

KERALA PUBLIC SCHOOLS

ACADEMIC YEAR 2020-21

HOME ASSIGNMENT (20-07-2020 to 25-07-2020)



CLASS	SUBJECT	CHAPTER	TOPIC	WEBLINK																																								
VII	CHEMISTRY	Ch - 4 : Language of Chemistry and Balancing Chemical Equations	<p>1. Formulate in language of chemistry and balance the following:-</p> <p>a) Methane reacts with Oxygen to give Carbon-di-oxide and Water.</p> <p>b) Ammonium Chloride reacts with Sodium Nitrite to give Ammonium Nitrite and Sodium Chloride</p> <p>c) Ammonium Sulphate decomposes to give Ammonium bisulphate and Ammonia</p> <p>d) Ammonia reacts with Chlorine to give Ammonium chloride and Nitrogen molecule.</p> <p>e) Ammonia reacts with Chlorine to give Nitrogen tri-chloride and Hydrochloric Acid.</p> <p>Note: Study the last two reactions reactants are same but the products are different.</p> <p>2. Balance the following skeletal equations:</p> <table border="1"> <tbody> <tr> <td>a)</td> <td>$P + N_2O$</td> <td>\longrightarrow</td> <td>$P_2O_5 + N_2$</td> </tr> <tr> <td>b)</td> <td>$Na + N_2O$</td> <td>\longrightarrow</td> <td>$Na_2O + N_2$</td> </tr> <tr> <td>c)</td> <td>$S + N_2O$</td> <td>\longrightarrow</td> <td>$SO_2 + N_2$</td> </tr> <tr> <td>d)</td> <td>$P_2O_5 + HNO_3$</td> <td>\longrightarrow</td> <td>$HPO_3 + N_2O_5$</td> </tr> <tr> <td>e)</td> <td>$KMnO_4 + H_2SO_4 + NO$</td> <td>\longrightarrow</td> <td>$K_2SO_4 + MnSO_4 + HNO_3$</td> </tr> <tr> <td colspan="4">Note: Just try the above question</td> </tr> <tr> <td>f)</td> <td>$P + HNO_3$</td> <td>\longrightarrow</td> <td>$H_3PO_4 + NO_2 + H_2O$</td> </tr> <tr> <td>g)</td> <td>$KMnO_4 + NH_3$</td> <td>\longrightarrow</td> <td>$KOH + MnO_2 + N_2$</td> </tr> <tr> <td>h)</td> <td>$Fe(OH)_3 + HNO_3$</td> <td>\longrightarrow</td> <td>$Fe(NO_3)_3 + H_2O$</td> </tr> <tr> <td>i)</td> <td>$Cu + HNO_3$</td> <td>\longrightarrow</td> <td>$Cu(NO_3)_2 + NO_2$</td> </tr> </tbody> </table>	a)	$P + N_2O$	\longrightarrow	$P_2O_5 + N_2$	b)	$Na + N_2O$	\longrightarrow	$Na_2O + N_2$	c)	$S + N_2O$	\longrightarrow	$SO_2 + N_2$	d)	$P_2O_5 + HNO_3$	\longrightarrow	$HPO_3 + N_2O_5$	e)	$KMnO_4 + H_2SO_4 + NO$	\longrightarrow	$K_2SO_4 + MnSO_4 + HNO_3$	Note: Just try the above question				f)	$P + HNO_3$	\longrightarrow	$H_3PO_4 + NO_2 + H_2O$	g)	$KMnO_4 + NH_3$	\longrightarrow	$KOH + MnO_2 + N_2$	h)	$Fe(OH)_3 + HNO_3$	\longrightarrow	$Fe(NO_3)_3 + H_2O$	i)	$Cu + HNO_3$	\longrightarrow	$Cu(NO_3)_2 + NO_2$	Read your book and check "language of chemistry"
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3. Name the following compounds:

1	P_2O_5	
2	Na_2O	
3	SO_2	
4	HNO_3	
5	MnO_2	
6	HPO_3	
7	N_2O_5	
8	H_3PO_4	
9	NO_2	
10	KOH	
11	$Fe(OH)_3$	
12	$Fe(NO)_3$	
13	$Cu(NO_3)_2$	
14	NO	
15	N_2O	

Rakshmi

DIRECTOR ACADEMICS