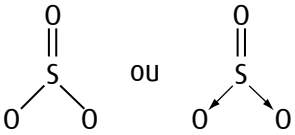
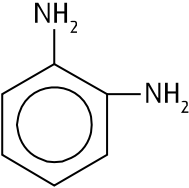
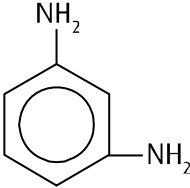
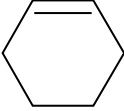
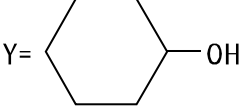
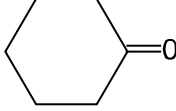
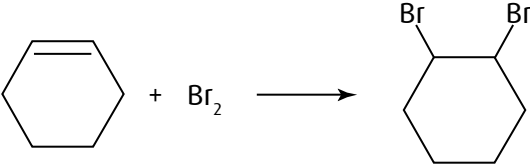


PADRÃO DE RESPOSTAS
(VALOR DE CADA QUESTÃO= 2 PONTOS)

Questão	Resposta
1	<p>Massa de KNO_3 puro = $1515 \times 0,8 = 1212 \text{ g}$ $4 \text{ mols de } \text{KNO}_3 \rightarrow 8 \text{ mols de gases}$</p> <p>$4 \times 101 \text{ g} \rightarrow 8 \times 22,4 \text{ L}$ $1212 \text{ g} \rightarrow x \quad x = 537,6 \text{ L}$</p> <p>Carbonato de potássio e sulfeto de potássio.</p>
2	<p>$\text{Cd}(\text{OH})_2 \rightleftharpoons \text{Cd}^{2+} + 2 \text{OH}^-$</p> <p>$2 \times 10^{-5} \quad 2 \times 10^{-5} \quad 4 \times 10^{-5}$</p> <p>$K_{ps} = [\text{Cd}^{2+}] [\text{OH}^-]^2 = 2 \times 10^{-5} \times (4 \times 10^{-5})^2 = 3,2 \times 10^{-14} \text{ mol}^3 \times \text{L}^{-3}$</p>
3	<p>De acordo com Lewis, a amônia é uma base, pois dispõe de um par de elétrons livres para formar a ligação com o H^+.</p> <p>A solução ficará amarela.</p> <p>$\text{NH}_4\text{Cl}_{(s)} + \text{H}_2\text{O}_{(l)} \rightarrow \text{NH}_4\text{OH}_{(aq)} + \text{H}^+_{(aq)} + \text{Cl}^-_{(aq)}$</p>
4	<p>$\text{SO}_2_{(g)} + \frac{1}{2} \text{O}_2_{(g)} \rightarrow \text{SO}_3_{(g)}$</p> <p>$\Delta H^\circ \text{ reação} = \Delta H^\circ_f \text{ produtos} - \Delta H^\circ_f \text{ reagentes}$</p> <p>$\Delta H = (-394,6) - (296,8 + 0) = -97,8 \text{ kJ} \times \text{mol}^{-1}$</p> <p>  </p>
5	<p>$200 \text{ mg} \rightarrow 100 \text{ mg} \rightarrow 50 \text{ mg} \rightarrow 25 \text{ mg}$ Como foram decorridos 3 períodos de meia-vida, tem-se: $420 \div 3 = 140 \text{ dias}$.</p> <p>${}_{84}\text{Po}^{210} \rightarrow {}_2\alpha^4 + {}_{82}\text{Pb}^{206}$</p> <p>Em meio aquoso: $\text{PbSO}_4 \rightarrow \text{Pb}^{2+} + \text{SO}_4^{2-}$</p> <p>$2 \text{H}_2\text{O} \rightarrow 2 \text{H}^+ + 2 \text{OH}^-$</p> <p>Redução catódica: $\text{Pb}^{2+} + 2\text{e}^- \rightarrow \text{Pb}$</p> <p>Oxidação anódica: $2 \text{OH}^- \rightarrow \text{H}_2\text{O} + \frac{1}{2} \text{O}_2 + 2 \text{e}^-$</p> <p>Equação global: $\text{PbSO}_4 + \text{H}_2\text{O} \rightarrow \text{Pb} + \frac{1}{2} \text{O}_2 + 2\text{H}^+ + \text{SO}_4^{2-}$</p>
6	<p>Amostra B. Por apresentar maior número de partículas dissolvidas.</p> <p>Cálculo da diluição:</p> <p>$C_i \times V_i = C_f \times V_f$</p> <p>$280 \times V_i = 35 \times (V_i + 7)$</p> <p>$V_i = 1 \text{ L}$</p>

7	$\text{CaCO}_3 + 2 \text{HCl} \rightarrow \text{CaCl}_2 + \text{H}_2\text{O} + \text{CO}_2$ <p>Quartzo, galena e barita</p>
8	<p>Amida</p> <p>Uma das fórmulas:</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div>
9	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>X =</p>  </div> <div style="text-align: center;"> <p>Y =</p>  </div> <div style="text-align: center;"> <p>Z =</p>  </div> </div> <p>X = ciclohexeno Y = ciclohexanol Z = ciclohexanona</p>
10	<div style="text-align: center;">  </div> <p>Adição eletrofílica</p>