Q1W3-Test1- INtroduction to periodic table

Multiple Choice
Identify the choice that best completes the statement or answers the question.

____ 1. Which of the following elements is not used to dope in an *n*-type semiconductor?
a. antimony
b. arsenic
c. phosphorus
d. silicon

____ 2. _____ is an unreactive element.
a. Hydrogen
b. Chlorine
c. Helium
d. Sodium

____ 3. One of the elements whose existence was predicted by Mendeleev was _____.
a. aluminum
b. silicon
c. potassium
d. germanium

____ 4. Elements in the same group have similar _____.
a. electron structures
b. numbers of electrons
c. densities
d. periods

____ 5. Almost all of Earth's atmosphere is made up of _____.
a. metals
b. nonmetals
c. metalloids
d. synthetics

____ 6. Modern periodic law states that properties of elements repeat in a regular pattern when the elements are arranged in order of increasing _____.
a. density
b. atomic mass
c. atomic number
d. periodicity

____ 7. Which of the following elements is a metal?
a. Boron
b. Nitrogen
c. Magnesium
d. Carbon

____ 8. Which of the following is an example of periodicity?
a. eating breakfast
b. hitting a home run
c. writing a letter
d. sneezing

____ 9. Dobereiner's classification system was based on groups of elements he called _____.
a. families
b. periods
c. groups
d. triads

____ 10. Columns of the periodic table are known as _____.
a. groups
b. periods
c. similarities
d. rows

____ 11. According to ____ periodic table, the physical and chemical properties of elements are periodic functions of their atomic weights.
a. Dmitri Mendeleev's
b. John Newlands'
c. Henry Moseley's
d. Lothar Meyer's

____ 12. _____ is credited with discovering the periodic law.
a. Linus Pauling
b. Artemis Halogen
c. Dmitri Mendeleev
d. J.W. Dobereiner

____ 13. Which element is least likely to be used in semiconductors?
a. silicon
b. phosphorus
c. sulfur
d. boron

____ 14. The concept of triads suggested that the properties of an element are related to its _____.
a. atomic number
b. atomic mass
c. periodicity
d. melting point

____ 15. At room temperature, most elements are _____.

a. solid
b. liquid
c. gas
d. plasma

____ 16. Which groups are considered to be transition elements?
a. 1 and 2
b. 3 through 12
c. 1, 2, and 18
d. 13 through 18

____ 17. Chlorine, iodine, and _____ make up the halogen triad.
a. bromine
b. lithium
c. sodium
d. potassium

____ 18. All of the following elements are metals except _____.
a. aluminum
b. chlorine
c. sodium
d. copper

____ 19. The blank spaces in Mendeleev's periodic table represented _____.
a. liquids
b. gases
c. nonexistent elements
d. undiscovered elements

____ 20. Most semiconductors are _____.
a. metals
b. nonmetals
c. metalloids
d. synthetics

____ 21. Which of the following is not a characteristic of a metal?
a. lustrous
b. conducts heat
c. brittle
d. flexible

____ 22. An element with three valence electrons is used to dope a semiconductor. What type of semiconductor is formed?
a. *n*
b. *p*
c. *npn*
d. *pnp*

____ 23. All Group 1 elements have _____.
a. one valence electron
b. one energy level
c. unpredictable properties
d. one electron

____ 24. Which of the following events is periodic?
a. a basketball game
b. tides
c. snowfall
d. a single flower blooming

____ 25. Most elements are _____.
a. metals
b. nonmetals
c. metalloids
d. synthetic

____ 26. Which of the following is a transition element?
a. gallium
b. nickel
c. aluminum
d. tellurium

____ 27. The second row of the periodic table includes _____ elements.
a. 2
b. 8
c. 18
d. 32

____ 28. Horizontal rows of the periodic table are known as _____.
a. groups
b. families
c. periods
d. columns

____ 29. Earliest attempts at classifying elements was based on _____.
a. size of atoms
b. atomic numbers
c. similar properties
d. changing states

____ 30. A certain element is a gas and does not conduct electricity or heat. Which of the following is a possible number of valence electrons for the atoms of this element?
a. 1
b. 2
c. 3
d. 6