VN 10.6 Calculating Cell Potential

A. Standard Reduction Potential

1. Tendency of a substance to _____ electrons (reduction)
2. Measured in _____
3. Standard conditions: 1 _____ solutions, 25°C, 1 atm
4. The more _____ the value of E, the more likely it is to be reduced

B. Cell Potential

1. The measure of the potential _____ between two half cells in an _____ cell.
2. In order for a galvanic cell to be _____, the E_{cell} must be _____

C. Adding Half-Reactions

1. Find both half-reactions on Standard Reduction Potential table
2. Identify and write down the reduction half-reaction- the most _____ reduction potential.
3. _____ and write the other half-reaction to turn it into oxidation and change the _____ of E.
4. Multiply half-reactions to make _____ equal. **DO NOT** multiply the value of E.
5. _____ electrons and add the half-reactions together.

Example

- Calculate the E^o_{cell} and write the overall rxn for the reaction between zinc and silver: