



ASIAN INTERNATIONAL SCHOOL Class -X

Assignment

Solution

Periodic Classification of Elements

1. K will have more metallic character because it can lose electrons easily due to its bigger atomic size and less effective nuclear charge.
2. P and R will show similar chemical properties because they have the same number of valence electrons.
3. On the right hand side of the Periodic Table most of them are non metals, therefore they form acidic oxides.
4. It is because one proton and one electron is being added successively. Therefore effective nuclear charge increases , atomic size decreases.
5. Atomic mass of Na = (atomic mass of Li + atomic mass of K)/2 = (7 + 39)/2 = 23.
6. The valency of Mg is 2. The valency of Ba is also 2 as they belong to the same group.
Barium nitrate = $\text{Ba}(\text{NO}_3)_2$ Barium sulphate = BaSO_4
7. $\text{Ca}(20) = 2,8,8,2$
 - (a) It will be a metal
 - (b) Its valency is 2
8. (a) $\text{F} < \text{N} < \text{Be} < \text{Li}$
(c) $\text{Cl} < \text{Br} < \text{I} < \text{At}$
9. The name of the element is Potassium K(19)
 - (a) Group 1
 - (b) Period 4
 - (c) Electronic configuration – 2,8,8,1
10. $2n^2$ where n is the shell number