

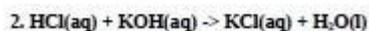
Interpret the following balanced equations in terms of moles, mass, and representative particles.

Show that the law of conservation of mass is observed for each reaction.

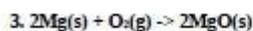
(Use: C = 12, O = 16, H = 1, N = 14, Mg = 24.3, Cl = 35.5, K = 39.1)



	$\text{N}_2(\text{g})$	+	$3\text{H}_2(\text{g})$	→	$2\text{NH}_3(\text{g})$
In terms of representative particles	_____ molecule(s) of N_2	+	_____ molecule(s) of H_2	→	_____ molecule(s) of NH_3
In terms of moles	_____ mol of N_2	+	_____ mol of H_2	→	_____ mol of NH_3
In terms of mass	_____ g of N_2	+	_____ g of H_2	→	_____ g of NH_3
Law of Conservation of Mass	_____ g Mass of Reactants				_____ g Mass of Products
	Mass is <u>conserved</u> / not conserved				



	$\text{HCl}(\text{aq})$	+	$\text{KOH}(\text{aq})$	→	$\text{KCl}(\text{aq})$	+	$\text{H}_2\text{O}(\text{l})$
In terms of representative particles	_____ molecule(s) of HCl	+	_____ molecule(s) of KOH	→	_____ molecule(s) of KCl	+	_____ molecule(s) of H_2O
In terms of moles	_____ mol of HCl	+	_____ mol of KOH	→	_____ mol of KCl	+	_____ mol of H_2O
In terms of mass	_____ g of HCl	+	_____ g of KOH	→	_____ g of KCl	+	_____ g of H_2O
Law of Conservation of Mass	_____ g Mass of Reactants				_____ g Mass of Products		
	Mass is <u>conserved</u> / not conserved						



	$2\text{Mg}(\text{s})$	+	$\text{O}_2(\text{g})$	→	$2\text{MgO}(\text{s})$
In terms of representative particles	_____ atom(s) of Mg	+	_____ molecule(s) of O_2	→	_____ molecule(s) of MgO
In terms of moles	_____ mol of Mg	+	_____ mol of O_2	→	_____ mol of MgO
In terms of mass	_____ g of Mg	+	_____ g of O_2	→	_____ g of MgO
Law of Conservation of Mass	_____ g Mass of Reactants				_____ g Mass of Products
	Mass is <u>conserved</u> / not conserved				