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)?

1. What does LEO goes GER and OIL RIG and “AN OX RED CAT” stand for?
2. Electrons in a battery flow in which direction?
3. In the salt bridge, which direction do the cations/anions ions flow?
4. While a battery is discharged, the mass of the cathode/anode increases or decreases?
5. If you reverse AND double a redox reaction, what happens to the magnitude AND sign of Eocell ?
6. Given the reduction potentials for the half reactions, how do you calculate Eocell?
7. The half-reaction with a more (+) / (-) EoRed is the reaction that takes place at which electrode?
8. When adding the two half reactions together, what is true about the # of electrons that are gained or lost?
9. a) If ΔGo is (−) / (+) , then Eocell is positive or negative?

b) ΔGo = −nFEo , what does ‘n’ refer to?

1. If Q increases/decreases, then the voltage (Eocell) of the battery goes up or down?
2. Electroplating/Electrolysis Calculation Shortcut: grams of metal electroplated = \_\_\_\_\_\_\_\_\_?