

Synthesis and Decomposition Reactions Practice

- 1.) $\text{Na} + \text{Cl}_2 \rightarrow$
- 2.) $2\text{H}_2\text{O} \rightarrow$
- 3.) $\text{H}_2 + \text{Cl}_2 \rightarrow$
- 4.) $\text{Li}_2\text{O} \rightarrow$
- 5.) $\text{Be} + \text{F}_2 \rightarrow$
- 6.) $\text{Mg} + \text{O}_2 \rightarrow$
- 7.) $\text{K} + \text{Cl}_2 \rightarrow$
- 8.) $\text{Fe} + \text{O}_2 \rightarrow$ (Hint: Fe has a +3 charge)
- 9.) $\text{Na} + \text{O}_2 \rightarrow$
- 10.) $\text{K} + \text{Br}_2 \rightarrow$
- 11.) $\text{MgCl}_2 \rightarrow$
- 12.) $\text{H}_2\text{O} \rightarrow$
- 13.) $\text{Ag}_2\text{O} \rightarrow$
- 14.) $\text{KBr} \rightarrow$
- 15.) $\text{CsCl} \rightarrow$
- 16.) Potassium reacts with iodine \rightarrow
- 17.) Hydrogen reacts with chlorine \rightarrow
- 18.) Potassium oxide decomposes \rightarrow
- 19.) Aluminum sulfide decomposes \rightarrow
- 20.) Copper reacts with oxygen \rightarrow (Hint: Cu has a +2 charge)

Predict the missing portion of the following:

- 21.) $\text{CaO} \rightarrow \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$
- 22.) $\text{NaBr} \rightarrow \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$
- 23.) $\text{LiI} \rightarrow \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$
- 24.) $\underline{\hspace{2cm}} \rightarrow \text{Cs} + \text{I}_2$
- 25.) $\underline{\hspace{2cm}} \rightarrow \text{Ca} + \text{N}_2$
- 26.) $\underline{\hspace{2cm}} \rightarrow \text{CaO}$
- 27.) $\text{HgO} \rightarrow \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$
- 28.) $\underline{\hspace{2cm}} \rightarrow \text{Na} + \text{Cl}_2$