

Mr. Schneider presents...

Magnet Topics

- Magnetic poles & B-field lines
- Magnetic interactions (attraction vs. repulsion of N/S)
- Magnetic domains
- Attracting “plain” iron
- Creating and destroying permanent magnets
- Earth’s magnetic field
- 3-D vector notation
- Strength of a solenoid B-field
- Source of all magnetic fields
- 3 right-hand rules:
 - Straight wire produces a B-field
 - Solenoid produces a B-field
 - Current **crossing** B-field lines produces a force
- Strength of force felt by charge crossing B-field lines
- Motor effect on a current carrying wire/coil
- Generator effect (current induced in a wire/coil)
- Lenz’s law
- Faraday’s law
- One generator rule (right-hand or left-hand)