ARKANSAS CHEMISTRY · UNIT 2 · 5 QUESTIONS

Bonding and Chemical Reactions — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **A Lewis diagram for water shows oxygen with two bonding pairs and**



A Two lone pairs

B No lone pairs

C Four lone pairs

D One lone pair

Understand It with Pulse | Flag a mistake

2 **Methane has a tetrahedral shape because its central carbon has four bonding pairs and**

A Two lone pairs

B No lone pairs

C One lone pair

D Three lone pairs

Understand It with Pulse | Flag a mistake

3 **Ancient stone pyramid with smooth triangular faces photographed from the front against a clear blue sky, no people, no text, large in frame. Ammonia has a pyramidal shape because nitrogen has three bonding pairs and**



A No lone pairs

B Two lone pairs

C One lone pair

D Four lone pairs

Understand It with Pulse | Flag a mistake

4 **Carbon dioxide is nonpolar overall even though its bonds are polar, because its linear shape makes bond dipoles**

- A Add together
- B Disappear
- C Become ionic
- D Cancel each other

Understand It with Pulse | Flag a mistake

5 **The energy diagram shown is for a reaction. The activation energy is**



- A 3
- B 5
- C 6
- D 8

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. A
2. B
3. C
4. D
5. B

© 2026 Brett Robbins. All Rights Reserved.