



SURREKEY EXAMINATIONS BOARD  
PRIMARY SIX END OF TERM ONE EXAMINATIONS  
2023

INTEGRATED SCIENCE

*Time Allowed: 2 hours 15 minutes*

| Admission No. |  |  |  |  |  | Personal No. |  |  |
|---------------|--|--|--|--|--|--------------|--|--|
|               |  |  |  |  |  |              |  |  |

**Pupil's Name:** .....

**Pupil's Signature:** .....

**School Name:** .....

**District Name:** .....

**Read the following instructions carefully:**

1. Do not forget to write your **school** or **district name** on the paper.
2. This paper has two sections: **A** and **B**. Section **A** has **40** questions and section **B** has **15** questions. The paper has **12** printed pages.
3. Answer **all** questions. **All** working for both sections **A** and **B** must be shown in the spaces provided.
4. **All** answers **must** be written using a **blue** or **black** ball point pen or ink. Any work written in pencil will **not** be marked.
5. Unnecessary **changes** in your work and handwriting that cannot be read easily may lead to **loss of marks**.
6. Do not fill anything in the table indicated: "**For Examiners' use only**" and boxes inside the question paper.

| FOR EXAMINERS' USE ONLY |       |           |
|-------------------------|-------|-----------|
| Qn. No.                 | MARKS | EXR'S NO. |
| 1 – 10                  |       |           |
| 11 – 20                 |       |           |
| 21 – 30                 |       |           |
| 31 – 40                 |       |           |
| 41 – 43                 |       |           |
| 44 – 46                 |       |           |
| 47 – 49                 |       |           |
| 50 – 52                 |       |           |
| 53 – 55                 |       |           |
| TOTAL                   |       |           |

## SECTION A: 40 MARKS

Questions **1** to **40** carry **one mark** each

1. Name the body organ affected by scalds.

.....

2. What type of soil is suitable for making roofing tiles?

.....

3. Give any **one** way in which a black jack benefits from growing near a beehive.

.....

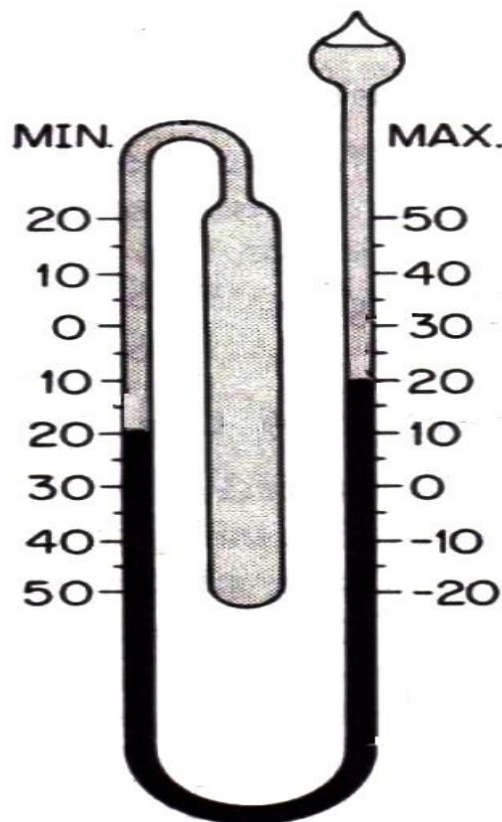
4. State any **one** effect of drought in an area.

.....

5. What is the importance of painting iron tools?

.....

The diagram below shows a type of thermometer. Use it to answer questions **6** and **7**




6. Identify the type of thermometer shown in the diagram above.

.....

7. How is the use of the above thermometer different from that of a clinical thermometer?

.....

.....

8. State any **one** way in which smoking affects the family.  
.....
9. State any **one** reason why birds fly from one place to another.  
.....
10. Name the process through which food moves through the oesophagus.  
.....
11. In which **one** way does toothpaste promote oral health?   
.....
12. State any **one** example of a chemical change that produces heat.  
.....
13. What happens to an object whose upthrust force is less than its weight?  
.....
14. Why is a mite classified under arachnids?  
.....
15. Give any **one** danger of settling near wetlands.  
.....
16. State any **one** principle of Primary Health Care (PHC).  
.....
17. Give any **one** reason why chickens should not be overcrowded in the coop.  
.....
18. Apart from causing diseases, give any **one** other way in which bacteria are harmful to people.  
.....
19. How is a swim bladder useful to a fish?  
.....  
.....

