

READ THESE INSTRUCTIONS CAREFULLY

1. You have been given this question paper and a separate answer sheet. The question paper contains 50 questions.
2. Make sure that you have written on the answer sheet.
 - (i) Your name
 - (ii) Name of your school
 - (iii) KNEC Assessment number

Time: 2hrs 15mins

SCIENCE & TECHNOLOGY

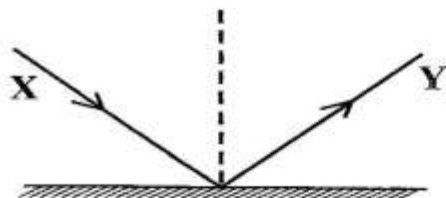
1. Mary is using an inclined plane to make work easier. Which is she **not** using?

A. Ladder B. Staircase
C. Wheelbarrow D. Ramp

2. Another name for pivot is _____

A. fulcrum B. effort
C. load D. weight

3. The diagram represents a ray diagram



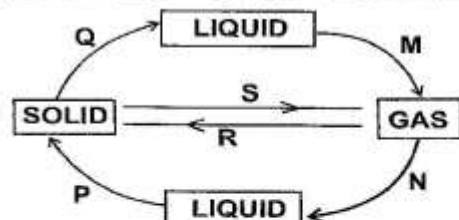
ray marked X is called

A. normal ray B. refracted ray
C. incident ray D. reflected ray

4. All the following are uses of oxygen in daily lives **except**

A. breathing
B. support burning
C. germination of seeds
D. for photosynthesis

The diagram below shows changes of matter. Use it for questions 5, 6 and 7.



5. Name the solid that undergoes process Q.

A. Salt B. Ice
C. Dust D. Metal

6. What is the name of the process S?

A. Sublimation B. Evaporation
C. Freezing D. Deposition

7. Which letters on the diagram above represent processes that require decrease in temperature?

A. M and N B. P and M
C. N and P D. P and Q

8. The diagram below shows an invertebrate



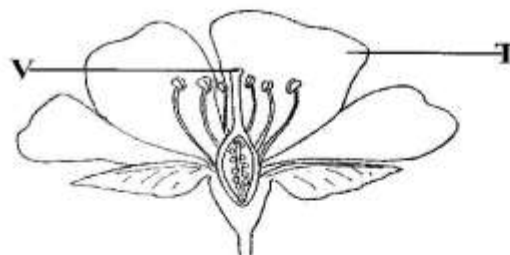
Which group of invertebrates does the animal belong?

A. Worms B. Spiders and ticks
C. Sea invertebrates D. Insects

9. Joy name the component of blood that helps in clotting of blood after injury. Which one did she name?

A. Plasma B. Platelets
C. Red blood cells D. White blood cells

Ruth collected a sample of flower during Science and Technology nature study. She drew the flower as shown. Use it to answer questions 10 and 11



10. What is the name of the part labelled T?

A. Petal B. Sepal
C. Stigma D. Anther

11. What is the function of the part labelled V?

A. Produce pollen
B. Develops into seeds
C. Protect the flower at bud stage
D. Receives pollen

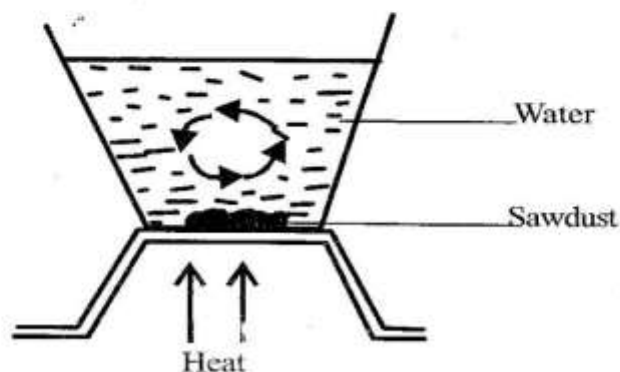
12. Which among the following is **not** a symptom of high blood pressure?
 A. Severe headache
 B. Chest pains
 C. Stomachache
 D. Abnormal heartbeat
13. We can minimize friction by doing the following **except**
 A. use of rollers
 B. roughening the surface
 C. smoothening the surfaces
 D. use of ball bearings
14. Onyando described gravity as force that
 A. opposes motion
 B. makes objects fall down
 C. attracts magnetic materials
 D. prevents water vessels from sinking
15. A ship floats in water due to its
 A. shape
 B. size
 C. mass
 D. weight
16. Some birds build their nests with the entry facing downwards. This is to
 A. make the nest cold
 B. make nest beautiful
 C. make the nest warm
 D. make the nest last longer
17. Gordon described the uses of light as follows. Which one is **wrong**?
 A. For lightning house
 B. For security
 C. For discouraging pests
 D. For warming the house
18. Grade Six learners observed the characteristic of certain plant shown below



It shows that plants

- A. grow
 B. reproduce
 C. feed
 D. move

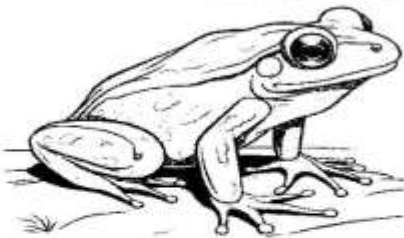
19. A Grade Four learner explained the uses of the leaf of a plant. What is the function of leaf in a plant?
 A. Supports the plant
 B. Make plant food
 C. Absorbs water from the soil
 D. Produces seeds
20. A group of Grade Six learners were investigating a certain mode of heat transfer as shown below.



What were they investigating?

