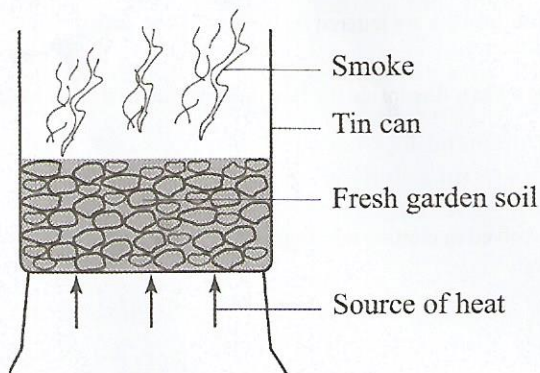


- Heat is transferred through a vacuum by
  - convection and conduction
  - convection only
  - conduction and radiation
  - radiation only.
- The **best** procedure of separating a mixture of sand, maize and salt is
  - picking, dissolving, filtering, evaporating
  - dissolving, filtering, picking, evaporating
  - picking, filtering, dissolving, evaporating
  - dissolving, decanting, picking, evaporating.
- To stop a moving object, the force applied should be
  - in the same direction as that of the moving object
  - opposite and less than that of the moving object
  - equal and in the opposite direction to that of the moving object
  - perpendicular and more than that of the moving object.
- The set up shown below can be used to investigate the presence of a certain component of soil.



The soil component investigated is

- organic matter
  - water
  - air
  - mineral salts.
- Which of the following pairs of processes occurs when temperature decreases?
    - Melting and condensation.
    - Freezing and melting.
    - Contraction and evaporation.
    - Freezing and condensation.

- Which one of the following animals has scales on its body?
  - Chameleon.
  - Whale.
  - Toad.
  - Newt.
- The **main** reason why mothers are encouraged to breast feed their infants is because breast milk
  - is free from disease causing germs
  - is at the right temperature for infants
  - boosts infant immunity
  - is easily digested by infants.
- Splash erosion can be prevented by
  - use of gabions
  - mulching
  - terracing
  - contour farming.
- Newton is the unit for measuring
  - weight
  - mass
  - volume
  - pressure.
- Soil that is good for modelling has
  - high water drainage
  - rough texture
  - high capillarity
  - large air spaces.
- The following are processes that take place during birth in humans
  - Dilation of the cervix*
  - Contraction of the uterus*
  - Bursting of the amniotic bag*
  - Pushing out of the baby*
  - Cutting of the umbilical cord*
 Which of the following is the **correct** order of the processes?
  - (i), (iii), (ii), (iv), (v).
  - (i), (iii), (iv), (ii), (v).
  - (ii), (i), (iii), (iv), (v).
  - (ii), (iv), (iii), (i), (v).

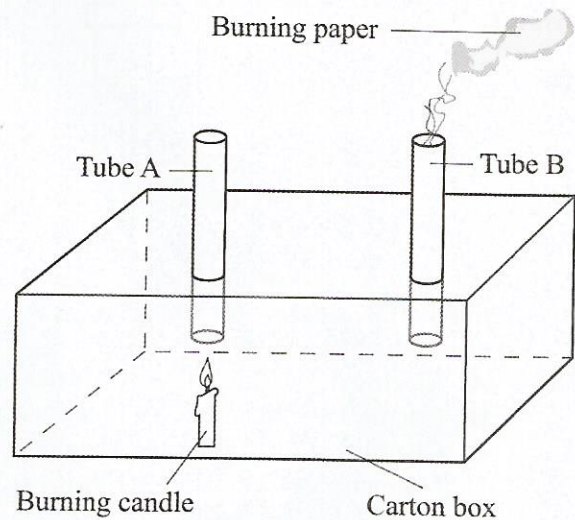


12. A farmer practicing stall feeding is **likely** to feed animals on
- pasture and fodder
  - pasture and concentrates
  - fodder and concentrates
  - concentrates only.
13. Which of the following statements is **true** about Vena Cava? It carries
- deoxygenated blood
  - blood from the lungs
  - blood under high pressure
  - blood from the heart.
14. Which of the following materials are both opaque?
- Mirror and fresh milk.
  - Paper smeared with oil and frosted glass.
  - Fresh milk and frosted glass.
  - Mirror and paper smeared with oil.
15. Which **one** of the following pairs is a source of electricity?
- Dam and a dynamo.
  - Wind-driven turbine and a dam.
  - Torch and a dynamo.
  - Dry cell and a geothermal generator.
16. Which of the following statements is **true** about cumulus clouds?
- Their presence is a sign of rain.
  - Appear at low altitude and spread out in flat layers.
  - They are shaped like mountains.
  - They are dark grey in colour.
17. Which of the following planets are in the 2nd and 6th positions from the sun?
- Mars and Jupiter.
  - Venus and Saturn.
  - Earth and Saturn.
  - Venus and Jupiter.
18. In which of the following pairs of levers is the load, effort and fulcrum **likely** to be in similar positions when in use?
- Crowbar and claw hammer.
  - Wheelbarrow and spade.
  - Crowbar and spade.
  - Claw hammer and wheelbarrow.

