

**COMPETENCE BASED CURRICULUM**Kenya Junior Secondary Education Assessment  
**FORMATIVE ASSESSMENT****ENDTERM 1****INTEGRATED SCIENCE**TIME  
2 HRS

SCHOOL: .....

NAME: .....

SIGNATURE: .....ASSESSMENT NO.....

**RUBRICS (for official use)**

MARK SCORE RANGE	<i>Below 40</i>	<i>40-59</i>	<i>60-79</i>	<i>80-100</i>
PERFORMANCE LEVEL	<i>Below expectation</i>	<i>Approaching expectations</i>	<i>Meeting expectations</i>	<i>Exceeding expectations</i>

FOR FACILITATOR'S USE ONLY

OUT OF	100%
LEARNERS SCORE	
PERCENTAGE SCORE	
PERFORMANCE LEVEL	

**Answer all Questions**

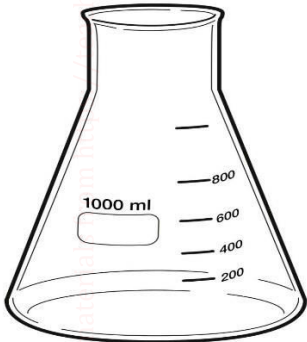
1. State three components of integrated science. (3 mks)

- a. Biology
- b. Chemistry
- c. Physics
- d. Health education

2. Outline two laboratory safety measures. (2 mks)

- a. Do not run, eat, drink, smell or taste anything in the lab
- b. Do not do any experiment without teachers instructions
- c. Be careful when handling apparatus etc

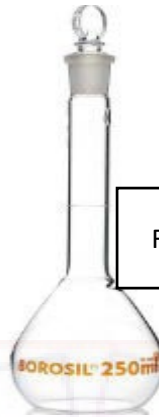
3. Name the following laboratory apparatus.(8mks)



Conical flask



Portable burner



Flat bottomed flask



Beam balance



Beaker



Tape measure



Spirit lamp



Stop watch

4. State the functions of the parts of a Bunsen burner.(7 mks)

Part	Function
Collar	Regulates amount of air entering the Bunsen burner through the air hole.
Air hole	Allows air to enter the chimney. (air mixes with the gas making flame hotter and blue.
Base	Supports the Bunsen burner and prevent it from toppling.
Gas hose	The flexible hose pipe connects the Bunsen burner and the gas tap.

5. State the meaning of the following laboratory hazard symbol. (3 mks)



Corrosive



Oxidizer

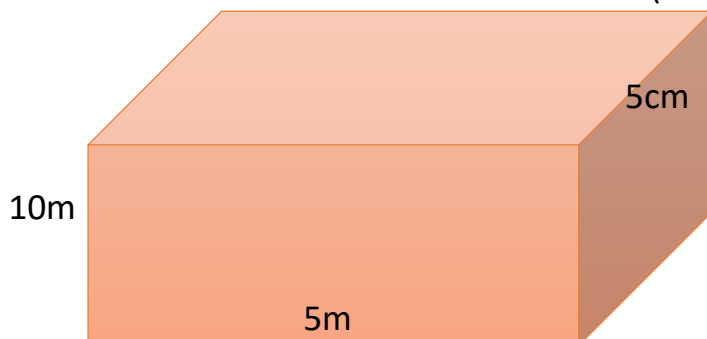


Toxic

6. The table below shows the basic quantity, write their SI unit and their symbols.(10 mks)

Basic quantity	SI unit	Symbol
Mass	Kilogram	kg
Length	Metre.	m
Time	Second	s
Temperature	Kelvin	K
Electric current	Ampere	A

7. Calculate the volume of the box below. (3 mks)



**Volume** =length x width x height (m x m x m) or m<sup>3</sup> (cubic metres)

$$=10\text{m} *5\text{m}*5\text{m}$$

$$=250\text{cm}^3$$

8. What is the density of a solid whose mass is 450grams having a volume of 90cm<sup>3</sup>?(3 mks)

$$\begin{aligned}\text{Density} &= \frac{\text{Mass}}{\text{Volume}} \text{ (Kg/m}^3\text{)} \\ &= 450/90 \\ &= 50\text{g/cm}^3\end{aligned}$$

9. Calculate the area of a piece of land which measures 50m and 100 m.(3 mks)

$$\begin{aligned}\text{Area (rectangle)} &= \text{Length} \times \text{width (m} \times \text{m) or m}^2 \text{ (square metres)} \\ &= 50\text{m} \times 100\text{m} = 5000\text{m}^2\end{aligned}$$

10. State three units that are used in measuring temperatures. (3 mks)

- Degrees Celsius (**°C.**)
- Degree Fahrenheit (**°F.**)
- Kelvin (**K**)

11. Name four common accidents in the laboratory.(4 mks)

- Falls
- Fractures
- Cuts
- Burns
- Electric shock
- Scalds

12. Name four protective wear for safety in the laboratory.(4 mks)

- Goggles
- Masks
- Apron/coats
- Gloves

e. Etc

13. Name three laboratory apparatus used for measuring mass of substances. (3 mks)

- a. Electric beam balance
- b. Double beam balance
- c. Triple beam balance

14. Give four differences between luminous and non-luminous flame. (8 mks)

15. Luminous flame	Non-luminous flame
Yellow/orange in colour	Blue in colours
Used for lighting	Used for heating
Has 4 regions and burns quietly	Has 3 regions and noisy
Produced when air hole is closed	Produced when air hole is open
Produces soot	Does not produce soot
Its wavy and large	Its straight

16. Name the following parts of the light microscope. (5 mks)

