

## Written assignment Science

1) Complete the chart using the Periodic table

Element	Chemical symbol	Number of electrons	Number of protons	Number of neutrons	Period	Group
	Cl					
Nitrogen						
		19				
			47			
	Hg					
Calcium				26		

2) Answer these questions

- a- How many atoms are there in this molecule:  $\text{NaC}_2\text{H}_3\text{O}_2$ ?
- b- What is the name given to a group of atoms chemically joined?
- c-  $\text{N}_2$  and  $\text{CaCO}_3$  are both molecules; but, what is the difference between them?
  
- d- Which molecule has more atoms: the octane ( $\text{C}_8\text{H}_{18}$ ) or the sodium nitrite ( $\text{NaNO}_2$ )?

Justify your answer.

3) Write the chemical formula

- a- Two atoms of nitrogen, one atom of carbon and three atoms of oxygen:
- b- Three atoms of carbon, eight atoms of hydrogen, one atom of nitrogen, five atoms of oxygen and one atom of phosphorous:

4) Classify the following substances into ELEMENT, SIMPLE MOLECULE, COMPOUND OR MIXTURE

- a- Sodium (Na):
- b- Milk (it is made with water, lactose, fat and proteins):
- c- Dry Ice ( $\text{CO}_2$ ):
- d- Hydrogen ( $\text{H}_2$ ):

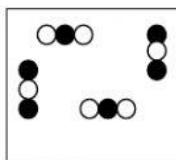
e- Alcohol ( $\text{CH}_3\text{OH}$ ):

f- Iron (Fe):

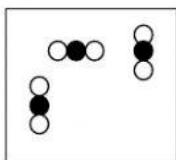
g- Bread (flour, water, yeast and salt):

h- Fluorine ( $\text{F}_2$ ):

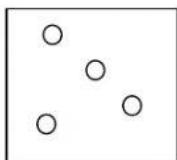
5) Match each diagram with its correct description



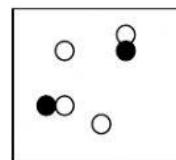
**A**



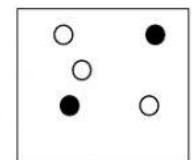
**B**



**C**



**D**



**E**

a- Element:

b- Mixture of two elements:

c- Compound:

d- Mixture of two compounds:

e- Mixture of a compound and an element: