ZoNi7567's Shock Value Test Key

Fill in the Blank
1. Alternating Current(AC)
2. Circuit Breaker
3. Piezoelectricity
4. Permeability
5. Conventional
6. Reciprocals
7. Diamagnetic
8. Electrode
9. Transformer
10. Direct Current(DC)
11. Network
12.a. Tungsten
    b.Plasma
13. Proton
14. Electrolyte
15.a. Voltage
    b.Time
16. Low Flow Switch
17. Equivalent
18. Metal Oxide Semiconductor(Silicon, I've seen it both ways) Field Effect Transistor
19. Turbine
20. Rotor
21. Electric Arc (Arc)
22. Resistor
23. Stator

True/False
1. False
2. True
3. False
4. False
5. True
6. False
7. False
8. True
9. False
10.True

Magnetism
1. N --> S
2. Left --> Right
1. South

2. Rub with magnet, place in coil with current, to magnetize, to demagnetize, heat beyond Curie point, or hit out of alignment
3. A core is placed in a solenoid
4. Iron, Nickel, Cobalt, Chromium Dioxide, NArWHAl is Paramagnetic(Aluminum)
5. No, net magnetization
6. Magnets
7. In normal copper wires, there is no current passing through it, the current magnetizes the wire
8. Voltage supplied, # of winds of wire, mass of core, gauge of wire
9. Turned off/on, electrons flow through the wire, turning the core into a magnet
10. Yes, yes, Sensors for traffic lights

Schematic Drawings And Symbols
PM for yes/no answers, as it is extremely difficult to create schematic drawings on my computer.

Symbols are online

Calculations
1. 556 & 223 in series in parallel with 243 & 919 in series
2. 223 & 556 & 243 in series in parallel with 919
3. 223 & 243 in series in parallel with 556 & 919 in series
4. 2028.1
a. 566.4 kWh
b. 65.56 watts
c. 13.5 cents
d. .55 Amps
e. 219.7Ω

Chart where W=watts, V=volts, I=current, and R=resistance
W=VI=V^2/R=I^2*R
V=IR=(WR)^.5=W/I
I=V/R=W/V=(P/R)^.5
R=V/I=V^2/W=W/I^2

Conceptual questions
1. current
2. not completing circuit
3. ceramic insulates
4. stick stuff to fridge, find random pieces of metal, motors, etc.
5. latin for iron
6. motor: electric->kinetic, generator: kinetic->electric, battery: chemical->electric
7. wet cell, dry cell
8. positive and negative directly touch, low resistance=higher current
9. Primary->not rechargeable, Secondary->rechargeable
10. spins the other way
11. nothing
12. zinc copper electrodes
13. CFL releases more heat than incandescant
14. tungsten
15. glowing with intense heat
16. designed to break at a certain amp, melts
17. multiple paths, one path
18. parallel
19. 8.99x10^9