SAT Chemistry Practice Test 16

SAT Chemistry Practice Test 2: Part A

1. Is measured in units of atmospheres or millimeters of mercury

A. Molarity

B. Molality

C. Mole fraction

D. Density

E. Partial pressure

2. Is measured in units of moles/kilogram

A. Molarity

B. Molality

C. Mole fraction

D. Density

E. Partial pressure

3. Is a measure of mass per unit volume

A. Molarity

B. Molality

C. Mole fraction

D. Density

E. Partial pressure

4. Is the quantity used in the calculation of boiling point elevation

A. Molarity

B. Molality

C. Mole fraction

D. Density

E. Partial pressure

5. Chiefly responsible for the relatively high boiling point of water

A. Hydrogen bonding

B. Ionic bonding

C. Network bonding

D. London dispersion force

E. Metallic bonding

6. Is present in liquid oxygen

A. Hydrogen bonding

B. Ionic bonding

C. Network bonding

D. London dispersion force

E. Metallic bonding

7. Is primarily responsible for the hardness of diamond

A. Hydrogen bonding

B. Ionic bonding

C. Network bonding

D. London dispersion force

E. Metallic bonding

8. Allows copper to conduct electricity

A. Hydrogen bonding

B. Ionic bonding

C. Network bonding

D. London dispersion force

E. Metallic bonding

9. Is present in solid KCl

A. Hydrogen bonding

B. Ionic bonding

C. Network bonding

D. London dispersion force

E. Metallic bonding

10. Has 7 valence electrons

A. Na^+

B. Al

C. F

D. Ti

E. Br^-

11. Has the electron configuration $1s^2 2s^2 2p^6 3s^2 3p^1$

A. Na^+

B. Al

C. F

D. Ti

E. Br^-

12. Has the same electron configuration as a neon atom

A. Na^+

B. Al

C. F

D. Ti

E. Br^-

13. Has valence electrons in *d* orbitals

A. Na^+

B. Al

C. F

D. Ti

E. Br^-

14. Will be colored blue

A. A 0.01-molar solution of HNO_3

B. A 0.01-molar solution of $HC_2H_3O_2$

C. A 0.01-molar solution of $Cu(NO_3)_2$

D. A 0.01-molar solution of $NaNO_3$

E. A 0.01-molar solution of NaOH

15. Will have a pH of 2

A. A 0.01-molar solution of HNO_3

B. A 0.01-molar solution of $HC_2H_3O_2$

C. A 0.01-molar solution of $Cu(NO_3)_2$

D. A 0.01-molar solution of $NaNO_3$

E. A 0.01-molar solution of NaOH

16. Will have the lowest freezing point

A. A 0.01-molar solution of HNO_3

B. A 0.01-molar solution of $HC_2H_3O_2$

C. A 0.01-molar solution of $Cu(NO_3)_2$

D. A 0.01-molar solution of $NaNO_3$

E. A 0.01-molar solution of NaOH

17. Will contain undissociated aqueous particles

A. A 0.01-molar solution of HNO_3

B. A 0.01-molar solution of $HC_2H_3O_2$

C. A 0.01-molar solution of $Cu(NO_3)_2$

D. A 0.01-molar solution of $NaNO_3$

E. A 0.01-molar solution of NaOH

18. Is the amount of energy that must be added to raise the temperature of 1 gram of a substance 1°C

A. Enthalpy change

B. Entropy change

C. Gibbs free energy change

D. Activation energy

E. Specific heat capacity

19. Its value indicates the spontaneity of a reaction

A. Enthalpy change

B. Entropy change

C. Gibbs free energy change

D. Activation energy

E. Specific heat capacity

20. Its value indicates whether a reaction is endothermic or exothermic

A. Enthalpy change

B. Entropy change

C. Gibbs free energy change

D. Activation energy

E. Specific heat capacity

21. Is the measure of the pull of the nucleus of an atom on the electrons of other atoms bonded to it

A. Ionization energy

B. Electronegativity

C. Atomic radius

D. Atomic number

E. Mass number

22. Is the energy required to remove an electron from an atom

A. Ionization energy

B. Electronegativity

C. Atomic radius

D. Atomic number

E. Mass number

23. Is equal to the number of protons in an atom

A. Ionization energy

B. Electronegativity

C. Atomic radius

D. Atomic number

E. Mass number