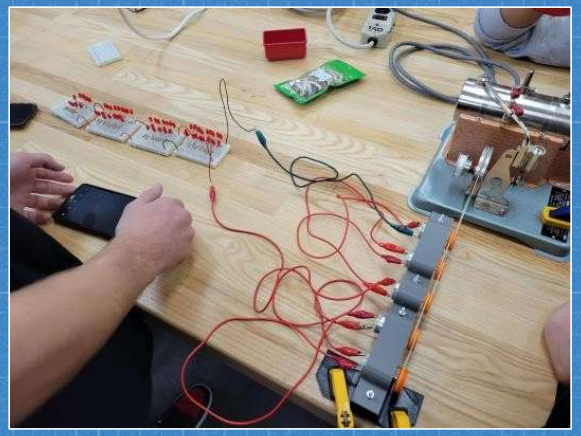

Power Grid Project

Om Patel

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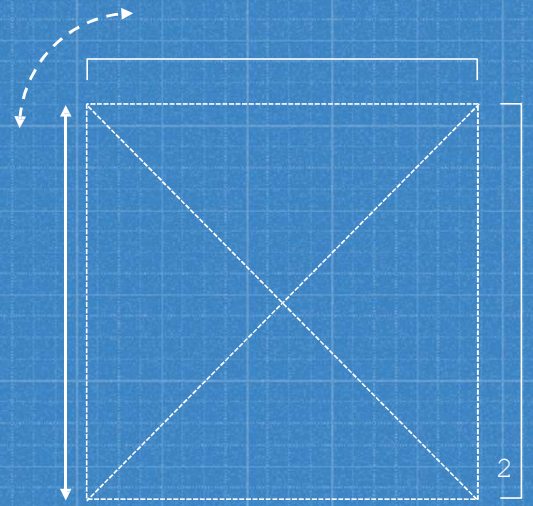
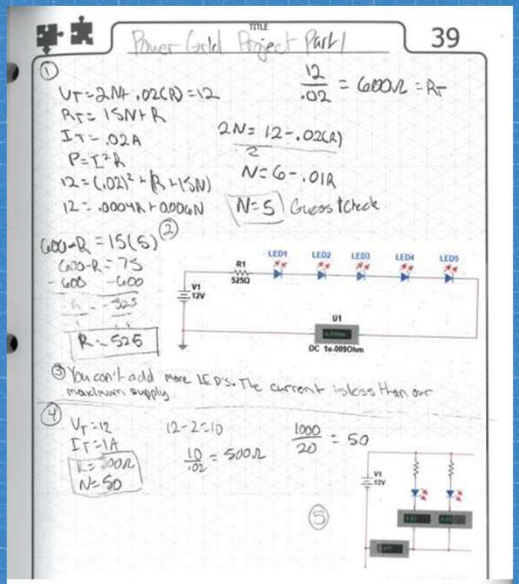
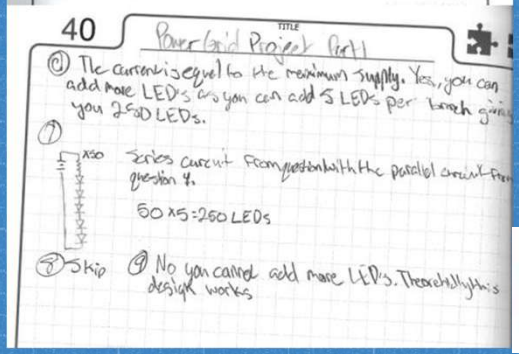
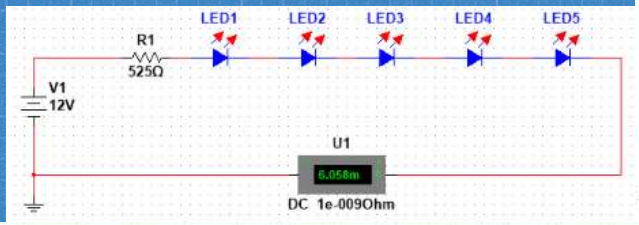
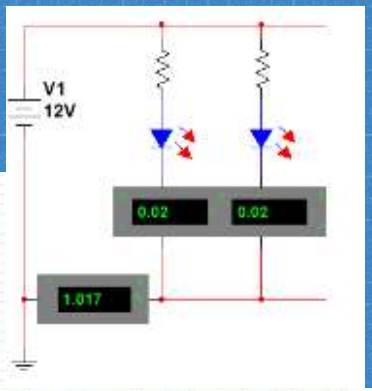


