

9 Electrochemistry - cells and electrolysis – Part 2 —Answers

Answers

Work through these after you have tried the questions yourself.

2.1 a galvanic cell uses a favorable reaction to produce electricity; an electrolytic cell uses electricity to force an unfavorable reaction.

2.2 the anode.

2.3 $E_{\text{cell}}^{\circ} = E_{\text{cathode}}^{\circ} - E_{\text{anode}}^{\circ} = 0.80 - (-0.44) = 1.24 \text{ V}$.

2.4 the reaction is favorable and runs on its own (the cell acts as a battery).

2.5 $Q = It = 1.5 \times (20 \times 60) = 1.5 \times 1200 = 1800 \text{ C}$.