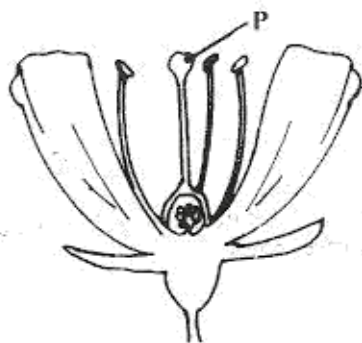


1. Which one of the following bodies produces light?
- Mars.
  - Venus.
  - Star.
  - Moon.

2. Which one of the following explains why flowing water moves objects? Flowing water
- has energy of movement
  - is a liquid
  - has potential energy
  - carries less dense objects only.

3. Which one of the following insects undergoes the stages of egg, nymph and adult in its life cycle?
- Tsetse fly.
  - Wasp.
  - Butterfly.
  - Cockroach.

4. The diagram below represents parts of a flower.



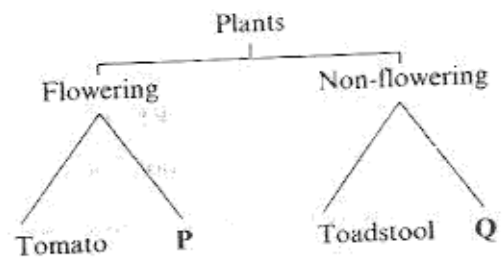
The function of the part labelled P is to

- produce nectar
- receive pollen grains
- lead pollen grains to the ovary
- produce pollen grains.

5. Engine oil mixes with kerosene but does not mix with water. Methylated spirit mixes with water but does not mix with kerosene. How many layers would be observed if the four liquids were put in the same container?
- 1
  - 2
  - 3
  - 4

6. A chameleon shoots out its tongue to
- taste food
  - locate food
  - catch food
  - cool itself.

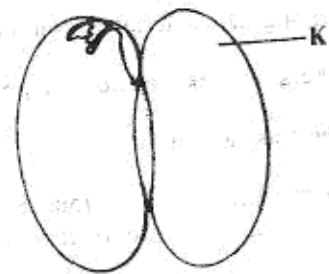
7. The chart below represents a simple classification of plants.



Which plants are represented by P and Q?

- | P         | Q         |
|-----------|-----------|
| A. Fern   | Moss.     |
| B. Banana | Fern.     |
| C. Moss   | Mushroom. |
| D. Grass  | Banana.   |

8. The diagram below represents parts of a germinating bean seed.

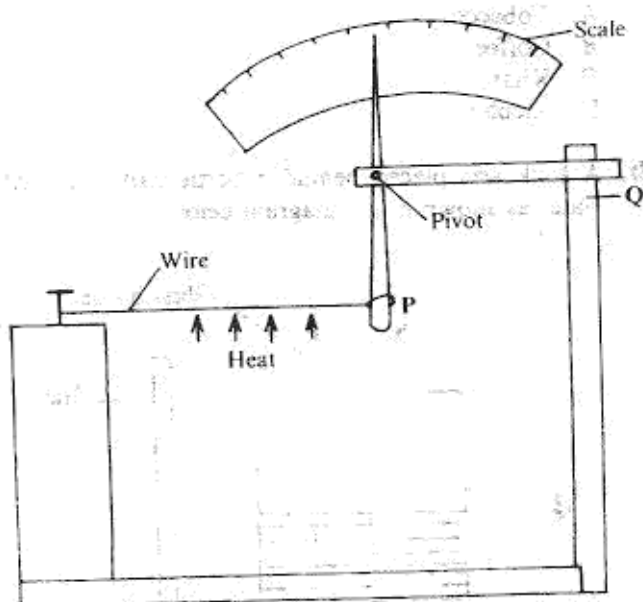


The part labelled K

- serves as first leaves
- becomes a shoot
- absorbs water for the young plant
- gives rise to roots.

9. On a cold day most birds raise their feathers to
- allow air to escape from their bodies
  - allow even distribution of heat in the body
  - avoid losing heat from their bodies
  - generate heat.

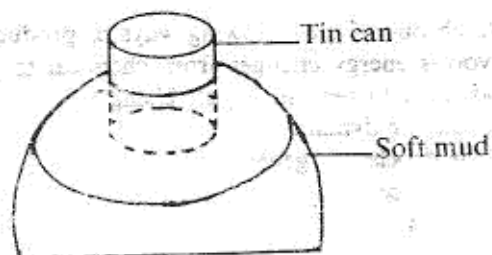
1. The diagram below represents an instrument that could be used to demonstrate that solids expand when heated.



Which one of the following should be done to make the instrument more efficient?

- Using a thinner pointer.
- Reducing the length between support Q and pivot.
- Using a thicker wire.
- Increasing the length between P and pivot.

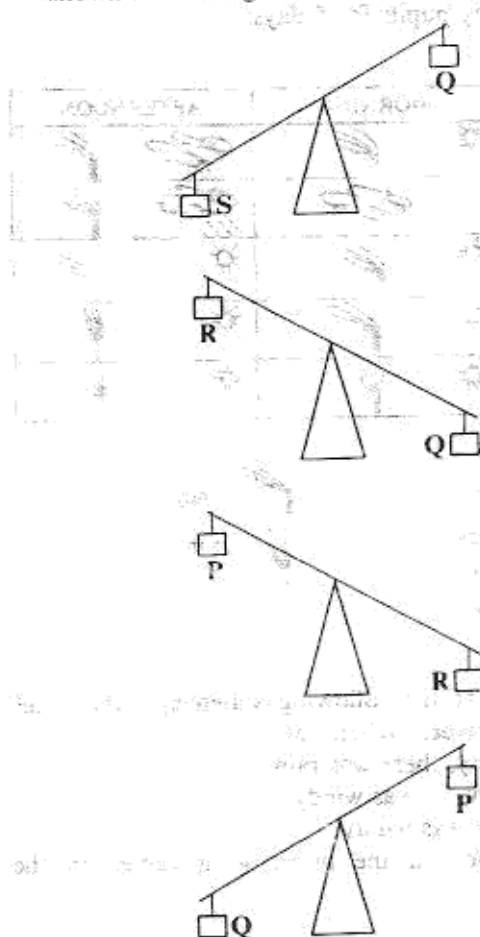
1. Pupils placed a little methylated spirit in a tin can and lit it. After a short while, they placed the tin can upside down over soft mud as shown in the diagram below.



The tin can sank into the soft mud. Which one of the following explains why the tin can sank into the mud?

- The tin can is denser than soft mud.
- Air pressure on the tin can forced the tin can into the soft mud.
- There was no air in the soft mud.
- Force of gravity forced the tin can into the soft mud.




















12. Objects P, Q, R and S were balanced on a beam as shown in the diagrams below.



The correct order from the heaviest to the lightest object is

- S Q R P
- Q R P S
- R S Q P
- Q P S R

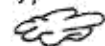
13. The diagram below represents a weather record that was made by pupils for 5 days.

