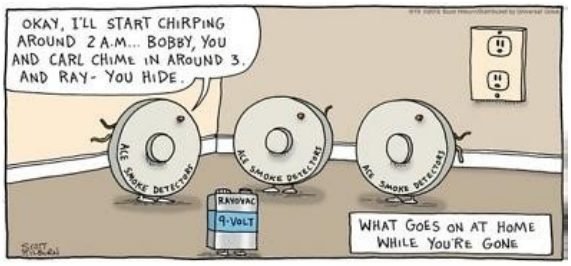
ATAR CHEMISTRY UNITS 3 AND 4



(Howard 2013)

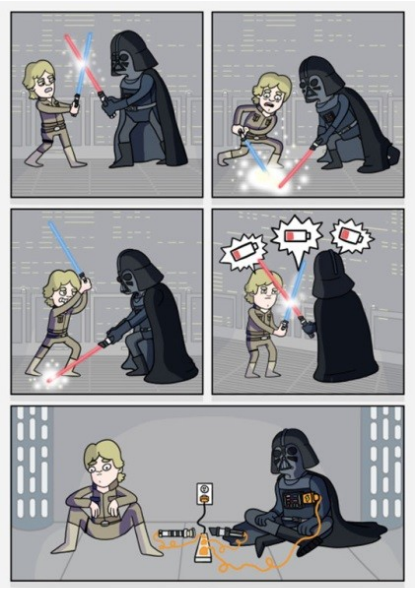
Extended Response: Electrochemistry

Weighting: 5%

Validation Test Date: Friday, 15 May (Week 3)

i. Draw up a table that will include the following information about the dry cell (a primary cell), the lead-acid cell (a secondary cell) and the alkaline hydrogen fuel cell. Under the table draw a fully labelled diagram of each of the electrochemical cells previously listed.

- What is the anode composed of?
- What is the cathode composed of?
- What is the electrolyte?
- Write the oxidation half-equation.
- Write the reduction half-equation.
- Write the overall, balanced redox equation.
- What voltage is this cell capable of delivering? Show all working.
- Outline three benefits of using this electrochemical cell.
- Outline three disadvantages of using this electrochemical cell.
- List two environmental impacts of using this electrochemical cell.


(LoganDX 2015)

ii. Complete Lucarelli 'Essential Chemistry ATAR Chemistry Units 3 + 4' Set 12 (pg 90) questions 2 – 12.

iii. You must include correctly referenced sources you have used to get information (you must use at least four sources).

Bibliography

Howard 2013: , (Howard 2013),

LoganDX 2015: , (LoganDX 2015),

mmgteacher 2013: , (mmgteacher 2013),

(mmgteacher 2013)