

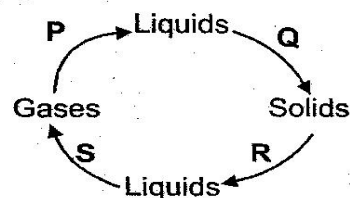
# **NYANDARUA COUNTY**

- ▶ **MATHEMATICS**
- ▶ **ENGLISH LANGUAGE**
- ▶ **ENGLISH COMPOSITION**
- ▶ **KISWAHILI LUGHA**
- ▶ **KISWAHILI INSHA**
- ▶ **SCIENCE**
- ▶ **SOCIAL STUDIES/C. R. E.**

## SCIENCE

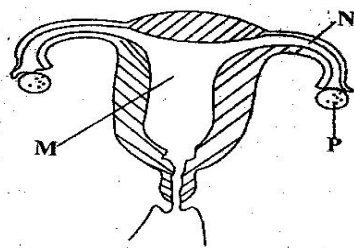
1. The following weather instruments are put in a weather house. Which one is not?  
 A. Anemometer.  
 B. Hygrometer.  
 C. Air thermometer.  
 D. Liquid thermometer.
2. The reason for using a biro cap as a pivot in the construction of an improvised windvane is to make the arrow  
 A. rotate freely  
 B. balance the stand  
 C. show the direction of the wind  
 D. heavy.
3. Which of the following is not true about pressure exerted by liquid? Pressure in liquid increases when the  
 A. amount of liquid is increased.  
 B. diameter of container is reduced.  
 C. depth of liquid is increased.  
 D. container with liquid is increased.
4. The following are some of the physical changes that take place during adolescence  
 (i) Hips become broader  
 (ii) Chest and shoulders become broader  
 (iii) Pimples may appear on the face  
 (iv) Voice breaks  
 (v) Pubic hair grows  
 Which of the changes take place in girls only?  
 A. (i), (ii), (iv) B. (i), (iii), (iv)  
 C. (ii), (iv), (v) D. (i), (iii), (v)
5. Which of the following correctly shows how a baby develops in the womb?  
 A. Zygote → Foetus → Embryo → Baby  
 B. Embryo → Foetus → Zygote → Baby  
 C. Baby → Foetus → Embryo → Zygote  
 D. Zygote → Embryo → Foetus → Baby.
6. Which one of the following states of matter has both indefinite shape and volume?  
 A. Milk. B. Brick.  
 C. Lump of soil. D. Carbon dioxide.
7. Which one of the following is not a characteristic of hydrophytes?  
 A. Increased number of stomata.  
 B. Reduced number of stomata.  
 C. Most of the stomata are on the upper surface of the leaf.  
 D. Stomata remain open most of the time.

8. Some animals protect themselves by appearing like their surroundings colour. What name is given to this?  
 A. Hibernation. B. Camouflage.  
 C. Burrowing. D. Pretence.
9. The diagram below shows the processes P, Q, R and S which cause change of state. Which two processes require an increase in temperature?



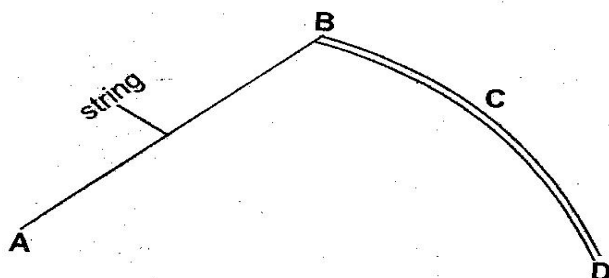
- A. R and S.  
 B. P and Q.  
 C. Q and R.  
 D. P and S.
10. Which one of the following may not be contained in hard water?  
 A. Lather.  
 B. Dissolved mineral salt.  
 C. Dust particles.  
 D. Dissolved gases.
11. The following are points to consider when taking medicine. Which one is not?  
 A. Date of manufacture.  
 B. Duration to complete dose.  
 C. How to store the medicine.  
 D. Expiry date.
12. Which one of the following determines the rate at which water drains through the soil?  
 A. Size of the particles of the soil.  
 B. Humus content in the soil.  
 C. Mass of the soil.  
 D. Air content in the soil.
13. Bats, seals and duck-billed platypus are similar in that all  
 A. have scales on their bodies  
 B. are flying mammals  
 C. have a constant body temperature  
 D. are cold blooded animals.

14. The diagram below represents the reproductive system in the female human body.



Which of the following processes occur at parts MNP respectively?

