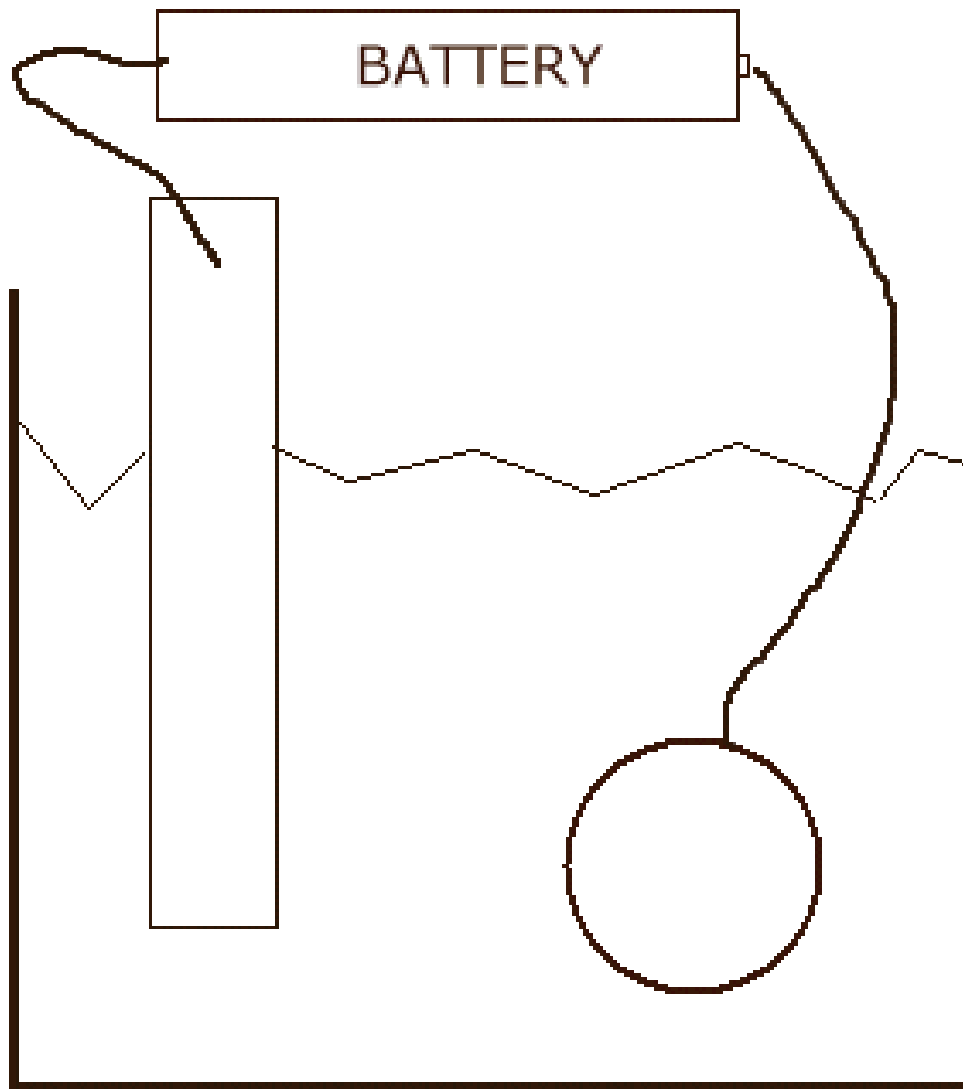


Redox HW #2 name: _____

Directions: draw an electrolytic cell that will plate gold onto a copper ring. Show:

1. electron flow, oxidation + reduction arrows in the beaker, show ions, & solution
2. write the $\frac{1}{2}$ reactions for oxidation and reduction below.
3. Explain in 1 good sentence, the difference between an electrolytic and voltaic cell.



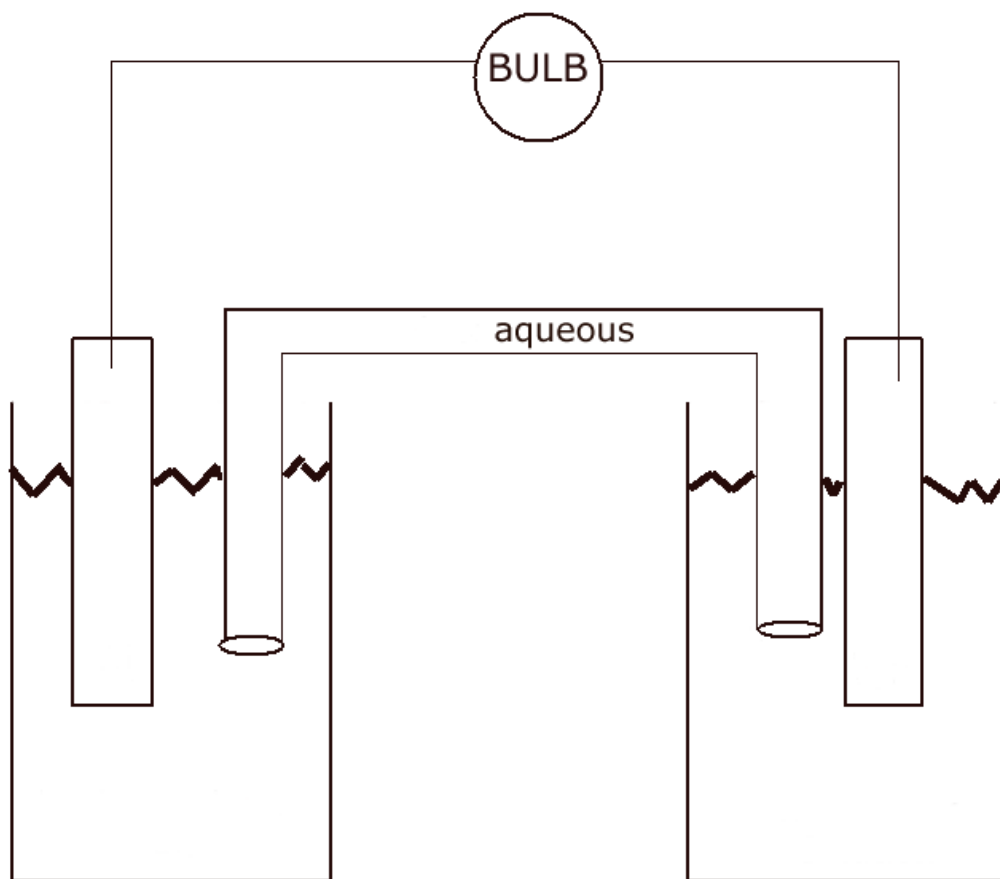
$\frac{1}{2}$ OX: _____

$\frac{1}{2}$ RED: _____

Tell the difference between this electrolytic and a voltaic cell:

Directions: draw a voltaic cell with cobalt in cobalt (III) chloride solution on the left half cell. In the right hand half cell put tin into tin (IV) acetate solution. The salt bridge has KCl solution. SHOW:

1. OX and RED below the beakers
2. Cations in each solution
3. arrows that show oxidation and reduction in the beakers
4. electron flow
5. ion flow in bridge
6. label the cathode, then the anode
7. Write the oxidation and reduction half reactions
8. Write the balanced oxidation and reduction half reactions
9. Write the NET IONIC equation for this redox.



Half reactions

Balanced Half reactions

$\frac{1}{2}$ OX _____

$\frac{1}{2}$ RED _____

Net Ionic Equation: