

IDENTIFYING OXIDIZING AND REDUCING AGENTS USING OXIDATION STATES

Fill in the blanks to complete the definitions below by choosing the appropriate word from the word bank below.

WORD BANK		
REDUCED	LOSE	GAIN
INCREASE	OXIDIZED	DECREASE

- 1) Oxidizing agents are themselves _____ so they show a/an _____
in oxidation state and will _____ electrons.
- 2) Reducing agents are themselves _____ so they show a/an _____
in oxidation state and will _____ electrons.

Identify the oxidation state of the underlined elements in the equations below, then state which reactant is the oxidizing agent and which reactant is the reducing agent in the spaces provided.

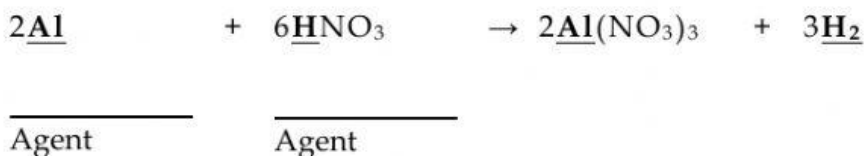
EXAMPLE:

Oxidation State

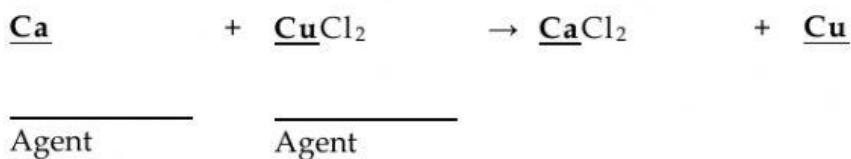
0		-1		+2		0
<u>Mg</u>	+	2H <u>Cl</u>	→	<u>Mg</u> Cl ₂	+	<u>H₂</u>
<u>REDUCING</u>		<u>OXIDIZING</u>				
Agent		Agent				

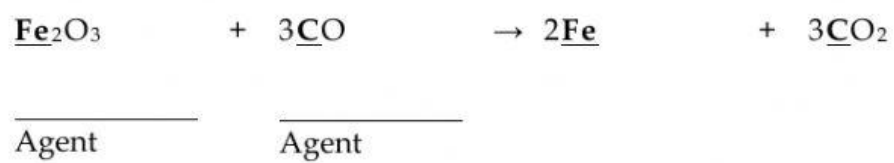
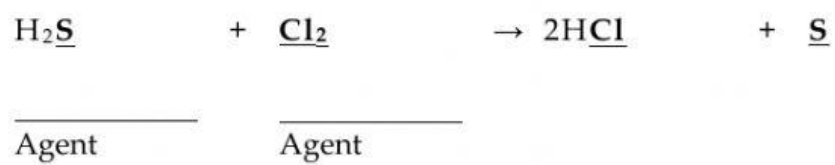
QUESTIONS

- ### 3) *Oxidation State*



- #### 4) *Oxidation State*



5) *Oxidation State*6) *Oxidation State*7) *Oxidation State*