20. Give any **one** way in which food can be kept safe for long time.

.....

21. Give any **one** communicable disease that attacks the human eye.

.....

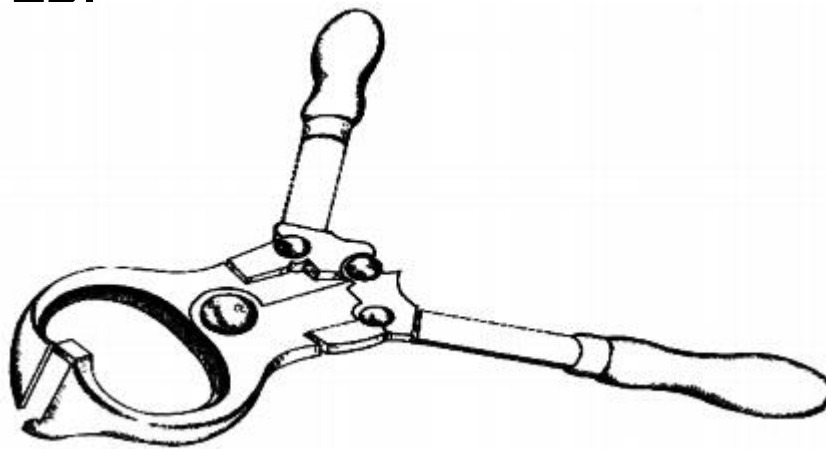
22. Name the structures on a butterfly that enable it to balance in air during flight.

.....

23. State any **one** way in which the spread of germs by mosquitoes can be controlled.

.....

The diagram below shows a farm tool. Study and use it to answer questions **24** and **25**.



24. Name the farm tool shown in the diagram above.

.....

25. Which farm practice is done using the farm tool shown in the diagram above?

.....

26. State any **one** factor that a doctor considers when prescribing drugs to a patient.

.....

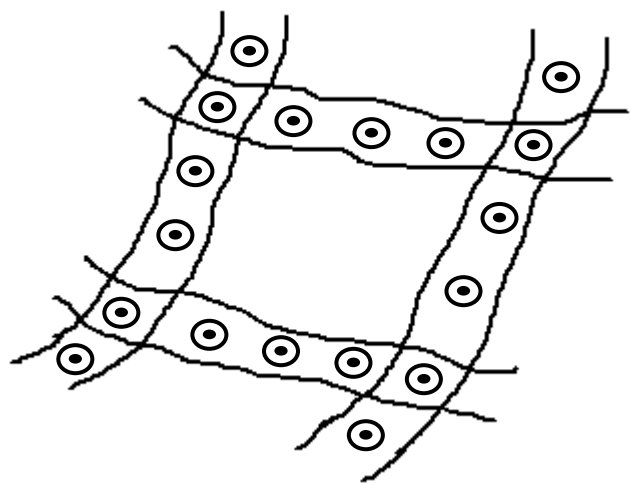
27. Name the vaccine given to children in three doses.

.....

28. Give any **one** reason why health workers discourage bottle feeding.

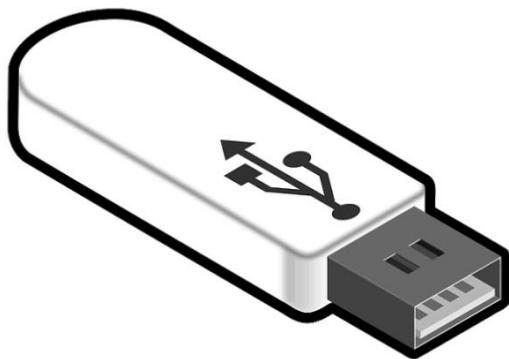
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The diagram below shows eggs laid by an amphibian. Study and use it to answer questions **29** and **30**.



29. Identify the amphibian that lays such eggs.  
.....
30. In which way does the above amphibian protect its eggs from predators?  
.....
31. Name the intestinal worm that penetrates through bare skin.  
.....
32. State any **one** way in which animals improve soil fertility.  
.....
33. Which method of separating mixtures enables a person to obtain juice from fruits?  
.....
34. Give any **one** way of controlling bad smell in pit latrines.  
.....
35. State any **one** sign of pneumonia in rabbits.  
.....
36. Apart from being effective, give any **one** other characteristic of essential drugs.  
.....
37. Why is coffee grouped under perennial crops?  
.....
38. State any **one** property of matter.  
.....

The diagram below shows a device used to store music. Study it and use it to answer questions **39** and **40**.



39. Name the method of storing music that involves the use of the above device.

.....

40. State any **one** way of reproducing music stored using the device above.

.....

**SECTION B: 60 MARKS**



Questions **41** to **55** carry four marks each.

41. a) Give any **two** signs which show that a baby lacks water in the body.

i) .....

ii) .....

b) Write down **two** mineral salts lost when the body lacks water.

i) .....

ii).....

42. a) State the importance of each of the following items when giving first aid to a casualty.

i) gauze .....

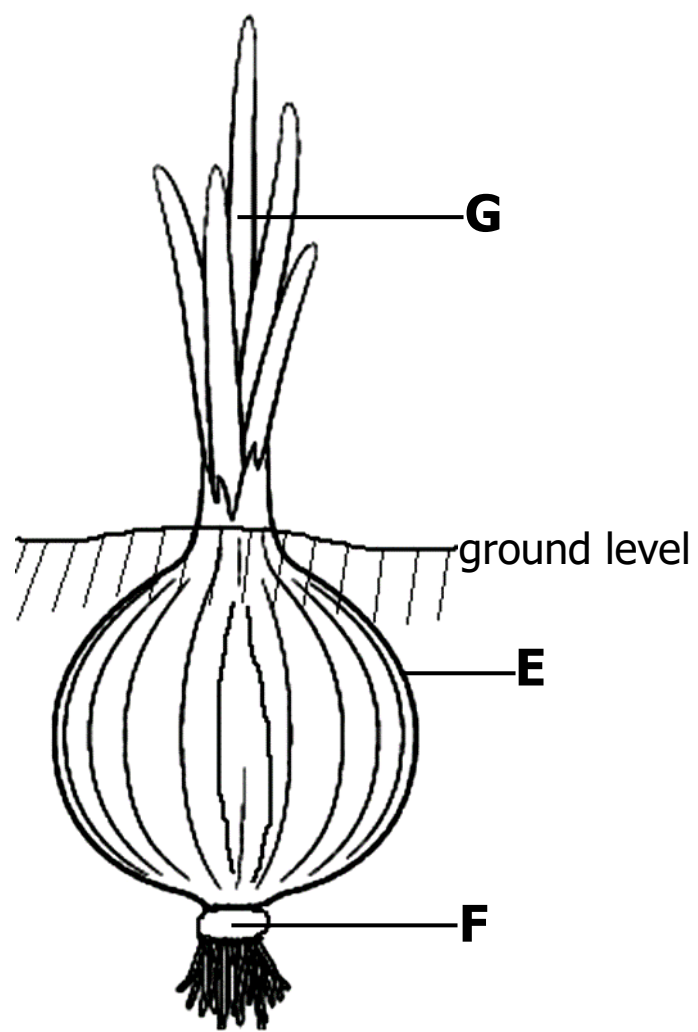
ii) razorblade .....

b) Give any **two** qualities of a good first aider.

i) .....

ii) .....

43. The diagram below shows a cross section through an onion bulb. Study and use it to answer the questions that follow.



- a) Name the parts marked **E** and **F**.
  - i) **E** .....
  - ii) **F** .....
- b) Give the function of part marked **G** to an onion.  
.....
- c) What type of root system does the above plant have?  
.....



44. a) Write down any **two** agents of weathering.
- i) .....
  - ii) .....
- b) Which component of soil is formed from weathering?  
.....
- c) How is weathering similar to decomposition in the study of soil?  
.....  
.....

45. The table below shows types of crops grown by five farmers. Study it to answer the questions that follow.

| Farmers  | Type of crops grown |       |         |         |
|----------|---------------------|-------|---------|---------|
|          | beans               | maize | cassava | cabbage |
| <b>P</b> | X                   | X     | ✓       | X       |
| <b>Q</b> | ✓                   | ✓     | ✓       | ✓       |
| <b>R</b> | X                   | ✓     | ✓       | ✓       |
| <b>S</b> | X                   | X     | X       | X       |
| <b>T</b> | X                   | ✓     | ✓       | ✓       |

**KEY**

X – Crops not grown  
 ✓ - Crops grown

- a) Which farmers grew all the four types of crops above?  
 .....
- b) Identify the type of crop which most of the farmers above did not grow.  
 .....
- c) Mention the problem that is likely to affect soil for farmer **R**, **S** and **T**.  
 .....
- d) What advice would you give to farmers **R**, **S** and **T** to solve the problem mentioned in (c) above?  
 .....

46. a) What causes an echo?  
 .....
- b) Give any **one** way in which an echo is useful to a bat.  
 .....
- c) State any **two** ways of reducing echoes in a cinema hall.  
 i) .....  
 ii) .....



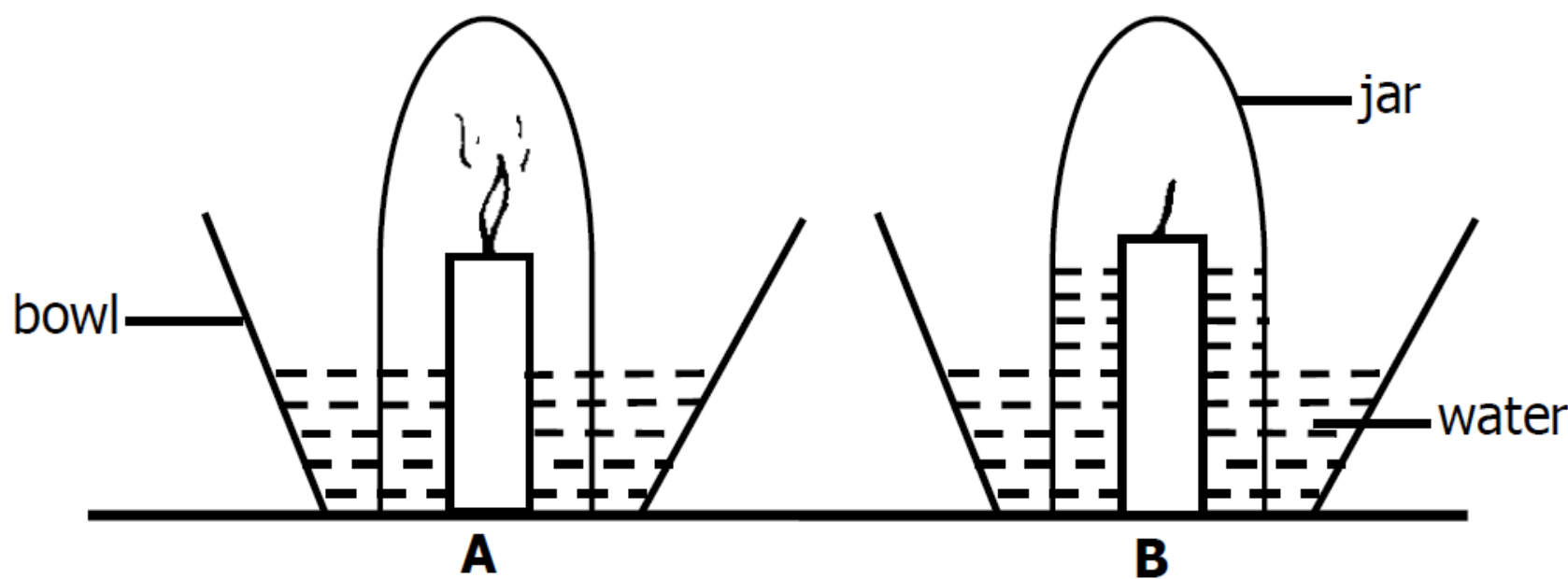


47. Use the list of fungi given below to answer the questions that follow.

**mould, yeast, penicillium, toadstool**

- a) Which fungus on the list above is poisonous to people when eaten?  
.....
- b) Identify the fungus on the list above which;
  - i) grows on leftover food .....
  - ii) is used to make antibiotics .....
- c) How is yeast different from other fungus on the list above in terms of reproduction?  
.....  
.....

48. The diagram below shows a candle flame placed in a bowl containing water. Study and use it to answer the questions that follow.



- a) Which gas is found in the jar in diagram **A**?  
.....
- b) Why does the candle flame go off in the jar as shown in the diagram **B**?  
.....
- c) Give a reason why the level of water rises as shown in the diagram **B**.  
.....
- d) What does the above experiment show?  
.....

49. a) Which type of chicken are known as heavy breeds?  
 .....  
 b) Give any **two** examples of such types of chicken.  
 i) .....  
 ii) .....  
 c) What is the main purpose of keeping the type of chicken in (a) above?  
 .....



50. a) Give the main function of the heart in the human body.  
 .....  
 b) Apart from the heart, give any **one** other component of the circulatory system.  
 .....  
 c) Why does blood go to each of the following organs during circulation?  
 i) lungs .....  
 ii) kidneys .....

51. The table below shows groups of birds, type of food eaten and nature of their beaks. Study and complete it correctly.

| Group          | Type of food        | Nature of beak                         |
|----------------|---------------------|--|
| Climbing birds | .....               | Strong pointed and chisel shaped beak. |
| .....          | Flesh               | Strong sharp hooked beak               |
| Wading birds   | .....               | Long thin beak                         |
| Swimming birds | Fries, toads, frogs | .....<br>.....                         |

52. a) Apart from sunshine, give **one** other element of weather necessary for plant growth.

.....

- b) In which **two** ways is sunshine necessary for plant growth?

i) .....

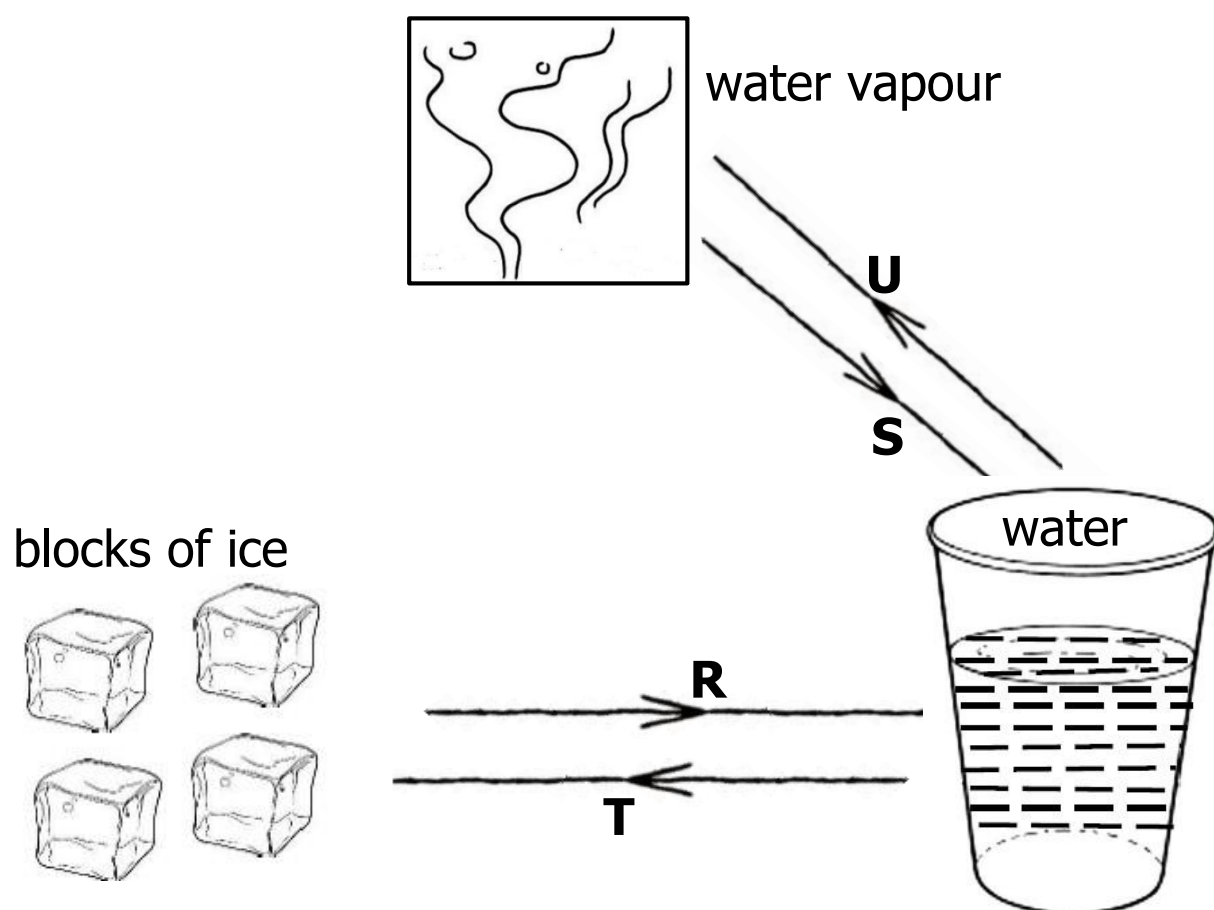
ii) .....

