

1. Determine the Mass of Iron lost by the nail.

$$\begin{array}{r} 17.07 \text{ g} \quad \text{mass of nail before reaction} \\ - 14.42 \text{ g} \quad \text{mass of nail after reaction} \\ \hline \underline{2.655} \quad \text{mass lost by the nail} \end{array}$$

$$= \underline{\underline{2.65 \text{ g}}}$$

2. Number of Moles of Iron Used

mass of iron used 2.65g

Molar mass of Iron = 56

$$\text{Moles} = \frac{\text{Mass}}{\text{Molar mass}}$$

$$= \frac{2.65}{56} = 0.04732$$

$$= \underline{\underline{0.04732 \text{ moles}}}$$