



EXAMINATIONS COUNCIL OF ZAMBIA

PRIMARY SCHOOL LEAVING EXAMINATION – 2024



Integrated Science

SUBJECT 4/1

60 MINUTES

TD/INT3/PSLE/2024

- 1 Read these instructions carefully.
- 2 **Do not** turn this page before you are told. Your teacher will tell you when to turn this page to begin the questions.
- 3 There are **50** questions in this **Integrated Science Paper**. You will be given **exactly 60 minutes** to do the questions.
- 4 For each question, four answers are given, but only one of the four is right. Work out which is the **best** answer. Then, on your **Answer Sheet**, mark the box completely by shading the answer space of the letter of your choice. If you had chosen answer **D** for a question, you would show it like this:-

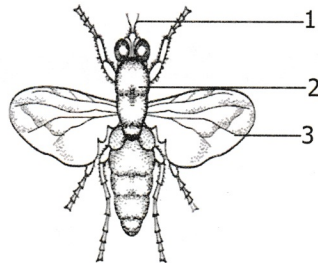


- 5 You must **shade** your answer spaces **completely** and **darkly** using an HB pencil. If you have to change your answer, you must rub out the shading **very neatly** before shading the new one. **Use a clean rubber.**
- 6 When you have finished one page, go straight on without waiting to be told. If you have time left at the end of the question paper, use it to check your work carefully.
- 7 Look at your **ANSWER SHEET**. On the top left hand side are boxes which should have Examination Year, your School Number and Examination Number. It should also say **Subject 4, Paper 1**.
- 8 Look at your **ANSWER SHEET** again. At the bottom left hand side, it should have your Surname, Forename, Subject **Integrated Science**, Name of Primary School, and your Secondary School of Choice.
- 9 **Put up your hand now if:**
You have any question.
You have the wrong Answer Sheet.
You will **not** be able to ask questions once the examination has begun.

**DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD.
USE ONLY AN HB PENCIL FOR YOUR ANSWERS.**

- 1 How long does a normal pregnancy last in a human being?
 - A 9 months
 - B 10 months
 - C 11 months
 - D 12 months

- 2 The diagram shows the basic structure of an insect.

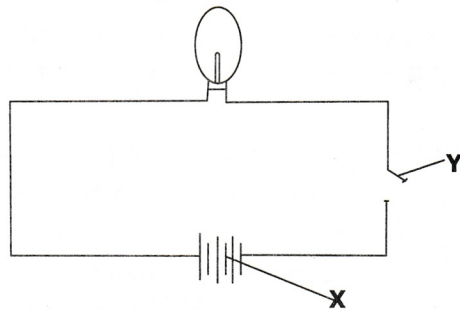


Name the parts labelled 1, 2 and 3.

	1	2	3
A	Antenna	Head	Wing
B	Antenna	Thorax	Wing
C	Leg	Thorax	Abdomen
D	Leg	Wing	Thorax

- 3 People should be discouraged from drinking alcohol while driving because drinking can result in ...
 - A accidents.
 - B poor health.
 - C quarrels.
 - D violence.

- 4 Study the following diagram of a simple electric circuit.



What are components **X** and **Y** in the circuit?

	X	Y
A	Battery	Switch
B	Switch	Battery
C	Switch	Wire
D	Wire	Bulb

- 5 The measurement of temperature is done using ...
- A a barometer.
 - B a hydrometer.
 - C a thermometer.
 - D an anemometer.

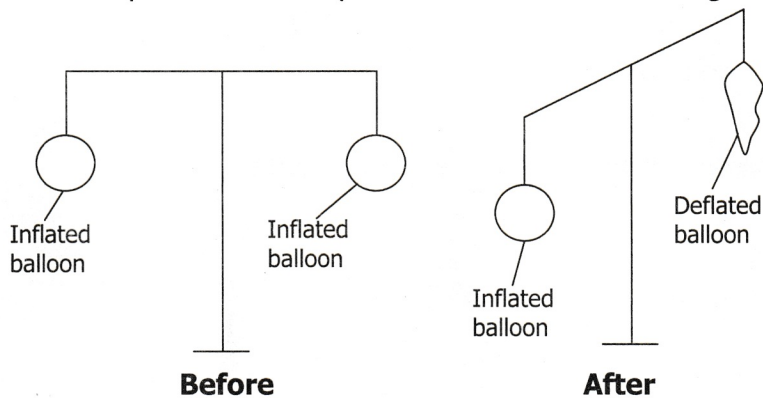
6 Study the following list:

- (i) Air conditioner
- (ii) Air vent
- (iii) Wall
- (iv) Table
- (v) Fan
- (vi) Window
- (vii) Roof

Which ones are ventilators?

