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**Sources of Electrical Energy**

**Lab #2 – Generate Electricity with Magnetism**

**Equipment and Materials**

* Magnet (preferably a bar magnet)
* Compass

**Note:** A galvanometer or voltmeter can be used for the compass.

* 36 inches, approximately, of hook up wire

**Procedure**

1. Wind about four turns of wire around your compass, then loosely wrap the rest of the wire around the bar magnet.
2. Wind the wire so that the ends will be close enough to be connected.

**Note:** The wire forms a continuous loop. See Figure below.



1. Move the magnet out of the “coil” of wire, and observe the movement of the compass needle.
2. Move the magnet back into the coil, and observe the movement of the compass needle.
3. Hold the magnet still, and move the wire coil while observing the compass.