



MAHA BODHI SCHOOL
2024 END OF YEAR EXAMINATION
PRIMARY THREE SCIENCE
(BOOKLET A)

Name : _____ ()

Class : Primary 3 _____

Date : 24 Oct 2024

Total Duration for Booklets A and B: 1 h 30 min

INSTRUCTIONS TO CANDIDATES:

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Shade your answers in the Optical Answer Sheet (OAS) provided.

This booklet consists of 15 printed pages.

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BOOKLET A : [24 x 2 marks = 48 marks]

For each question from 1 to 24, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and shade your answer in the Optical Answer Sheet (OAS) provided.

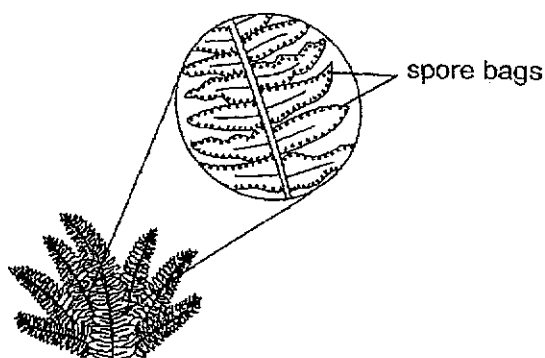
1. Which group consists of only non-living things?

- (1) bee, tortoise, ant
- (2) fan, lamp, slippers
- (3) bus, grass, waterfall
- (4) apple, television, cockroach

2. Which of the following observations is correctly matched to the characteristic of living things?

	Observation	Characteristic
(1)	A cow eats grass.	Living things grow.
(2)	A fish has scales.	Living things reproduce.
(3)	A chicken lays eggs.	Living things need air, food and water.
(4)	A plant grows towards sunlight.	Living things respond to changes.

3. Alice went for a walk in the park and found the plant shown below.



Which statement about the plant above is true?

- (1) It has flowers.
- (2) It reproduces by seeds.
- (3) It is a non-flowering plant.
- (4) It cannot make its own food.

4. Which statement is true about all plants?

- (1) Plants have roots.
- (2) Plants have flowers.
- (3) Plants grow on land.
- (4) Plants cannot make their own food.

5. Study the animal Y below.



Animal Y

Which statement is true about the animal Y above?

- (1) It has scales.
- (2) It lives on land and in water.
- (3) It reproduces by giving birth.
- (4) It breathes only through its skin.

6. Ali found an animal and made the following observations about it.

- It lays eggs.
- It has feelers.
- It has six legs.

Which group of animals does this animal belong to?

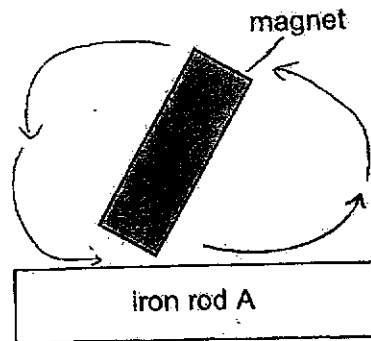
- (1) Fish
- (2) Insects
- (3) Reptiles
- (4) Mammals

7. Which of the following does not belong to the group of living things called fungi?
- (1) fern
 - (2) yeast
 - (3) mould
 - (4) mushroom
8. Which of the following is correct about bacteria?
- A. They are all harmful.
 - B. They can be used to make food.
 - C. They can only be seen under a microscope.
- (1) A and B only
 - (2) B and C only
 - (3) A and C only
 - (4) A, B and C
9. Which statement about materials is correct?
- (1) All materials can float on water.
 - (2) An object can only be made of one material.
 - (3) A transparent object allows most light to pass through.
 - (4) The strength of a material is its ability to bend without breaking.
10. Mr Tan wants to buy a water bottle for his four-year-old son.
- Which properties should he consider when he buys the bottle?
- (1) It is strong.
 - (2) It is flexible.
 - (3) It is transparent.
 - (4) It is able to float on water.

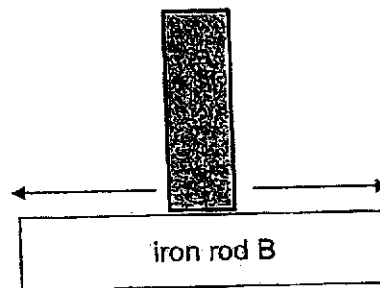
11. Martin tried to magnetise rods, A, B, C and D, using the stroking method as shown in the diagrams below. The arrow (\rightarrow) shows the direction of movement of the magnet during this time.

