Problem Set 10

Reading

Chapter 20.1, 20.3 - 20.5

Exercises

Chapter 20: 29 (Include a Cell Diagram and Sketch a Picture of the Cell), 30 (Include a Cell Diagram and Sketch a Picture of the Cell), 33, 35, 37 (a,b), 55 (a,b).

Additional Exercises

1. The standard reduction potential for the reaction:

\[
2 \text{D}^+(aq) + 2e^- \rightarrow \text{D}_2(g)
\]

where D is deuterium, is –0.0034 V at 25°C. Calculate \(E^\circ\) and K at 25°C for the reaction:

\[
2 \text{H}^+(aq) + \text{D}_2(g) \rightarrow 2 \text{D}^+(aq) + \text{H}_2(g)
\]