

Word Equations 2

Write the word equations below as chemical equations. Include states of matter appropriately.

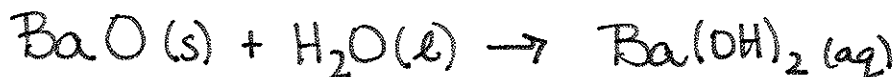
1. Nitrogen trihydride gas (ammonia gas) reacts with aqueous hydrochloric acid to form aqueous ammonium chloride.



2. When heated, solid calcium carbonate decomposes to form solid calcium oxide and carbon dioxide gas.



3. Solid barium oxide reacts with liquid water to form aqueous barium hydroxide.



4. Liquid acetaldehyde (CH_3CHO) decomposes to form two gases; carbon tetrahydride and carbon monoxide.



5. Solid zinc reacts with aqueous copper (II) nitrate to form aqueous zinc nitrate and solid copper.



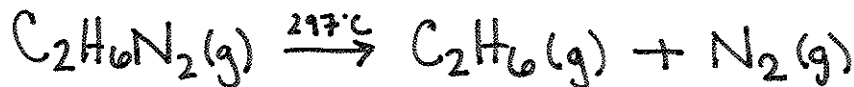
6. When heated, solid calcium sulfite decomposes to form solid calcium oxide and sulfur dioxide gas.



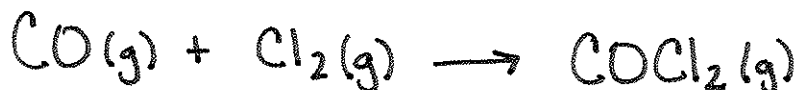
7. Solid iron reacts with aqueous sulfuric acid to form aqueous iron (II) sulfate and hydrogen gas.



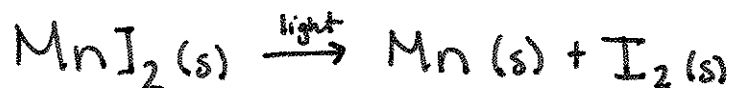
8. Gaseous azomethane ($\text{C}_2\text{H}_6\text{N}_2$) decomposes to form two gases; dicarbon hexahydride and nitrogen gas at 297°C .



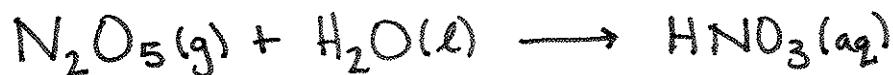
9. Gaseous carbon monoxide reacts with chlorine gas to form phosgene gaseous (COCl_2).



10. Solid manganese (II) iodide decomposes when exposed to light to form two solids; manganese and iodine.



11. Gaseous dinitrogen pentoxide reacts with liquid water to produce aqueous nitric acid.



12. Solid magnesium reacts with solid titanium (IV) chloride to produce two solids; magnesium chloride and titanium.



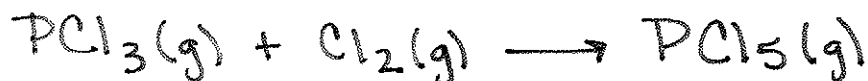
13. Solid carbon reacts with solid zinc oxide to produce solid zinc and carbon dioxide gas.



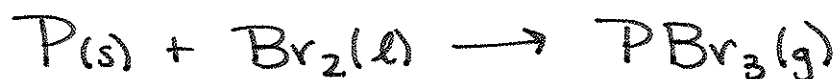
14. Liquid bromine reacts with solid sodium iodide to form solid sodium bromide and solid iodine.



15. Gaseous phosphorus trichloride reacts with chlorine gas to produce gaseous phosphorus pentachloride.



16. Solid phosphorus reacts with liquid bromine to produce gaseous phosphorus tribromide.



17. Solid calcium hydride reacts with liquid water to produce aqueous calcium hydroxide and hydrogen gas.



18. Aqueous sulfuric acid reacts with aqueous potassium hydroxide to produce aqueous potassium sulfate and liquid water.



19. Gaseous tricarbon octahydride reacts with oxygen gas to produce carbon dioxide gas and liquid water.



20. Hexacarbon hexahydride gas reacts with oxygen gas to produce carbon dioxide gas and gaseous water.

