

- 16 A student investigated the chloride of a Period 3 element. This is what the student wrote down as their observations.

The compound was a white crystalline solid. It dissolved easily in water to give a solution of pH 12. When placed in a test-tube and heated in a roaring Bunsen flame, the compound melted after several minutes' heating.

What can be deduced from these observations?

- A At least one of the recorded observations is **not** correct.
- B The compound was magnesium chloride, $MgCl_2$.
- C The compound was phosphorus pentachloride, PCl_5 .
- D The compound was sodium chloride, $NaCl$.