19. Which of the following pairs of objects is **correctly** classified into magnetic and non-magnetic?

| Magnetic        | Non-magnetic |
|-----------------|--------------|
| A. Glass sheet  | Tin can.     |
| B. Steel needle | Pencil lead. |
| C. Copper coin  | Steel wool.  |
| D. Razor blade  | Staple pin.  |

20. The diagram below represents a set-up that is used to demonstrate a certain aspect of matter



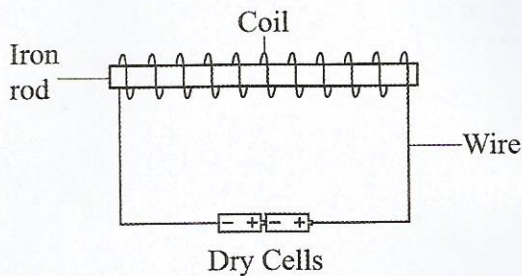
The aspect investigated is

- radiation
  - convection
  - conduction
  - expansion.
21. The following are uses of some components of air:
- germination
  - preserving soft drinks
  - electric bulbs
  - burning.
- Which two uses are for the component that makes up 21% of air?
- (i) and (iii).
  - (ii) and (iii).
  - (i) and (iv).
  - (ii) and (iv).



22. A pupil was walking towards the northern direction past an air strip and noticed a windvane pointing to her right. In which direction was the wind blowing from?
- East.
  - South.
  - North.
  - West.

23. The diagram below represents a simple electromagnet.



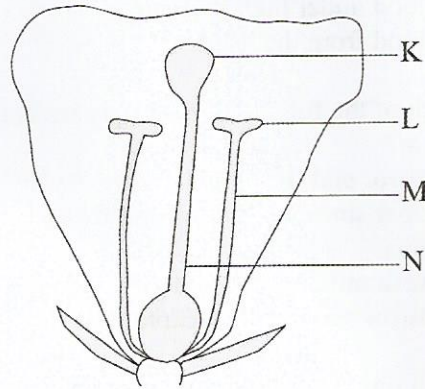
Which of the following energy transformations occur in the electromagnet?

- Electrical → Magnetic → Chemical.
  - Chemical → Magnetic → Electrical.
  - Chemical → Electrical → Magnetic.
  - Magnetic → Chemical → Electrical.
24. Vaccines given at birth protect an infant against
- diphtheria and tuberculosis
  - tuberculosis and poliomyelitis
  - tetanus and diphtheria
  - whooping cough and poliomyelitis.
25. Farmers apply farm yard manure to the soil to
- improve soil structure
  - release nutrients needed by plants immediately
  - provide specific nutrients
  - provide nutrients in right amounts.
26. Which pair of plants stores food in the roots?
- Sweet potato and carrot.
  - Irish potato and arrow root.
  - Carrot and Irish potato.
  - Onions and cassava.

27. Which of the following groups of food crops is **correctly** classified into cereals, legumes and fruits?

| Cereals  | Legumes     | Fruit    |
|----------|-------------|----------|
| A. Peas  | Millet      | Orange.  |
| B. Apple | Green grams | Beans.   |
| C. Rice  | Ground nuts | Pawpaw.  |
| D. Wheat | Banana      | Sorghum. |

28. The diagram below shows some parts of a flower.



The parts representing the stigma and filament are

- K and L
  - L and N
  - K and M
  - N and M.
29. Which of the following food chains is **correct**?
- Grass → grasshopper → goat.
  - Maize → mice → snake.
  - Sunflower → butterfly → rabbit.
  - Grass → antelope → rhino.
30. Which of the following groups of animal feeds **mainly** provides a diet of proteins, carbohydrates and fats respectively?
- Desmodium, clover, sweet potato vines.
  - Lucern, maize stalks, oats.
  - Napier grass, sweet potato vines, maize stalks.
  - Lucern, desmodium, napier grass.