	MORNING	AFTERNOON
MONDAY	 	 
TUESDAY		 
WEDNESDAY	 	 
THURSDAY	 	 
FRIDAY	 	 

KEY



Sunny



Cloudy



Rainy



Windy

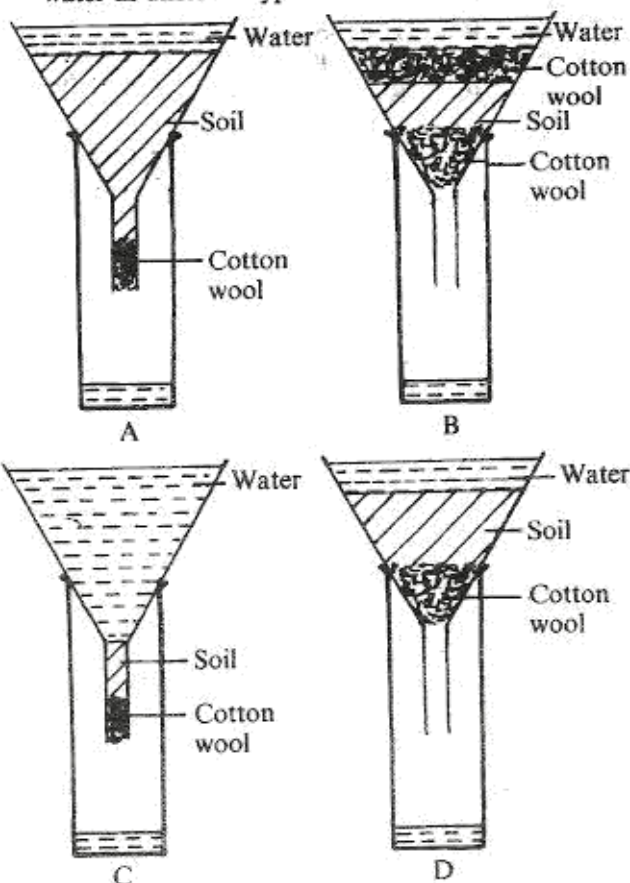


Calm

Which one of the following statements about the weather is correct? Whenever it

- was windy, there was rain
- was sunny, it was windy
- rained, it was windy
- was windy in the morning, it rained in the afternoon.

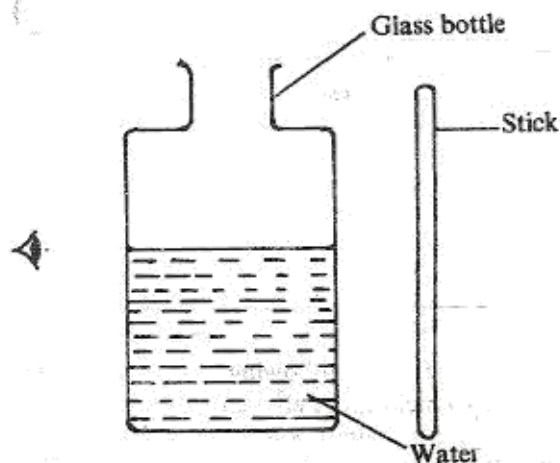
14. Which one of the diagrams below represents the correct set up that is used to compare drainage of water in different types of soil.



15. Which one of the following drugs is a stimulant when used in small quantities but a depressant when used in large quantities?

- Tobacco.
- Coffee.
- Khat.
- Alcohol.

16. A stick was placed behind a bottle half filled with water as shown in the diagram below.



The part of the stick below the level of water appeared to be larger in size than the part above the level of water because rays of light were

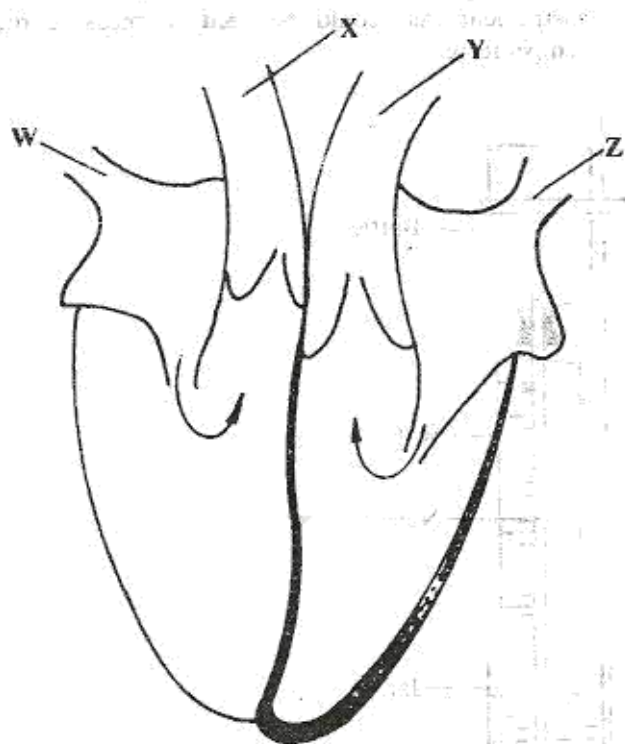
- absorbed
- refracted
- dispersed
- reflected.

17. Which one of the following ways of producing light involves energy changes from chemical to electrical and lastly to heat and light? Using a

- bicycle dynamo
- hydroelectric generator,
- solar cells
- torch.



8. The diagram below represents a mammalian heart.



Which one of the following represents blood vessels W, X, Y and Z?

