

Name:

Date:

Pd:

VOLTAIC CELL - ELECTROCHEMISTRY VIRTUAL LAB

Procedure:

Go to [this link](#) to use the University of Oregon Voltaic Cell Simulation.

1. Click on the "Metal" tab on both the left and the right side of the screen to choose a metal for your **cathode** and a metal for your **anode**:

Cathode: _____

Anode: _____

2. Based on your cathode and anode choices, you need to "make" 20 mL of solution for each side:
 - In the "Molarity" box, be sure to click "1.0M" for each solution.
 - Click on the "Solutions" tab on both the left and the right side of the screen to choose the appropriate solution for each beaker.

Cathode side: 1.0 M _____

Anode side: 1.0 M _____

Review: Calculate how many grams of that substance you would need to make 0.75 L of solution. Show work for calculations!

3. Draw your apparatus below and label it appropriately with the cathode (including charge), anode (including charge), salt bridge, wire (with flow of electricity), voltmeter, and the ions in solutions.

Apparatus:

Name:

Date:

Pd:

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Data: Click the switch on the simulation and record the voltage below. Watch the reaction and record qualitative observations below.

<i>Voltage of Voltaic Cell:</i>	
<i>Observations:</i>	

Molecular Level Reaction- click on the "Molecular Level Reaction" for both the cathode and the anode after the simulation has run.		
Electrode	Drawing/Diagram:	Description:
Cathode:		

Name:

Date:

Pd:

Anode:		
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Analysis:

1. Write down your **oxidation** and **reduction half reactions** here: