INDIAN SCHOOL DARSAIT

DEPARTMENT OF CHEMISTRY

Subject: Chemistry Topic : s-block elements Date of Worksheet: 4.2.2019

Resource Person: Rohitha Date of Submission:_____

Name of the Student: _____ Class &Division: XI Roll Number: _____

1.	Why are halides of beryllium polymeric?	1
2.	Arrange the alkaline earth metal carbonates in the decreasing order of thermal stability.	1
3.	What is the chemical formula of Plaster of Paris?	1
4.	How does the basic character of hydroxides of alkali metals vary down the group?	1
5.	Among the alkali metals which has (i) Highest melting point (ii) Most electropositive character (iii) Lowest size of ion (iv) Strongest reducing character.	2
6.	Name the chief factors responsible for anomalous behaviour or lithium.	2
7.	Which out of Li and Na has greater value for the following properties: (i) Hydration enthalpy (ii) Stability of hydride (iii) Stability of carbonate (iv) Basic character of hydroxide	2
8.	Why are alkali metals not found in nature?	2
9.	Why are lithium salts commonly hydrated and those of the other alkali ions usually anhydrous?	2
10.	Beryllium and magnesium do not give colour to flame whereas other alkaline earth metals do so why?	2
11.	Why are alkali metals soft and have low melting points?	2
12.	Why is LiF almost insoluble in water whereas LiCl soluble not only in water but also in acetone?	2
13.	Give reason why alkali metals impart colour to the flame.	2
14.	The hydroxides and carbonates of sodium and potassium are easily soluble in water while the corresponding salts of magnesium and calcium are sparingly soluble in water. Explain	2

15.	When an alkali metal dissolves in liquid ammonia the solution can acquire different colours. Explain the reasons for this type of colour change	2
16.	State as to why a)a solution of Na_2CO_3 is alkaline? b)alkali metals are prepared by electrolysis of their fused chlorides? c) sodium is found to be more useful than potassium?	3
17.	What happens when: (i) Sodium metal is dropped in water? (ii) Sodium metal is heated in free supply of air? (iii)milk of lime reacts with chlorine?	3
18.	In what ways lithium shows similarities to magnesium in its chemical behaviour?	3
19.	a) explain the process of preparation of Na2CO3. b)why K2CO3 cannot be obtained by solvay process?	5
20.	a)why are Cs and K used as electrodes in photoelectric cells? b) Compare the alkali metals and alkaline earth metals with respect to (i) ionization enthalpy (ii) basicity of oxides and (iii) solubility of hydroxides.	5