

$$\begin{array}{r}
 1) \quad 945.5\text{g} \\
 \quad 12.74\text{g} \\
 \hline
 95.824
 \end{array}$$

95.8g

$$2) \quad 0.102\text{cm} \times \frac{10\text{mm}}{1\text{cm}} = 1.02\text{mm}$$

$$\begin{array}{r}
 1.02\text{mm} \\
 11.6\text{mm} \\
 \hline
 12.62\text{mm}
 \end{array}$$

12.6mm

Ignore odd even rule

$$3) \quad a. \quad 7.038\text{g}$$

$$c. \quad 0.002865$$

$$b. \quad 1.576 \times 10^4\text{m} \quad d. \quad 8.310 \times 10^6\text{J}$$

$$\begin{aligned}
 4) \quad (3.7\text{cm})^3 &= 50.65\text{cm}^3 \times \frac{1\text{g}}{\text{cm}^3} \\
 &\times \frac{1\text{kg}}{1000\text{g}} = 0.05065\text{kg}
 \end{aligned}$$

$$0.05065\text{kg} < 1\text{kg}$$

5) salt, sugar

6) S, Fe, N₂

7) color, Melting Pt

$$9) 6.75 \text{ m}^3 \times \frac{1000 \text{ L}}{1 \text{ m}^3} \times \frac{10^6 \mu\text{L}}{1 \text{ L}} \\ = 6.75 \times 10^9 \mu\text{L}$$

10) a. 5 sigs b. 2 sigs c. 3 sigs

11) a. $1.05 \times 10^4 \text{ g}$ b. 0.038 mL

c. $8.65 \times 10^3 \text{ M}$ d. 7.34 cm^2 e. 1.68 s

$$12) 795 \text{ g} \times \frac{1 \text{ cm}^3}{7.86 \text{ g}} \times \frac{1}{0.887 \text{ mm}} \\ \times \frac{10 \text{ mm}}{1 \text{ cm}} = 1.14 \times 10^3 \text{ cm}^2$$

$$13) \begin{array}{r} 8.735 \text{ g} \\ 2.3 \text{ g} \\ \hline 93.683 \text{ g} \\ \hline 104.718 \text{ g} \end{array} \quad 104.7 \text{ g}$$

