

GRADE 7 INTEGRATED SCIENCE



1. Integrated science is a learning area in the junior school. Outline two career opportunities related to knowledge and skills gained in integrated science. (2mks)

i. _____

ii. _____

2. Mr. Jack, a teacher of Integrated Science, asked his learners to name Basic Scientific skills that one gains while learning integrated science. List four skills they are likely to have mentioned. (4mks)

1

i. _____

ii. _____

iii. _____

iv. _____

3. In the laboratory students come across different laboratory equipment. Draw the laboratory equipment mentioned below. (5mks)

i. Beaker

ii Measuring cylinder

iii. Conical flask

iv. Round bottomed flask

v. Pipette

4. Grade 7 learners were learning about quantities of measurement. Complete the table below. (3mks)

Basic quantity	SI Unit
Volume	
Light intensity	
Mass	

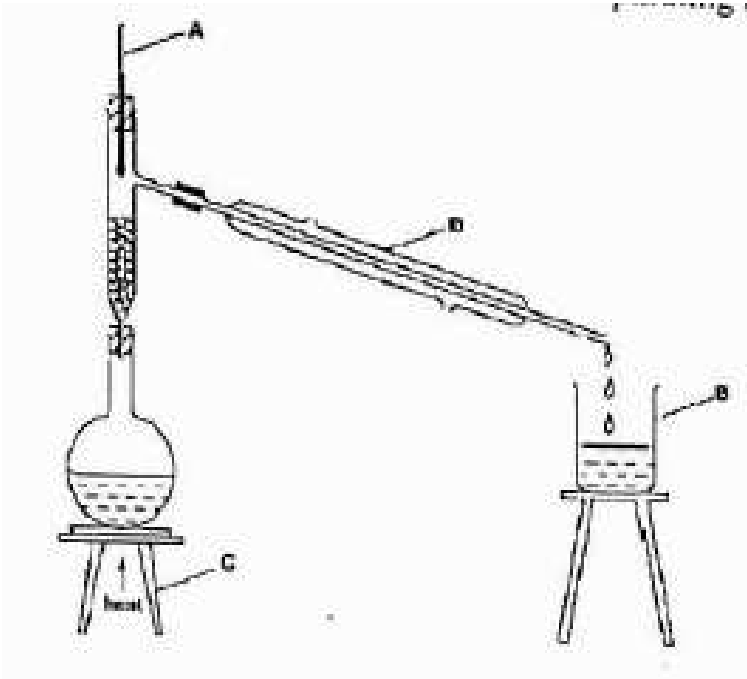
5. State the color of the litmus paper in the following solutions. (2mks)

a) Acid solution: _____.

b) Basic solution: _____.

2

6. Grade 7 learners of Hekima primary school were separating mixtures. They used the method drawn below.



(a) What is the name of the method they used? _____ (1mk)

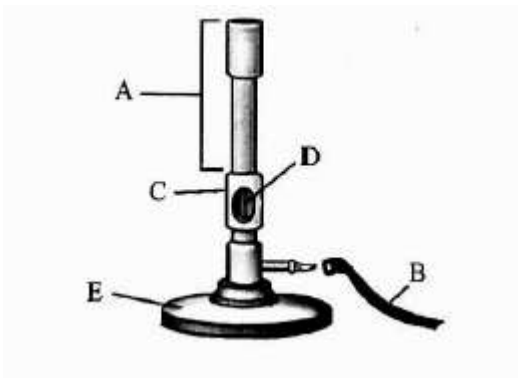
(b) Name two liquids that can be separated using the method drawn above. (1mk)

- i _____
- ii _____

7. As Tom was walking home from school, he met his classmate who had a minor cut. Outline the first aid measures he should have taken. (5mks)

- i _____
- ii _____
- iii _____
- iv _____
- v _____

8. There are various apparatus in the laboratory that are used for different purposes. The diagram below shows a Bunsen burner. Name the parts labelled A, B, C, D and E. (5mk)



