

KERALA PUBLIC SCHOOLS
ACADEMIC YEAR 2020-21
HOME ASSIGNMENT (13-07-2020 to 18-07-2020)



CLASS	SUBJECT	CHAPTER	TOPIC	WEBLINK																																								
VII	CHEM	Ch - 4 : Language of Chemistry and Balancing Chemical Equations	<p>1. Formulate in language of chemistry and balance the following:-</p> <p>a) When Magnesium Nitride reacts with water to give Magnesium hydroxide and Ammonia.</p> <p>b) When Calcium Hydroxide reacts with Carbon dioxide it gives Calcium carbonate and water..</p> <p>c) When Magnesium bicarbonate reacts with Calcium carbide to give Magnesium carbonate, Calcium carbonate and Water.</p> <p>d) Magnesium reacts with Ammonium Chloride to give Magnesium chloride, Ammonia and Hydrogen.</p> <p>e) Barium Carbonate reacts with steam of Water to give Barium Hydroxide and Carbon dioxide.</p> <p>2. Balance the following Chemical equations:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>a)</td> <td>$\text{CaO} + \text{C}$</td> <td style="text-align: center;">—————></td> <td>$\text{CaC}_2 + \text{CO}$</td> </tr> <tr> <td>b)</td> <td>$\text{Mg} + \text{O}_2$</td> <td style="text-align: center;">—————></td> <td>MgO</td> </tr> <tr> <td>c)</td> <td>$\text{Cr}_2\text{O}_3 + \text{Al}$</td> <td style="text-align: center;">—————></td> <td>$\text{Al}_2\text{O}_3 + \text{Cr}$</td> </tr> <tr> <td>d)</td> <td>$\text{Mn}_3\text{O}_4 + \text{Al}$</td> <td style="text-align: center;">—————></td> <td>$\text{Al}_2\text{O}_3 + \text{Mn}$</td> </tr> <tr> <td>e)</td> <td>$\text{B}_2\text{O}_3 + \text{Al}$</td> <td style="text-align: center;">—————></td> <td>$\text{Al}_2\text{O}_3 + \text{B}$</td> </tr> <tr> <td colspan="4" style="text-align: center;">Note: The last three reactions are examples of Aluminium acting as reducing agent</td> </tr> <tr> <td>f)</td> <td>$\text{AlCl}_3 + \text{NH}_4\text{OH}$</td> <td style="text-align: center;">—————></td> <td>$\text{Al(OH)}_3 + \text{NH}_4\text{Cl}$</td> </tr> <tr> <td>g)</td> <td>$\text{Al(OH)}_3 + \text{NaOH}$</td> <td style="text-align: center;">—————></td> <td>$\text{NaAlO}_2 + \text{H}_2\text{O}$</td> </tr> <tr> <td>h)</td> <td>$\text{Al(OH)}_3 + \text{HCl}$</td> <td style="text-align: center;">—————></td> <td>$\text{AlCl}_3 + \text{H}_2\text{O}$</td> </tr> <tr> <td>i)</td> <td>$\text{Al(OH)}_3 + \text{NaOH} + \text{H}_2\text{O}$</td> <td style="text-align: center;">—————></td> <td>$\text{Na Al(OH)}_4 + \text{H}_2$</td> </tr> </tbody> </table>	a)	$\text{CaO} + \text{C}$	—————>	$\text{CaC}_2 + \text{CO}$	b)	$\text{Mg} + \text{O}_2$	—————>	MgO	c)	$\text{Cr}_2\text{O}_3 + \text{Al}$	—————>	$\text{Al}_2\text{O}_3 + \text{Cr}$	d)	$\text{Mn}_3\text{O}_4 + \text{Al}$	—————>	$\text{Al}_2\text{O}_3 + \text{Mn}$	e)	$\text{B}_2\text{O}_3 + \text{Al}$	—————>	$\text{Al}_2\text{O}_3 + \text{B}$	Note: The last three reactions are examples of Aluminium acting as reducing agent				f)	$\text{AlCl}_3 + \text{NH}_4\text{OH}$	—————>	$\text{Al(OH)}_3 + \text{NH}_4\text{Cl}$	g)	$\text{Al(OH)}_3 + \text{NaOH}$	—————>	$\text{NaAlO}_2 + \text{H}_2\text{O}$	h)	$\text{Al(OH)}_3 + \text{HCl}$	—————>	$\text{AlCl}_3 + \text{H}_2\text{O}$	i)	$\text{Al(OH)}_3 + \text{NaOH} + \text{H}_2\text{O}$	—————>	$\text{Na Al(OH)}_4 + \text{H}_2$	Read your book and check “language of chemistry”
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3. Name the following compounds:

1	Al_2O_3	
2	CaC_2	
3	Mn_3O_4	
4	B_2O_3	
5	NaAlO_2	
6	NH_4OH	
7	NH_4Cl	
8	Cr_2O_3	
9	MgO	

Rakshmi
DIRECTOR ACADEMICS