SASKATCHEWAN CHEMISTRY 30 · UNIT A · 25 QUESTIONS

Chemical Bonding — 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 bond formed by transfer of electrons between a metal and a nonmetal is called**

- A ionic bond
- B metallic bond
- C electronegativity
- D polar bond

Understand It with Pulse | Flag a mistake

2 **An ionic bond forms most often between a**

- A nonmetal and a nonmetal
- B metal and a nonmetal
- C metal and a metal
- D gas and a liquid

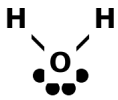
Understand It with Pulse | Flag a mistake

3 **A substance has molar mass 18 g per mole. The amount in 36 g of it, in moles, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **The diagram shows a water molecule with a bent shape. The shape is explained by**



A equal sharing only

B metallic bonding

C lone pairs on oxygen

D no bonds

Understand It with Pulse | Flag a mistake

5 **A bond formed by sharing electrons between nonmetals is called**

- A electronegativity
- B polar bond
- C nonpolar bond
- D covalent bond

Understand It with Pulse | Flag a mistake

6 **Water is polar because oxygen attracts shared electrons**

- A more strongly than hydrogen
- B less strongly than hydrogen
- C equally to hydrogen
- D not at all

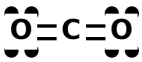
Understand It with Pulse | Flag a mistake

7 **A substance has molar mass 44 g per mole. The amount in 88 g of it, in moles, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **The diagram shows a linear molecule. A linear shape has a bond angle of about**



A 90 degrees

B 180 degrees

C 109 degrees

D 120 degrees

Understand It with Pulse | Flag a mistake

9 **A bond in which electrons move freely among metal atoms is called**

A polar bond

B nonpolar bond

C metallic bond

D intermolecular force

Understand It with Pulse | Flag a mistake

10 **Hydrogen bonding is strongest in water because of attractions between**

A hydrogen and carbon

B oxygen and oxygen only

C carbon and carbon

D hydrogen and oxygen

Understand It with Pulse | Flag a mistake

11 **A substance has molar mass 18 g per mole. The mass of 2 moles of it, in grams, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

12 **The ability of an atom to attract shared electrons is called**

A electronegativity

B nonpolar bond

C intermolecular force

D hydrogen bond

Understand It with Pulse | Flag a mistake

13 **VSEPR predicts shape from**

A mass of atoms

B repulsion between electron pairs

C colour of atoms

D temperature

Understand It with Pulse | Flag a mistake

14 **A substance has molar mass 58.5 g per mole. The amount in 58.5 g of it, in moles, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

15 **A covalent bond with unequal sharing of electrons is called**

A intermolecular force

B hydrogen bond

C polar bond

D VSEPR theory

Understand It with Pulse | Flag a mistake

16 **A molecule with four bonding pairs and no lone pairs has shape**

A linear

B bent

C trigonal planar

D tetrahedral

Understand It with Pulse | Flag a mistake

17 **A substance has molar mass 40 g per mole. The mass of 3 moles of it, in grams, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

18 **A covalent bond with equal sharing of electrons is called**

A nonpolar bond

B hydrogen bond

C VSEPR theory

D Lewis structure

Understand It with Pulse | Flag a mistake

19 **Metallic bonding explains why metals**

A are brittle always

B conduct electricity

C dissolve in water

D are gases

Understand It with Pulse | Flag a mistake

20 **Table salt, sodium chloride, is held together mainly by**

A covalent bonds

B ionic bonds

C hydrogen bonds only

D metallic bonds

Understand It with Pulse | Flag a mistake

21 **A force between molecules is called**

A VSEPR theory

B Lewis structure

C intermolecular force

D ionic bond

Understand It with Pulse | Flag a mistake

22 **A substance has molar mass 17 g per mole. The mass of 4 moles of it, in grams, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **A strong attraction between hydrogen and nitrogen, oxygen or fluorine is called**

A Lewis structure

B ionic bond

C covalent bond

D hydrogen bond

Understand It with Pulse | Flag a mistake

24 **Which substance would conduct electricity when melted**

A sugar

B sodium chloride

C pure water

D methane

Understand It with Pulse | Flag a mistake

25 **A theory that predicts molecular shape from electron pair repulsion is called**

A VSEPR theory

B ionic bond

C covalent bond

D metallic bond

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. A
2. B
3. 2
4. C
5. D
6. A
7. 2
8. B
9. C
10. D
11. 36
12. A
13. B
14. 1
15. C
16. D
17. 120
18. A
19. B
20. B
21. C
22. 68
23. D
24. B
25. A

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