- A. Ovulation, Fertilisation, Implantation.  
 B. Conception, Fertilisation, Ovulation.  
 C. Implantation, Fertilisation, Ovulation.  
 D. Ovulation, Implantation, Fertilisation.
15. Which one of the following groups consists of only the diseases that are immunizable?  
 A. Whooping cough, Tuberculosis, Tetanus.  
 B. Measles, Malaria, Diphtheria.  
 C. Dysentery, Poliomyelitis, AIDS.  
 D. Bilharzia, Cholera, Tuberculosis.
16. The diagram below is of a fishing rod



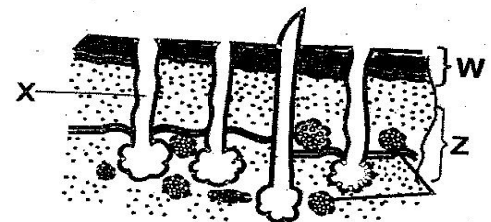
Which parts show the fulcrum, effort and load respectively?

- A. ABC.      B. ABD.  
 C. DCA.      D. DCB.
17. All the following are correct about deoxygenated blood except  
 A. it enters the heart via venacava  
 B. it is pumped into the lungs to remove carbon dioxide  
 C. it travels back to the heart via the pulmonary vein  
 D. It is pumped into the lungs via pulmonary artery.

18. Which is the easiest way for testing water hardness?

- A. Boiling the water.  
 B. Distilling water.  
 C. Making lather with soap.  
 D. Adding chemicals.
19. What is the use of the toothless gap in the lower jaw of herbivores?  
 A. Turning plant material in the mouth for proper chewing.  
 B. Holding food material.  
 C. Allowing space for more food.  
 D. Preventing the animals from biting their tongues.

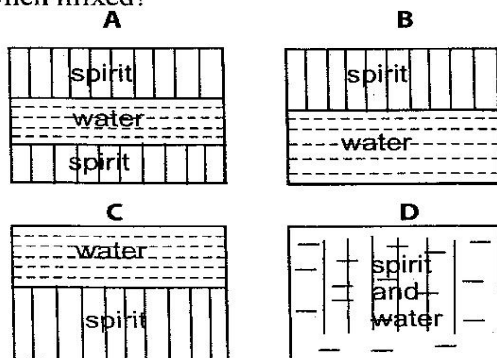
Use the diagram below to answer questions 20 and 21



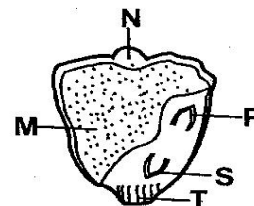
20. What is the function of the part marked X?  
 A. Produces sweat      B. Passes out sweat  
 C. Passes out blood      D. Produces blood.
21. Name the parts marked W and Z respectively in the diagram above  
 A. Epidermis, Dermis  
 B. Dermis, Epidermis  
 C. Epidermis, Sweat gland  
 D. Dermis, Sweat gland
22. The following are functions of the placenta except  
 A. enhances the flow of digested food from the mother to the foetus  
 B. enhances the passage of waste products from the mother to the foetus  
 C. helps in exchange of gases  
 D. facilitates the transfer of waste products from the foetus to the mother.
23. The following are control measures for HIV and AIDS. Which one is not?  
 A. Creating public awareness on HIV and AIDS  
 B. Campaigns through various media  
 C. Voluntary counselling and testing to know one's status  
 D. Building more wards to accommodate the rising number of patients.



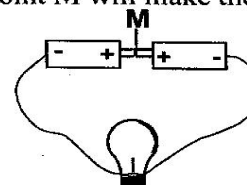
24. Which one of the following parts of a human body produces urine?  
 A. Bladder. B. Kidney.  
 C. Skin. D. Urethra.
25. Which one of the following is a group of internal livestock parasites?  
 A. Ticks, Fleas, Liverflukes.  
 B. Tapeworms, Roundworms, Fleas.  
 C. Liverflukes, Ticks, Mites.  
 D. Tapeworms, Lungworms, Roundworms.
26. Which of the following statements about babies born to smoking mothers is incorrect?  
 A. Are usually underweight.  
 B. May become slow learners.  
 C. May become sickly.  
 D. Have a strong immune system.
27. Which of the following is not a disadvantage of friction?  
 A. Causing wear and tear.  
 B. Making work difficult.  
 C. Production of heat on the surfaces.  
 D. Braking to stop movement.
28. Which of the following drugs can be prepared artificially in the laboratory?  
 A. Mandrax. B. Cocaine.  
 C. Heroin. D. Khat.
29. The following are advantages of mulching except  
 A. improves soil texture  
 B. suffocates weeds  
 C. controls soil erosion  
 D. pollutes the soil.
30. Which of the following pairs of experiments on soil have the same characteristics?  
 A. Drainage and Capillarity.  
 B. Capillarity and Retention.  
 C. Retention and texture.  
 D. Drainage and Retention.
31. Which one of the following diagrams shows how water and methylated spirit will behave when mixed?



