

Unit 13: Electrochemistry

Learning Objectives

1. Identify a reaction as an oxidation/reduction reaction.
 - I can determine the oxidation number of elements involved in a reaction.
 - I can define oxidation and reduction in terms of gaining and losing oxygen and also in terms of gaining and losing electrons.
 - I can identify the oxidizing agent and reducing agent in a reaction.
2. Calculate the voltage (E_{cell}) of an electrochemical reaction.
 - I can write half reactions.
 - I can use reduction potentials to determine the likelihood of a substance being reduced.
3. Describe how to construct a spontaneous galvanic cell.
 - I can determine the direction of electron flow in a galvanic cell.
 - I can determine whether a reaction is spontaneous or not by calculating the voltage of the cell.