1. A card with the word **BRICK** written on it was placed in front of a mirror. Which one of the following shows how the word would appear in the mirror?
   A. **BRICK**
   B. **KCIRB**
   C. **BRICK**
   D. **KCRIB**

2. Absorption of water in the alimentary canal of human beings takes place in the
   A. stomach
   B. duodenum
   C. small intestines
   D. large intestines

3. Standard five pupils observed and grouped some small animals. Which one of the following animals were CORRECTLY grouped?
   A. Ant, tick, spider.
   B. Beetle, moth, ant.
   C. Spider, weevil, beetle.
   D. Tick, moth, weevil.

4. Which one of the following groups consists of non-flowering plants only?
   A. Moss, grass, pine.
   B. Fern, algae, pine.
   C. Moss, algae, cabbage.
   D. Cabbage, grass, fern.

5. Which one of the following statements about vertebrates is TRUE?
   A. Fish and amphibians have scales.
   B. Amphibians and reptiles lay their eggs on land.
   C. Fish and birds have constant body temperature.
   D. Reptiles and birds lay fertilized eggs.

6. The diagram below shows parts of a flower.

   ![Flower Diagram](image)

   Which one of the labelled parts is NOT CORRECTLY matched with its function?
   **Part**  |  **Function**
   --- | ---
   A. W | Receives pollen grains.
   B. X | Produces pollen grains.
   C. Y | Develops into a seed after fertilization.
   D. Z | Protects inner parts of a flower.

7. Which one of the following parts of a maize grain is CORRECTLY matched with its function?
   **Part**  |  **Function**
   --- | ---
   A. Cotyledon | Protects inner parts.
   B. Plumule | Develops into roots.
   C. Eospermum | Stores food.
   D. Radicle | Develops into shoot.

8. Which one of the following is NOT an excretory organ?
   A. Skin.
   B. Lung.
   C. Kidney.
   D. Rectum.

9. Which one of the following are the percentages of carbon dioxide and nitrogen in the air?
   A. 1% and 21%.
   B. 0.03% and 78%.
   C. 21% and 78%.
   D. 0.03% and 1%.
10. The processes I, II, III and IV in the chart below bring about changes in states of matter.

\[ \text{SOLIDS} \rightarrow \text{LIQUIDS} \rightarrow \text{GASES} \]

The processes that require increase in temperature are:
A. I, II, IV
B. I, II, III
C. I, IV
D. I, III

11. The diagram below shows a set-up that was used to investigate a certain property of air.

Which one of the following would NOT be observed if the tin can was heated gently?
A. Bubbles in the basin.
B. Drop of ink moving towards water in the basin.
C. Water level in the basin decreasing when heating is stopped.
D. Water level in the glass tube decreasing when heating is stopped.

12. Which one of the following factors will NOT affect sinking and floating of a material in water? The
A. mass of the material
B. type of the material
C. shape of the material
D. size of the material

13. In which one of the following activities is friction LEAST needed?
A. Writing.
B. Riding a bicycle.
C. Walking.
D. Using pulleys.

14. Which one of the following statements about a single fixed pulley is TRUE? The effort
A. moves a shorter distance than the load.
B. and the load move the same distance.
C. moves twice the distance the load moves.
D. required is half the load.

15. Standard five pupils added equal amounts of water to three equal amounts of soil samples J, K and L in funnels as shown in the diagrams below.

After 10 minutes the pupils measured the amount of water that had drained through each soil sample.

<table>
<thead>
<tr>
<th>Soil sample</th>
<th>J</th>
<th>K</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of water collected (cm³)</td>
<td>28</td>
<td>19</td>
<td>33</td>
</tr>
</tbody>
</table>

Which one of the following statements is a CORRECT conclusion from the results obtained?
A. J has larger particles than L.
B. K has larger particles than L.
C. K has larger particles than J and L.
D. L has larger particles than J and K.

16. Which one of the following consists of magnetic materials only?
A. Tin, aluminum, copper.
B. Iron, steel, cobalt.
C. Tin, iron, copper.
D. Aluminium, steel, cobalt.

17. When breathing in, the
A. diaphragm flattens.
B. lungs shrink.
C. diaphragm becomes dome shaped.
D. volume of the chest decreases.

18. Which one of the following LEAST conserves soil
A. Mulching.
B. Planting cover crops.
C. Contour ploughing.
D. Terracing.
19. A person intends to push a drum full of oil along an inclined plane, on to a platform. Decreasing the slope of the inclined plane would
A. decrease effort applied
B. decrease effort distance
C. decrease load distance
D. not affect the effort applied.

20. Which of the following information is usually given when obtaining medicine from a pharmacy?
A. Expiry date.
B. Disposal method of containers.
C. The dose.
D. How to store the medicine.

21. The following are tuber crops EXCEPT:
A. onion
B. carrot
C. sweet potato
D. beetroot.

22. When sand particles are put in a glass of cold water and heated at the bottom, the particles are seen to rise and fall. This is because sand particles
A. are carried by hot water which comes down on cooling
B. rise when heated and come down on cooling
C. become lighter than water when heated
D. and water rise when heated and come down on cooling.