- A (i), (ii) and (vi)
 - B (ii), (v) and (vii)
 - C (iii), (iv) and (vi)
 - D (iv), (v) and (vii)
- 7 What is the main source of thermal energy?
- A Moon
 - B Planets
 - C Stars
 - D Sun

8 A learner performed an experiment as shown in the diagram.

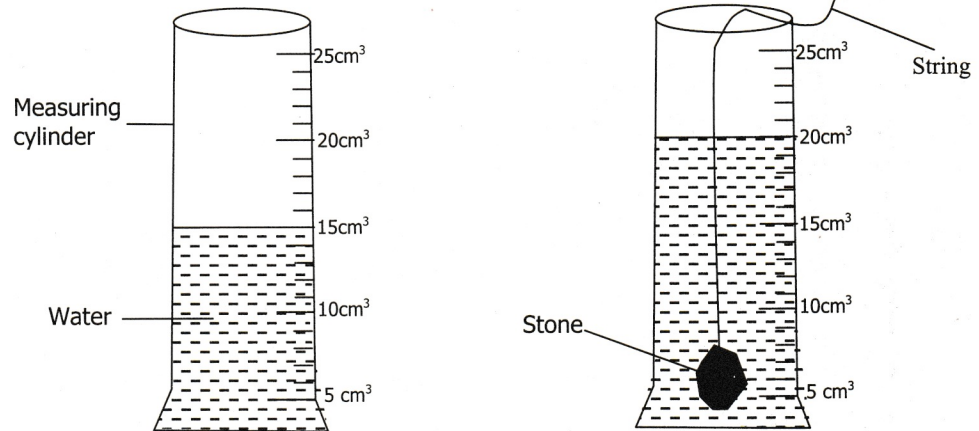


The learner wanted to find out if air ...

- A has weight.
- B is colourless.
- C is invisible.
- D occupies space.

- 9 A teenage girl went to the clinic complaining of having missed her menstrual period and was told that she ...
- A had an STI.
 - B was alright.
 - C was sick.
 - D was pregnant.
- 10 Drug abuse causes people to become ...
- A addicted.
 - B humble.
 - C intelligent.
 - D smart.
- 11 Which of the following converts chemical energy to electrical energy?
- A Battery
 - B Bulb
 - C Radio
 - D Torch
- 12 Not having enough fresh air in a room may lead to ...
- A a dry cough.
 - B shortness of breath.
 - C tiredness.
 - D vomiting.
- 13 Keeping many animals on a small piece of land results in ...
- A cross-breeding.
 - B good animal health.
 - C high milk production.
 - D overgrazing.
- 14 Which of the following is **not** a water treatment method?
- A Boiling
 - B Chlorination
 - C Condensation
 - D Filtration

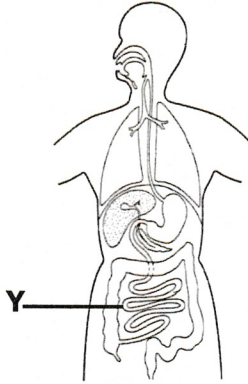
- 15** The following experiment was conducted to find out the volume of a stone.



What is the volume of the stone?

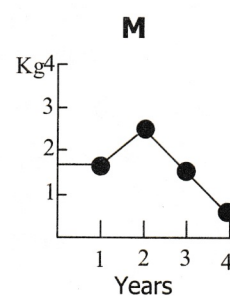
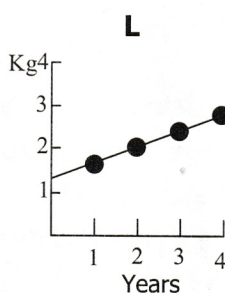
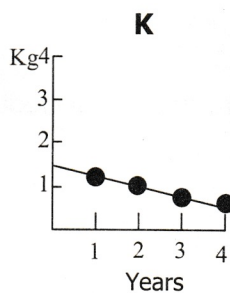
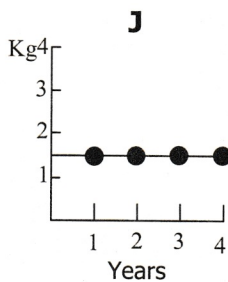
- A** 5 cm³
 - B** 15 cm³
 - C** 20 cm³
 - D** 35 cm³
- 16** Salt which has dissolved in water can be separated from the solution by ...
- A** condensation.
 - B** decantation.
 - C** distillation.
 - D** evaporation.
- 17** Ring worm is ... disease.
- A** a deficiency
 - B** a skin
 - C** a waterborne
 - D** an airborne
- 18** Health risks associated with early sexual debut include ...
- A** early marriage and divorce.
 - B** early marriage and STIs.
 - C** teenage pregnancy and divorce.
 - D** teenage pregnancy and STIs.

