

MINISTRY OF EDUCATION, HERITAGE AND ARTS

YEAR 13 CHEMISTRY

REVISION WORKSHEET 6

Write the answers to the following questions in your exercise/activity books.

Strand 3: Reactions

Sub-strand: Electrochemistry

1. Calculate the **oxidation number** of:

(i) Cl in  $\text{Cl}_2\text{O}_7$  (1 mark)

(ii) S in  $\text{S}_2\text{O}_3^{2-}$  (1 mark)

2. Determine whether each of the equations given below is an **oxidation** or **reduction** half equation:

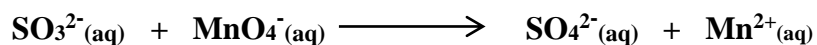
(i)  $\text{NO}_3^- \longrightarrow \text{NO}_2^-$  (2 marks)

[Hint: Calculate the oxidation number of N on the LHS and on the RHS, and see whether there is an increase or decrease in oxidation number]

(ii)  $\text{C}_2\text{O}_4^{2-} \longrightarrow \text{CO}_2$  (2 marks)

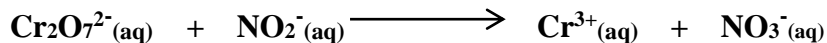
[Hint: Calculate the oxidation number of C on the LHS and on the RHS, and see whether there is an increase or decrease in oxidation number]

3. Identify the **oxidising agent** and **reducing agent** in the following redox equation.



(2 marks)

4. Deduce the **overall** balanced equation in an **acidic medium** for the unbalanced redox reaction equation given below.



(4 marks)

The End