Oct 25, 2019

go over answers pg 247 #4,5/ Reaction Worksheet
more Chp 6 Review

Test Monday on Chp 6 Chemical Reactions!!

Mar 29-2:35 PM

Answers pg 247 #4,5

4. a) synthesis
   b) single replacement
   c) double replacement
   d) decomposition
   e) decomposition
   f) single replacement
   g) synthesis

5. a) barium + sulfur $\Rightarrow$ barium sulfide

$Ba + S \Rightarrow Ba^{2+}S^{2+}$

$Ba + S \Rightarrow BaS$ (skeletal and balanced)

b) bromine + sodium iodide $\Rightarrow$ iodine + sodium bromide

$Br_2 + Na^{1+}I^{1-} \Rightarrow I_2 + Na^{1+}Br^{1-}$

$Br_2 + NaI \Rightarrow I_2 + NaBr$ (skeletal)

$Br_2 + 2NaI \Rightarrow I_2 + 2NaBr$ (balanced)

c) barium nitrate + sodium sulfide $\Rightarrow$ barium sulfide + sodium nitrate

$Ba^{2+}NO_3^{1-} + Na^{1+}S^{2-} \Rightarrow Ba^{2+}S^{2-} + Na^{1+}NO_3^{1-}$

$Ba(NO_3)_2 + Na_2S \Rightarrow BaS + NaNO_3$ (skeletal)

$Ba(NO_3)_2 + Na_2S \Rightarrow BaS + 2NaNO_3$ (balanced)

d) lithium carbonate $\Rightarrow$ carbon dioxide + lithium oxide

$Li^{1+}CO_3^{1-} \Rightarrow CO_2 + Li^{1+}O^{2-}$

$Li_2CO_3 \Rightarrow CO_2 + Li_2O$ (skeletal and balanced)

Mar 29-2:33 PM

e) lead (II) oxide $\Rightarrow$ lead + oxygen

$Pb^{2+}O^{2-} \Rightarrow Pb + O_2$

$PbO \Rightarrow Pb + O_2$ (skeletal)

$2PbO \Rightarrow 2Pb + O_2$ (balanced)

f)calcium + water $\Rightarrow$ hydrogen + calcium hydroxide

$Ca + H_2O \Rightarrow H_2 + Ca^{2+}OH^{1-}$

$Ca + H_2O \Rightarrow H_2 + Ca(OH)_2$ (skeletal)

$Ca + 2H_2O \Rightarrow H_2 + Ca(OH)_2$ (balanced)

g) sulfur trioxide + water $\Rightarrow$ sulfuric acid

$SO_3 + H_2O \Rightarrow H_2SO_4$ (skeletal and balanced)

1)	**2** $NaBr$ + **1** $Ca(OH)_2$ → **1** $CaBr_2$ + **2** $NaOH$	Type of reaction: **double displacement**
2)	**2** NH_3 + **1** H_2SO_4 → **1** $(NH_4)_2SO_4$	Type of reaction: **synthesis**
3)	**4** C_5H_9O + **27** O_2 → **20** CO_2 + **18** H_2O	Type of reaction: **combustion**
4)	**3** Pb + **2** H_3PO_4 → **3** H_2 + **1** $Pb_3(PO_4)_2$	Type of reaction: **single replacement**
5)	**1** Li_3N + **3** NH_4NO_3 → **3** $LiNO_3$ + **1** $(NH_4)_3N$	Type of reaction: **double replacement**
6)	**2** $KClO_3$ → **2** KCl + **3** O_2	Type of reaction : **decomposition**
7)	**2** KBr + F_2 → **2** KF + Br_2	Type of reaction: **single replacement**
8)	Na_3PO_4 + **3** KOH → **3** $NaOH$ + K_3PO_4	Type of reaction: **double replacement**
9)	$MgCl_2$ + Li_2CO_3 → $MgCO_3$ + **2** $LiCl$	Type of reaction: **double replacement**
10)	$CaCO_3$ → CaO + CO_2	Type of reaction: **decomposition**
11)	**2** C_5H_5 + Fe → $Fe(C_5H_5)_2$	Type of reaction: **synthesis**
12)	$SeCl_6$ + O_2 → SeO_2 + **3**Cl_2	Type of reaction: **single replacement**
13)	C_3H_6O + **4** O_2 → **3** CO_2 + **3** H_2O	Type of reaction: **combustion**
14)	**2** NO_2 → **2** O_2 + N_2	Type of reaction : **decomposition**
15)	**1** $AlCl_3$ + **3** Cs → **3** $CsCl$ + **1** Al	Type of reaction: **Single Displacement**

Types of Reactions

Synthesis (Building Up)

One product

Decomposition (Breaking Down)

One Reactant

Combustion (burning)

complete products are CO_2 + H_2O

incomplete products are CO_2 + CO + C + H_2O

Single Replacement

element + compound as reactants and products

Double Replacement

compound + compound as reactants and products

Nov 1-7:40 AM

Remember these tips when balancing

*Remember you can only add co-efficient's

* Balance the easy atoms first (those that only appear once on each side of the equation)

* Keep poly-atomics that stay together together.

* Keep oxygen till the end

* if there is an odd number of oxygen balance the other atoms 1st then put the odd number in front of the O_2 and double the remaining coefficients.

* if you have an OH on one side and an H_2O on the other rewrite the H_2O as HOH.

Complete

Chp 6 Review WS/Types of Reaction Review WS

Practice, Practice, Practice these are the same types of questions that are on your test!!!!

Answers will be posted on the website make sure you check!!!

Also make sure you can identify reaction type, write skeletal equations and balance!!! (There is a question on the test like this worth a lot of marks!!!!)