**COMPETENCE BASED CURRICULUM**

Kenya Junior Secondary Education Assessment

FORMATIVE ASSESSMENT

TIME

2 HRS

ENDTERM 1

**INTEGRATED SCIENCE**

G7

2024

**SCHOOL:** ……….……………………………………………………..……

**NAME:** ……………….…………………..………………………...………..

**SIGNATURE: ………………ASSESSMENT NO…………………………..**

***RUBRICS (for official use)***

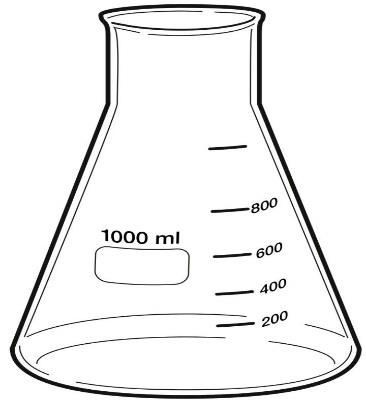
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| --- | --- | --- | --- | --- |
| **MARK SCORE RANGE** | ***Below 40*** | ***40-59*** | ***60-79*** | ***80-100*** |
| **PERFORMANCE LEVEL** | *Below expectation* | *Approaching expectations* | *Meeting expectations* | *Exceeding expectations* |
|  |  |  |  |  |

|  |  |
| --- | --- |
| **OUT OF** | **100%** |
| **LEARNERS SCORE** |  |
| **PERCENTAGE SCORE** |  |
| **PERFORMANCE LEVEL** |  |

**FOR FACILITATOR’S USE ONLY**

**Answer all Questions**

1. State three components of integrated science. (3 mks)
   1. Biology
   2. Chemistry
   3. Physics
   4. Health education
2. Outline two laboratory safety measures. (2 mks)
3. Do not run, eat, drink, smell or taste anything in the lab
4. Do not do any experiment without teachers instructions
5. Be careful when handling apparatus etc
6. Name the following laboratory apparatus.(8mks)



Flat bottomed flask

Portable burner

Conical flask





Beaker



Beam balance





Tape measure

Stop watch

Spirit lamp

1. 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.* |

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



Oxidizer

Toxic

Corrosive

1. 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** |

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

5cm

10m

5m

**Volume** =length x width x height (m x m x m) or m3 (cubic metres)

**=10m \*5m\*5m**

**=250cm3**

1. What is the density of a solid whose mass is 450grams having a volume of 90cm3?(3 mks)

**Density** = Mass (Kg/m3)

Volume

=450/90

=50g/cm3

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

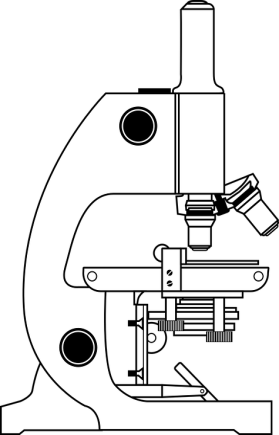
**Area** (rectangle) = Length x width (m x m) or m2 (square metres)

=50m\*100m=5000m2

1. State three units that are used in measuring temperatures. (3 mks)
   1. Degrees Celsius (**0C.)**
   2. Degree Fahrenheit (**0F**.)
   3. Kelvin (**K**)
2. Name four common accidents in the laboratory.(4 mks)
3. Falls
4. Fractures
5. Cuts
6. Burns
7. Electric shock
8. Scalds
9. Name four protective wear for safety in the laboratory.(4 mks)
10. Goggles
11. Masks
12. Apron/coats
13. Gloves
14. Etc
15. Name three laboratory apparatus used for measuring mass of substances.(3 mks)
16. Electric beam baance
17. Double beam balance
18. Triple beam balance
19. Give four differences between luminous and non-luminous flame.(8 mks)

|  |  |
| --- | --- |
| 1. 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 |

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



Eye piece lens

Body tube

Stage

Mirror

Base