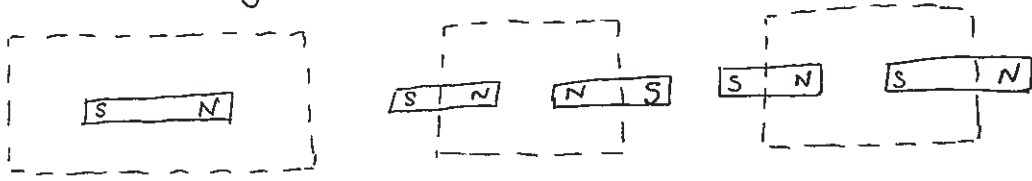
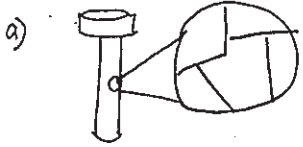


EM Demos

1) Draw the magnetic field lines



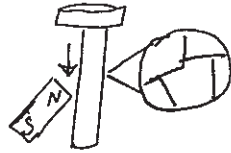
2) sketch domains



b) Magnetize the iron



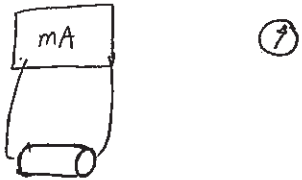
c) After Stroked



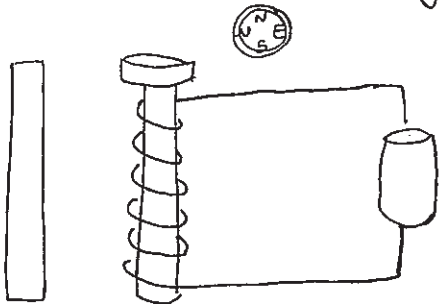
d) How to demagnetize?

e) How does magnetite form?

3) Demo Ampere's Law, sketch $\pm V$, I , B

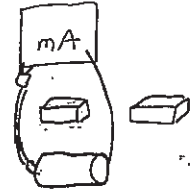


4) Create an electromagnet, sketch $\pm V$, I , B , N-S

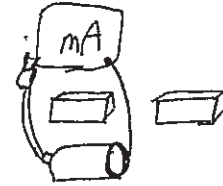


5) Demo Lorentz Force
Sketch \pm , I , \vec{B} , N-S, \vec{F}_B

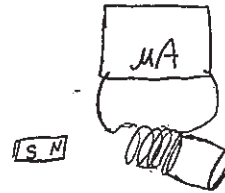
a) Pull wire up



b) Pull wire down



6) Demo Faraday's Law



7) Demo Motor

a) Draw

b) _____ \rightarrow _____ energy
How does it work?

demo Generator

a) Draw

b) _____ \rightarrow _____ energy
How does it work?

8) Build your own DC motor

a) sketch $\pm V$, I , \vec{B} , \vec{F} , rotation, N-S
(Lorentz force explanation)

b) Ampere's Law Reasoning:

c) How did you know what to sand off?

