Review (Voltage, Current, Series, Parallel, R, C, L):

Voltage is analogous to water pressure, current is analogous to water flow in a pipe.

In series the same current flows through both elements (voltage drop across each element can be different)
In parallel the voltage is the same across both elements (currents through each element can be different).

Voltmeters have a high input impedance and usually don't affect the circuit under test (place in parallel).
Ammeters have a low input impedance and usually don't affect the circuit under test (place in series).

Resistor:

$V = IR$ (Voltage = Current * Resistance), Volts = Amps * Ohms (Ω).

Capacitor:

$Q = CV$ (Charge = Capacitance * Voltage), Coulombs = Farads * Volts.

$E = 0.5CV^2$ (Energy = 0.5 * Capacitance * Voltage squared), Joules = Farads * Volts^2

$I = CdV/dt$ (Current = Capacitance * rate of change of the Voltage) ($V = 1/C \int idt$)

AC impedance: $Xc = 1/(2\pi fC)$, high impedance at low frequency, shorts out at high frequency

Inductor:

$E = 0.5LI^2$ (Energy = 0.5 * Inductance * Current squared), Joules = Henries * Amps^2

$V = Ldi/dt$ (Voltage = Inductance * rate of change of the Current) ($I = 1/L \int vdt$)

AC impedance: $X_L = 2\pi fL$, shorts out at low frequency, high impedance at high frequency

Power:

$P = V * I$ (Watts = Voltage * Current), $P = V^2/R$, $P = I^2R$

Series/parallel:

Resistors add inductors add in series, capacitors add in parallel.
Resistors and inductors add reciprocally in parallel, capacitors add reciprocally in series.