VIRGINIA CHEMISTRY · UNIT 2

Bonding and Chemical Reactions — Practice Test

Virginia Chemistry • 10 questions

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 double replacement reaction that forms an insoluble solid produces a**

- A precipitate
- B gas only
- C metal only
- D catalyst

Understand It with Pulse | Flag a mistake

2 **Compared with sugar, sodium chloride has a**

A lower melting point

B lower boiling point

C higher melting point

D weaker attraction between particles

Understand It with Pulse | Flag a mistake

3 **The total number of hydrogen atoms in $2H_2O$ is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **Metals are malleable because layers of metal ions can**

A break all bonds at once

B slide past each other without breaking the bonding

C form hydrogen bonds

D lose all their electrons

Understand It with Pulse | Flag a mistake

5 **Hydrogen chloride is polar because chlorine**

A attracts shared electrons more strongly than hydrogen

B has the same electronegativity as hydrogen

C loses an electron to hydrogen

D has no electrons

Understand It with Pulse | Flag a mistake

6 **In the balanced equation $4Fe + 3O_2 \rightarrow 2Fe_2O_3$, the coefficient of iron is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **An acid reacting with a carbonate produces carbon dioxide, water, and a**

A metal

B gas only

C salt

D base

Understand It with Pulse | Flag a mistake

8 **Boron trifluoride has a central boron atom bonded to three fluorine atoms and no lone pairs. The shape of the molecule is**

A linear

B trigonal planar

C bent

D tetrahedral

Understand It with Pulse | Flag a mistake

9 **The total number of ions in two formula units of NaCl is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **Combustion requires a fuel and**

A oxygen

B nitrogen

C carbon dioxide

D water

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	A	**5.**	A	**9.**	4
2.	C	**6.**	4	**10.**	A
3.	4	**7.**	C		
4.	B	**8.**	B		

© 2026 Brett Robbins. All Rights Reserved.