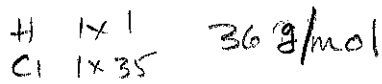


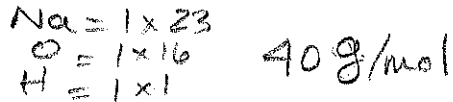
A2 mole WS mole \leftrightarrow mass

① $59 \text{ g HCl} = \text{--- mol}$



$$\frac{59 \text{ g HCl}}{1} \bigg| \frac{1 \text{ mol HCl}}{36 \text{ g HCl}} = \boxed{1.64 \text{ mol HCl}}$$

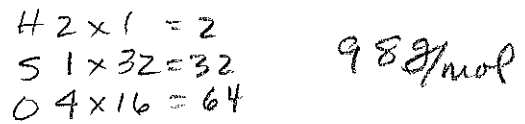
② $0.46 \text{ mol NaOH} = \text{--- g}$



$$\frac{0.46 \text{ mol NaOH}}{1} \bigg| \frac{40 \text{ g/mol}}{1 \text{ mol}} = \boxed{18.4 \text{ g NaOH}}$$

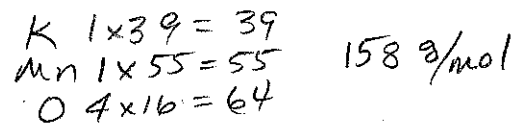
③ $35 \text{ g H}_2\text{SO}_4$ | 1 mol
1 | 98 g

$$= \boxed{0.36 \text{ mol H}_2\text{SO}_4}$$

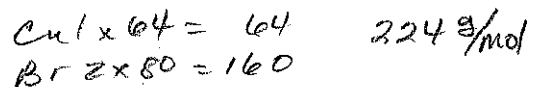


④ 877 g KMnO_4 | 1 mol
1 | 158 g

$$= \boxed{5.55 \text{ mol KMnO}_4}$$

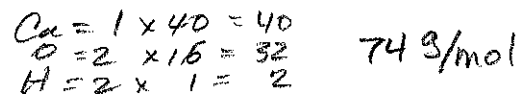


⑤ 3.4×10^{24} moles $\text{CuBr}_2 = \text{--- g}$



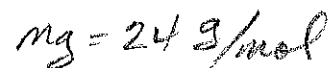
$$\frac{3.4 \times 10^{24} \text{ mol CuBr}_2}{1} \bigg| \frac{224 \text{ g}}{1 \text{ mol}} = \boxed{7.62 \times 10^{26} \text{ g CuBr}_2}$$

⑥ $0.56 \text{ mol Ca(OH)}_2 = \text{--- g}$



$$\frac{0.56 \text{ mol Ca(OH)}_2}{1} \bigg| \frac{74 \text{ g}}{1 \text{ mol}} = \boxed{41.44 \text{ g Ca(OH)}_2}$$

⑦ $4.0 \times 10^{23} \text{ g Mg} = \text{--- mol}$



$$\frac{4.0 \times 10^{23} \text{ g Mg}}{1} \bigg| \frac{1 \text{ mol}}{24 \text{ g}} = \boxed{1.67 \times 10^{-24} \text{ mol Mg}}$$

$$\textcircled{8} \quad 49 \text{ g H}_2\text{O} = \text{--- mol H}_2\text{O}$$

$$\begin{aligned} \text{H } 2 \times 1 &= 2 \text{ g} \\ \text{O } 1 \times 16 &= 16 \text{ g} \\ &= 18 \text{ g/mol} \end{aligned}$$

$$\frac{49 \text{ g H}_2\text{O}}{1} \Bigg| \frac{1 \text{ mol H}_2\text{O}}{18 \text{ g H}_2\text{O}} = \boxed{2.4 \text{ mol H}_2\text{O}}$$

$$\textcircled{9} \quad 6.4 \text{ g Fe} = \text{--- mol Fe} \quad \text{Fe} = 1 \times 56 = 56 \text{ g/mol}$$

