## PROPOSED ASSESSMENT GRID

TEST TAKER'S NABWIRE SAMSON . STREAM.	
STREAM	SIGNATURE

CHEMISTRY PAPER 1

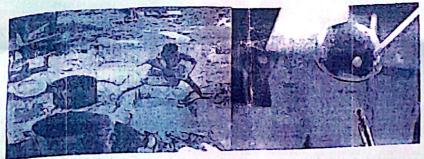
SENIOR 3

INSTRUCTION: RESPOND TO ALL ITEMS

**DURATION: 1:30 MINUTES** 

## ITEM 1

The Ministry of Energy and Mineral development has discovered some traces of sodium in Karamoja region of North Eastern Uganda. Residents have heard about the information are curious to know its composition and properties.



The area Member of Parliament has organized a sensitization workshop to be guided on environmental concerns of this product. You have been contacted to give some views as chemistry student.

## Task.

Using the knowledge of chemistry, you have attained.

a) Expid		63
i)	Category of the product	e
score 03; All 3.	Category of the product  It's a metal.  Loses Ht Outermost  a Cation. Foreseamele	electron to form
		Sodium.
Score 01: Any 1		
Score 00: None		

多。1940年的1月1日中国的1月1日中国的1月1日日间的1日日间的
ii) Likely properties of the product.
(03 scores)
Score Dr. M. Har Low me Iting Point
Identificant 4 properties ductile
Score 03: Atleast 4 protections ductive Points (doutefted Its SOFT PS)
Score D2: Atleast 2 proported to how shinning appearance
Score 01: Any one property
Score 00: No property
b) Help to guide him on the uses of the product. (01 score)
Used to make alloys like sodium amalgam.
Acoept any offen use
c) Sattle their warries are built at
c) Settle their worries on whether the product is environmentally friendly or not. (02 scores)
Exercisive sodium can after natural 02
e Co su steem soil of constant and after natural
plant growth and this can bon mitigated by
reduced use a sodium-based fertilizers.
ITEM 2
The manager of the laundry department of a new cleaning service unit in
one village where they use spring water has failed to raise profits in the
project.



They use too much of the detergent during the washing process. He keeps purchasing the same detergent and still no change thus making loses and puzzled.

			_
~	-	-	1.
	-		к

d)	problems he makes while choosing the product. (02 scores)  Chose a soard detergent instead a  Soares detergent
L \	11. 1
b)	Soap molecules contains two parts:  the hidrophilic part and hidrophowie part
	between water
	With constant agitation, the dirt
c)	Advice on the challenges associated
	Advice on the challenges associated with long term use of the product.  (02 scores)  Soap contain chemicals which cause
	Skin burney
	attented areas. Thomashing wasking the
	02/
d	Advice on the choice of the products.
	(03 scores)

jo.
Soapy detergent is gentle on skin
doring washing.
during washing.  Jt form scum with hard water B
Its. biodegradable
~
SECTION B
ITEM 3
Air which is a mixture of different components contains 21% oxygen.  Due to a wide spread of respiratory illness caused by COVID-19, there
was increased demand for oxygen by patients in hospitals. The
government supply of oxygen is not enough and is planning to set up an
oxygen production plant with minimal environmental impact.
However, the science club members in your school would like to know
how the process of production will be carried out.
TASK
As about the state of the state

As chemistry student, make up a write up you will use during the presentation. (11 scores).

**END** 

ITEM 3 Manyfacture of Docygen. Raw materials: 1 Rm Air. 02 Reject - Liquid air. Process & production. Air is passed through air filters to remove dust and smoke particles. Air is passed through concentrated soolium hydrociale solution to remove Carlon disocide. Air is-then passed through isilicagel to absort Water vapour. Carbon dioxide and water vapour are removed from fir be fore it is liquertied because they solidity and block the apparatus. The remaining components of air are repeatedily compressed at 200 atmospheres and allowed to ccol at about -200°c to obtain tiquid air. The Liquid air is practionally distilled using a tractionating column.
Nétrogen boils off first be cause it has a lower boiling point (-196°C) leaving behind opcygen with higher boiling troint (-183°C). Both nitrogen and occurren collected contain traces of noble gares. fure coeygen is then stored under pressure in steel cylinders.

score 03, 4-5 mentioned (V, Cp, Ch, Pr, Cd)

Any 3 mentioned Score 02;

Any one mentioned score oi;

No process of production. score oo,

Side affect & the trocess of production of opengen and mitigation. Eachlosion of Oxygen Cylinders due to high pressure This can cause other materials to catch fire hence, alamage of equipments; and injury to workers. This can be mitigated by regular maintenance and mornitoring of cylinders. Accept any other side effect + Explanation + Mitigation. Score 03: One side effect + Explanation + Mitigation. Score 02; one side effect + Explanation or side effect + mitigation. score 01: One side effect or Explanation or Mitigation. Score 00: None identified. Social benefits. So Source of emptoyment opportunities which results into increased income among the residents hence "tandards of tiving 03 Accept any other social benefit of social benefit effect + Impact of of the benefit. score 03: one social benefit + Effect gitte benefit + Impact & benefit. Score 02: one social benefit + Effect 9 the benefit or social benefit + impact q benefit or . E Hect & benefit + impact & benefit. Score o1: one social benefit. or one effect I benefit. or one impact of benefit. Score 00; None Identified.