**A Penny for a Battery** Name:

1. Place a small piece of aluminum foil on the desk.
2. Place a piece of paper towel on the foil
3. Place a clean copper penny on the paper towel.
4. Using a voltmeter touch the aluminum foil with one lead and the penny with the other. Record the reading

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| Voltmeter Reading (dry paper towel) |  |

1. Remove the paper towel, soak it in vinegar and place it back between the aluminum and the penny.
2. Use the voltmeter to find the reading between the aluminum foil and the penny with a wet paper towel.

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| Voltmeter Reading (wet paper towel) |  |

**Questions:**

1. How was the reading different in step 4 different from step 6? What caused the difference?
2. Make a prediction on what the voltmeter will read if you were to stack another piece of aluminum foil, vinegar soaked paper towel and penny on top of the one you already have.

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| Predicted  Voltmeter Reading |  |

1. Stack another piece of aluminum foil, vinegar soaked paper towel and penny on top of the one you already have. Take a reading with one lead touching the bottom piece of aluminum foil and the other touching the top penny.

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| Voltmeter Reading (2 stacks) |  |
| Voltmeter Reading (3 stacks) |  |

1. If you did not have vinegar, what other liquid do you think you could try? Try one stack with the liquid you chose and give the reading of the voltmeter. Say what liquid you chose.

**Chosen Liquid:**

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| Voltmeter Reading (wet paper towel) |  |