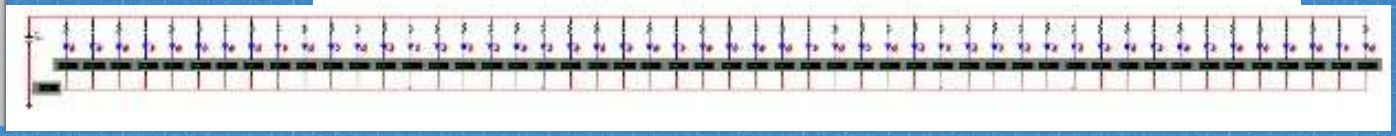
Sketches, Multisims, & Theoretical Calculations









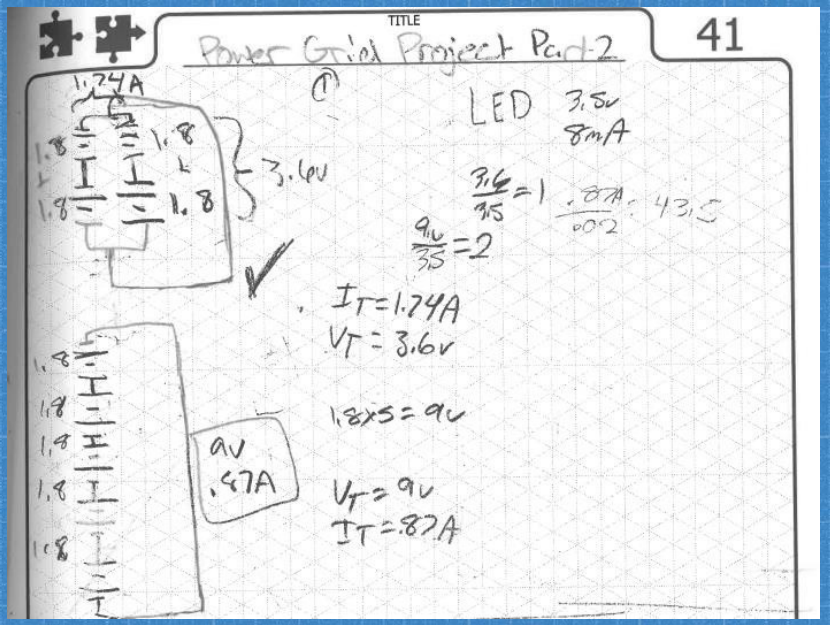


In this activity I practiced my skills of calculating theoretical maximum power grids.

I also used Multisim to check my work.

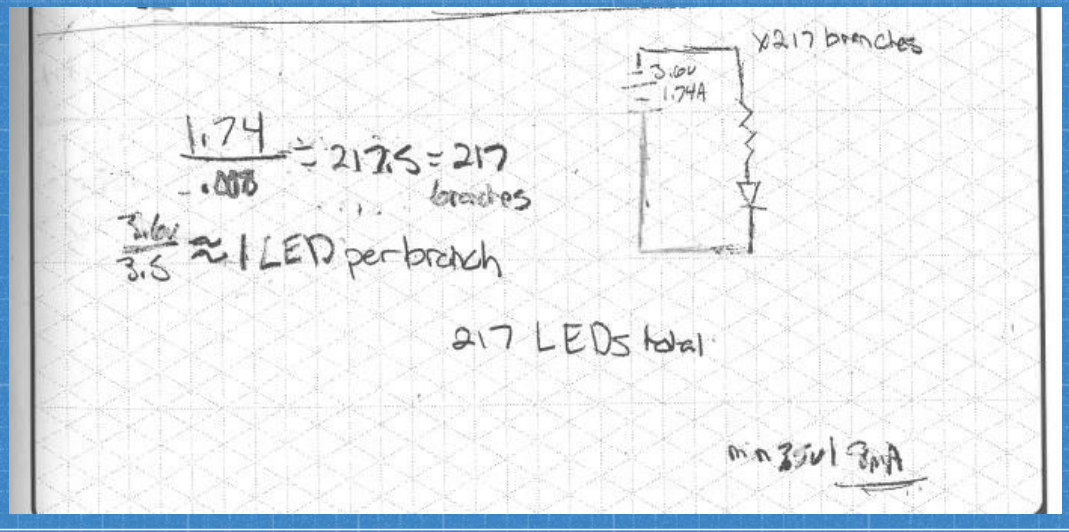
Theoretical Maximum Power Supply Design & Calculations

Using the minimum current and volatage for the LED to power and the generators maximum output voltage and current, I tried to calculate and desgin the maximum power supply.



