

PRESIDENT'S OFFICE

REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

GEITA ADVENTIST SECONDARY SCHOOL

FORM TWO HOLLIDAY PACKAGE 27TH APRIL 2020

CHEMISTRY

1. a) Below is a part of the periodic table and the numbers represents atomic numbers. Study the table carefully then answer the questions that follows:-

1							2
3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18
19	20						

- i) Write T in the space where a noble gas in period 3 would occupy
- ii) Write U in the space where the Alkali earth metal in period 3 would occupy
- iii) Write W in the space where the alkali metal in period 3 would occupy
- iv) Write X in space which could be occupied by an element in period 3 capable of forming an electronic configuration of 2:8:6
- v) Write Y in group II period 4 element
- vi) Write Z in group VI period 3 element

2. Assume you have visited the laboratory of one school in Mafia known as Vasco da Gam Secondary school and you noted that in the school laboratory the only materials available are: **CHEMICALS:** Manganese (IV) oxide, potassium chlorate and water
APPARATUS: Test tube, Gas jar, Round bottom flask, beehive stand, Bunsen burner, retort Stand, delivery tube, trough and stopper.

- a) As a form two student from Geita Adventist secondary school, what can you prepare from the material above? _____
- b) Draw a well labeled diagram to show how you will arrange your experiment apparatus and write a word equation from the reaction of chemical s given
- c) How can you test your product from (a) above?
- d) State three uses of a substance you prepared (a) above.

3. a) Write down the electronic configuration of

i) Ar = 18 ii) K = 19

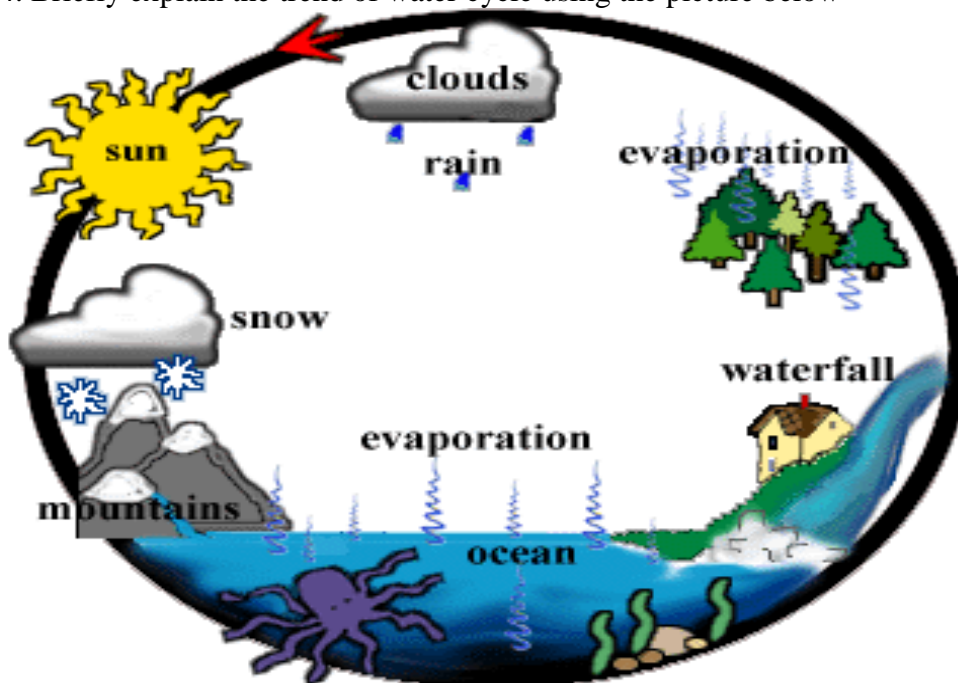
b) Silicon has three isotopes, silicon-28(92.2%), silicon-29(4.7%) and silicon-30(3.1%).

Calculate the R.A.M of silicon.

c) An element X has a mass number of 40 and 21 neutrons. Calculate the number of protons and electrons. Which element is represented by letter X?

d) Give the reasons as to why water not recommended for extinguish fire from electricity or from Liquids like petrol.

4. Briefly explain the trend of water cycle using the picture below



"ALL THE BEST"

Sir. Faraja R.

Subject teacher