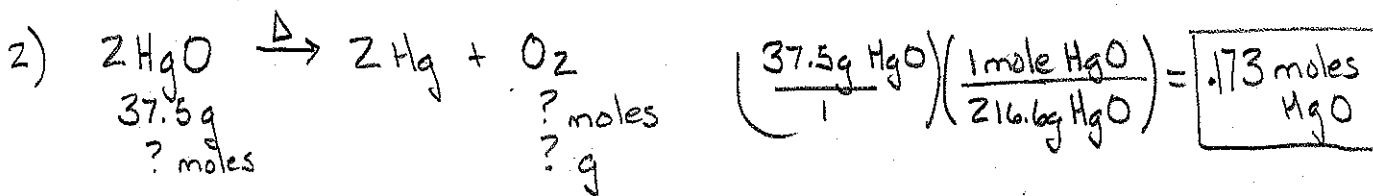


$$\left( \frac{12.7 \text{g Mg}}{1} \right) \left( \frac{1 \text{ mole Mg}}{24.3 \text{g Mg}} \right) \left( \frac{1 \text{ mole O}_2}{2 \text{ mole Mg}} \right) \left( \frac{32.0 \text{g O}_2}{1 \text{ mole O}_2} \right) = \boxed{8.36 \text{g O}_2}$$

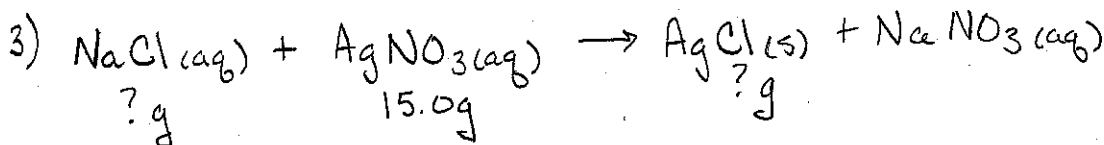
$$\left( \frac{12.7 \text{g Mg}}{1} \right) \left( \frac{1 \text{ mole Mg}}{24.3 \text{g Mg}} \right) \left( \frac{2 \text{ mole MgO}}{2 \text{ mole Mg}} \right) \left( \frac{40.3 \text{g MgO}}{1 \text{ mole MgO}} \right) = \boxed{21.1 \text{g MgO}}$$



$$\left( \frac{37.5 \text{g HgO}}{1} \right) \left( \frac{1 \text{ mole HgO}}{216.6 \text{g HgO}} \right) = \boxed{.173 \text{ moles HgO}}$$

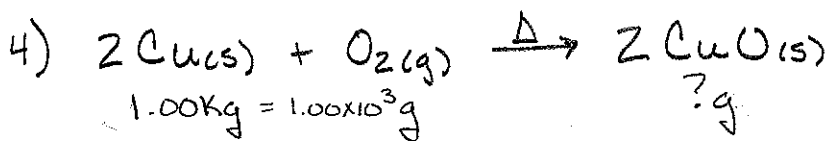
$$\left( \frac{.173 \text{ mole HgO}}{1} \right) \left( \frac{1 \text{ mole O}_2}{2 \text{ mole HgO}} \right) = \boxed{.0866 \text{ mole O}_2}$$

$$\left( \frac{.0866 \text{ mole O}_2}{1} \right) \left( \frac{32.0 \text{g O}_2}{1 \text{ mole O}_2} \right) = \boxed{2.77 \text{g O}_2}$$



$$\left( \frac{15.0 \text{g AgNO}_3}{1} \right) \left( \frac{1 \text{ mole AgNO}_3}{169.9 \text{g AgNO}_3} \right) \left( \frac{1 \text{ mole AgCl}}{1 \text{ mole AgNO}_3} \right) \left( \frac{143.4 \text{g AgCl}}{1 \text{ mole AgCl}} \right) = \boxed{12.7 \text{g AgCl}}$$

$$\left( \frac{15.0 \text{g AgNO}_3}{1} \right) \left( \frac{1 \text{ mole AgNO}_3}{169.9 \text{g AgNO}_3} \right) \left( \frac{1 \text{ mole NaCl}}{1 \text{ mole AgNO}_3} \right) \left( \frac{58.5 \text{g NaCl}}{1 \text{ mole NaCl}} \right) = \boxed{5.16 \text{g NaCl}}$$



$$\left( \frac{1.00 \times 10^3 \text{g Cu}}{1} \right) \left( \frac{1 \text{ mole Cu}}{63.5 \text{g Cu}} \right) \left( \frac{2 \text{ mole CuO}}{2 \text{ mole Cu}} \right) \left( \frac{79.5 \text{g CuO}}{1 \text{ mole CuO}} \right) = \boxed{1,250 \text{g CuO}}$$