Powering up an LED

ledcalc.com; A useful tool to determine the value of resistors to be used in the circuit.

 $V = I \times R$ (Ohm's law) supply voltage = 5V resistor used = 2 x 33ohm resistor connected in parallel = 16.5 ohm to determine current ; I = V/R

5 / 16.5 = 300mA

(Power supply voltage - LED voltage) / current (in amps) = desired resistor value (in ohms)

To calculate the amount of power that the resistor will dissipate;

Power Rule: $P = (I \times V)$ W

If a current *I* flows through through a given element in your circuit, losing voltage *V* in the process, then the power dissipated by that circuit element is the product of that current and voltage: $P = I \times V$.