- | W                   | X                | Y              | Z                |
|---------------------|------------------|----------------|------------------|
| A. Aorta            | Vena cava        | Pulmonary vein | Pulmonary artery |
| B. Pulmonary artery | Aorta            | Vena cava      | Pulmonary vein   |
| C. Pulmonary vein   | Pulmonary artery | Vena cava      | Aorta            |
| D. Vena cava        | Pulmonary artery | Aorta          | Pulmonary vein   |

19. Fruits that are dispersed by water
- have pods with lines of weakness
  - are small and hairy
  - are hollow and fibrous
  - are small with hooks.

20. A certain animal lays eggs, has scales and the body temperature varies with the surrounding. The animal is likely to be a
- snake
  - platypus
  - toad
  - duck.

21. The type of modified roots found in mangroves are called
- breathing
  - prop
  - buttress
  - clasping.

22. Which one of the following is the function of the rectum?

- Completes digestion of food.
- Stores undigested matter.
- Absorbs water.
- Absorbs digested food.

23. Which one of the following aspects of a given object DOES NOT affect sinking or floating of the object?

- Size.
- Shape.
- Material.
- Weight.

24. A purple flower extract was added to substances K, L, M and N to find out whether they were acids or bases. The results are shown in the table below.

Substance	Colour change
K	pink
L	blue
M	no change
N	pink

Which two of the substances react to form salt and water only?

- K and M.
- M and N.
- K and L.
- L and M.

25. Which one of the following aspects of an object cannot be changed?

- Mass.
- Density.
- Weight.
- Volume.

26. Which one of the following should NOT be the same when comparing rates of melting in substances?

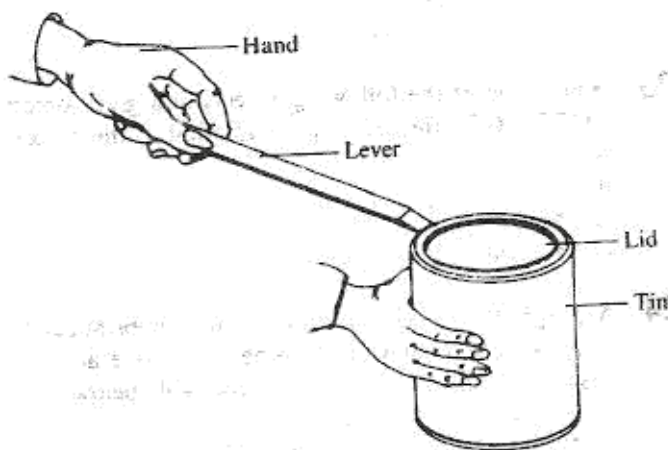
- Quantity of substances.
- Amount of heat.
- The substances.
- Duration of heating.

27. Standard Eight pupils suggested the following as ways of preventing monkeys from destroying crops.
- Laying a trap for the monkeys.
  - Putting up a fence around the farm.
  - Seeking the assistance of the game warden.
  - Guarding the farm.

Which one of them is NOT acceptable?

- (i).
- (ii).
- (iii).
- (iv).

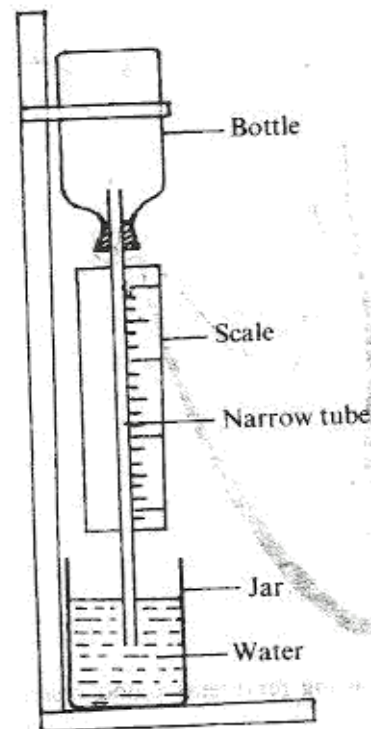
28. The diagram below represents a certain lever being used to open a tin.



Which one of the following works in the same way as the lever shown above?

