri-NOO-uh-buhl REE-sors) an energy resource that can be replaced easily or cannot be used up **(18)**

series circuit (SEER-eez SUR-kit) a circuit that has only one path for electric current to follow **(9)**

static discharge (STAT-ik DIS-chahrj) the loss of electric charge **(6)**

static electricity (STAT-ik i-lek-TRIS-i-tee) the buildup of electric charge on an object **(5)**