

# Magnetism

Just a part of the electric force

Magnets have a North & a South pole (NEVER just have one)

Opposites attract & likes repel.

Magnetic ( $\vec{B}$ ) fields go from N to S

LESSON

BACKGROUNDS

Charged, moving particle, it will experience a force from a magnetic field.

Force is described by

①  $\vec{F}_B = q\vec{v}\vec{B}$  strength

② Right hand rule #1 Direction

LESSON

BACKGROUNDS

# RHR#1

Index finger: line up w/  $\vec{B}$  field

Thumb: line up with velocity of **POSITIVE** charge (flip answer for negative charge)

fingers/Palm: then tells you direction of force.

LESSON

BACKGROUNDS

# Magnetic Fields

measured in Tesla (T)

$$1 \text{ T} = \frac{\text{N} \cdot \text{s}}{\text{C} \cdot \text{m}}$$

$$1 \text{ gauss} = 10^{-4} \text{ T}$$

NEW LESSON OPEN LESSON LESSON BACKGROUNDS SAVE SAVE AS PRINT

# Magnetic Fields

$\vec{B}$   Points Right

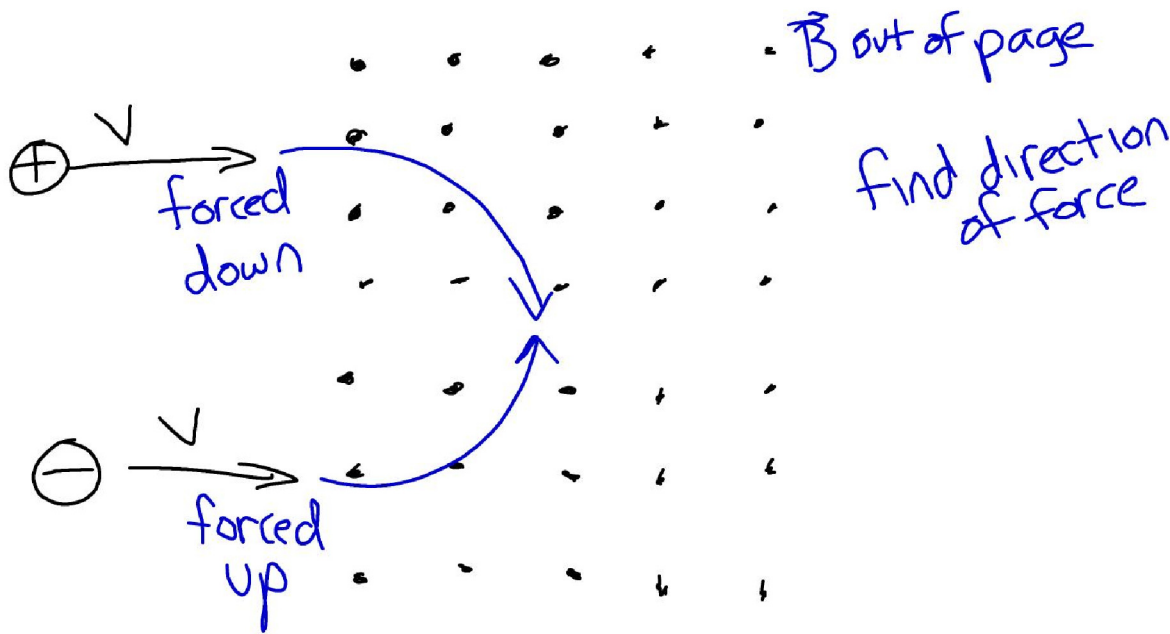
$\vec{B}$   Points Left

$\vec{B}$   Points out of the page

$\vec{B}$   Points into the page

LESSON

BACKGROUNDS



LESSON

BACKGROUNDS

