

Name _____
Fundamentals of simple Redox reactions

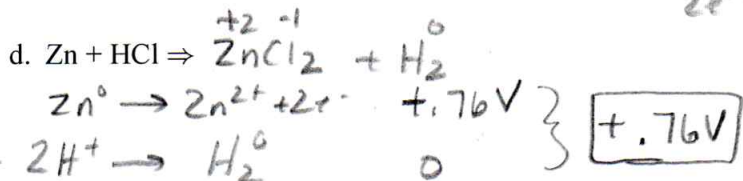
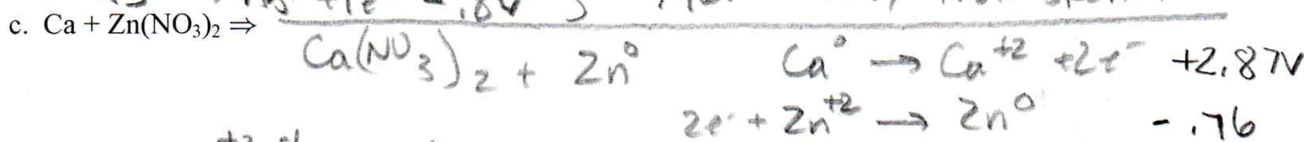
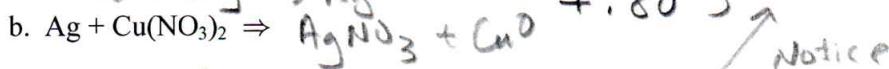
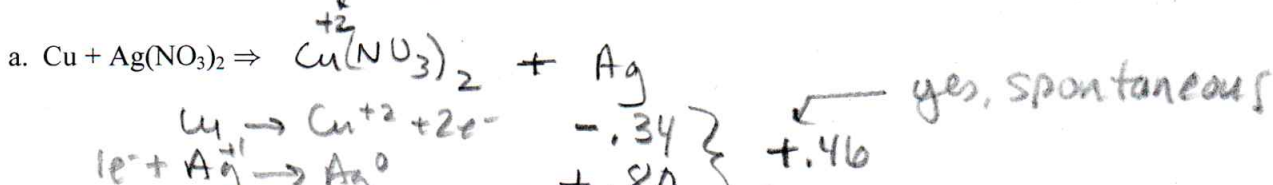
Students will be able to:

Predict the products of a simple redox reaction.

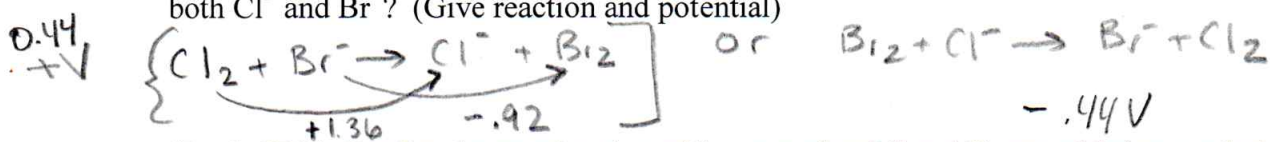
Determine the voltage of these simple redox reactions.

Note: +1 also possible

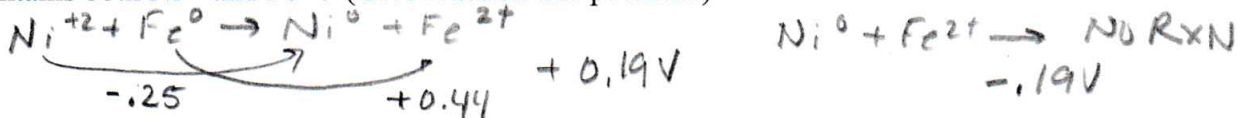
1. Predict the products of the following reactions. Determine if the reaction will run spontaneously.



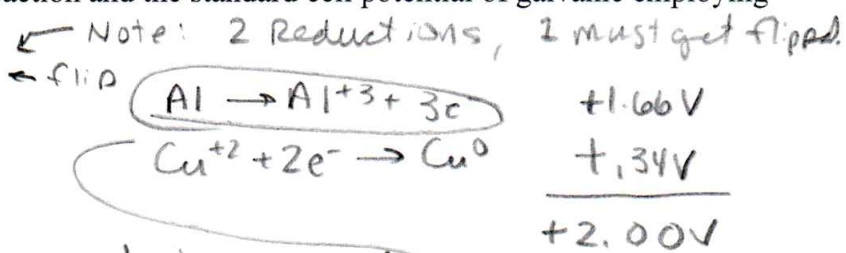
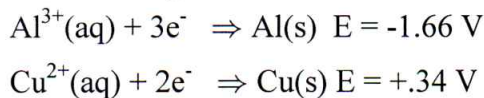
2. (Brady873) What spontaneous reaction occurs if Cl_2 and Br_2 are added to a solution that contains both Cl^- and Br^- ? (Give reaction and potential)



3. (Brady874b) Predict the reaction that will occur when Ni and Fe are added to a solution that contains both Ni^{2+} and Fe^{2+} . (Give reaction and potential)



4. (Brady874) What would be the cell reaction and the standard cell potential of galvanic employing the following half-reactions?

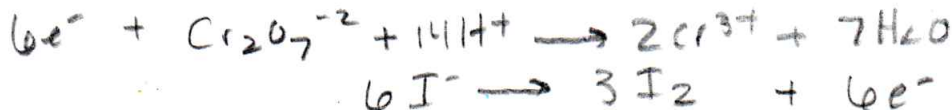
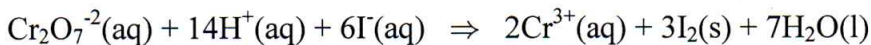


Which half-cell would be the anode?

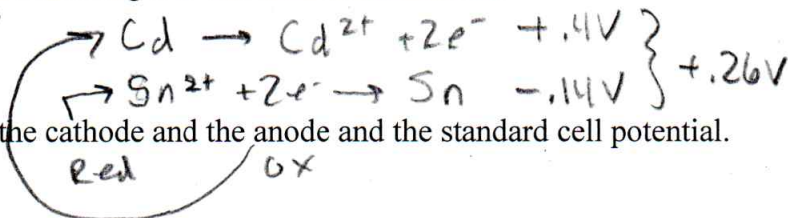
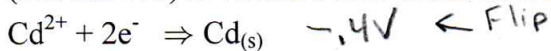
↳ Oxidation = anode
 Reduction = Cathode

Normal AP Reduction chart Not sufficient, or online

5. (Brown767) Using the standard reduction potentials listing in your text, calculate the standard emf for the cell reaction listed here.



6. (Brown767b) A voltaic cell is based on the following two standard half-reactions:



Determine the half reactions that occur at the cathode and the anode and the standard cell potential.

7. (Brown770) Using the standard reduction potentials listed in your text, determine whether the following reactions are spontaneous or non-spontaneous.

