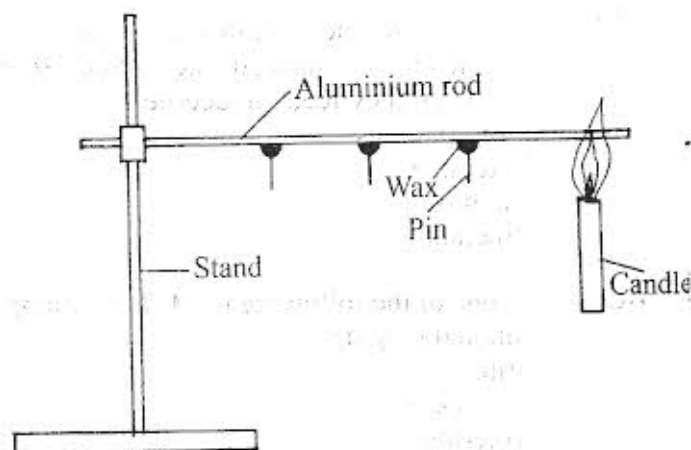


- Which one of the following components of blood is involved in clotting after an injury?
  - Plasma.
  - White blood cells.
  - Red blood cells.
  - Platelets.
- Which one of the following shows the **CORRECT** order of blood flow in the heart?
  - Vena cava → pulmonary artery → pulmonary vein → aorta.
  - Pulmonary artery → vena cava → pulmonary vein → aorta.
  - Pulmonary vein → aorta → pulmonary artery → vena cava.
  - Aorta → pulmonary vein → vena cava → pulmonary artery.
- Which one of the following pairs consists only of social effects of drug abuse?
  - Rape and truancy.
  - Lack of concentration and addiction.
  - Accidents and withdrawal.
  - Impaired judgement and loss of consciousness.
- Which one of the following statements is **TRUE** about the incubation stage of HIV infection?
  - If HIV test is carried out, the result is negative.
  - This is the first stage of infection.
  - There are no visible signs.
  - The body cannot fight diseases.
- Which one of the following is **NOT** a **CORRECT** statement about a foetus?
  - Receives oxygen through placenta.
  - The blood of the mother and that of the foetus mix.
  - Receives food substances from the mother's blood.
  - Waste products are removed through the placenta.
- Which one of the following pairs of infections consists only of those that are sexually transmitted?
  - Chancroid and HIV.
  - Gonorrhoea and Bilharzia.
  - Syphilis and Typhoid.
  - Gonorrhoea and Tuberculosis.

- A ruler placed slanting and partially immersed in water appears bent because light
  - from that part of the ruler under water is reflected
  - from that part of the ruler under water is refracted
  - from that part of the ruler under water is scattered
  - travels in a straight line in the same medium.
- The diagram below represents a set-up that can be used to demonstrate a certain aspect of heat.



The aspect demonstrated is that

- solids melt when heated
  - metals expand when heated
  - solids conduct heat
  - metals bend when heated.
- Which one of the following is a storage pest?
    - Weaverbird.
    - White ant.
    - Cutworm.
    - Aphid.
  - Which one of the following stores food in the same part of the plant as Irish potato?
    - Carrot.
    - Sweet potato.
    - Sugarcane.
    - Cassava.
  - The embryo of a seed is made up of
    - plumule and testa
    - cotyledon and plumule
    - radicle and plumule
    - cotyledon and radicle.



12. The following are some characteristics of certain animals:

- (i) body covered with scales
- (ii) lay eggs
- (iii) body temperature varies with the surroundings
- (iv) breathe through lungs.

Which one of the following pairs of animals has ALL the characteristics listed?

- A. Turtle and shark.
  - B. Lizard and tortoise.
  - C. Tilapia and frog.
  - D. Crocodile and platypus.
13. Which one of the following is the main constituent of a balanced diet obtained by animals when they feed on lucerne?
- A. Carbohydrates.
  - B. Protein.
  - C. Vitamins.
  - D. Minerals.

14. Which one of the following is NOT an example of rotational grazing?

- A. Strip.
- B. Paddocking.
- C. Tethering.
- D. Herding.

15. The following are activities carried out when modelling the solar system, but not in their correct order.

- (i) Draw circles on manilla paper to show orbits
- (ii) Model the planets and the sun using clay
- (iii) Put name tags on models of planets and the sun
- (iv) Fix models of planets to orbits and the model of the sun at the centre
- (v) Paste manilla paper on soft board.

Which one of the following is the CORRECT order in which the activities are carried out?

