

# May 9, 2019

Answers word equation worksheet  
more practice writing word and chemical equations

## Warm - Up

Write the word equation and chemical equation for the following:

1. Lithium hydroxide and sulfuric acid ( $\text{H}_2\text{SO}_4$ ) react to form lithium sulfate and water.

lithium hydroxide + sulfuric acid  $\Rightarrow$  lithium sulphate + water (word eqn)

$\text{LiOH} + \text{H}_2\text{SO}_4 \Rightarrow \text{Li}_2\text{SO}_4 + \text{H}_2\text{O}$  (chemical eqn)

- Pg 198  
 $\text{Li}^+ \text{SO}_4^{2-}$

1) When dissolved beryllium chloride reacts with dissolved silver nitrate in water, aqueous beryllium nitrate and silver chloride powder are made.

$Be^{2+} Cl^{-} Ag^{+} NO_3^{-} \rightarrow Be^{2+} NO_3^{-} Ag^{+} Cl^{-}$

Beryllium chloride + silver nitrate → beryllium nitrate and silver chloride

$BeCl_2 + AgNO_3 \rightarrow Be(NO_3)_2 + AgCl$

Reactants products

2) When isopropanol ( $C_3H_8O$ ) burns in oxygen, carbon dioxide, water, and heat are produced.

Isopropanol + oxygen → carbon dioxide + water

$C_3H_8O + O_2 \rightarrow CO_2 + H_2O$

Reactants products

3) When dissolved sodium hydroxide reacts with sulfuric acid, aqueous sodium sulfate, water, and heat are formed.

$Na^{+} OH^{-} Na^{+} SO_4^{-}$

Sodium hydroxide + sulfuric acid → sodium sulfate + water

$2 NaOH + H_2SO_4 \rightarrow Na_2SO_4 + 2 H_2O$

Reactants products

4) When fluorine gas is put into contact with calcium metal at high temperatures, calcium fluoride powder is created in an exothermic reaction.

$Ca^{2+} F^{-}$

Fluorine + calcium → calcium fluoride

$F_2 + Ca \rightarrow CaF_2$

Reactants products

5) When sodium metal reacts with iron (II) chloride, iron metal and sodium chloride are formed.

$Fe^{2+} Cl^{-} Na^{+} Cl^{-}$

Sodium + iron (II) chloride → iron and sodium chloride

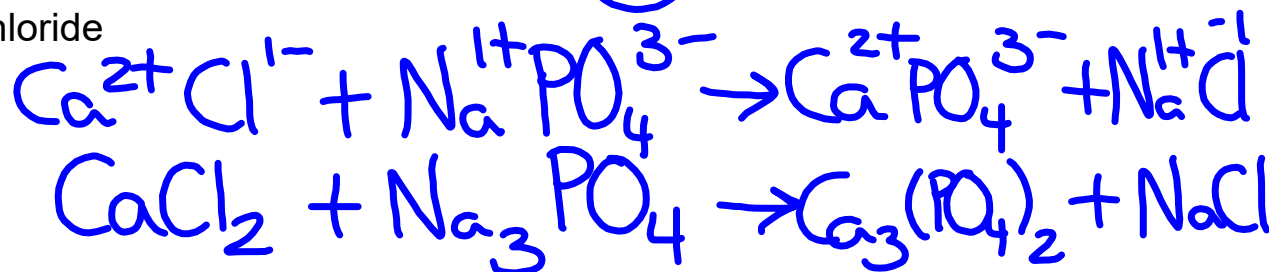
$2 Na + FeCl_2 \rightarrow 2 NaCl + Fe$

Reactants products

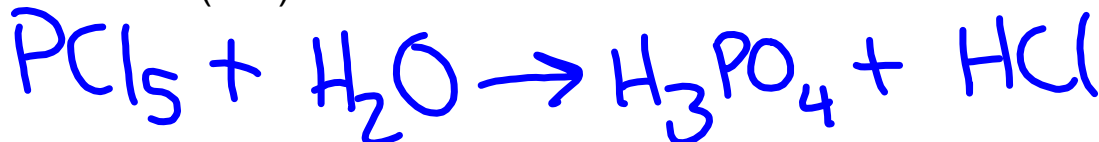
## More Examples Word/Chemical Equations

Write the chemical equations for the following:

1) calcium chloride + sodium phosphate  $\Rightarrow$  calcium phosphate + sodium chloride



2) phosphorous pentachloride + water  $\Rightarrow$  phosphoric acid ( $\text{H}_3\text{PO}_4$ ) + hydrochloric acid (HCl)



3) hydrogen + tin (IV) oxide  $\Rightarrow$  tin + water

