

# ACADEMIC BREAKTHROUGH SERIES

SASON  
001

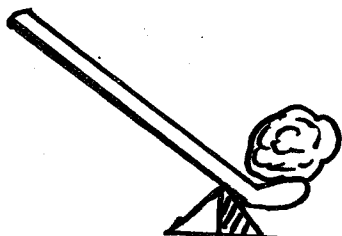
STD. 8 YEAR - 2021

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## SCIENCE

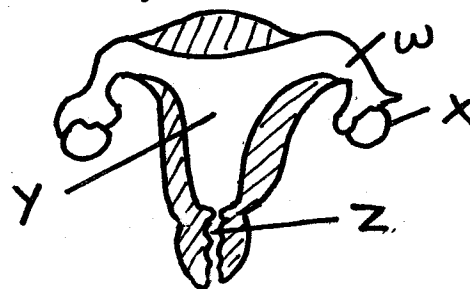
Time: 1 Hr 40 Min.

- In which part of the digestive system are mineral salts absorbed?  
A. Mouth                      B. Stomach  
C. Small intestines      D. Large intestines
- Which one of the following is not caused by force? Force:-  
A. make objects to change state  
B. make objects change their shape  
C. stops objects from moving  
D. makes objects change direction
- Which one of the following is in the same class of levers as the one drawn below?



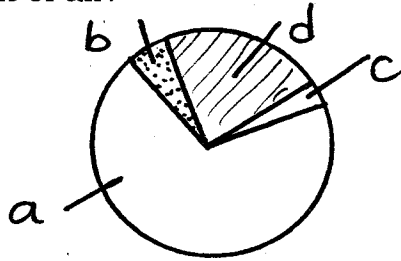
- A. Nut cracker.              B. Wheelbarrow  
C. Pliers                      D. Spade
- Which one of the following diseases cannot be prevented by maintaining proper hygiene?  
A. Bilharzia                      B. Cholera  
C. Anaemia                      D. Typhoid
  - The following are some characteristics of weeds:-  
**(i) Strong smell**  
**(ii) Thorns on stem**  
**(iii) Pink flowers**  
**(iv) Purple or white flowers**  
Which **two** characteristics are of sodom apple?  
A. ii and iii  
B. ii and iv  
C. i and iii  
D. i and iv
  - Which one of the following pairs of vaccines is administered at birth?  
A. BCG and DPT  
B. DPT and measles  
C. BCG and polio  
D. Polio and measles
  - Which of the following statements is **true** about blood vessels?

- A. Aorta has valves  
B. Venacava has thin walls  
C. Pulmonary vein carries deoxygenated blood  
D. Pulmonary artery carries blood to the heart
- Which one of the following methods of grazing is recommended for a farmer who wants to keep many animals on his farm?  
A. Herding                      B. Tethering  
C. Paddock                      D. Zero - grazing
  - The diagram below shows female reproductive system.



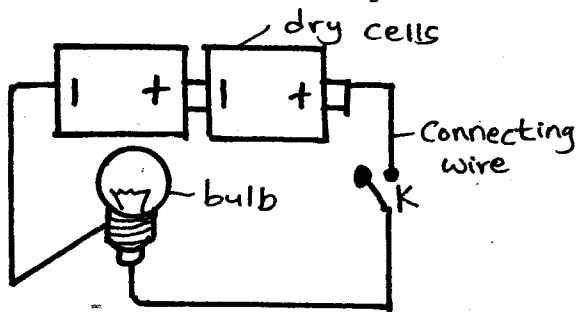
- Which letter above shows where fusion of sex cells take place?  
A. W                      B. X                      C. Y                      D. Z
- An HIV patient had the following signs:-  
**(i) Looked normal and healthy**  
**(ii) Tested negative**  
**(iii) Could infect others**  
The patient was undergoing a stage called:-  
A. full blown  
B. window period  
C. incubation stage  
D. symptomatic stage
  - Which one of the following is **not** a common communicable disease?  
A. Malaria  
B. Tuberculosis  
C. Typhoid  
D. Tetanus
  - The **main** function of the red blood cells is to:-  
A. transport hormones  
B. help in blood clotting  
C. transport oxygen in the body  
D. fight germs

13. The pie chart below shows the composition of air.



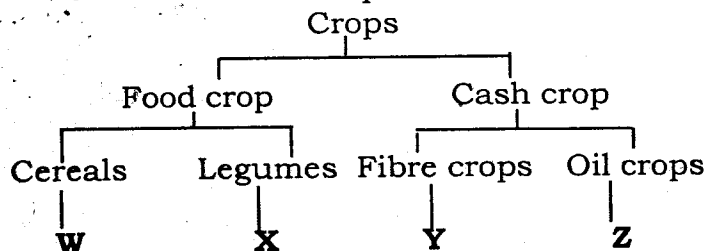
Which portion shows the part of the air that supports life?

- A. b      B. c      C. d      D. a
14. Which one of the following is a reason why infants are immunized?
- A. To enable the child grow faster  
 B. To prevent the child from contraction some diseases  
 C. To make their teeth and bones strong  
 D. To treat diseases which a child may inherit from the mother
15. Which one of the following are both reasons for lighting a house?
- A. Safety and drying  
 B. Seeing clearly and warming  
 C. Drying and warming  
 D. Safety and discouraging pests
16. The diagram below represents a set-up that can be used to investigate good and bad conductors of electricity.



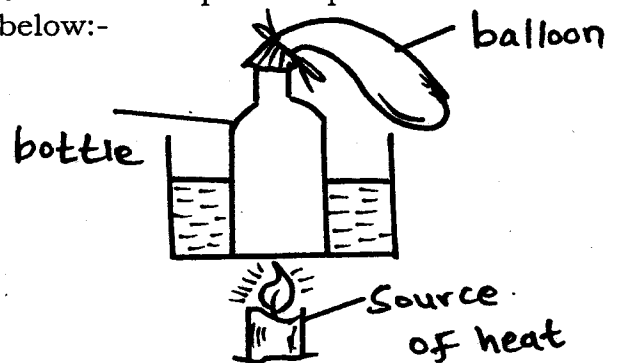
Which one of the following materials when used to connect wires at position **K** would make the bulb light?

- A. Glass rod      B. Wet thread  
 C. Rubber      D. Plastic ruler
17. The chart below represent simple classification of crops.



Which one of the following crops are **correctly** represented by **W, X, Y** and **Z** respectively?

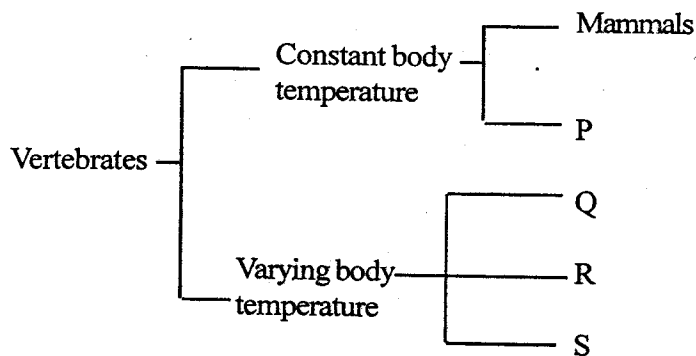
- A. Rice, greengrams, kales, cotton  
 B. Sorghum, peas, sisal, coconut  
 C. Greengrams, wheat, sisal, pawpaw  
 D. Pea, wheat, sunflower, cotton
18. A child was diagnosed with the following signs and symptoms:-  
 (i) **Loose skin**  
 (ii) **Sores at the corner of the mouth**  
 (iii) **Weakness**  
 (iv) **Swollen body parts**
- Which one of the following foods should the child be fed on?
- A. Milk      B. Yams  
 C. Fruits      D. Vegetables
19. Which one of the following is not a reason why a young couple should take a HIV test?
- A. To avoid HIV re-infection  
 B. To plan for the future  
 C. To promote stigmatisation  
 D. To seek information on nutrition
20. Standard five pupils of Shariani Primary School set-up an experiment as shown below:-



What was their observation after sometime?

- A. The balloon got inflated  
 B. Drops of water formed in the bottle  
 C. Drops of water formed in the balloon  
 D. The balloon was blown away
21. Which one of the following food preservation methods make micro-organisms inactive?
- A. Drying      B. Using low temperatures  
 C. Salting      D. Smoking
22. Class six pupils put seeds in water and placed them in a cold room. Which of the following conditions necessary for germination were they investigation?
- A. Air      B. Warmth  
 C. Light      D. Moisture

