



- 1 Which of the following physical properties is true of ionic compounds?
- A Have high melting and boiling points
  - B Cannot conduct electricity in molten state
  - C Dissolve in organic solvents
  - D Exist as liquids at room temperature
- 2 A compound exists as a gas at room temperature. It dissolves in organic solvents. It cannot conduct electricity whether in solid or aqueous state. This compound could be
- A sodium chloride,  $\text{NaCl}$ .
  - B magnesium oxide,  $\text{MgO}$ .
  - C zinc bromide,  $\text{ZnBr}_2$ .
  - D carbon dioxide,  $\text{CO}_2$ .
- 3 An ionic compound X has very high melting point and boiling point because
- A the cations and anions are big.
  - B the electrostatic force between the cations and anions is very strong.
  - C the intermolecular force between molecules X is weak.
  - D the molecules in compound X cannot move freely.
- 4 An ionic compound Y cannot conduct electricity in solid state because
- A the cations and anions cannot move freely in solid state.
  - B the compound only contains neutral molecules in solid state.
  - C the ionic bond in solid state is weak.
  - D there are no ions in solid state.
- 5 The table below shows the proton numbers of elements P, Q, R and S.

Element	Proton number
P	3
Q	6
R	8
S	1

Which two elements will form a compound with high melting point and boiling point?

- A Q and R
- B S and Q
- C P and R
- D R and S