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

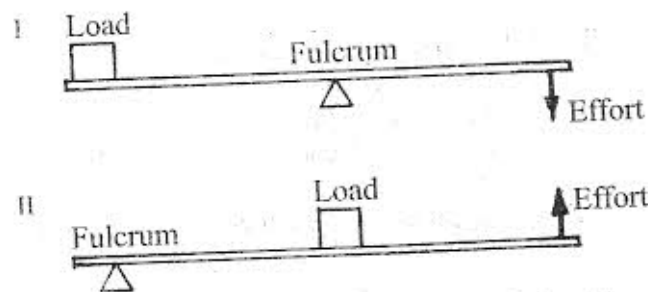
16. The following are some uses of components of air:

- (i) manufacture of electric bulbs
- (ii) supporting burning
- (iii) manufacture of soft drinks
- (iv) germination of seeds
- (v) putting out fires.

Which of the uses are for carbon dioxide?

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

17. A certain machine, when in use, can work with load, effort and fulcrum at different positions as shown in the diagrams I and II.



The machine is a

- A. wheelbarrow
- B. crowbar
- C. spade
- D. clawhammer.

18. The following are methods of separating mixtures:

- (i) picking
- (ii) filtering
- (iii) decanting
- (iv) sieving.

Which two methods are suitable for separating a mixture of water and sand?

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

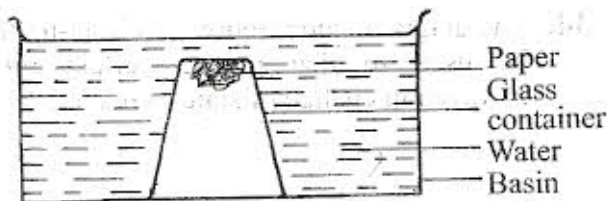
19. Which one of the following is a CORRECT food chain?

- A. Grass → Rabbit → Eagle → Leopard.
- B. Maize → Grasshopper → Lizard → Snake.
- C. Grass → Grasshopper → Eagle → Rabbit.
- D. Kales → Aphid → Weaverbird → Rabbit.



20. When pieces of paper are dropped above a fire they rise. This is because
- heat makes the paper lighter than air
  - paper expands when heated
  - hot air carries the paper upwards
  - heat from the fire carries the paper upwards.

21. The diagram below represents a set-up that was used to demonstrate a certain property of matter.



The property demonstrated was

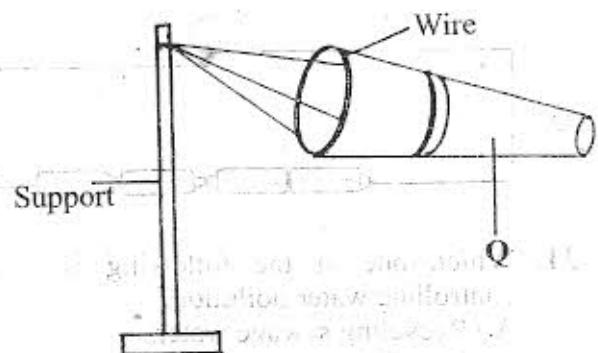
- air occupies space
  - water exerts pressure
  - air has mass
  - water occupies space.
22. Which one of the following materials allows light to pass but one cannot see through it clearly?
- Frosted glass.
  - Mirror.
  - Clean water.
  - Milk.
23. Which one of the following is the BEST method of managing plastic waste?
- Burning.
  - Burying.
  - Recycling.
  - Reusing.
24. Which one of the following diseases can be prevented by wearing gumboots and gloves?
- Typhoid.
  - Malaria.
  - Bilharzia.
  - Cholera.
25. Which one of the following practices is an advantage to the soil?
- Ploughing across the contours.
  - Disposal of vegetable refuse.
  - Burning of crop remains.
  - Use of herbicides.

26. Which one of the following DOES NOT explain why an improved jiko conserves energy? It has
- a cone shape
  - walls made of clay
  - a small space for holding charcoal
  - an outer cover made of metal.

27. In which one of the following is work made easier by changing the direction of force applied?
- Ladder.
  - Flag post.
  - Staircase.
  - A road winding up a hill.

28. Which one of the following groups of foodstuffs constitutes a balanced diet?
- Potatoes, beans, eggs.
  - Chicken, cabbage, beans.
  - Rice, chapatti, beef.
  - Peas, ugali, spinach.

