

Name: \_\_\_\_\_

Blk: \_\_\_\_\_ Date: \_\_\_\_\_

Chemistry 12  
Electrochemistry Lesson #2  
**OXIDATION NUMBERS!!!**

An OXIDATION NUMBER is \_\_\_\_\_

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THIS IS A "FICTIOUS CONCEPT" , however, a **useful idea**.

The following ASSUMPTIONS can be made when assigning OXIDATION NUMBERS, use the charges on the periodic table:

**GENERAL RULES:**

- 1.
- 2.
- 3.
- 4.

Example 1: What is the oxidation number of **P** in the molecule  $\text{H}_4\text{P}_2\text{O}_7$ ?

Example 2: What is the oxidation number of **P** in  $\text{P}_4$ ?

Example 3: What is the oxidation number of **Cr** in  $\text{Cr}^{3+}$  ?

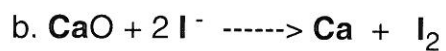
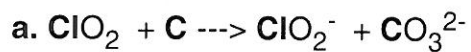
Example 4: What is the oxidation number of Mn in  $\text{KMnO}_4$  ?

TO DETERMINE IF A SUBSTANCE IS UNDERGOING **OXIDATION** OR **REDUCTION** IN A REDOX REACTION:

1.

2.

Example 1: Assign an oxidizing number to the bold species and then decide if it is being oxidized or reduced:



**FOR HOMEWORK:** DO Exercises pg 165 #'s 3-6, PLO's S2 + S3