ELECTRICITY



## **Electricity Review**

Chapter 11 – Static Electricity

- Static electricity is imbalance of charge
- Charge by friction
- Only electrons move → excess = -ve charge → deficit = +ve charge
- Charges balance by discharge 'shocks' and lightning
- Conductors/insulators
- Electrostatic painting, lightning rods

p. 498 # 1 a, b, e, d, 4, 6, 15 c, 23

## Chapter 12 – Electrical Energy Production

- Moving magnet near coiled copper wires creates current in the wire!
- 4 components to a safe circuit (& function of each)
- Be able to name methods for producing electricity  $\rightarrow$  Pros/cons for them
- Renewable / non-renewable, traditional or conventional / alternative sources
- % efficiency calculations
- Cost to run calculations

p. 542 # 5, 10, 11, 12 (do a couple only), and go over the Chapter 12 Review posted on line.

## Chapter 13 – Circuits & Electrical Quantities

- Series & parallel circuits
- Be able to draw circuit diagrams (using those symbols) from a description
- Resistors / loads
- Current, potential difference, resisteance, m power, energy, coulombs (quantities)
- How to wire in ammeter, voltmeter and ohmeter
- How bright are light bulbs connected in series? In parallel?
- Ohm's law calculations

p. 580 # 1, 2, 3, 4, 5, 7, 8, 12, 23, 24, 25 (**note**: 1 mA = 0.001 A  $\rightarrow$  just like 1 mm = 0.001 m

so 35 mA = 0.035 A

also note: 'voltage drop' means find the potential difference.