19 Study the following diagram carefully.



What happens to food in the part labelled Y? It is ...

- A absorbed.
 - B assimilated.
 - C eliminated.
 - D stored.
- 20 Which of the following are basic needs of animals?
- A Cleanliness and protection
 - B Cleanliness and water
 - C Shelter and protection
 - D Shelter and water
- 21 Which of the following planets is the largest?
- A Jupiter
 - B Mercury
 - C Neptune
 - D Venus
- 22 Study the following records on children's under five clinic cards.



Which of the cards indicates a child who is growing well?

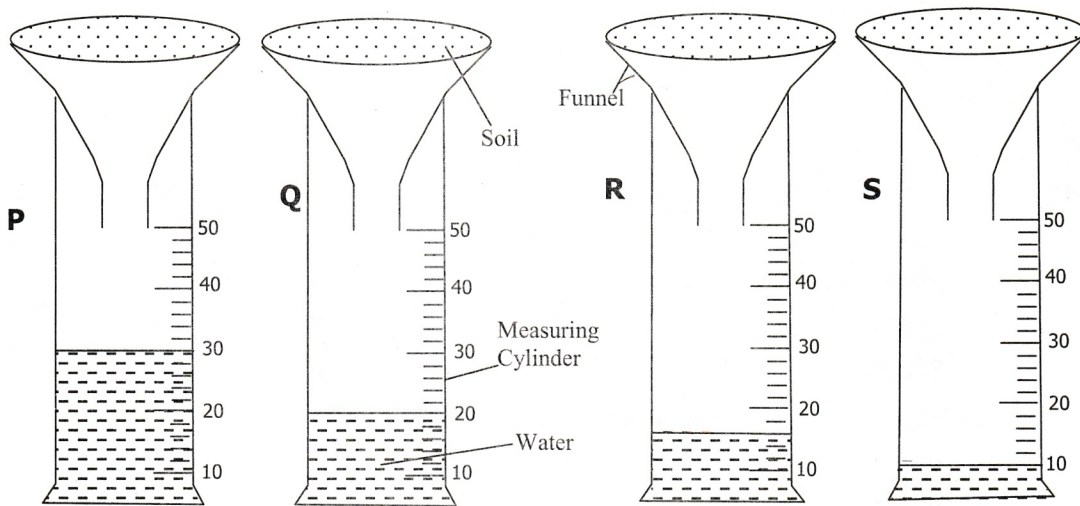
- A J
- B K
- C L
- D M

- 23** Food must be chewed thoroughly before it is swallowed in order to ...
- A** dissolve the food completely.
 - B** kill germs in the food.
 - C** make a person salivate more.
 - D** make digestion easy.
- 24** A mixture of red pepper powder and ash can be used to ...
- A** control pests.
 - B** dehydrate animals.
 - C** make garden manure.
 - D** treat animal diseases.
- 25** Which of the following is an organ of digestion where gastric juice is produced?
- A** Liver
 - B** Mouth
 - C** Pancreas
 - D** Stomach
- 26** Which of the following is needed for photosynthesis to take place?
- A** Carbon dioxide
 - B** Oxygen
 - C** Soil
 - D** Starch
- 27** Which organ in fish is equivalent to lungs in a human?
- A** Fins
 - B** Gills
 - C** Head
 - D** Swim bladder
- 28** Which of the following blood cells help to fight diseases?
- A** Platelets and red blood cells
 - B** Red blood cells
 - C** White blood cells
 - D** White blood cells and platelets
- 29** Chicken manure is an example of ... fertiliser.
- A** artificial
 - B** composite
 - C** inorganic
 - D** organic

- 30 Which of the following can be used to make sound louder?
- A Forcing vibration
 - B Increasing vibration
 - C Reducing vibration
 - D Stopping vibration
- 31 Which of the following characteristics is only common in females at puberty?
- A Menstruation
 - B Pimples on face
 - C Pubic hair
 - D Yellow colour
- 32 The solar eclipse is formed when the ...
- A earth comes between a star and the moon.
 - B earth comes between the sun and the moon.
 - C moon comes between a star and the earth.
 - D moon comes between the sun and the earth.
- 33 Stamens are ...
- A brightly coloured to attract insects.
 - B female parts of a flower.
 - C male parts of a flower.
 - D protective parts of a flower.
- 34 When testing a leaf for starch, the leaf is boiled in alcohol in order to ...
- A break the cells.
 - B kill the protoplasm.
 - C make it soft.
 - D remove chlorophyll.
- 35 What is the most common source of water in the villages?
- A Bore holes
 - B Dams
 - C Taps
 - D Wells
- 36 Which of the following is **not** a physical property of air? It is ...
- A colourless.
 - B hard.
 - C invisible.
 - D odourless.

