



Myfuture CBC Revision

Integrated Science - GRADE 9

Question Paper

1. A concave mirror has focal length 10 cm. An object is placed 30 cm from the mirror. Using the mirror formula $1/f = 1/u + 1/v$ (taking distances as positive here), where is the image formed?

- A. 30 cm behind the mirror
- B. 10 cm from the mirror in front
- C. 20 cm behind the mirror
- D. 15 cm from the mirror in front

2. What is the primary metal used in the automotive industry for engine parts?

- A. Gold
- B. Zinc
- C. Iron
- D. Aluminum

3. Which laboratory apparatus is used for measuring small amounts of liquids?

- A. Dropper
- B. Graduated cylinder
- C. Beaker
- D. Test tube rack

4. Which of the following is NOT a metal?

- A. Iron
- B. Gold
- C. Copper
- D. Oxygen

5. What does it mean if a mixture is homogeneous?

- A. made of elements
- B. cannot tell one part from another
- C. you can see the different parts
- D. chunks of particles

6. The number of protons in an atom determines the atom's...

- A. Element
- B. Isotopes
- C. Electrons
- D. Neutrons

7. What is a variable in a scientific investigation?

- A. A guess
- B. A conclusion
- C. A fixed value
- D. A factor that can change

8. Bellow are prevention of kidney stones. Which one is not?

- A. Restricting healthy protein in the diet
- B. Reducing intake of salt
- C. Drinking enough water
- D. Restricting unhealthy protein in the diet

9. How does the number of neutrons in an atom affect its stability?

- A. It affects the charge
- B. It determines the chemical properties
- C. It changes the atomic number
- D. It determines the isotope

10. Which one is not a source of electricity?

- A. Geothermal power
- B. Hydro-electric power.
- C. Solar power
- D. Candle

11. Where does bladder receive urine from?

- A. Renal vein
- B. Ureter
- C. Urethra
- D. Kidney

12. A homogeneous mixture contains.....state of matter(s).

- A. 3
- B. all
- C. 2
- D. 1

13. Which one is not a safety measures when handling electrical appliances?

- A. Never connect appliances with bare electric wires .
- B. Never put sticks into a socket.
- C. Never touch electric equipment with wet hands .
- D. Overloading sockets .

14. What is the voltage of a standard household electrical outlet in Kenya?

- A. 120V
- B. 220V
- C. 440V
- D. 12V

15. Which of the following substances is a key component of plant cell walls?

- A. Cellulose
- B. Proteins
- C. Chlorophyll
- D. Carbohydrates

16. Which position of an object gives an image equal in size to the object for a concave mirror?

- A. At the centre of curvature
- B. Far away at infinity
- C. At the focal point
- D. Between the mirror and the focal point

17. Which of the following is NOT a method of eliminating static electricity?

- A. Grounding
- B. Ionization
- C. Shielding
- D. Rubbing

18. Which of the following is a vital nutrient that animals need for growth and repair?

- A. fiber
- B. carbohydrates
- C. vitamin C
- D. protein

19. Define volume.

- A. the space occupied by matter
- B. distance between two points
- C. quantity of matter in an object
- D. mass per unit area

20. Which metal is a major component of stainless steel?

- A. Iron
- B. Copper
- C. Chrome
- D. Aluminum

21. What happens when a compound is formed?

- A. The properties of the elements combine to form new properties
- B. The elements can be easily separated
- C. The elements lose their properties
- D. The properties of the elements change

22. What is the colour observed when Methyl orange indicator is added to an acidic solution?

- A. Yellow
- B. Pink
- C. Purple
- D. Orange

23. Which of the following is a source of carbohydrates in the diet of animals?

- A. meat
- B. bread
- C. eggs
- D. milk

24. _____ is when a girl's body changes before or during her periods.

- A. Menstrual pain
- B. Heavy bleeding
- C. Irregular periods
- D. Premenstrual syndrome

25.andare the process of separating solids that do not dissolve from liquids.

- A. Sublimation and sedimentation
- B. Solvent extraction and decantation
- C. Magnetism and Simple distillation
- D. Decantation and Filtration

26. If a glass plate is placed over a magnet and iron filings are sprinkled over the glass, a pattern will be visible. What does this pattern indicate?

