

Name: _____

Due: _____

Electrochemistry in Everyday Life

A brochure assignment

Purpose:

Students will be able to use the concept of spontaneous and non-spontaneous reactions to explain practical applications of reduction-oxidation (redox) reactions.

Background:

By now, you should have some appreciation of the wide variety of electrochemical reactions that you encounter daily. The study of electrochemistry is an enormous field responsible for billions of dollars annually in industry. This unit has been a brief introduction to the world of Electrochemistry aka Redox Chemistry. In this activity, you will have the opportunity to explore your choice of applied redox reactions.

Procedure:

1. Choose one of the examples of electrochemistry in everyday life:
 - batteries
 - electroplating
 - electrorefining
2. Research (using appropriated sources) and explain:
 - The parts (or components)
 - The Voltages (either required or produced)
 - The half reactions involved
 - Various practical applications
3. Create a brochure to present this information (you will be provided with card stock)
 - Create a six-page brochure using a Microsoft Word Brochure Template (or other)
 - The front page will serve as the "Title Page"
 - The back page will be your "bibliography"
 - The remaining four pages must be used to display the research you have uncovered for the four topics listed above
 - Presentation is important, I want it to be "eye-catching" with images (create a brochure that you would want to pick up while waiting for an appointment)

Criteria	1	2	3	4
Title Page	Student has put in no effort	Student has put in minimal effort	Student has put in significant effort	Student has put in an exceptional effort
Topics: “parts, voltage, and involved half-reactions”	Not enough relevant information on the topic	The topic is supported with detail, but includes irrelevant information	The topic is detailed and provides relevant information	The topics is presented with exceptional information to support the topic
“practical applications”	Not enough relevant information on the topic	The topic is supported with detail, but includes irrelevant information	The topic is detailed and provides relevant information	The topics is presented with exceptional information to support the topic
Bibliography	Student uses material from few sources	Student uses a variety of sources, not all relevant	Student uses variety of sources, All relevant	Student uses variety of sources, all very relevant
Supporting Materials	Few “images” are present	Some “images” are present	“images” are present throughout	“images” are present and of exceptional quality
Grammar	Serious grammar and spelling errors are present	Few grammar and spelling errors are present	Brochure is free of grammar and spelling errors	No Grammar or spelling errors, use of language is varied and creative.

Total Score:

/ 24
