SCH 4U - 2020-05-11 (Monday)

From: Fred Schlenker <fred_schlenker@bwdsb.on.ca>
Date: Mon, 11 May 2020 12:43:35 +0000 (*2020-05-11 08:43:35 AM*)

Good Morning All:

Hope you enjoyed the weekend. Don't you just love winter! I have heard warmer weather by Friday!

Please check in: <u>https://forms.office.com/Pages/ResponsePage.aspx?id=GAmpRLReCU2WCd35y</u> hGvQsuodiaVPQJHoMguHaAhWSBUN05BOU01SjFQTUNOS09FUFJRUDM3RIc3SiQIQCN0P Wcu

The redox part #2 is a good challenge. You would need to know this if you were in a first or second year chemistry class that covers this method. It is one of the tools that chemists have the helps ensure a full understanding of why equations balance a particular way. Law of conservation of mass is all you need in grade eleven. As the equations get more challenging, conservation of electrons (the redox principle of electrons lost = electrons gained) and the conservation of charge, now help/constrain what is a balanced equation. There will be no evaluation or follow up on this. It is your choice as to how much learning/struggling you want to do.

Goal today is redox part #3. Have a look and learn what you can. The goal is to come up with balanced redox equation same as in part #2 This method is easier than the method outlined in part #2. Part #2 lends itself well to redox reactions that involve a full mix of all reactants. Part #3, lends itself well to circumstances where the reaction is divided into two half cell reactions, one an oxidation, the other a reduction. If those two half cells are set up in separate reaction vessels and connected by a wire and a salt bridge, it becomes possible to extract useful electrical potential and current from the reaction. This is how a battery works, perhaps an important use of chemistry??? The table that is to be found in the redox part #3 section are written as reductions. Of course to make matters more difficult, chemist work from one table, rather than two. What this means is in order to obtain oxidations from the table you have to read/write the equation backwards! Think Hess' Law and flip.

Have fun! I would learn and try or at least look at the quiz.

Mr. Schlenker

(O) This message and/or attachment is intended for the sole use of the individual to which it is addressed and may contain information that is privileged and confidential. If the reader of this message is not the intended recipient or an authorized representative of the intended recipient, you are hereby notified that any dissemination of this communication is strictly prohibited. If you have received this communication in error, please notify me immediately and delete the message and any attachments from your system