

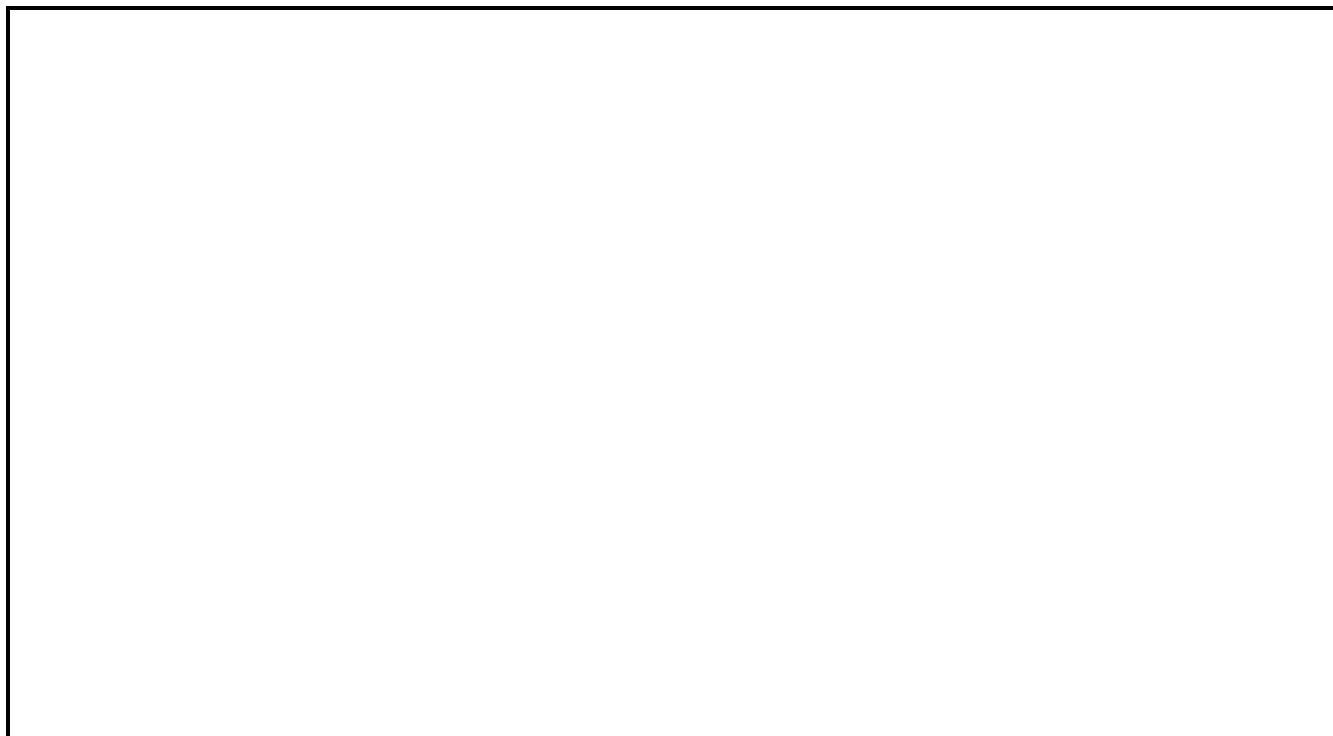
Name:

Date:

Class:

How to Create a Galvanic Cell Student Worksheet

Instructions: In the space below, draw a diagram of your working galvanic cell including your completed electrical circuit. Make sure to clearly label the parts of your cell including the metal strips, electrical components, and chemical solutions.



Discussion Questions

1. Which substance is being oxidized in your galvanic cell?
2. Which substance is being reduced in your galvanic cell?
3. Based on the activity series, what other metal ions could be used to power this reaction?
4. Use the space below to write out the balanced redox reaction for this cell:

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Post-lab Discussion Questions

1. After completing this activity, how would you define a voltaic cell? If this definition is different from how you would define one before this lab, explain how and why your definition changed.
2. Why do you think it is important to have a salt bridge connecting the two metal ion solutions?
3. Do you feel this would be a reliable and environmentally safe source of energy? Explain your answer.
4. Did having access to fewer materials have a dramatic effect on your activity? How do you think engineers and scientists deal with this challenge in the workplace or during real world experiments?

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5. What are some possible sources of error from this activity? How could this have affected the overall outcome or success of your experiment?

6. How could this activity be improved upon for future implementation?