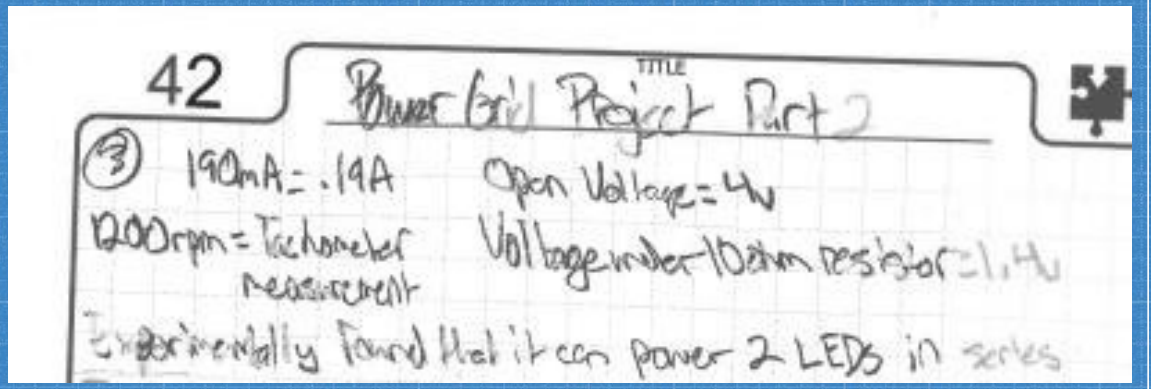
Theoretical Maximum Grid Design & Calculations

With the power supply I designed, I tried to create a the maxi
a specified LED's minimum voltage and current. This grid will
ohm resistor for each LED.



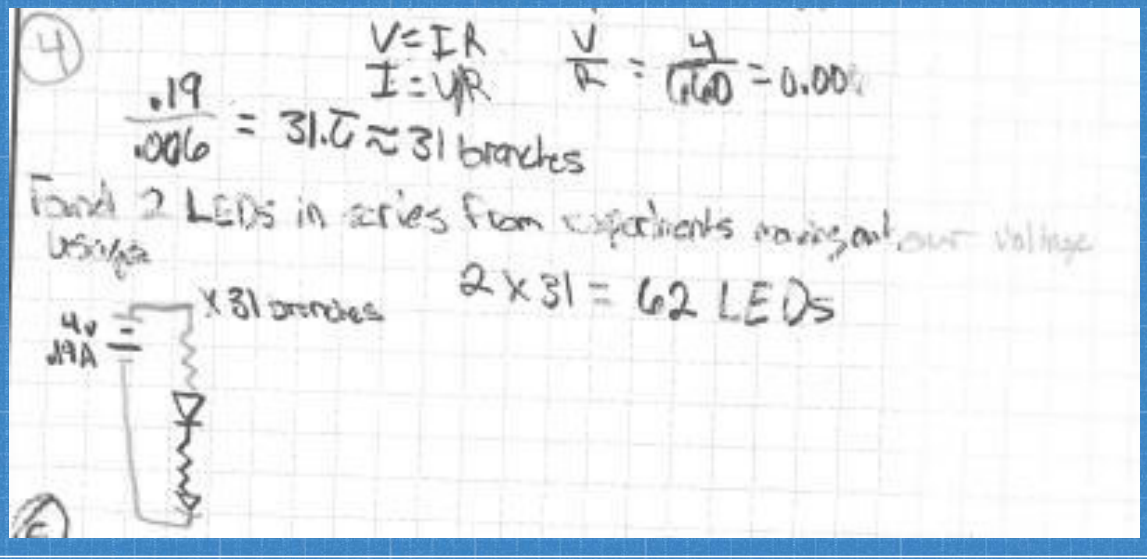
Experimental Maximum Power Supply Measurements

With a power supply picked and built in real life it allowed me to get measurements of voltage, current, and rpm.



Grid Redesign

With the voltage and current found in the experiments, I could the amount of branches and leds in a branch. Allowing me maximum number of LEDs for that power supply.



Final Grid Design

With my calculations, I created breadboards with LEDs in a series parallel combonation. The final amount of LEDs that could light up were 62.