

60 ReviewIsotopes : Manganese-53Atomic mass
(amu)

53 amu

(1 atom = 53 amu)

Mass #
($p^+ + n^0$)Molar Mass
(g/mol)

53 g/mol (53 g = 1 mol)

Periodic TableAvg. Molar Mass

54.94 g/mol (54.94 g = 1 mol)

60 ReviewPhosphoric Acid [H₃PO₄](PO₄)₁ = 1

Hydrogen [H]

3

1.01 g

(PO₄)₂ = 2Phosphate [PO₄]

1

94.97 g

Phosphoric Acid [H₃PO₄]

98.00 g/mol

PO₄

P: 1 | 30.97 g

O: 4 | 16.00 g

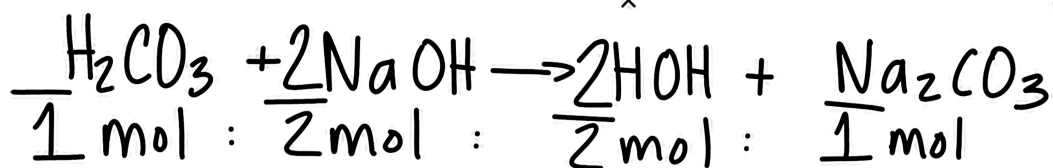
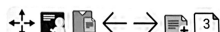
PO₄ = 94.97 g

6D Review

Convert $59.2 \text{ L SO}_2(g) \rightarrow \text{mol SO}_2(g)$
 $[1 \text{ mol} = 22.4 \text{ L}]$

$$\frac{59.2 \cancel{\text{L SO}_2}}{22.4 \cancel{\text{L SO}_2}} \times 1 \text{ mol SO}_2 = 2.64 \text{ mol SO}_2(g)$$

$$\frac{\text{Vol} \rightarrow \text{mol}}{\text{(start) LA} \mid 1 \text{ mol LA}} \\ \frac{\quad \quad \quad}{22.4 \text{ LA}} \\ = \text{--- mol LA}$$



Convert $59.3 \text{ L NaOH to mol NaOH} \rightarrow \text{mol HOH} \rightarrow \text{Vol HOH (L)}$

$$\frac{59.3 \cancel{\text{L NaOH}}}{22.4 \cancel{\text{L NaOH}}} \times \frac{2 \cancel{\text{mol NaOH}}}{1 \cancel{\text{mol NaOH}}} \times \frac{2 \cancel{\text{mol HOH}}}{2 \cancel{\text{mol HOH}}} \times \frac{22.4 \text{ L HOH}}{1 \cancel{\text{mol HOH}}} = 59.3 \text{ L HOH(g)}$$

