

## Science Chapter B3 Study Guide

- When two objects have different electric charges they pull toward each other.
- A machine that produces electricity is called a generator.
- Electric current is the flow of negative charges through matter.
- The Northern Lights are caused by Earth's magnetic field.
- Electric wire is coated with plastic or rubber because these materials are good resistors.
- If you plug too many appliances into one electric outlet, you can cause an overload.
- Every time you turn on a light, you close an open circuit.
- The flow of negative charges through matter is called electric current.
- When you turn off one lamp and all the lights in the room go off, the electric appliances must be connected to a series circuit.
- When you rub two balloons together, negative electric charges can move from one to the other.
- If you connect too many appliances to one circuit, the wires can overheat and cause a fire.
- An electromagnet is created when electric current flows through a wire.
- You hold the south poles of two magnets near each other and the poles will repel each other.
- A magnet's force is greatest at its poles.
- Most electric generators make electricity using a magnet and an energy source.
- Generators have huge electromagnets with huge coils of wire and magnets. They use a power source such as coal to move the magnet and produce electricity.
- As you walk, your body picks up negative charges from the carpet. When you touch the switch the negative charges move from your hand to the switch and you feel it as a shock.