

Question	Marking guidance	Mark	AO	Comments
10.1	<p>Q is calcium or magnesium bromide</p> <p>R is aluminium chloride</p> <p>S is iron(III) sulfate</p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>	<p>AO3 1b</p> <p>AO3 1b</p> <p>AO3 1b</p> <p>AO3 1b</p> <p>AO3 1b</p> <p>AO3 1b</p>	Mark this question independently
10.2	<p>$\text{Ba}^{2+} + \text{SO}_4^{2-} \longrightarrow \text{BaSO}_4$</p> <p>$[\text{Fe}(\text{H}_2\text{O})_6]^{3+} + 3\text{OH}^- \longrightarrow \text{Fe}(\text{H}_2\text{O})_3(\text{OH})_3 + 3\text{H}_2\text{O}$</p> <p>$2[\text{Fe}(\text{H}_2\text{O})_6]^{3+} + 3\text{CO}_3^{2-} \longrightarrow$ $2\text{Fe}(\text{H}_2\text{O})_3(\text{OH})_3 + 3\text{H}_2\text{O} + 3\text{CO}_2$</p> <p>$[\text{Fe}(\text{H}_2\text{O})_6]^{3+} + 4\text{Cl}^- \longrightarrow [\text{FeCl}_4]^- + 6\text{H}_2\text{O}$</p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p>	<p>AO1a</p> <p>AO1a</p> <p>AO1a</p> <p>AO1a</p>	