

4 Titration, acids and bases, and redox – Part 2 — Answers

Answers

Work through these after you have tried the questions yourself.

2.1 the acid and base have reacted in exactly the right amounts (the moles match the equation).

2.2 moles of NaOH = $0.0250 \times 0.100 = 2.50 \times 10^{-3}$; equal moles of acid, so $[\text{acid}] = \frac{2.50 \times 10^{-3}}{0.0200} = 0.125 \text{ M}$.

2.3 $\text{H}^+ + \text{OH}^- \rightarrow \text{H}_2\text{O}$.

2.4 oxidation is loss of electrons; reduction is gain of electrons.

2.5 oxidized – it loses two electrons (OIL: Oxidation Is Loss).