

Chapter 8 Reactions Practice Answer Key

1. A sample of calcium carbonate is heated.



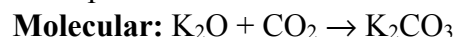
Net Ionic: same [not aqueous]

2. Sulfur trioxide gas is bubbled through water.



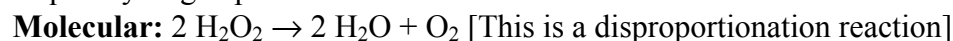
Net Ionic: same [H_2SO_3 is weak acid, does not dissociate]

3. Solid potassium oxide is heated in a container of carbon dioxide gas.



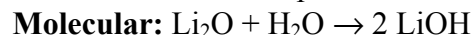
Net Ionic: same [not aqueous]

4. Liquid hydrogen peroxide is warmed.



Net Ionic: same [H_2O is covalent]

5. Solid lithium oxide is placed in water.



Net Ionic: $\text{Li}_2\text{O} + \text{H}_2\text{O} \rightarrow 2 \text{Li}^+ + 2 \text{OH}^-$ [soluble ionic]

6. Molten aluminum chloride is electrolyzed.



Net Ionic: same [not aqueous]

7. A small piece of solid sodium is heated with iodine vapor.



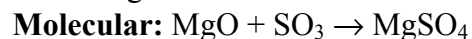
Net Ionic: same [not aqueous]

8. A sample of carbonic acid is heated.



Net Ionic: same [H_2CO_3 is a weak acid]

9. Solid magnesium oxide is heated with sulfur trioxide gas.



Net Ionic: same [not aqueous]

10. Dichlorine heptoxide gas is bubbled through water.



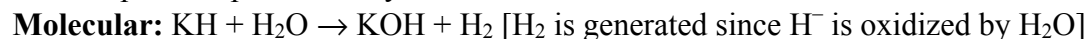
Net Ionic: $\text{Cl}_2\text{O}_7 + \text{H}_2\text{O} \rightarrow 2 \text{H}^+ + 2 \text{ClO}_4^-$ [strong acid]

11. A sample of solid strontium is added to water.



Net Ionic: $\text{Sr} + 2 \text{H}_2\text{O} \rightarrow \text{Sr}^{2+} + 2 \text{OH}^- + \text{H}_2$

12. A small piece of potassium hydride is reacted with water.



Net Ionic: $\text{KH} + \text{H}_2\text{O} \rightarrow \text{K}^+ + \text{OH}^- + \text{H}_2$