- A. Carrying a load using a wheelbarrow.
  - B. Cutting hair using scissors.
  - C. Scooping sand using a shovel.
  - D. Catching fish using a fishing rod.
29. Which one of the following statements about a single fixed pulley is **NOT CORRECT**? The load
- A. distance is equal to the effort distance
  - B. moves in the opposite direction to that of the effort
  - C. is twice the effort used
  - D. is equal to the effort used.
30. The planet with a ring around it is
- A. Mercury
  - B. Saturn
  - C. Pluto
  - D. Jupiter.
31. The soil that drains water fastest
- A. has small air spaces
  - B. cracks when dry
  - C. has poor capillarity
  - D. has smooth texture.

32. The diagram below represents an improvised instrument that could be used to measure room temperature.

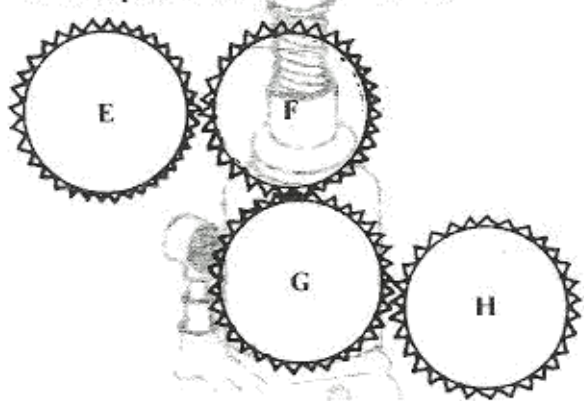


The working of the instrument is based on the fact that

- A. liquids expand when heated and contract when cooled
  - B. liquids rise in narrow tubes
  - C. gases exert pressure
  - D. gases expand when heated and contract when cooled.
33. The component of air in the atmosphere which amount vary from time to time is
- A. oxygen
  - B. water vapour
  - C. carbon dioxide
  - D. nitrogen.
34. The stages involved in the formation of rain are:
- (i) clouds are formed
  - (ii) water evaporates
  - (iii) heat from the sun warms water
  - (iv) rain falls
  - (v) water vapour condenses.
- The correct order in which the stages take place
- A. (iii), (ii), (i), (v), (iv)
  - B. (ii), (iii), (v), (i), (iv)
  - C. (ii), (v), (i), (iii), (iv)
  - D. (iii), (ii), (v), (i), (iv).



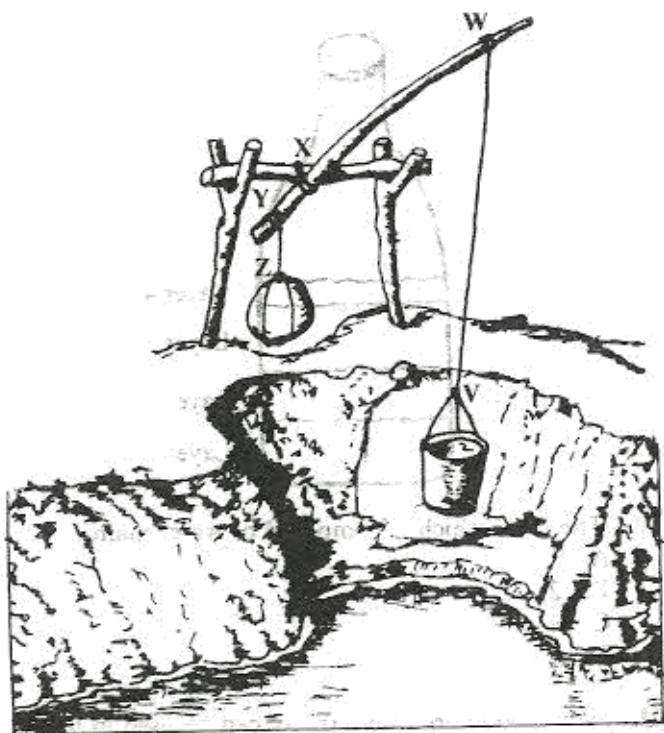
35. The diagram below represents an arrangement of bottle tops to show the working of gears.



In which direction will F, G and H turn when E is turned in a clockwise direction?

