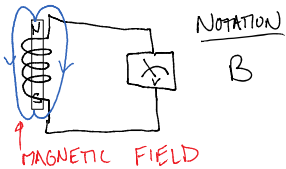


LAB 7 - INDUCTION

WARNING: KEEP ELECTRONICS, CREDIT CARDS ETC AWAY FROM MAGNETS



NOTATION
B

* MAGNETS $\xrightarrow{\text{STATIONARY}}$ NO VOLTAGE PRODUCED
 \downarrow MOVING
 VOLTAGE PRODUCED

FARADAY'S LAW

$$\mathcal{E} = -N \frac{\Delta \Phi}{\Delta t}$$

N = # OF TURNS OF WIRE IN COIL

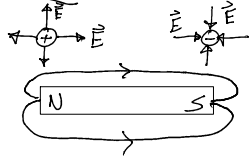
\mathcal{E} = ELECTROMOTIVE FORCE (EMF)

Φ = MAGNETIC FLUX $\rightarrow \frac{\Delta \Phi}{\Delta t} = \frac{d\Phi}{dt}$ RATE OF CHANGE

t = TIME

COMPARISON

E-FIELD & MAG. FIELDS

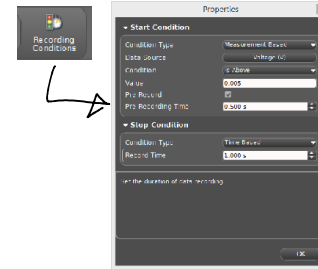


FIELD	NATURE	FORCE
ELECTRIC	CREATED AROUND E-CHARGE	PROPORTIONAL TO E-CHARGE
MAGNETIC	CREATED AROUND A MOVING E-CHARGE	PROPORTIONAL TO E-CHARGE & ITS SPEED

EXPERIMENT

VOLTAGE SENSOR - 200Hz
 GRAPH \rightarrow DETERMINING AREA

FOR DELTA T START



REPORT

- COVER SHEET
- DATA - NORTH \int AREA 1
- SOUTH \int AREA 2
- QUESTIONS

