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Name:	Date:	
Notes: Oxidation and Reduction		
What happens to the electrons of met	tals?	
What type of charge do <i>metal</i> ions ha	ve?	
Define oxidation :		
What happens to the electrons of non	motals?	
What happens to the electrons of <i>nonmetals</i> ? What type of charge do <i>nonmetal</i> ions have?		
Define reduction:		
What is true of oxidation and reductio	n?	
What makes a reaction qualify as an oxidation-reduction reaction?		
What other name are evidation reduction reactions known by?		
What other name are oxidation-reduction reactions known by? What are the characteristics of a <i>reduction half-reaction</i> ?		
what are the characteristics of a reduction half-reaction:		
What are the characteristics of an <i>oxidation half-reaction</i> ?		
For each of the half-reactions shown below, determine if they represent oxidation or reduction.		
$I_2 + 2e^- \rightarrow 2I^-$	Na° → Na⁺ + e⁻	
Ca → Ca ⁺² + 2e ⁻	$O_2 + 4e^- \rightarrow 20^{-2}$	
$Fe^{+2} \rightarrow Fe^{+3} + e^{-}$	$P^{-3} + 2e^{-} \rightarrow P^{-5}$	
S° + 2e⁻ → S⁻²	Be ⁺¹ \rightarrow Be ⁺² + e ⁻	
K → K+ + e		
Cl₂ + 2e⁻ → 2Cl⁻	Pb ⁺² \rightarrow Pb ⁺⁴ + 2e ⁻	
$Cu^{+2} + 2e^{-} \rightarrow Cu^{\circ}$	Ba° → Ba ⁺² + 2e ⁻	

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Type of reaction:		
Description of Reaction:		
Type of reaction:		
Type of reaction: Description of Reaction:		
Description of Reaction.		
For each of the reactions on your notes, determ decomposition reaction.	ine if the reaction is a <i>synthesis</i> or a	
$N_2 + 3H_2 \rightarrow 2NH_3$	2H ₂ O → 2H ₂ + O ₂	
4Fe + $3O_2 \rightarrow 2Fe_2O_3$	2PbO₂ → 2PbO + O₂	
NaHCO ₃ → NaOH + CO ₂	8Fe + S ₈ → 8FeS	
$2KCIO_3 \rightarrow 2KCI + 3O_2$	$F_2 + H_2 \rightarrow 2HF$	
Type of reaction:		
Description of Reaction:		
Example:		
What does the activity series show?		
Where are the most reactive metals found?		
Type of reaction:		
Description of Reaction:		
When would this type of reaction not happen?		
Decide if each reaction will happen (YES) or will not happen (NO) based on the activity series.		
Ba + MnCl ₂ \rightarrow Mn + BaCl ₂	Fe + $ZnCl_2 \rightarrow Zn + FeCl_2$	
$Ni + PbBr_2 \rightarrow Pb + NiBr_2$	2Ag + 2HCl → H ₂ + 2AgCl	
$Cr + CaBr_2 \rightarrow Ca + CrBr_2$	3Li + AlBr ₃ \rightarrow Al + 3LiBr	
$2Na + FeSO_4 \rightarrow Fe + Na_2SO_4$	Ca + 2HBr \rightarrow H ₂ + CaBr ₂	