

Name _____

Sci# _____

Electromagnet Lab

1) What is the scientific definition for an electromagnet?

2) How many volts are in a D cell battery?

Record the number of paper clips picked up in the table below

# of turns of wire	3.0 volts	4.5 volts	6.0 volts
10			
15			
20			
25			
30			
35			

3) How is the number of paper clips lifted a measure of the magnetic force?

4) How is the strength of the magnetic force of an electromagnet related to the number of batteries attached?

5) How is the strength of the magnetic force of an electromagnet related to the number of turns of wire?

Make a line (not bar graph) of your results in the area below. Make sure to use a different color of line for 3.0 volt, 4.5 volt, and 6.0 volt.

Number of paper clips