- A. Convection in solids
 B. Convection in liquids
 C. Conduction in solids
 D. Conduction in liquids
21. Heat from the sun will reach a girl walking home from school by
 A. conduction
 B. convection
 C. radiation
 D. evaporation
22. Reflected sound is also known as
 A. wave
 B. ray
 C. spark
 D. echo
23. Which one of the following is **not** true about the windpipe?
 A. It has C-shaped rings
 B. It is sponge-like
 C. Connects to the lungs
 D. It divides into two as it enters the lungs

Grade Six learners took a photo of a certain vertebrate as shown in the picture below. Use it to answer questions 24 and 25



24. The animal belongs to the group of vertebrates called
 A. reptiles B. fish
 C. mammals D. amphibians
25. The animal has the following characteristics **except**
 A. it lays eggs
 B. it lives in both land and water
 C. body is covered with scales
 D. it is cold blooded animal

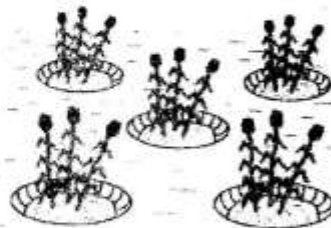
AGRICULTURE.

26. A farmer kept a domestic animal that gives meat, milk and can produce mohair for the farmer. The animals he kept is **likely** to be
 A. Goat B. Sheep
 C. Cow D. Donkey
27. Rose prepared an organic waste pit. He used the following materials **except**
 A. Egg shells B. Leaves
 C. Stones D. Papers
28. Fatmah prepared the food shown in the picture below



- The method used to prepare the food is called
 A. shallow frying
 B. deep frying
 C. dry fat frying
 D. boiling

29. Nicholas wanted to launder a fast coloured item. He needs the following **except**
 A. vinegar
 B. fast coloured shirt
 C. mild soap
 D. white cotton blouse
30. Poor soils can be found in the following places. Which one is **not**?
 A. Mining site
 B. Soil deposition site
 C. Construction sites
 D. Eroded sites
31. Ali was seen uprooting excess seedlings from his innovative garden at home. This type of gardening practice is called
 A. thinning B. gapping
 C. weeding D. pruning
32. Ogal was seen practising water conservation on his farm by placing dry leaves and grass at the base of cabbage crops. This practice is called
 A. staking B. shading
 C. mulching D. cover cropping
33. Pambo suffers from goitre. Pambo lacks
 A. iron B. calcium
 C. iodine D. protein
34. Why are cereals dried before storing?
 A. To prevent aflatoxin
 B. To improve flavour
 C. To add nutrients
 D. To prevent pests
35. A farmer planted her crop in the type of seedbeds shown below.



- This type of seedbeds are called
 A. nursery beds
 B. organic seedbeds
 C. sunken beds
 D. shallow pits

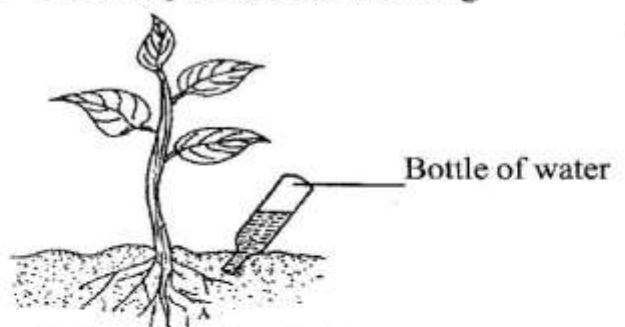
36. The following are examples of physical deterrents. Which one is **not**?
- Mesh fence
 - Scarecrows
 - Deflectors
 - Innovative lights
37. Charity uses a safe trap to capture wild animals. What should she do to the animals trapped?
- Kill them
 - Keep them
 - Set them free to the park
 - Poison them

A farmer keeps the small domestic animal shown in his farm. Use it to answer questions 38 and 39



38. The animal is kept for the following **except**
- | | |
|-----------|-------------|
| A. meat | B. pet |
| C. manure | D. security |
39. The following are routine practices when rearing the animal above. Which one is **true**?
- Parasite control
 - Debeaking
 - Hoof-trimming
 - Teeth clipping
40. Before sun-drying, fruits are
- sliced and eaten
 - washed, peeled and sliced
 - washed, sliced and eaten
 - peeled and fed to animals
41. Moraa is eating a baked food. Moraa is unlikely to be eating
- | | |
|------------|-------------|
| A. mandazi | B. cake |
| C. bread | D. biscuits |
42. Practices that enhance body cleanliness as habits include the following **except**
- managing sweats
 - observing menstrual hygiene
 - wear dirty inner wear
 - trimming pubic hair

43. To remove grass stain from a garment, you should use
- vinegar
 - salty water
 - baking soda
 - jik
44. In crocheting, you need the following tools and materials **except**
- crotchet hook
 - knitting needle
 - yarn
 - pair of scissors
45. Tom prepared compost manure from the following materials. Which one is **not**?
- | | |
|-----------|----------------|
| A. Grass | B. Sawdust |
| C. Papers | D. Metal chips |
46. A small wild animal that destroys the maize while in the farm can be
- | | |
|-----------|-------------|
| A. monkey | B. moles |
| C. hare | D. squirrel |
47. Important substances found in foods are called
- | | |
|-------------|--------------|
| A. poison | B. content |
| C. minerals | D. nutrients |
48. Alice ate a diet that had eggs and chapati. What food was missing to make the diet balanced?
- | | |
|------------|----------|
| A. Milk | B. Beans |
| C. Oranges | D. Ugali |
49. The following are personal protective equipment. Which one is **not**?
- | | |
|------------|-----------|
| A. Overall | B. Vest |
| C. Mask | D. Gloves |
50. A farmer practised the following



- This practice is called
- drip irrigation
 - mulching
 - sprinkle irrigation
 - staking