32. One method of preserving fish is to spread salt over and under the fish. The main function of salt is to \_\_\_\_\_  
 A. dehydrate water that causes decomposition  
 B. add minerals which preserve fish  
 C. make fish tastier when it is eventually cooked  
 D. cushion fish from invasion by bacteria and fungi.
33. Which one of the following activities will not increase the solubility of a solute in a solvent?  
 A. Increasing the temperature of the solvent.  
 B. Stirring the mixture.  
 C. Reducing size of the solute.  
 D. Reducing the temperature of solvent.
34. Which of the parts below forms the embryo of a seed?

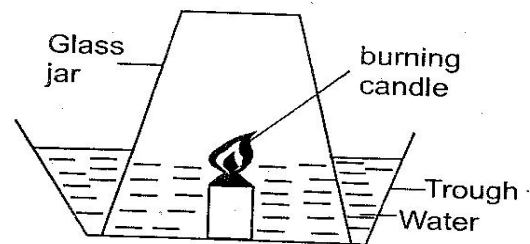


- A. MT. B. PT.  
 C. PS. D. NM.
35. The diagram below shows a food chain  
**Maize Goat Cheetah Vulture**  
 What would happen if all the cheetahs were removed?  
 A. The goats would reduce and maize increase.  
 B. The vulture would increase and the goats reduce.  
 C. The goats would increase and maize reduce.  
 D. The goats would increase and the maize increase.
36. Birds with strong hooked beaks and talons are usually called  
 A. grain eaters B. flesh eaters  
 C. nectar feeders D. filter feeders.
37. Std 7 pupils from Enos Academy made the following simple circuit. Which material if placed at point M will make the bulb to light?



- A. Glass. B. Graphite.  
 C. Rubber. D. Wood.

38. Mercury is the most suitable liquid in the use of a thermometer because \_\_\_\_\_  
 A. it is cheap and readily available  
 B. it is visible and expands evenly  
 C. it evaporates easily  
 D. it is invisible and contracts evenly.
39. What is the function of the stigma in a flower?  
 A. Protects the flower at bud stage.  
 B. Attracts insect for pollination process.  
 C. Is for fertilisation process in the flower.  
 D. Receives pollen grains during pollination.
40. Which one of the following mixtures cannot be separated using a magnet?  
 A. Copper and silver.  
 B. Cobalt and aluminium.  
 C. Nickel and silver.  
 D. Iron and Cobalt.
41. Which one of the following statements is true about the window stage of HIV infection?  
 A. If HIV test is carried out the result is negative.  
 B. It is the second stage of HIV infection.  
 C. The body cannot fight diseases at this stage.  
 D. There are visible signs.
42. Which of the following pairs of effects of drug abuse consists of social effects only?  
 A. Drug induced accidents and truancy.  
 B. Depression and headaches.  
 C. Loss of consciousness and rape.  
 D. Theft and impaired judgement.
43. Which one of the following explains why leaves of some plants are modified to spines?  
 A. To increase surface area of the leaves.  
 B. To increase absorption of water.  
 C. To reduce transpiration.  
 D. To reduce photosynthesis.
44. Which pair of crops are cereals?  
 A. Groundnuts and Maize.  
 B. Barley and Rice.  
 C. Beans and Peas.  
 D. Wheat and Soya beans.
45. What is the use of wood ash in a compost heap?  
 A. To increase decaying process.  
 B. To add nutrients.  
 C. To keep the compost heap dry.  
 D. To add bacteria in the soil.
46. In which of the following parts of the digestive system does bile mix with fats?  
 A. Colon.  
 B. Stomach.  
 C. Ileum.  
 D. Duodenum.
47. Animals adapted to flight have streamlined bodies. This helps in  
 A. increasing friction between the body surface and the air  
 B. allowing them to move slowly  
 C. reducing the resistance to movement between the body surface and the air  
 D. making the wings remain stationary.
48. The diagram below shows an experiment which was done by a group of std 6 pupils.



- Three of the following were the observations made after a short while except  
 A. level of water in the trough reduced  
 B. Level of water rose in the glass  
 C. Candle did not stop burning immediately  
 D. Level of water reduced in the glass.
49. The following are the main functions of the amniotic fluid except  
 A. allows the foetus to turn freely in the uterus  
 B. helps to protect the foetus from getting hurt when something presses the mother's belly  
 C. acts as a shock absorber  
 D. helps in dilating the cervix.
50. Which of the following pairs of blood vessels carries blood away from the heart?  
 A. Pulmonary vein and aorta.  
 B. Pulmonary artery and aorta.  
 C. Venacava and pulmonary vein.  
 D. Aorta and Venacava.