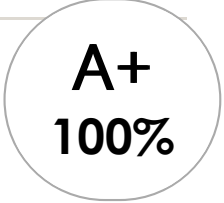


24 Multiple choice questions



A+
100%

- the combining power of an element
 - CORRECT:** valency
 - atom
 - alloy
 - mole

- a statement that matter can neither be created nor destroyed; it can only be changed from one form to another
 - law of combining volumes
 - ionisation energy
 - activity series of metals
 - CORRECT:** law of conservation of matter

- the mass in grams of one mole of a substance with units of grams per mole; calculated by adding the atomic weights of all atoms in the substance
 - mole
 - CORRECT:** molar mass
 - mineral
 - ore

- the negative electrode in an electrolysis cell
 - CORRECT:** cathode
 - anode
 - mole
 - atom

- the quantity of product predicted from the balanced chemical equation when known quantities of reactants undergo reaction
 - electrolysis
 - empirical formula
 - periodic table
 - CORRECT:** theoretical yield

6. the passing of a direct electric current through a solution or molten material to decompose it
 - a. electronegativity
 - b. molar mass
 - c. isotopes
 - d. **CORRECT: electrolysis**

7. the average mass of the atoms present in a naturally occurring element relative to the mass of an atom of carbon-12 taken as exactly 12 as the standard
 - a. mineral
 - b. **CORRECT: atomic weight**
 - c. anode
 - d. atom

8. the percentage by mass of each element of a compound
 - a. electronegativity
 - b. **CORRECT: percentage composition**
 - c. electrolysis
 - d. isotopes

9. the energy required to remove an electron from an atom in the gas state
 - a. **CORRECT: ionisation energy**
 - b. isotopes
 - c. mineral
 - d. valency

10. a tool which shows the relative reactivity of common metals from most reactive to least reactive, based on the chemical reactions they undergo
 - a. **CORRECT: activity series of metals**
 - b. atomic weight
 - c. periodic table
 - d. law of conservation of matter

11. the formula for a compound representing its atomic or ionic composition expressed in simple whole numbers e.g. the empirical formula for benzene, C₆H₆ IS CH
- mineral
 - theoretical yield
 - molar mass
 - CORRECT: empirical formula**
12. the positive electrode in an electrolysis cell
- ore
 - CORRECT: anode**
 - mole
 - cathode
13. a statement that equal volumes of all gases at the same temperature and pressure contain equal numbers of particles
- molar mass
 - Avogadro's number
 - CORRECT: Avogadro's law**
 - isotopes
14. atoms with the same number of protons, but different numbers of neutrons and so different mass
- anode
 - atom
 - CORRECT: isotopes**
 - mole
15. a table of the chemical elements in order of atomic number, arranged in rows and columns to illustrate periodic similarities and trends in physical and chemical properties
- atomic weight
 - CORRECT: periodic table**
 - anode
 - mole

16. an equation written to describe an oxidation or reduction half-reaction, showing the loss or gain of electrons by an atom, forming an ion
- CORRECT: half-equations**
 - cathode
 - valency
 - molar mass
17. a natural material obtained from the crust of the Earth that contains metals or other material
- mole
 - CORRECT: ore**
 - anode
 - atom
18. a measure of the ability of an element to attract electrons
- atomic weight
 - CORRECT: electronegativity**
 - electrolysis
 - periodic table
19. a statement that the volumes of reacting gases involved (at the same temperature and pressure) may be expressed in simple whole number ratios
- CORRECT: law of combining volumes**
 - law of conservation of matter
 - half-equations
 - Avogadro's number
20. the number of particles in one mole of any substance; equal to 6.022×10^{23}
- Avogadro's law
 - CORRECT: Avogadro's number**
 - molar mass
 - anode

21. a naturally occurring solid with a fixed chemical composition from which a metal or other material can be obtained
- mole
 - CORRECT: mineral**
 - valency
 - ore
22. a homogeneous mixture of a metal with one or more metals (or carbon) to give different properties e.g. steel and brass
- CORRECT: alloy**
 - atom
 - anode
 - mole
23. the smallest particle of matter that can take part in a chemical reaction; consists of a nucleus surrounded by electrons
- cathode
 - CORRECT: atom**
 - anode
 - alloy
24. the amount of substance that contains the same number of particles as there are in exactly 12.00 grams of carbon-12
- atom
 - ore
 - anode
 - CORRECT: mole**