23. Which one of the following shows the 4th and 7th planets from the Sun?
A. Venus, Neptune.
B. Jupiter, Saturn.
C. Mars, Uranus.
D. Jupiter, Uranus.

24. Which one of the following shows the correct order of energy changes that take place when a bulb is connected to a dry cell to produce light?
A. Chemical → heat → electrical → light.
B. Electrical → chemical → heat → light.
C. Chemical → electrical → heat → light.
D. Electrical → heat → chemical → light.

25. Which one of the following consists of only characteristics of insect pollinated flowers?
A. Sweet scented, large number of pollen grains.
B. Brightly coloured petals, sticky pollen grains.
C. Light pollen grains, sweet scented.
D. Brightly coloured petals, light pollen grains.

26. Which one of the following is NOT a source of light?
A. Moon.
B. Firefly.
C. Star.
D. Sun.

27. The chart below represents a simple classification of pollutants.

```
<table>
<thead>
<tr>
<th>Pollutants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil pollutants</td>
</tr>
<tr>
<td>River water pollutants</td>
</tr>
</tbody>
</table>
```

Fertilizers X sewage Y

The pollutants represented by X and Y are
A. Factory waste
B. Herbicides
C. Oil spillage
D. Acid rain

28. The MOST appropriate method of separating a mixture of sand and salt after addition of water is
A. decanting
B. filtering
C. sieving
D. evaporating.

29. In which one of the following processes is oxygen NOT used?
A. Making plant food
B. Burning
C. Breathing
D. Germination of seed.

30. Which one of the following statements about HIV and AIDS is TRUE?
A. People living with HIV and AIDS are thin.
B. HIV and AIDS is a curse.
C. Premarital sex is the only mode of transmission of HIV and AIDS.
D. People living with HIV and AIDS are advised to eat small amounts of food at a time.

31. Which one of the following is NOT an essential constituent of commercial animal feeds?
A. Water.
B. Vitamins.
C. Proteins.
D. Carbohydrates.

32. Which one of the following is likely to cause an increased growth of water plants in a nearby river?
A. market centre
B. factory
C. garage
D. tea farm.
33. A child with thin and brown hair, swollen hands, feet and face is also likely to
   A. have knock knees
   B. appear weak and inactive
   C. have a face like an old person
   D. have faster heart beats

34. Which one of the following statements is NOT TRUE about manure? They
   A. improve the ability of the soil to hold water
   B. bind soil particles
   C. release nutrients very fast to the soil
   D. improve air circulation in the soil

35. Which one of the following is a function of fibre in the diet?
   A. Helps in getting rid of undigested food.
   B. Helps in absorption of digested food.
   C. Adds nutrients to the body.
   D. Helps in digestion of food.

36. Draining of stagnant water can prevent the spread of
   A. cholera and typhoid
   B. bilharzia and malaria
   C. typhoid and malaria
   D. cholera and bilharzia

37. Which one of the following DOES NOT produce electricity?
   A. Bicycle dynamos.
   B. Batteries.
   C. Water dams.
   D. Solar panels.

38. Which one of the following descriptions of beaks would be for a bird that most likely feeds on nectar?
   A. Short and curved.
   B. Long and curved.
   C. Short and strong
   D. Long and straight.

39. Which one of the following animals belongs to the same group as a weevil?
   A. Crab.
   B. Mite.
   C. Spider.
   D. Termite.

40. Which one of the following statements is NOT CORRECT about a windsock?
   A windsock
   A. is open at both ends
   B. gets filled with air and rises
   C. points to the direction from which wind blows
   D. should be placed in the open field.
2. The diagram below represents a set-up that is used to investigate a certain property of light.

The property investigated is that light
A. is refracted
B. travels in a straight line
C. is dispersed
D. does not pass through opaque materials.

3. Which one of the following groups of sources of energy consists of only renewable sources?
A. Firewood, kerosene, waterfall.
B. Wind, charcoal, biogas.
C. Diesel, waterfall, wind.
D. Biogas, kerosene, firewood.

4. Which one of the following is NOT a reason for lighting a house?
A. For safety purposes.
B. To discourage pests.
C. To feel warm.
D. To read comfortably.

5. The following are ways of maintaining tools EXCEPT:
A. cleaning after use
B. greasing
C. sharpening
D. using them regularly.

6. Which one of the following effects of drug abuse consists of only social effects?
A. Theft and lack of concentration.
B. Drug induced accidents and injury.
C. Rape and withdrawal symptoms.
D. Drug addiction and loss of consciousness.

47. The presence of thick white and mountain shaped clouds are a sign of
A. heavy rain falling soon
B. low temperatures
C. fine weather
D. strong winds blowing.

48. A lactating mother needs foods rich in iron
A. to protect the baby against diseases
B. for the formation of strong bones in the baby
C. to increase milk production
D. to replace blood lost during birth.

49. The component of soil that improves its water holding capacity is
A. mineral salts
B. air
C. organic matter
D. living organisms.

50. Which one of the following BEST describes the term environment?
A. The surrounding of a living organism.
B. Where a living organism obtains food from.
C. Where a human being lives.
D. The home of a living organism.