31. Which of the following groups of foods would provide nutrients suitable for a child suffering from kwashiorkor?
- Sorghum, carrots, sweet potatoes.
  - Oranges, Irish potatoes, sugar cane.
  - Beef, peas, milk.
  - Mangoes, arrowroots, spinach.
32. Bilharzia can be prevented by
- boiling water before drinking
  - wearing gumboots when walking in stagnant water
  - draining stagnant water from around the homestead
  - covering latrines after use.
33. Which of the following uses of water are recreational only?
- Transport, cleaning, swimming.
  - Cleaning, boat racing, mixing chemicals.
  - Swimming, fishing, boat racing.
  - Fishing, transport, mixing chemicals.
34. Which of the following statements about HIV infected persons is **correct**?
- Infected persons
- can only be taken care of by health workers
  - need to visit hospitals for cure
  - should be provided with a balanced diet
  - should be discouraged from playing with others.
35. Excessive use of herbicides and pesticides affect the soil by reducing the
- number of animals in the soil
  - nutrients in the soil
  - humus content in the soil
  - water retention in the soil.
36. Which of the following parts of the human breathing system are both involved in cleaning, warming and moistening air?
- Diaphragm and trachea.
  - Lungs and diaphragm.
  - Nose and lungs.
  - Trachea and nose.
37. Which of the following pairs of livestock parasite control methods can control liver flukes?
- Rotational grazing and deworming.
  - Dipping and spraying of animals.
  - Rotational grazing and spraying of animals.
  - Deworming and dipping.
38. In which of the following are the characteristics of solids and liquids **correctly** matched?
- | Solids                | Liquids            |
|-----------------------|--------------------|
| A. Definite volume    | Definite shape.    |
| B. No definite volume | Definite shape.    |
| C. Definite volume    | No definite shape. |
| D. No definite shape  | Definite volume.   |
39. Which of the following groups of objects consists of **only** objects that would sink in water?
- Piece of chalk, steel needle, cork.
  - Nail, piece of glass, stone.
  - Bottle top, nail, cork.
  - Piece of chalk, plastic bottle, polythene bag.
40. The following are reasons for fitting a tap near the bottom of a tank **except**
- making gravitational force to act on water
  - making water to flow faster
  - to increase pressure
  - to let all the water out.
41. The **main** reason why murrum is placed on roads is to
- absorb rain water
  - make the roads last longer
  - increase grip with tyres
  - make the roads more attractive.
42. Which of the following groups of products are **correctly** classified according to the farm animals producing them?
- | Cattle    | Sheep  | Goats  |
|-----------|--------|--------|
| A. Dairy  | Beef   | Wool.  |
| B. Beef   | Dairy  | Wool.  |
| C. Mutton | Wool   | Dairy. |
| D. Beef   | Mutton | Dairy. |



43. The following processes are involved in the formation of a zygote in plants:

- (i) Growth of pollen tube
- (ii) Pollination
- (iii) Fusion
- (iv) Pollen tube breaks.

The correct order of the processes is

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

44. Which of the following **only** consists of energy giving foods?

- A. Lemon and honey.
- B. Butter and coconut.
- C. Eggs and fish.
- D. Bread and pineapple.

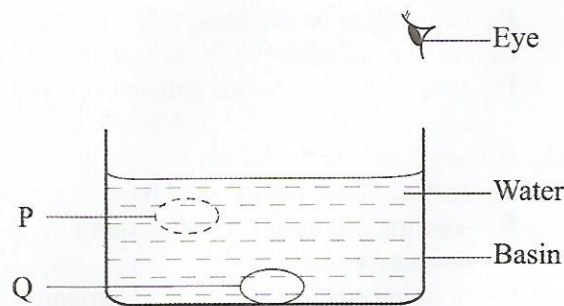
45. Which of the following statements describes soft water? Soft water

- A. is clear and clean
- B. requires a lot of soap for washing
- C. is safe for drinking
- D. is water that has been boiled.

46. In an activity to investigate mixing of liquids, liquid P mixed with liquid Q. Liquid R did not mix with Liquid P and Q. Liquid R mixed with cooking oil. Which one of the following **correctly** represents liquids P, Q and R?

- | P           | Q        | R         |
|-------------|----------|-----------|
| A. Water    | Milk     | Kerosene. |
| B. Kerosene | Water    | Milk.     |
| C. Milk     | Kerosene | Water.    |
| D. Water    | Kerosene | Milk.     |

47. The diagram below represents a set up used to demonstrate a certain property of light.



Which one of the following statements is **correct** about the set up? Light is

- A. refracted from P to the eye
- B. reflected from Q to the eye
- C. refracted from Q to the eye
- D. reflected from P to the eye.

48. Which one of the following pairs of materials will pollute soil?

- A. Saw dust and artificial fertilizer.
- B. Plastics and artificial fertilizer.
- C. Wood ash and saw dust.
- D. Plastics and iron filings.

49. In a certain investigation pupils used a straight pipe to observe a candle flame. They then bent the pipe and observed again.

Which aspect of light was being investigated?

- A. Formation of shadows.
- B. Uses of light.
- C. Sources of light.
- D. How light travels.

50. A pupil was blindfolded and asked to listen as a bell was rang from different positions.

Which aspect of sound was being investigated?

- A. Direction of sound.
- B. Effects of sound pollution.
- C. Loud and soft sounds.
- D. Meaning of special sounds.