# INDIAN SCHOOL NIZWA - WORKSHEET

CHEMISTRY

CH : 10 S BLOCK ELEMENTS Class: XI

**ANSWER THE FOLLOWING**

1. List the factors on which reduction potential of a metal depend?
2. Contrast the action of heat on the following. $CaCO_3$ and $Ca(NO_3)_2$
3. Which out of $Na^+$ and $Mg^{2+}$ has greater polarizing power? Why?
4. **Give reasons for the following.**

a Alkali metals give characteristic flame colouration.

b. Beryllium resembles aluminium.

c. Potassium is more reactive than sodium.

d. Ionization enthalpy alkali metals decreases with increasing atomic number.

e. Beryllium and magnesium do not impart colour to flame whereas other alkaline earth metals do so.

f. Li show anomalous behavior in its group.

g. LiF is insoluble in water, but soluble in organic solvents.

h. In group II thermal stability of oxides decreases down the group.

**i.** Magnesium salts are hydrated.

j. $BeCl_2$ is soluble in organic solvents.

k. Solubility of alkaline earth metal hydroxides in water decreases down the group.

l. Compounds of alkaline earth metals are more extensively hydrated than the compounds of alkali metals.

m. Among the halides of lithium , LiI is the most covalent in nature.Why?

n. Account for the low solubilities of LiF and CsI.

o. First ionization of sodium is lower than that of magnesium, but second ionization enthalpy of sodium is higher than that of magnesium . Why?