

AP Chemistry

Thou Shalt Not Forget Questions

Electrochemistry

1. a) When does hydrogen NOT have a +1 Oxidation # (besides when it is a pure element)?
b) When does oxygen NOT have a -2 oxidation number (besides when it is a pure element)?
2. What does LEO goes GER and OIL RIG and “AN OX RED CAT” stand for?
3. Electrons in a battery flow in which direction?
4. In the salt bridge, which direction do the cations/anions ions flow?
5. While a battery is discharged, the mass of the cathode/anode increases or decreases?
6. If you reverse AND double a redox reaction, what happens to the magnitude AND sign of E°_{cell} ?
7. Given the reduction potentials for the half reactions, how do you calculate E°_{cell} ?
8. The half-reaction with a more (+) / (-) E°_{Red} is the reaction that takes place at which electrode?
9. When adding the two half reactions together, what is true about the # of electrons that are gained or lost?
10. a) If ΔG° is (-) / (+) , then E°_{cell} is positive or negative?
b) $\Delta G^\circ = -nFE^\circ$, what does ‘n’ refer to?
11. If Q increases/decreases, then the voltage (E°_{cell}) of the battery goes up or down?
12. Electroplating/Electrolysis Calculation Shortcut: grams of metal electroplated = _____?