- A. _____
 B. _____
 C. _____
 D. _____
 E. _____

3

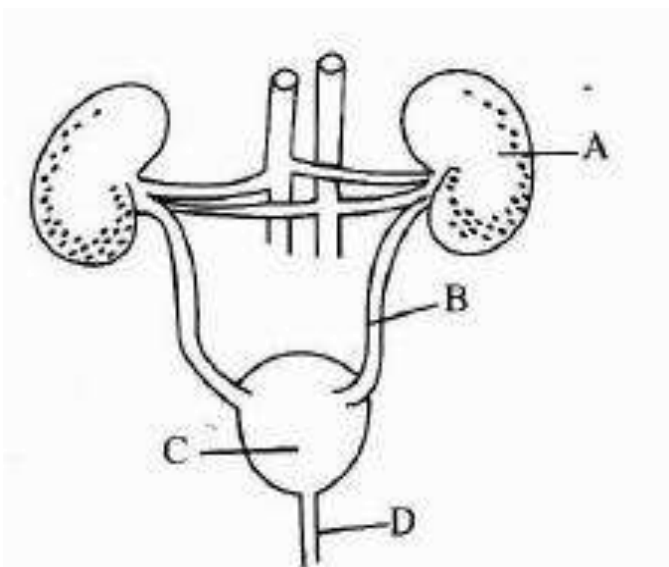
9. Differentiate between the following terms, homogenous and heterogeneous mixtures. (2mks)

Homogenous mixture	Heterogeneous mixture

10. As we grow our bodies begin to experience changes during adolescence. State four challenges that girls experience during adolescence. (4mks)

- i. _____
 ii. _____
 iii. _____
 iv. _____

11. Grade 7 learners were learning about excretion in Human beings. The diagram below shows parts of the human excretory system.



a) Name the parts labelled A,B,C and D. (4mks)

- A. _____
- B. _____
- C. _____
- D. _____

b) Apart from the urinary system, name two other organs involved in excretion. (2mks)

- i _____
- ii _____

12. There are some lifestyles that are very important for a healthy skin. State four lifestyles that promote a healthy skin. (4mks)

- i _____
- ii _____
- iii _____
- iv _____

13. Your brother who is a grade seven was given an assignment by their teacher and he was unable to do. The assignment was to get the volume of a cuboid measuring 20cm by 30 cm by 40 cm. If the answer was to be given in SI units, work out the calculations you will show him. (3mks)

14. The circulatory system helps in the transportation of materials over the body. It is made up of the heart, the blood vessels and the blood. There are three types of blood vessels through which blood is pumped. Mention them. (3 marks)

- i _____
- ii _____
- iii _____

Learner's sign: _____.

Guardian's sign: _____.

Date completed: _____.

INTEGRATED SCIENCE

1. 1. Environmental conservationist or ecologist — working to protect and manage natural resources and ecosystems.
2. Laboratory technician or medical researcher — working in health, research, or industrial labs to test and analyze samples.
2.
 1. Observing
 2. Measuring
 3. Classifying
 4. Predicting
3. to be assessed
4.
 1. Cubic meter
 2. Farenheit
 3. Kilogram
5.
 - a) Acid solution — **Red**
 - b) Basic solution — **Blue**
6.
 - (a) The method they used is **distillation**.
 - b) Two liquids that can be separated using distillation are:

1. Water and alcohol

2. Water and kerosene

7.
 1. Wash his hands before touching the wound to avoid infection.
 2. Clean the cut gently with clean water to remove dirt.
 3. Stop the bleeding by pressing the cut with a clean cloth or sterile gauze.
 4. Apply an antiseptic to prevent infection.
 5. Cover the cut with a clean bandage or plaster.
8.

A — Barrel

B — Rubber tubing (gas hose)

C — Collar

D — Air hole

E — Base
9.
 1. **Homogeneous mixture** — A mixture where the components are evenly mixed and appear as one uniform substance (e.g., salt dissolved in water).
 2. **Heterogeneous mixture** — A mixture where the components are not evenly mixed and you can see the different parts (e.g., sand and iron filings).
10.
 1. Menstrual periods, which may cause discomfort or embarrassment.
 2. Emotional changes and mood swings due to hormonal changes.
 3. Body image concerns as their bodies develop (e.g., hips widen, breasts grow).
 4. Peer pressure and challenges in managing relationships with family and friends.
11.

a) **A** — Kidney

B — Ureter

C — Bladder **D** — Urethra

b)

 1. Lungs (remove carbon dioxide and water vapour)
 2. Skin (removes sweat which contains water, salts, and urea)

12. 1. Eating a balanced diet rich in vitamins and minerals.
 2. Drinking plenty of clean water to keep the skin hydrated.
 3. Regular washing and keeping the skin clean.
 4. Exercising regularly to improve blood circulation.
13. **Volume = Length × Width × Height** Volume = $20 \times 30 \times 40 = 24,000 \text{ cm}^3$

Convert to SI units (m^3): Since 1 m =

100 cm, then $1 \text{ cm}^3 = 1/1,000,000 \text{ m}^3$.

Volume = $24,000 \div 1,000,000 = 0.024 \text{ m}^3$

14. 1. Arteries
 2. Veins
 3. Capillaries