



Electric Lemon!

Supplies:

- Lemon (knife to cut in half)
- Plate
- 5 Pennies
- 5 Dimes
- Paper Towel

Directions:

1. Place a paper towel onto a plate
2. Squeeze lemon juice onto the paper towel until fairly saturated
3. Make a tower of coins, alternating the pennies and dimes, placing a portion of the lemon juice soaked paper towel between each coin.
4. Dampen your index fingers and hold the tower between your fingers - do not let your hands touch!
5. You have just created a "wet cell" - the original battery!
 - a. Citric Acid acts as a conductor for the metals in the coins

STE(A)M Subject:

Chemistry and Electricity

Related Badge(s) or Journey(s):

(B) Home Scientist, Innovation (J) Product Designer (C) Innovation

Additional Resources:

Acids and Base: http://www.ducksters.com/science/acids_and_bases.php

Lemon Fun Facts: <http://www.sciencekids.co.nz/sciencefacts/food/lemons.html>

Lemon Chemistry Experiment: <https://sciencebob.com/lemon-chemistry-an-acid-base-experiment/>

Basic Electricity Terms/Facts: http://www.ducksters.com/science/electricity_102.php

Wet Cells: <http://weirdsciencekids.com/Definitionwetcell.html>

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