YEAR 13 A/ B – CHEMISTRY

WEEK 2 (29th March to 2nd April)

Work sent to the students through Whats app group / Google classroom /Zoom Learning Platform

Lessson Objective: Revise electrochemistry , redox reactions and basic calculations

Resources: Text book, Worksheet file, video, past papers and power point presentations.

Sunday – 4th, 5th & 8th period (Yr 13 A) Sunday – 1st , 2nd& 3rd period (Yr 13 B)	Interpret the reactions of transition metal ions with aqueous sodium hydroxide and aqueous ammonia, both in excess, limited to reactions with aqueous solutions of $Cr^{3+}(aq)$, $Fe^{2+}(aq)$, $Fe^{3+}(aq)$, $Co^{2+}(aq)$ and $Cu^{2+}(aq)$ Calculations in a problem solving context, e.g. % of Fe in an iron tablet; cleaning solutions, % of copper in an alloy, etc. Read textbook Solve past papers. Complete worksheet file questions.
Tuesday – 1st & 2nd period (Yr 13 A)	Understand redox reactions for the interconversion of the oxidation states of vanadium (+5, +4, +3 and +2), in terms of the relevant E^0 values. Explain and write equations for the reaction of - dichromate(VI) ion, $Cr_2O_7^{2-}$ to Cr^{3+} and Cr^{2+} ions using zinc in acidic conditions. - dichromate(VI) ion, $Cr_2O_7^{2}$ to Cr^{3+} using hydrogen peroxide. Explain disproportionation reactions using the standard electrode potential values. Read textbook Solve past papers. Complete worksheet file questions.
Wednesday – 2nd period-Yr 13 A Wednesday – 4th , 5th & 6th period -Yr 13 B	Write the steps in the procedure, note the end point and using the redox equation to do calculations for different redox reactions. Write the equations involved in the working of different fuel cells. Use the equation $\triangle S_{total} = nFE_{cell,}$ and $\ln K = \triangle S_{total} / R = nFE_{cell}/R$ to do calculation and get the relation between E_{cell} and S.

	Read textbook Solve past papers. Complete worksheet file questions.