OUR OWN HIGH SCHOOL – ALWARQA'A

Chemistry **Periodic Classification of elements** **Grade X**

EASY QUESTIONS

1) What is a triad ? List any three triads .
2) Why was Newlands method of classification called Newlands Octaves?
3) On what basis did Mendeleev classify the elements .
4) What were the merits and demerits of Mendeleev's periodic table .
5) What variation do you notice in the atomic size as you move from left to right in a period ,give reason for your answer.

Try these you will need to investigate a bit -.(High acheivers must try this as it will help you in grade 11)

1) **What are representative elements . Name some of them .**
2) **Why are group one elements called ALKALI METALS ?**
3) **The radii of a cation is much smaller than its corresponding atom . justify .**
4) **What is the outer shell electronic configuration of chalcogens ?**
5) **What is a diagonal relationship .name two metals (grp 1 and grp 2) which show this relationship . Give one reason for the same .**
6) **Alkali metals are called S block elements . Give reasons**
7) **The element Rubidium (Rb) has an atomic number of 37 and a mass of 85.**
   (a) How many electrons, protons and neutrons are there in an atom of Rubidium?

Based on your knowledge of Lithium, Sodium and Potassium PREDICT ...

(b) the physical properties of rubidium eg appearance, melting and boiling point atomic size, metallic nature , and its density (you may just say high or low)

(c) whether its melting or boiling point is higher or lower than that for potassium (group trends)
(d) the number of electrons in the outer shell and the symbol of the rubidium ion (explain)
(e) the formula of rubidium chloride and rubidium oxide and the type of chemical bonding involved
(f) what you would observe on adding rubidium to water containing universal indicator, and name the products formed and give a symbol equation for the reaction
(g) whether rubidium is more or less reactive than potassium, explain the group reactivity trend

8) **The element Astatine is in the same group as Cl, Br and I, but below iodine. PREDICT**

…..the appearance, physical state and formula of the molecules that make up the element will it be more or less reactive than fluorine .Give reason for you answer.