

Lab #20 Electrochemical Cell

Lab Goals:

- To understand an electrochemical cell

Lab Procedure:

1. Roll the fruit to break the internal cell membranes.
2. Insert 2 different metal strips into the fruit about 1 cm apart.
3. Set voltmeter to 2.5 Volts, DC. Attach test leads of voltmeter to metal strips and record voltage. Put positive lead on copper.
4. Set voltmeter to 10 mA. Attach test leads of voltmeter to metal strips and record current.

Use the following combinations in each fruit:

Zinc & Copper

Iron & Copper

Aluminum & Copper

Summary:

- What is an electrochemical cell?
- What were the electrodes and the electrolyte in the cell?
- Did the type of fruit or the metals used affect the amount of voltage and current more?
- How can you use several cells to produce more voltage?