

APOLLO

The metallic model

SL

Chemistry

First assessment 2025

6 questions | questions

9. Which metal has the strongest bonding?

- A. Mg
- B. Ca
- C. Sr
- D. Ba

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2225-0210

9. Which answer shows the correct order of metallic bond strength from strongest to weakest?
- A. $\text{Al} > \text{Mg} > \text{Na} > \text{K}$
 - B. $\text{Al} > \text{Mg} > \text{K} > \text{Na}$
 - C. $\text{Na} > \text{K} > \text{Mg} > \text{Al}$
 - D. $\text{K} > \text{Na} > \text{Mg} > \text{Al}$

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2225-0222

9. Which statement best explains the malleability of magnesium metal?
- A. The metal lattice is held together by the attraction between magnesium ions.
 - B. The outer shell electrons of magnesium are free to move.
 - C. The layers of magnesium ions can slide relative to each other.
 - D. There are strong attractions between the magnesium ions and the free moving electrons.

9. Which metal has the strongest metallic bond?

- A. Mg
- B. Al
- C. K
- D. Ga

8. Which properties depend on the movement of the delocalized electrons in a metal?

- I. Electrical conductivity
 - II. Thermal conductivity
 - III. Density
- A. I and II only
 - B. I and III only
 - C. II and III only
 - D. I, II and III

Turn over

11. What is the explanation for the malleability of metals?

- A. The bonds are strong.
- B. The bonds are weak.
- C. The bonds involve free electrons.
- D. The bonds do not have a specific direction.