

15 Halogenoalkanes – Part 2 —Answers

Answers

Work through these after trying the questions yourself.

15.1 (a) NaOH dissolved in water, with heat \ (b) NaOH dissolved in ethanol, with heat.

15.2 An alkene.

15.3 $\text{C}_2\text{H}_5\text{Br} + \text{NaOH} \rightarrow \text{C}_2\text{H}_4 + \text{NaBr} + \text{H}_2\text{O}$.

15.4 The iodoalkane reacts faster, because the C–I bond is the weakest, so it breaks most easily.

15.5 The C–Cl bond.

15.6 1-iodobutane gives a precipitate first. Its C–I bond is the weakest of the three, so it breaks most easily and releases I^- ions soonest, which form the silver iodide precipitate. The stronger C–Cl bond reacts more slowly.