- A. The piezoelectric effect
- B. The chemical reaction of the magnet and the filings
- C. The magnetic field
- D. The electrostatic field

27. Where does the process of digestion begin in animals?

- A. Mouth
- B. Small intestine
- C. Stomach
- D. Liver

28. Which of the following objects would NOT be affected by a nearby magnet?

- A. Plastic ruler
- B. Wooden stick
- C. Paper clip
- D. Iron nail

29. Which method can be used to separate a mixture of sand and naphthalene?

- A. Solvent extraction
- B. Sublimation
- C. Decantation
- D. Paper chromatography

30. What is the purpose of the crop in the digestive system of birds?

- A. Produce bile
- B. Neutralize stomach acid
- C. Store food temporarily
- D. Digest proteins

31. Which subatomic particle contributes to the mass of an atom?

- A. Protons and electrons
- B. Electrons only
- C. Electrons and neutrons
- D. Neutrons and protons

32. Which one is not a laboratory indicator?

- A. Litmus solution
- B. Methyl orange
- C. Phenolphthalein
- D. Propane

33. How does temporary hardness differ from permanent hardness?

- A. Temporary hardness can be removed by boiling, permanent hardness cannot
- B. Permanent hardness can be removed by boiling, temporary hardness cannot
- C. Neither type of hardness can be removed by boiling
- D. Both types of hardness can be removed by boiling

34. Convert 350cm into SI unit.

- A. 3.5 km
- B. 3.5 m
- C. 35 m
- D. 0.35 km

35. Which of the following is an example of an alloy?

- A. Aluminum foil
- B. Copper wire
- C. Pure gold
- D. Brass

36. What is the most common method used to measure water hardness?

- A. Filtration
- B. Evaporation
- C. Titration
- D. Decantation

37. Which metal is used in the production of mirrors for its reflective properties?

- A. Copper
- B. Silver
- C. Aluminum
- D. Iron

38. When the egg and sperm join together, it is known as....

- A. Pollination
- B. fertilization
- C. ovulation
- D. intercourse

39. Where is the focal point of a concave mirror located?

- A. At the point where parallel rays to the principal axis meet after reflection
- B. Behind the mirror where virtual images form
- C. At the mirror surface
- D. Halfway between the object and the image always

40. Which organism can serve as a bioindicator of good air quality in a Kenyan town?

- A. Algae in polluted drainage
- B. Lichens growing on trees and rocks
- C. Mosquito larvae in stagnant water
- D. Rat populations in sewers

41. holds the eyepiece and revolving nosepiece

- A. clip
- B. body tube
- C. arm
- D. base

42. Which of the following is NOT a characteristic of a good scientific question?

- A. Subjective
- B. Specific
- C. Relevant
- D. Testable

43. What is the primary source of energy for plants?

- A. Sunlight
- B. Water
- C. Air
- D. Soil

44. Which of the following is NOT a safety precaution when using laboratory instruments?

- A. Tying back long hair
- B. Eating snacks in the lab
- C. Wearing safety goggles
- D. Using gloves

45. Which of the following devices is commonly used to demonstrate static electricity by producing sparks?

- A. Light bulb
- B. Van de Graaff generator
- C. Microwave oven
- D. Television

46. Which metal is commonly used in the aerospace industry due to its lightweight properties?

- A. Copper
- B. Aluminum
- C. Gold
- D. Silver

47. What happens when two balloons are brought together before they were rubbed?

- A. I don't know
- B. They attracted
- C. They repelled
- D. Nothing

48. What happens when one balloon is rubbed and brought close to another uncharged balloon?

- A. Nothing happened
- B. They discharged each other
- C. They attracted
- D. They repelled

49. Which of the following laboratory apparatus is used for measuring volume of liquids?

- A. Beaker
- B. Thermometer
- C. Test tube
- D. Graduated cylinder

50. Which laboratory apparatus is used for accurately measuring time in experiments?

- A. Stopwatch
- B. Balance
- C. Thermometer
- D. Test tube rack

