

Name: _____

For Teacher Use Only:

Minutes _____

Approved _____

Lab: REDOX (Lemon Battery)

Lab Credit Sheet

Answer the following questions with thoughtful, detailed answers in complete sentences. Cite specific examples from your observations and results of the lab activity.

Part 1: VOLTAIC CELL (Lemon Battery)

1. Take a close look at your lemon. What part of the lemon is the salt bridge?
2. Which one of your trials produced the highest voltage? Explain why, using Table J.
3. If you brought another sample of fruit or vegetable, describe how your results were different than your lemon results.
4. If you were given a choice of any metals or any fruit / vegetable for this experiment, what would you do differently to generate an even higher voltage?

Part 2: ELECTROLYTIC CELL

1. Is the net reaction spontaneous or not? Explain your reasoning.
2. How do you know one product is a gas?
3. Write out the two half-cell reactions for what happened at each electrode.
4. State which half-cell represents oxidation and which one represents reduction.
5. Write a balanced skeletal equation for the net redox reaction