

Name:

Note: Data will be provided so that you don't have to do the experiment.

Pre Lab Questions:

1. What is the difference between simulation vs. hands on labs
2. Why did Sam and Derick fail to light up the LED?
3. Why was Steve successful lighting up the LED?
4. What is a battery? Who invented it?
5. What is an electrolyte?
6. What is anode and cathode?
7. What are the differences between potatoes and lemons?
8. How can we use lemons/potatoes to light up a LED?
9. What is pH?

Data: I have collected the data for you. It is provided in the table below

Quantity	1	2	3	4
Voltage (Lemons)	.96	1.4	2.3	3.2
Light up/not light up	N	N	Y	Y

Quantity	1	2	3	4
Voltage (potatoes)	.5	.8	1.2	1.6
Light up/not light up	N	N	N	Y

Post Lab Question:

1. How do lemons convert chemical to electric energy?

2. What does electrolyte do in Battery? Is it acidic (pH 0-7) or basic (pH 7-14)

3. Why do batteries eventually stop converting producing energy?