29. The diagram below represents a windsock constructed by pupils.

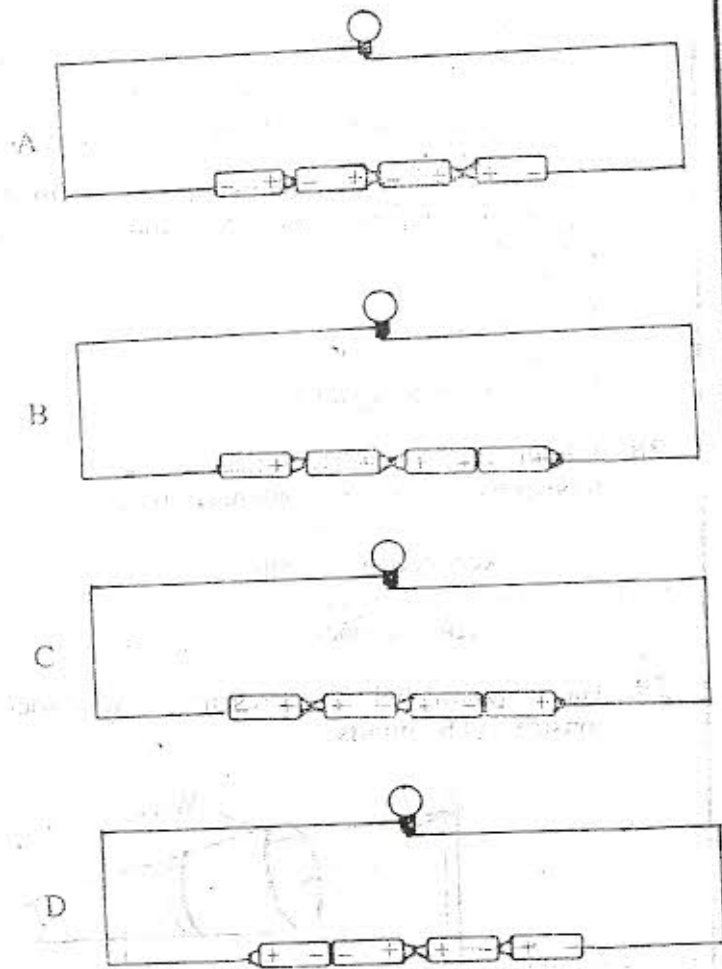


A suitable material that can be used to make the part labelled Q is

- sheet of metal
- manilla paper
- polythene sheet
- piece of mosquito net.



30. In which one of the following circuit diagrams will the bulb not light?



31. Which one of the following is a way of controlling water pollution?  
 A. Recycling sewage water.  
 B. Reusing domestic water for irrigation.  
 C. Storing water in dams.  
 D. Using water sparingly.

32. The MAIN reason why a baby needs to be breastfed by the mother is that the milk produced  
 A. helps to build the baby's immunity  
 B. helps the baby to grow fast  
 C. helps the baby's bones to be strong  
 D. is easily digested.

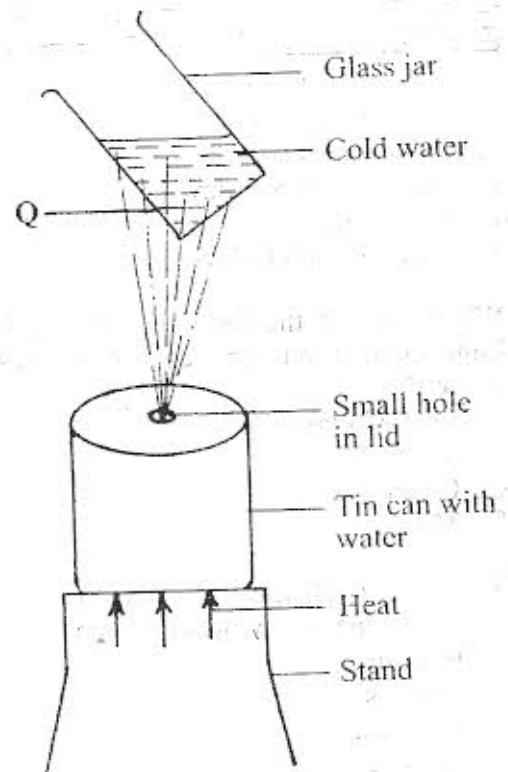
33. The following are features of certain types of clouds:

- (i) white in colour
- (ii) appear like bundles of cotton
- (iii) dark grey in colour
- (iv) mountainous in shape.

Which pair of features are for nimbus clouds?