$$\frac{6.4 \text{ g Fe}}{1} \Bigg| \frac{1 \text{ mol Fe}}{56 \text{ g Fe}} = \boxed{0.11 \text{ mol Fe}}$$

$$\textcircled{10} \quad 4.5 \text{ mol HNO}_3 = \text{--- g HNO}_3$$

$$\begin{aligned} \text{H} &= 1 \times 1 = 1 \\ \text{N} &= 1 \times 14 = 14 \\ \text{O} &= 3 \times 16 = 48 \\ &= 63 \text{ g/mol} \end{aligned}$$

$$\frac{4.5 \text{ mol HNO}_3}{1} \Bigg| \frac{63 \text{ g HNO}_3}{1 \text{ mol HNO}_3} = \boxed{283.5 \text{ g HNO}_3}$$

$$\textcircled{11} \quad 2.1 \times 10^{-10} \text{ g PBr}_5 = \text{--- mol PBr}_5$$

$$\begin{aligned} \text{P} &= 1 \times 31 = 31 \\ \text{Br} &= 5 \times 80 = 400 \\ &= 431 \text{ g/mol} \end{aligned}$$

$$\frac{2.1 \times 10^{-10} \text{ g PBr}_5}{1} \Bigg| \frac{1 \text{ mol PBr}_5}{431 \text{ g PBr}_5} = \boxed{4.87 \times 10^{-13} \text{ mol PBr}_5}$$

$$\textcircled{12} \quad 9.6 \text{ mol NiSO}_4 = \text{--- g NiSO}_4$$

$$\begin{aligned} \text{Ni} &= 1 \times 59 = 59 \\ \text{S} &= 1 \times 32 = 32 \\ \text{O} &= 4 \times 16 = 64 \\ &= 155 \text{ g/mol} \end{aligned}$$

$$\frac{9.6 \text{ mol NiSO}_4}{1} \Bigg| \frac{155 \text{ g NiSO}_4}{1 \text{ mol NiSO}_4} = \boxed{1488 \text{ g NiSO}_4}$$

$$\textcircled{13} \quad 1.15 \text{ mol HC}_2\text{H}_3\text{O}_2 = \text{--- g HC}_2\text{H}_3\text{O}_2$$

$$\begin{aligned} \text{H} &= 4 \times 1 = 4 \\ \text{C} &= 2 \times 12 = 24 \\ \text{O} &= 2 \times 16 = 32 \\ &= 60 \text{ g/mol} \end{aligned}$$

$$\frac{1.15 \text{ mol HC}_2\text{H}_3\text{O}_2}{1} \Bigg| \frac{60 \text{ g HC}_2\text{H}_3\text{O}_2}{1 \text{ mol HC}_2\text{H}_3\text{O}_2} = \boxed{69 \text{ g HC}_2\text{H}_3\text{O}_2}$$

$$\textcircled{14} \quad 65.7 \text{ g AgNO}_3 = \text{--- mol AgNO}_3$$

$$\begin{aligned} \text{Ag} &= 1 \times 108 = 108 \\ \text{N} &= 1 \times 14 = 14 \\ \text{O} &= 3 \times 16 = 48 \\ &= 170 \text{ g/mol} \end{aligned}$$

$$\frac{65.7 \text{ g AgNO}_3}{1} \Bigg| \frac{1 \text{ mol AgNO}_3}{170 \text{ g AgNO}_3} = \boxed{0.39 \text{ mol AgNO}_3}$$

15) $0.25 \text{ mol Sr}_3\text{P}_2 = \text{--- g Sr}_3\text{P}_2$

Sr $3 \times 88 = 264$
P $2 \times 31 = 62$
 $= 326 \text{ g/mol}$

$0.25 \text{ mol Sr}_3\text{P}_2$	$326 \text{ g Sr}_3\text{P}_2$
1	$1 \text{ mol Sr}_3\text{P}_2$

$$= \boxed{81.5 \text{ g Sr}_3\text{P}_2}$$