P1.5)

1. Electrical current – This is the movement of electrical charge through some means. This is usually measured in Amps.
2. Voltage – This is the potential difference between the split atoms/particles. This is usually measured in Volts.
3. An open switch – This means that no electric current is flowing through this switch, because it is not connected. I like to think of it as one of the old hinge switches that’s open.
4. A closed switch – The opposite of an open switch, so electric current is flowing through this switch because the circuit is now closed. The conductors, which carry the current, are now within range so that they may transfer the electric current.
5. Direct current – This is the electricity flowing in one direction only. So if it’s positive, it will always be positive. Not necessarily constant though. I think of the electrons moving from one atom to the next all the way down the cord (or whatever is being used to direct the current).
6. Alternating current – This is a current that reverses it’s direction constantly at regular intervals. This form of electricity is usually better for traveling long distances. I like to think of it as the electrons moving back and forth from two different positions.

P1.8) Since this is a negative 5 Amps from A to B, The electrons are moving toward B. In order to find the number of electrons passing through a cross section of a wire over time we use the equation “Total Charge” = “Amps” x “time in seconds” since amps are Coulombs/seconds. So the total electrons would be 5A x 3 sec = 15 Coulombs.