PS Chemistry Notes- Balancing Equations

How matter changes.

- Chemical Reaction –
- Chemical Equation -

$$2H_2 + O_2 \longrightarrow 2H_2O$$

	Example:	
+		+
		plus
		yields
	plu	us

• Reactant(s) —
• <u>Product(s)</u> -

Practi	CE Reactants	Products
Fe + S —FeS		
$H_2SO_4 + Zn \longrightarrow ZnSO_4 + H_2$		
$Mg + S \longrightarrow MgS$		
AgNO ₃ + NaCl → NaNO ₃ + AgCl		

Law of Conservation of Matter		
Matter		
in a chemical char	ige.	
The same		are
present before an	d after the reaction.	
• The mass of the		equals the mass
of the		
	CaCl ₂ solution Na ₂ SO ₂ solution Na ₂ SO ₃ solution	CaSO ₄ white procipitate in NaCl solution

•	How do you balance the equation? Salancing equations satisfies the			
The same number and kinds of atom				
•	on both sides of the equation.			
•	Use to balance.			
NOT subscripts! NOT subscripts! NOT subscripts!				
	2H ₂ + O ₂			

Examples

$$\underline{}$$
 $H_2O + \underline{}$ $O_2 \rightarrow \underline{}$ H_2O_2

$$AI + CuSO_4 \longrightarrow AI_2(SO_4)_3 + Cu$$

Practice

$$_$$
 NaCl + $_$ $F_2 \rightarrow _$ NaF + $_$ Cl₂

$$\underline{\hspace{1cm}}$$
 P + $\underline{\hspace{1cm}}$ O₂ \rightarrow $\underline{\hspace{1cm}}$ P₂O₅

Na +
$$MgF_2 \longrightarrow NaF + Mg$$