- c) State any **one** disadvantage of too much sunshine to plants.

.....



53. The diagram below shows changes of state of matter. Study and use it to answer the questions that follow.



- a) Name the changes of state marked **R** and **S**.

i) **R** .....

ii) **S** .....

- b) Give any **one** way in which the change of state marked **U** is important to people.

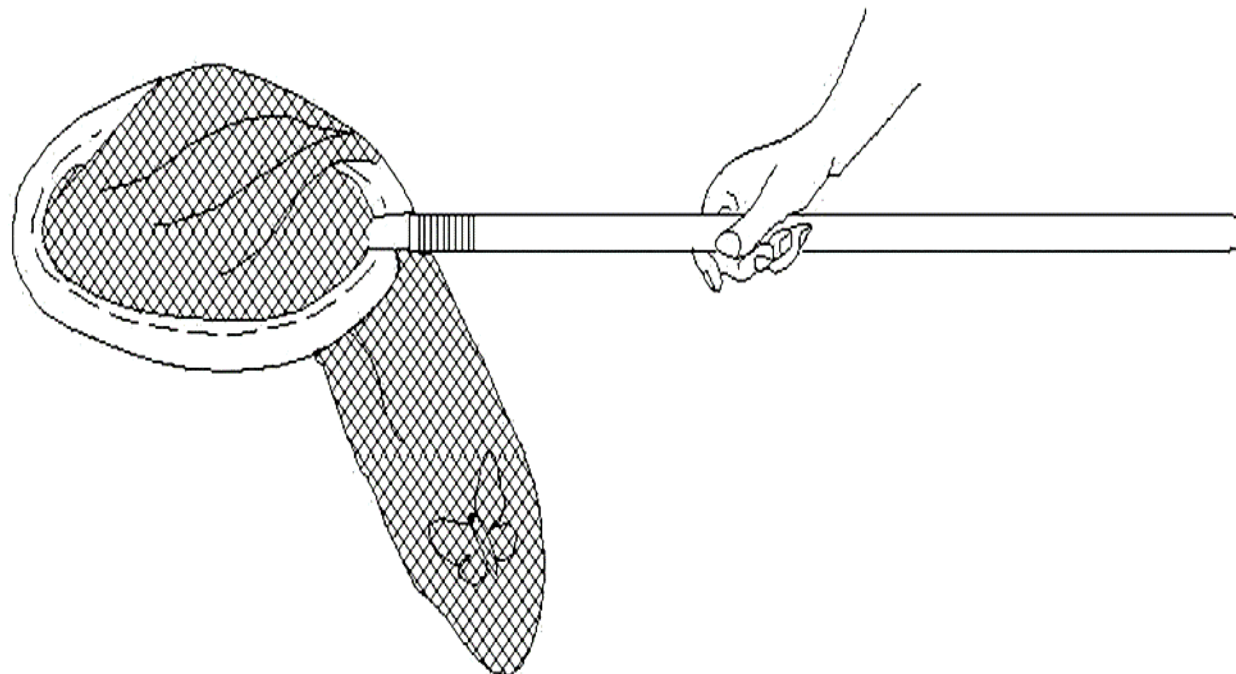
.....

- c) Mention any **one** state of change from the diagram above that requires heat to take place.

.....

54. a) Name any **two** breeds of sheep that are mainly kept for wool production.
- i) .....
- ii) .....
- b) Which farm practice is done to obtain wool from a sheep?
- .....
- c) Give any **one** reason why the above farm practice is done during dry season.
- .....

55. The diagram below is of an equipment used in bee keeping. Study and use it to answer the questions that follow.



- (a) Name the equipment in the diagram above.
- .....
- (b) How is the above equipment useful to a bee keeper?
- .....
- (c) Which activity in bee keeping involves the use of the above equipment?
- .....
- (d) Apart from the above equipment, name **one** other equipment used to do the activity named in (c) above.
- .....

