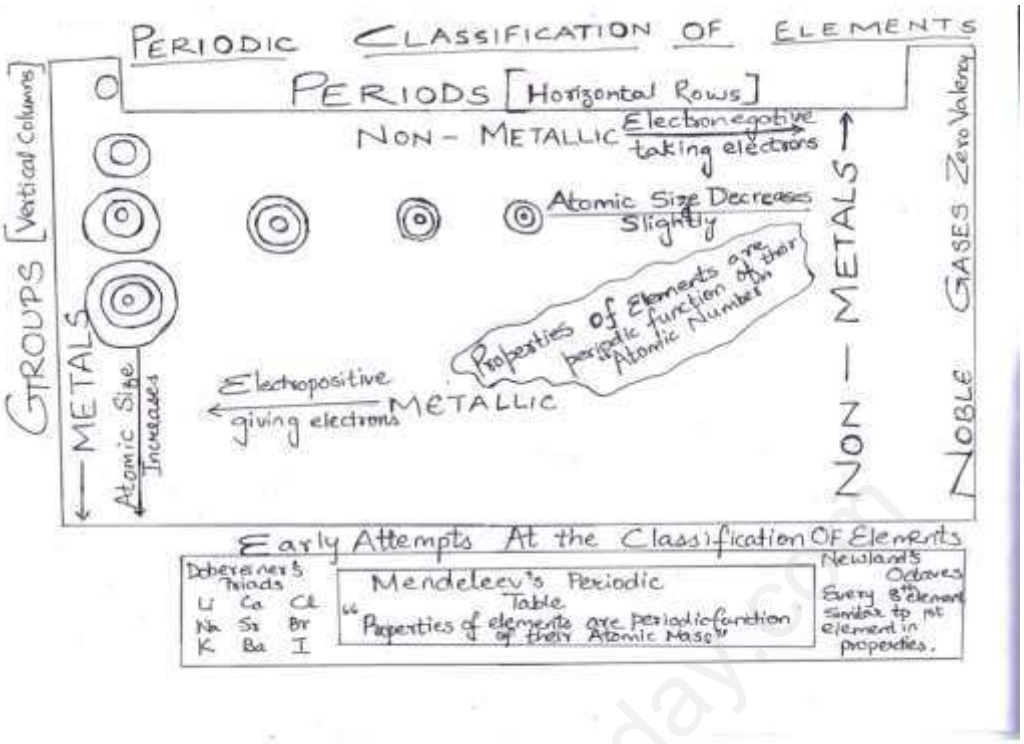
MIND MAP



FORMATIVE ASSESSMENT III

TIME: 1 HRS
M.M:30

Q.1what is the position of hydrogen in the modern periodic table? (1)

Q.2 where are the isotopes of the same elements having different atomic masses placed in the periodic table ? (1)

Q.3 An element M is the third group of the periodic table. Write the formula of its oxide? (1)

Q.4 What is the valency of magnesium with atomic no. 12 and chlorine with atomic no. 17? (1)`

Q.5what is the difference in number of shell in magnesium and sulphur? (1)

Q.6 on the basis of electronic configuration , how will you select (1)

i)the terminating member in a period .

ii) the chemically similar elements .

Q.7Give reason as to why the atomic radii of elements increase in a group while moving from top to bottom ? (2)

Q.8 element in a group of periodic table have similar chemical properties why ? (2)

Q.9 explain why atomic number is more important than atomic weight in determining chemical properties ? (2)

Q. 10 where in periodic table do we find :

i)elements classified as non metal .

ii) elements forming negative ions .

iii)elements with high melting points .

iv)elements forming positive ions . (2)

Q.11 in a group reactivity of metals increases while those of non metals decreases . Explain. (2)

Q.12 elements in a group of periodic table have similar chemical properties why (2)
Q.13 elements of group 18 are called zero group. Why? (2)
Q.14 write the electronic configuration of atoms of
A)potassium (K) B)argon (Ar) C)lithium (li) D)fluorine (F) E)chlorine (Cl) (5)

Q.15i)Why is potassium more reactive than lithium ?
ii)why is fluorine is more reactive than chlorine ?
iii)which is smaller in size Cl or Ar ?
iv)which is smaller in size Li or F ?
v)which is more electronegative F or Cl?
Q.16The atomic no. of an element is 17.
i)what is its valency?
ii) Whether it is a metal or non-metal?
iii) Whether it is bigger or smaller in size then an element of atomic no.18?
iv) What type of bonds it will form with elements of group 18?
v) How would its oxide behave with litmus solution? (5)

HOTS QUESTIONS

Q.1 an element has two electron in its M shell:
i) Identify the element. ?
ii) What type of ion will it form ?
iii) What will be the formula of its chloride ?
iv) Predict the solubility of its chloride ?
Q.2 which among the following elements whose atomic number are given below belong to the same period ? give the reason 17,10,20,12,19,15
Q.3 element X with atomic 12 and element Y with atomic number 17 reacts with hydrogen to form hydrides . Which of them is expected to have high melting points?
Q.4 why is position of hydrogen not justified in modern periodic table?

FORMATIVE ASSESSMENT IV

QUIZ

Q.1 Name the element with atomic number 12.
Q.2 Name a metal in making cans and a member of group14.
Q.3Name the most electronegative element in the periodic table.
Q.4 Name the horizontal rows in the periodic table .
Q.5 on moving across the period , atomic size of the element increase or decrease.
Q.6 who gave the classification on the basis of musical note .
Q.7Name two elements belonging to group one which can be cut with the help of knife .
Q.8 what name is given to the elements belonging to group 2 of the periodic table and why?
Q.9 Name the lustrous non metal having 7 valence electron .

Q.10 Name the highly reactive metal that give violet colour to flame.
Q.11 Name the gas used in coloured advertising lights having 2 valence electron .

DEBATE AND DISCUSSION

A) Drawbacks of Mendeleev's and modern periodic table.
B) Achievements of Mendeleev's and modern periodic table.
C) Advantages of modern periodic table in understanding chemistry.

PROJECTS

1 Power point Presentation on the following topics:
1. Modern Periodic Table based on the similarity of properties of elements
2. Contribution by various Scientists towards the development of Periodic Table.
3. PERIODIC CLASSIFICATION
1.Making flash cards to study atomic numbers electronic configuration and other properties of elements.
2.Make an outline sketch of the Modern Periodic Table.

TOPIC 3: HOW DO ORGANISMS REPRODUCE?

GIST OF THE LESSON

1) Reproduction: process by which living organism produce new individual of their own kind.
2) Creation of DNA copy: when the cell divides into two, each new cell gets a copy of each DNA or chromosomes.
3) Importance of variation: variations are created by DNA copying mechanism during sexual reproduction.
4) Asexual modes of reproduction:
a) Fission—binary & multiple fission
b) Fragmentation
c) Regeneration
d) Budding
e) Vegetative propagation
f) Spore formation
5) Sexual reproduction-
a) In flowering plant
b) In human beings
6) Parts of flowers
7) Pollination: self and cross pollination
8) Fertilization: male and female germ cell fuses to form zygote.
9) Puberty: The age, when reproductive organs become functional,(in female 10-12 years, in male 13-14 years).
10) Male reproductive system in human beings.
11) Female reproductive system in human beings.
12) Reproductive health-
a) To have awareness about STDs, (sexually transmitted disease).
b) Some common STDs are gonorrhea, syphilis & HIV-AIDS.
13) Contractive methods: to avoid pregnancy-

a) barrier method b)chemical methods c) surgical methods