Question 13 (Answer: **C**)

- The concentrations are equal, yet the end point comes at half the acid's volume – so each alkali unit must supply two OH^-.
- That points to $Ba(OH)_2$ rather than NaOH or NH_3.
- The curve starts at a very low pH and finishes at a very high one, so both are strong: HCl with $Ba(OH)_2$.

Question 14 (Answer: **A**)

- Reaction 1 makes silver atoms in bright light, and that is what darkens the glass.
- Reactions 2 and 3 together regenerate Cu^+: it is used in one and remade in the other.
- A species consumed and then remade is a catalyst, so the copper ions catalyse the fading.