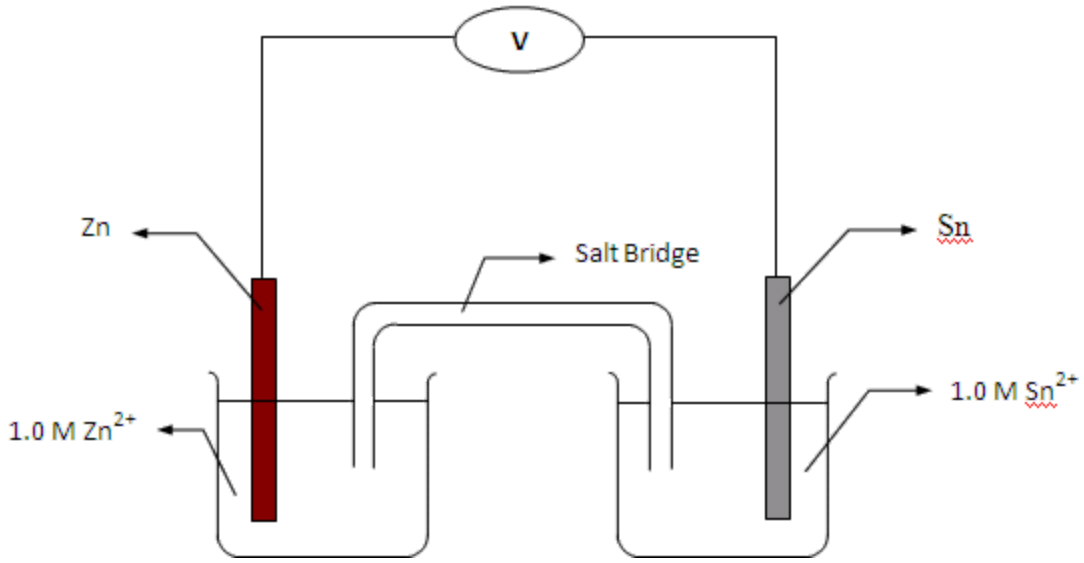


1. Which element is the cathode and why? Which one is the anode and why?
2. Which way will the electrons flow?]
3. Which is getting oxidized? Reduced?
4. What is a safe assumption to make for the compound in the salt bridge?
5. What are the half-reactions for the cathode and anode?
6. Which element will increase in size? Why?
7. Which element would decrease in size? Why

Answers at the bottom of the page

1. Tin is the cathode because it's lower on the activity series and will therefore react less and gain electrons. Zinc is the anode because it is higher on the activity series and will react more, causing it to lose its electrons
2. Electrons will flow from zinc to tin because tin is gaining electrons from the zinc
3. Zinc is oxidized, losing its electrons. Tin is reduced, gaining electrons from the zinc
4. Either KCL or Na2SO4 because those are the most common and the solutions made with the ions are either ZnCl/ SnCl or ZnSO4/ SnSO4
5. 
    a. Anode: Zn = Zn2+ + 2e-
    b. Cathode: Sn2+ + 2e- = Sn
6. Tin because the electrons are added to the tin ions which creates solid tin
7. Zinc because it’s losing an electron and creates more zinc ions