Which one of the iron rods below will be magnetised?

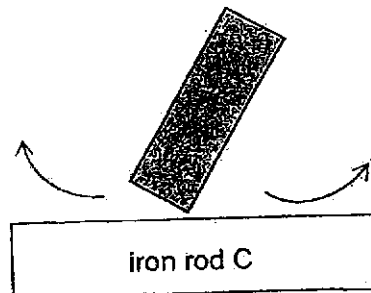
(1)



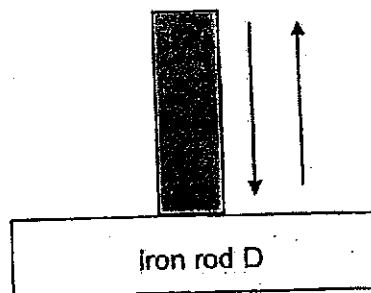
(2)



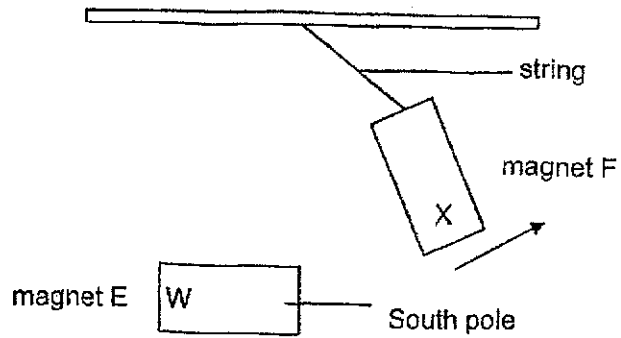
(3)



(4)



12. The diagram below shows two magnets. When the two magnets, E and F, are placed near each other, magnet F swings away.

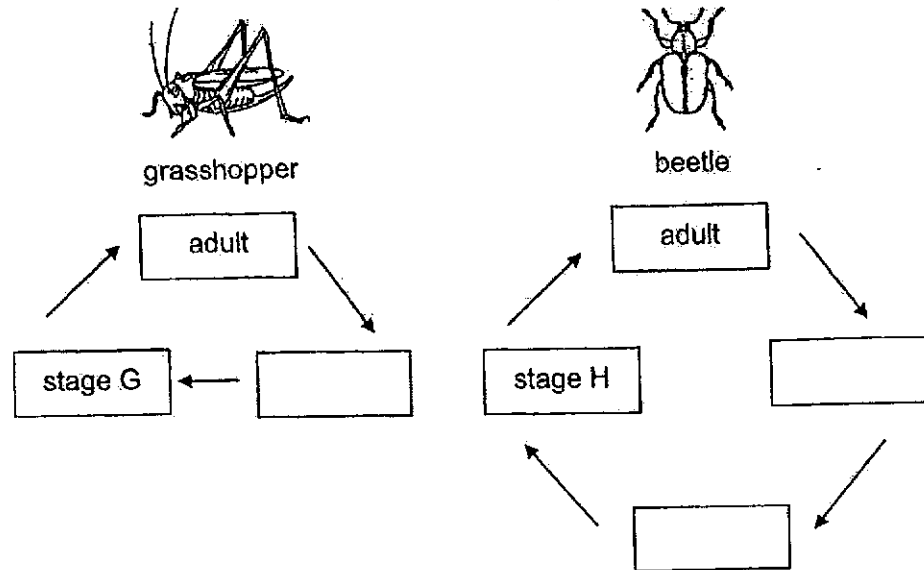


Which of the following are the poles for W and X?

	W	X
(1)	North	North
(2)	North	South
(3)	South	North
(4)	South	South

13. The diagrams below show the stages in the life cycles of grasshopper and beetle.

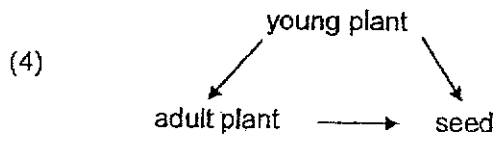
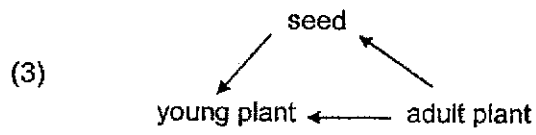
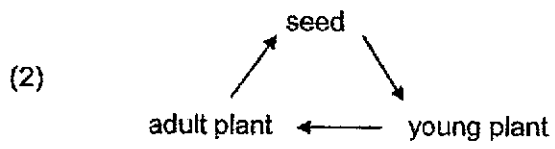
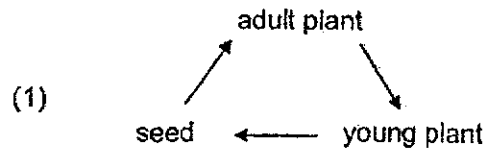
Each box represents a stage in the life cycle.



