Magnets all around us!

**What you’ll need:**

* 1 9V battery
* 2 small paper clips
* 1 nail approx. 2½ to 3 inches long
* Approx. 4 ½ feet of insulated copper wire with 1 inch of insulation stripped off both ends
* A couple small washers or paperclips to pick up with the magnet
* Some tape to secure the wire

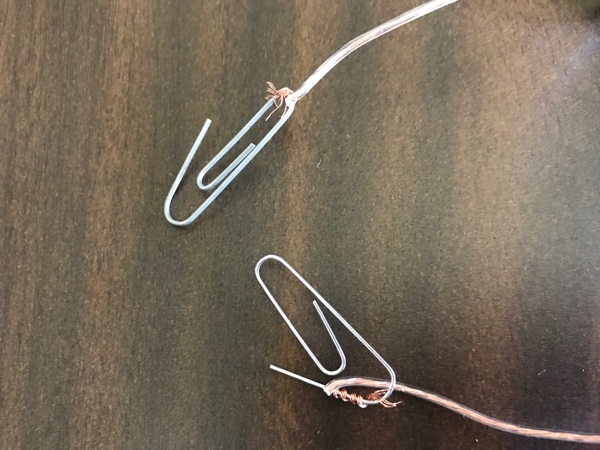
**Instructions:**

1. Take the Nail and the Copper Wire, and start wrapping the wire around the nail in a coil, starting at the head of the nail. Be sure to leave about 6 inches of wire hanging off the head so it can be connected to the battery later.  
    
2. Coil the wire around the nail tightly. Make sure to not leave any gaps between winds of the wire. The more times you wind the wire around the nail, the stronger the magnet will be.

Continue on the other side of the page. ☺

1. Wind the wire until there’s about 6 inches of wire hanging off each end. Use some tape to hold the wire on the nail.



1. Twist each of the bare ends of the copper wire to a small paperclip.
2. Bend the paperclips slightly and connect them to the 2 contacts on the 9V battery. Make sure they stay separated, and do not touch each other. You can use a little tape to help them stay if necessary.  
   
3. Pick up the nail and try picking up the small washers or paperclips with it. When connected to the battery it will be turned into an electromagnet. Disconnecting one of the wires from the battery will cause the nail to lose its magnetism again.
4. When finished, be sure to disconnect the wires from the battery, so you can play again later. Leave it disconnected when not playing.