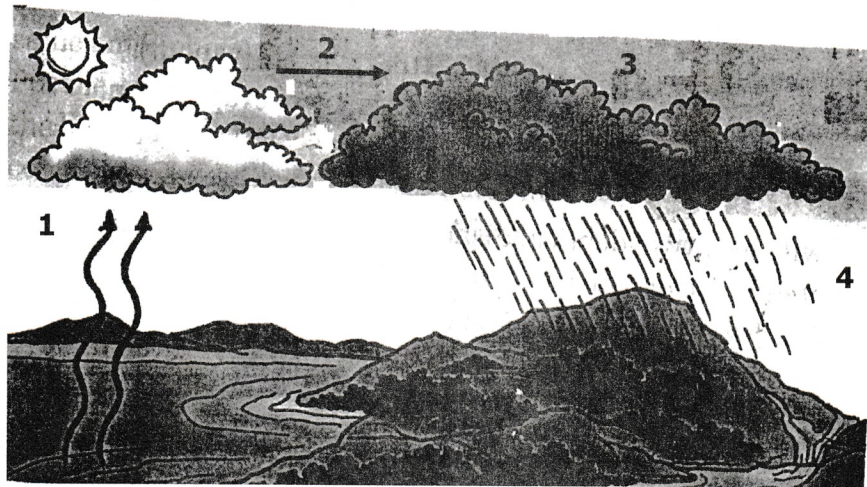
- 37** Which of the following is a good conductor of electricity?
- A** Glass
 - B** Nail
 - C** Paper
 - D** Wood
- 38** How can diseases be prevented in livestock?
- A** Feeding animals with treated feed
 - B** Promoting communal grazing
 - C** Rearing them with wild animals
 - D** Vaccinating animals against common diseases
- 39** People may wear rubber gloves on their hands to remove hot pots from fire because rubber is a ...
- A** good conductor of heat.
 - B** bad conductor of heat.
 - C** metal.
 - D** light material.
- 40** Which of the following drugs is illicit?
- A** Chloroquine
 - B** Heroin
 - C** Quinine
 - D** Septrin
- 41** The following are sources of vitamins and mineral salts.
- (i) Vegetable
 - (ii) Fish
 - (iii) Egg
 - (iv) Pumpkin
- Which **two** are sources of calcium?
- A** (i) and (iii)
 - B** (i) and (iv)
 - C** (ii) and (iii)
 - D** (ii) and (iv)
- 42** Which of the following are the correct stages of copper extraction?
- A** Crushing → floating → smelting
 - B** Crushing → smelting → floating
 - C** Floating → crushing → smelting
 - D** Floating → smelting → crushing

- 43 Mulching is one way of ...
- A adding air to the soil.
 - B controlling plant seed.
 - C encouraging seed germination.
 - D retaining water in the soil.
- 44 What causes days and nights?
- A Earth's rotation
 - B Earth's revolution
 - C Moon behind the earth
 - D Moon between the sun and earth
- 45 Equal amount of water was poured in the filter funnels with equal amounts of different types of soil as shown in diagrams **P**, **Q**, **R** and **S**.



- Which soil type **P**, **Q**, **R** and **S** is sand soil?
- A P
 - B Q
 - C R
 - D S
- 46 People who are addicted to drugs can be assisted by...
- A isolating them from the public.
 - B putting them on a balanced diet.
 - C showing them love and support.
 - D taking them for rehabilitation.

- 47 Which of the following methods of communication is most effective?
A Conversation
B E-mail
C Radio
D Television
- 48 Which of the following is an invertebrate?
A Bird
B Lizard
C Snake
D Wasp
- 49 Which of the following lists consists of types of food which are good sources of vitamin A?
A Beans, rice, pineapples
B Liver, carrots, mangoes
C Rice, bread, green vegetables
D Sugar, fat, fish
- 50 Study the following diagram of the water cycle.



What process takes place at 4?

- A Condensation
B Evaporation
C Precipitation
D Transpiration

STOP! PLEASE CHECK ALL YOUR WORK CAREFULLY.