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

34. The diagram below represents a set-up that can be used to demonstrate certain processes involved in change of state of matter.



The process that takes place at point labelled Q is

- A. boiling
- B. condensation
- C. evaporation
- D. freezing.

35. Which one of the following activities can be used to demonstrate rill erosion?

Pouring water

- A. at different positions of a slanting soil surface
- B. in channels of soil on a slanting surface
- C. on a flat surface of soil
- D. on a flat surface using a tin with many holes.

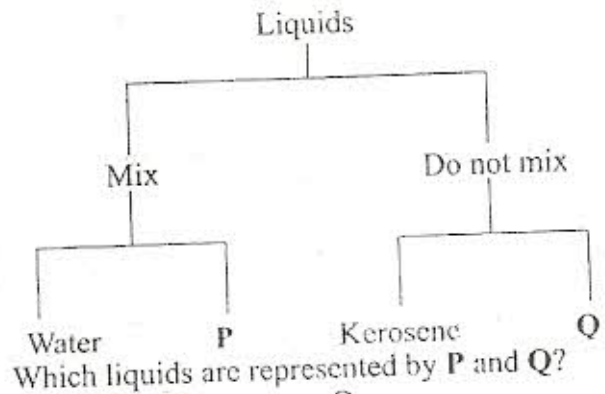


6. Which one of the following pairs consists only of materials that are non-magnetic?
- Copper and aluminium.
  - Steel and zinc.
  - Silver and steel.
  - Iron and aluminium.
7. Which one of the following activities will make an aluminium foil that was floating on water sink?
- Increasing amount of water.
  - Rolling the aluminium foil into a tube.
  - Making holes on the aluminium foil.
  - Crushing the aluminium foil into a ball.
8. Which one of the following ways of improving soil fertility will take the longest time for plants to get nutrients?
- When using
- compost manure
  - compound fertilizer
  - farmyard manure
  - green manure.
9. Pupils felt a sample of soil with their fingers. This activity was done to investigate
- soil texture
  - presence of water in the soil
  - soil capillarity
  - presence of small animals in the soil.
10. Which one of the following is NOT a practice for maintaining simple tools?
- Oiling.
  - Using them for the right purpose.
  - Sharpening.
  - Storing in a safe place.
41. Newton is a unit for
- mass
  - force
  - pressure
  - volume.
42. Which one of the following pairs consists of only animals that have webbed feet?
- Turkey and crocodile.
  - Kingfisher and flamingo.
  - Hippopotamus and toad.
  - Frog and duck.
43. Corrugated iron sheets can be damaged when they come into contact with
- oil spills
  - herbicides
  - industrial gases
  - dust.
44. The MAIN reason why black-jack weed should be uprooted from a vegetable farm when they are still young is
- because it is easy to uproot the weed
  - to avoid loss of soil nutrients
  - to reduce loss of water
  - to control the spread of the weed.
45. Which one of the following is a modern method of preserving food?
- Canning.
  - Salting.
  - Smoking.
  - Drying.
46. The following are activities involved in demonstrating that light travels in a straight line:
- Light a candle and place it at the opposite end of the cardboards
  - Thread a string through the holes
  - Observe the candle through the holes
  - Make a hole at the same level in the three cardboards
  - Cut three similar squares of cardboard and fix each cardboard to a piece of wood.
- Which one of the following is the correct order of activities?
- (v), (i), (iv), (iii), (ii).
  - (v), (iv), (ii), (i), (iii).
  - (v), (i), (iv), (ii), (iii).
  - (v), (iii), (iv), (ii), (i).
47. Which one of the following groups consists only of cash crops?
- Maize, tea, yams.
  - Arrow roots, groundnuts, cotton.
  - Bananas, Irish potatoes, sorghum.
  - Sunflower, sisal, coffee.
48. The purpose of using rollers to move a load is to
- increase the force required to push the load
  - reduce the force that hinders movement of the load
  - make the load lighter
  - control the direction of the movement of the load.



49. Which one of the following is **TRUE** about heat transfer by convection?  
It takes place in
- A. solids only
  - B. liquids and gases
  - C. gases only
  - D. solids and gases.

50. The chart below represents a simple classification of liquids.



Which liquids are represented by **P** and **Q**?

- |                      |                   |
|----------------------|-------------------|
| <b>P</b>             | <b>Q</b>          |
| A. Methylated spirit | Milk.             |
| B. Engine oil        | Methylated spirit |
| C. Cooking oil       | Milk              |
| D. Turpentine        | Engine oil.       |

