Class : IX

Subject : Chemistry (HAP)

VIKAS
THE CONCEPT SCHOOL
HYDERABAD

HOLIDAY WORKSHEET

SOLID STATE

1. Solids which donot show the same physical properties in different directions are called as _____.
2. Glass is an example for _____ solid.
3. Amorphous solids are also called as _____ solids.
4. Crystalline solids have _____ melting points.
5. Old glass objects appear milky due to _____.
6. In primitve cubic unit cell, total number of atoms is _____.
7. In face centred unit cell, total number of atoms is _____.
8. In body centred unit cell, total number of atoms is _____.
9. In primitive cubic unit cell, the lattice points are present at the _____ of unit cell.
10. In body centred cubic unit cell, the lattice points are present at the _____ of unit cell.
11. In face centred cubic unit cell, the lattice points are present at the _____ of unit cell.
12. _____ solids have long range orderly arrangement of constituent particles.
13. Sodium chloride and quartz belongs to _____ type of solids.
14. _____ solid shows same values for refractive index when measured in different directions.
15. When a solid is cut with a sharp edge tool, they cut into two pieces and the newly generated surfaces are plain and smooth, the type of solid is _____.
16. The regular three dimensional array of lattice points in space is called _____.
17. The smallest repeating unit which when arranged in three dimensions gives the crystal lattice is called as _____.
18. Total number of cubic unit cell is _____.
19. Total number of centred unit cells is _____.
20. If the atoms of A are present at corners and atoms of B at the body centre, then formula of the formed compound is _____.
21. If the atoms of P occupy corners and atoms of Q occupy face centres, then the formula of the formed compound is _____.
22. If cations X^+ occupy edge centre and anions Y^- occupy corners, then the formula of the compound is _____.
23. If atoms of M occupy corners and atoms of N occupy alternate corners then formula of the compound is _____.
24. The conditions that favour the existence of a substance in the solid state is_____.
25. Diffusion of a solid is generally very slow or neglibible as the constituent particles have _____ position.
26. Volume of solids doesnot depend on _____ and _____ of a container.
27. Volume of solids is definite due to _____ and _____ of solids.
28. Substances can be converted to amorphous form either by _____ or _____
29. Amorphous solids can be converted into crystalline form on _____.
30. The no.of atoms in a cubic based unit cell having one atom on each corner and two atoms on each body diagonal are _____.

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Class : VIII

Subject : Chemistry (HAP)

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HOLIDAY WORKSHEET

ATOMIC STRUCTURE

1. The symbol of chromium element is _____.
2. The highest wavelength in visible region is exhibited by _____ colour.
3. If the atomic number of sodium is 11, then number of protons present in Na^+ is _____.
4. The subatomic particle that is not present in the nucleus of an atom is _____.
5. Number of protons and electrons in N^{3-} ion are _____ and _____ respectively.
6. The ratio of neutrons between carbon and silicon is _____.
7. Lightest subatomic particle is _____.
8. _____ and _____ are considered as nucleons of an atom.
9. The number of protons, electrons & neutrons present in $^{24}_{12}Mg$ are _____.
10. Total number of subatomic particles present in a tripositive ion of $_{27}CO^{59}$ is _____.
11. Among number of protons and electrons, the one that remains constant both in atomic state and ionic state is _____.
12. The element with no neutrons is _____.
13. Identify the isotopes, isobars and isotones among the following sets.

    a) $_{17}Cl^{35}$ & $_{17}Cl^{37}$ b) F^-, O^{2-} & Na^+ c) $_{18}Ar^{40}$ & $_{20}Ca^{40}$
14. Among isotopes the sub atomic particle that varies is _____.
15. Number of protons and neutrons in Dueterium is _____ and _____ respectively.
16. An example for isotones is _____.
17. The charge of an electron is equal to _____ coulombs.
18. The mass of an electron is equal to _____ kg.
19. Electron was discovered by _____.
20. Proton was discovered by _____.
21. Neutron was dicovered by _____.
22. Isotones differ in terms of _____ and _____, but have same number of _____.
23. Out of gamma (γ) - rays, X- rays & radio waves, the one with minimum wavelength is _____ and the one with maximum wavelength is _____.
24. The wave number of radiations, whose frequency is 4×10^{14} Hz is _____.
25. Among $_{10}A^{20}$, $_{11}B^{21}$, $_{11}C^{22}$, $_{12}D^{22}$, the isobasic pair is _____.
26. Rutherford's experiment that established nuclear model of an atom was carried out with the help of _____ rays.
27. The deflection of α - particles in Rutherfords experiment was detected by using _____.
28. Identify the isotopic pair, whose atomic number is equal to 6 and their atomic mass ratio is 6:7 _____.
29. The isoelectronic species whose atomic number is in a series and number of electrons in these negative ions is equal to 10 are _____, _____ and _____.
30. Rutherford's α -ray scattering experiment led to the discovery of _____.

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