

Announcements

- Turn on the Clicker (the red LED comes on).
- Push “Join” button followed by “20” followed by the “Send” button (switches to flashing green LED if successful).
- Official exams scores posted on D2L.
- Let me know of any potential grading errors as soon as possible.
- No labs or discussion this week.
- Survey of topic choices for chapter 18.
- HAVE A GREAT THANKSGIVING BREAK!

Chapter 17-Electrochemistry (also sec 5.5)

- Voltaic cells
- Redox RXNs (and balancing)
- Energetics of Redox ($\Delta G = -nFE$)
- Standard half-cell potentials (E°)
- Concentration and voltaic cell discharge
- Energy capacity (power) of batteries
- Electrolysis (recharging batteries)
- Electrochem and low emission vehicles.

Rules for assigning Oxidation #s

- All pure elements have an oxidation number = 0.
- O atoms in compounds usually have an oxidation number of -2, except in the case of peroxides.
- H atoms in compounds have oxid# = +1, except in metal hydrides.
- Alkali metals: +1, Alkali earths: +2, Halogens: -1 (but in oxides +1, +2...., in ClO^- , Cl is +1)
- The total of all the charges (oxid #s) on all the atoms in a molecule or ion must add up to the total charge on the species.
- Do not confuse oxid# with formal charge which is used to find the best Lewis structure.