- | F                 | G              | H              |
|-------------------|----------------|----------------|
| A. anti-clockwise | anti-clockwise | clockwise      |
| B. clockwise      | clockwise      | clockwise      |
| C. clockwise      | anti-clockwise | anti-clockwise |
| D. anti-clockwise | clockwise      | anti-clockwise |

36. The diagram below represents a simple machine that is used to draw water from a river.



The effort distance is

- A. XY  
B. WX  
C. VW  
D. YZ

37. The following are activities involved in making an improvised hammer:

- (i) making a hole
- (ii) fitting a bolt
- (iii) shaping a piece of wood
- (iv) making the handle smooth
- (v) fixing the nut.

The correct order is

- A. (iii), (iv), (i), (ii), (v)  
B. (i), (ii), (v), (iii), (iv)  
C. (iii), (i), (ii), (v), (iv)  
D. (v), (ii), (iii), (iv), (i)

38. Which one of the following groups of drugs are harmful but are legal in Kenya?

- A. Tobacco, khat, beer.  
B. Heroin, bhang, beer.  
C. Bhang, heroin, mandrax.  
D. Tobacco, mandrax, khat.

39. Vaccines are

- A. stimulants  
B. preventive drugs  
C. curative drugs  
D. pain relievers.

40. The planet that takes the longest time to move round the Sun once is

- A. Uranus  
B. Venus  
C. Mars  
D. Saturn.

41. One of the following practices DOES NOT help to conserve water. Which one is it?

- A. Drip irrigation.  
B. Using oil to kill mosquito larvae.  
C. Treating water from a factory.  
D. Mulching.

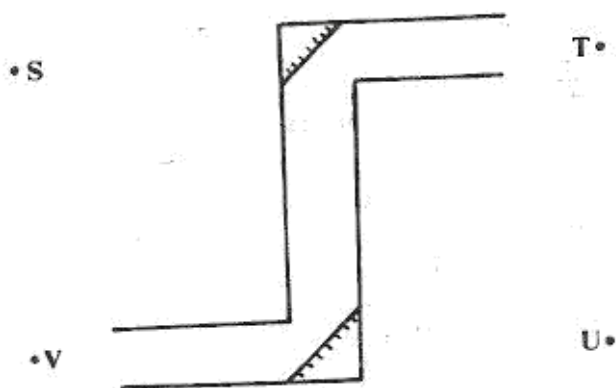
42. Birds which feed on grains have beaks that are

- A. strong, short and curved  
B. strong, short and cupped  
C. long, sharp and pointed  
D. strong, short and straight.

43. Which one of the following sets of characteristics are descriptions of a wind pollinated flower?

- A. Fewer large pollen grains, petals sometimes absent.  
B. Fewer large pollen grains, large loosely attached anthers.  
C. Small in size, large loosely attached anthers, sticky stigma.  
D. Small in size, large loosely attached anthers, petals sometimes absent.

44. The diagram below represents a periscope and the position of the image at point U.



The object is at position

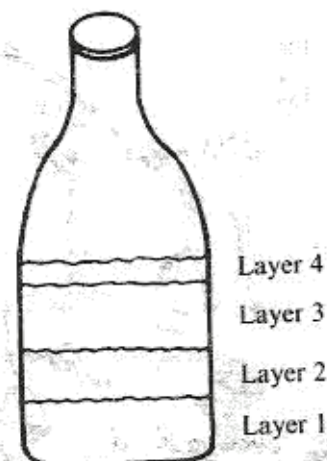
- A. S  
B. T  
C. U  
D. V.
45. If the hole of the pinhole camera is widened the image
- A. becomes blurred  
B. becomes larger  
C. is upright  
D. is not formed on the screen.
46. Which one of the following pairs consist of substances which have definite volume?
- A. Water vapour and ice.  
B. Stone and air.  
C. Sand and water.  
D. Ice and air.
47. A suitable way of handling plastic materials to avoid pollution is
- A. dumping in the river  
B. burning  
C. burying in the soil  
D. re-using.

48. The diagram below represents a simple machine.



The machine is an example of

- A. gear  
B. lever  
C. inclined plane  
D. wheel and axle.
49. A group of pupils filled a transparent bottle with soil and water. They shook the bottle and left it to stand for some time. Layers formed as shown in the diagram below.



The layer which is composed of water mainly is

- A. 1  
B. 2  
C. 3  
D. 4.
50. Non-conductors of electricity can be used in making
- A. insulators  
B. handles of cooking utensils  
C. fuses  
D. contacts in switches.