23. Three of the following are true about insect pollinated flowers **except**:-  
 A. large, brightly coloured petals  
 B. strongly scented, sticky stigmas  
 C. hairy stigmas, loosely attached anthers  
 D. produce nectar, anthers firmly attached to flowers
24. Which one of the following parts of a flower is **not** correctly matched with its functions?
- | <u>Part of a flower</u> | <u>Function</u>  |
|-------------------------|------------------|
| A. Stigma               | Produces pollen  |
| B. Pollen grains        | Fertilise ovules |
| C. Style                | Supports stigma  |
| D. Filament             | Supports anther  |
25. Which one of the following is the most effective control measure against the spread of malaria?  
 A. Sleeping under a mosquito net  
 B. Use a mosquito repellent  
 C. Treating of infected persons  
 D. Draining of stagnant water
26. Three of the following plants have common characteristics. Which one is **not**?  
 A. Algae  
 B. Toadstools  
 C. Puffballs  
 D. Mushrooms
27. Which one of the following is **not** a form of special sound?  
 A. Screaming  
 B. Ringing a bell  
 C. Hooting  
 D. Singing
28. In a flower fertilization takes place in the:-  
 A. stigma  
 B. pollen tube  
 C. ovary  
 D. ovule
29. Sheet erosion is also called:-  
 A. landslide  
 B. splash  
 C. rill  
 D. spatter
30. Which blood component fight germs in the body?  
 A. White blood cells  
 B. Red blood cells  
 C. Platelets  
 D. Plasma
31. Insectivorous plants grow in soil that lacks:-  
 A. oxygen  
 B. water  
 C. nitrogen  
 D. living organisms
32. Which blood vessel carries deoxygenated blood to the heart?  
 A. Aorta  
 B. Vena cava  
 C. Pulmonary vein  
 D. Pulmonary artery
33. The **best** way to allow sunlight in a house is to use:-  
 A. electricity  
 B. large windows  
 C. skylight  
 D. a chimney
34. The chart below shows a simple classification of vertebrates:-



Which one of the following groups of vertebrates does **P** represent?

- A. Reptiles  
 B. Amphibians  
 C. Birds  
 D. Fish

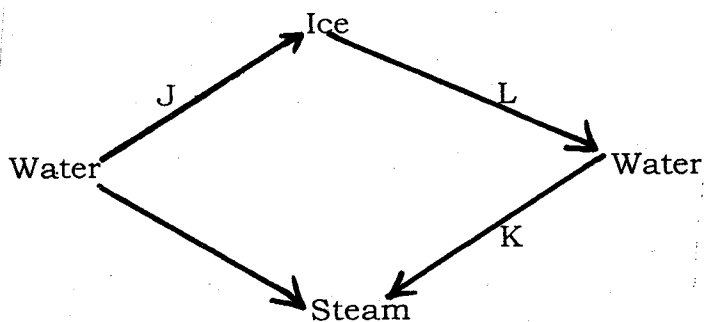
35. In a certain investigation on sound energy, a teacher rang a bell and then whistled as the pupils listened. Which one of the following was being investigated?

- A. Types of sounds  
 B. Special sounds  
 C. Sound pollution  
 D. Direction of sound

36. Which one of the following instruments is used to measure two different aspects of weather?

- A. Wind vane  
 B. Thermometer  
 C. Rain gauge  
 D. Windsock

37. Which one of the following methods of controlling weeds requires use of farm tools?
- Digging and mulching
  - Chemical and digging
  - Uprooting and mulching
  - Digging and slashing
38. In Kenya, rivers passing through cities are mainly polluted by:-
- industrial wastes
  - oil spillage
  - soil erosion
  - agricultural chemicals
39. Which one of the following disease symptoms is for cholera?
- Vomiting and diarrhoea
  - itchiness and coughing
  - Blood in stool
  - blood in urine
40. Which one of the following is the least effective control measure for sexually transmitted diseases among married couples?
- Be faithful to their partners
  - Use of sterilised personal items
  - Testing and counselling
  - Abstinence
41. Name the process labelled **J**, **K** and **L** in the diagram below respectively.



- Freezing, condensation, evaporation
  - Condensation, evaporation, melting
  - Melting, freezing, condensation
  - Freezing, evaporation, melting
42. Which one of the following completes a list of field pest **only**?
- Weaver birds, weevils, rats
  - Aphids, cutworms, termites
  - Stalkborers, weevils, rats
  - Weaver birds, stalkborers, aphids
43. Which of the following is **not** a communicable disease?
- Whooping cough
  - Tuberculosis
  - Tetanus
  - Measles
44. The purpose of salt in food preservation to:-
- remove water
  - remove air
  - add flavour
  - lower the temperature
45. Which one of the following is **not** a magnetic material?
- Steel
  - Iron
  - Tin
  - Copper
46. Which one of the following does **not** need to be the same while testing drainage?
- Time duration
  - Amount of soil
  - Amount of cotton wool
  - Type of soil
47. Babies born by a mother who smoke during pregnancy suffer from the following health problem except:-
- fast learners
  - under weight
  - weak immune system
  - poor mental growth
48. Cigarettes addiction is caused by a component of tobacco known as:-
- caffeine
  - carbon dioxide
  - tar
  - nicotine
49. Oxygenated blood flows to the left auricle through the:-
- venacava
  - pulmonary artery
  - aorta
  - pulmonary vein
50. Why are utensils made of metals sometimes fitted with rubber or wooden handle?
- To conduct heat properly
  - To insulate them
  - To make them last longer
  - To make them attractive