Solutions

Each answer shows the steps, then the **result**.

2.1

- $Q = It$

2.2

- $Q = (3.0)(200) = 600$ C

2.3

- $\dfrac{9650}{96\,500} = 0.10$ mol

3.1 B

- 96 500 C (Faraday's constant)

3.2

(a)

- $Q = (5.0)(1930) = 9650$ C; mol $e^- = 9650/96\,500 = 0.10$ mol

(b)

- $Na^+ + e^- \rightarrow Na$ (1:1), so 0.10 mol Na; mass $= 0.10 \times 23 = 2.3$ g

3.3

- $Cu^{2+} + 2e^- \rightarrow Cu$, so mol Cu $= 0.40/2 = 0.20$ mol