

Using Electricity to Make a Magnet

1. Build a simple circuit
2. Take your long red wire and wrap it 10 times around the rivet. Use the ends of the wire to tie a single knot to keep the wire on the rivet.
3. With the switch open remove the light from the circuit and attach the electromagnet into the circuit where the light was attached.
4. Turn the switch on (maximum of 10 seconds at a time) and place the electromagnet in the cup of washers to determine how many it can pick up.

Increasing Magnetic Force

- Using your electromagnetic circuit, determine the variable(s) that will increase the magnetic force of your electromagnet so it can pick up in excess of 10 washers.
- Create a rough draft lab report in your notebooks. (Use the lab report template handout as a guide.) Final lab report will be completed later.
- Final report should include information on ideas that you tried that did not work. Procedure section should just be a list of variables you tested and whether they worked or not.