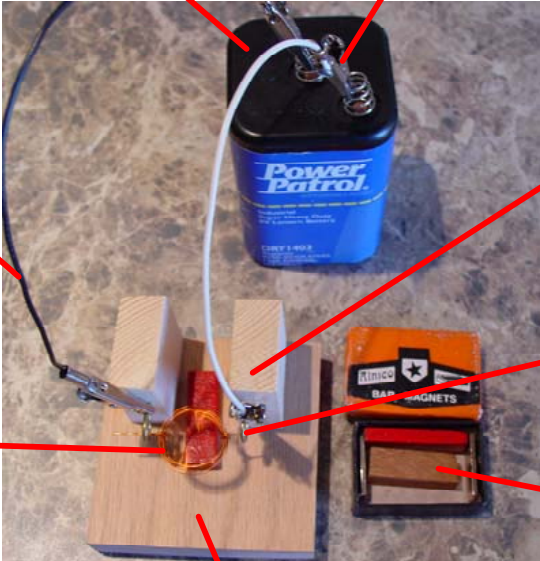


**6 Volt Lantern Battery**  
Spring terminals (also available in screw terminals)

**Alligator Clips**  
Best method to attach wires to the spring terminals on a lantern battery.

**Wire**  
18 gauge, single conductor. Black, Red, White colors.

**Support**  
Wood. Pine was used in this example. 1-1/2"x1-3/8"x0-3/4". Hot glued to base.



**Enamel Magnet Wire, Rotor**  
Students will wind the rotor around a 3/4" form such as an index card rolled up and taped.

**Brass Eyelet Screws**  
Screw into support. Open eyelet with needle nose pliers to allow rotor to slip inside

**Bar Magnets**  
Typically come in a set of 2. Just need 1 for this project.



**Base**  
Wood. Oak was used in this example. 3-1/2"x3-1/2"x0-3/4" (size may vary).

**Close-up of rotor and supports**  
Follow Activity 14 in *Magic of Electricity* manual to make rotor.

## Electric Motor Lab

### Magnetism Studies

**BILL OF MATERIALS**

Designation	Qty	Part Number	Description
Battery	1	7690K131	McMaster-Carr 6 Volt Lantern Battery
Alligator Clips	4	SB23790M	5 black, 5 red per pkg
Wire	1 ft*	8073K671	McMaster-Carr 18AWG solid hook-up, black
	1 ft*	8073K674	McMaster-Carr 18AWG solid hook-up, white
Magnet Wire	1 ft**	7588K61	McMaster-Carr 20AWG copper magnet wire
Switch (optional)	1	SB09736M	Single Pole Single Throw
Base Board	1		Wood
Support	2		Wood
Bar Magnets	1	SB26086M	Ceramic Bar Magnets 50mmx15mmx8mm
Brass Eyelet	2		Hardware store, 1/4" opening
Switch (optional)	1	SB09736M	Single Pole Single Throw

\* wire sold in 100' spools  
\*\* magnet wire sold in 900' spools

Part Number in the format 'SBnnnnnM' are NASCO SCIENCE parts (www.eNasco.com)