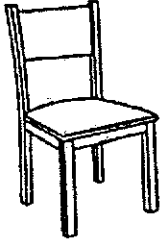



What are stage G and stage H?

	stage G	stage H
(1)	larva	nymph
(2)	nymph	pupa
(3)	larva	pupa
(4)	nymph	larva

14. Which of the following shows the life cycle of a plant?



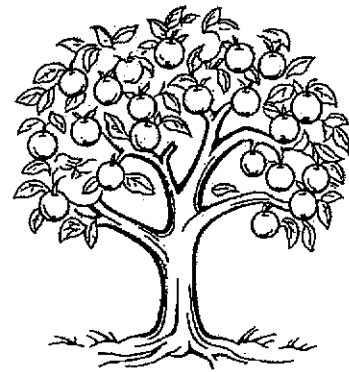
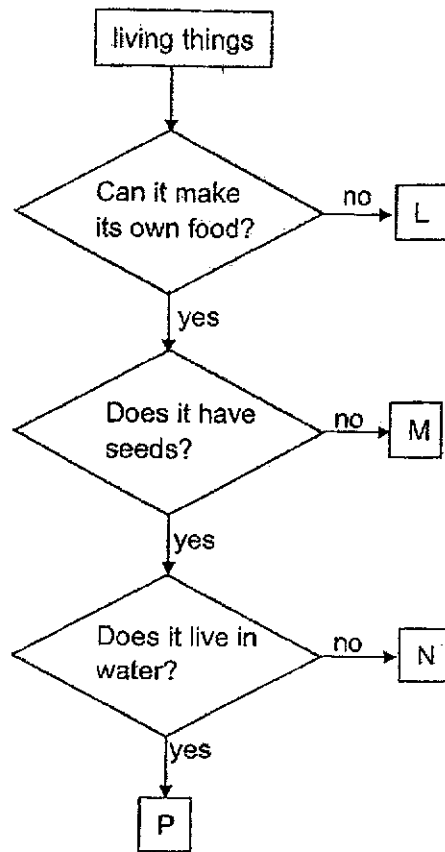
15. Observe the two groups of things, Group J and K, below.

Group J	Group K
 <p data-bbox="603 667 667 701">chair</p>  <p data-bbox="619 943 667 976">fork</p>	 <p data-bbox="1050 658 1114 692">plant</p>  <p data-bbox="1066 965 1114 999">bird</p>

Which statement about the things in the groups is correct?

- (1) ~~The things in both groups can grow.~~
- (2) The things in both groups can reproduce.
- (3) Only the things in group J can respond to changes.
- (4) Only the things in group K need water, food and air to live.

16. Study the flowchart below.



Plant Y

Plant Y grows in the garden.

Which living thing represents Plant Y?

- (1) L
- (2) M
- (3) N
- (4) P

17. Study the table below.
The animals have been classified according to their outer covering.
One of the animals below has been classified wrongly.

Q	R
cat toad salamander	fish turtle crocodile

Which animal has been classified wrongly?

- (1) cat
- (2) toad
- (3) crocodile
- (4) salamander

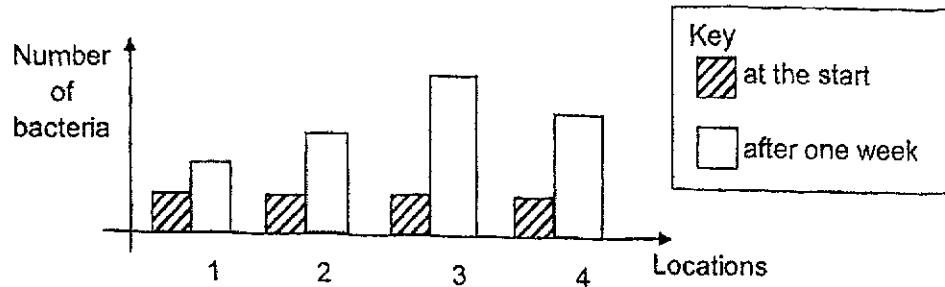
18. Study the table below.
A tick (✓) shows that the animal has the characteristic.

animals	characteristics		
	lay eggs	has only 2 legs	has wings
S		✓	
T	✓		
U			✓
W	✓	✓	✓

Which animal above represents an ant?

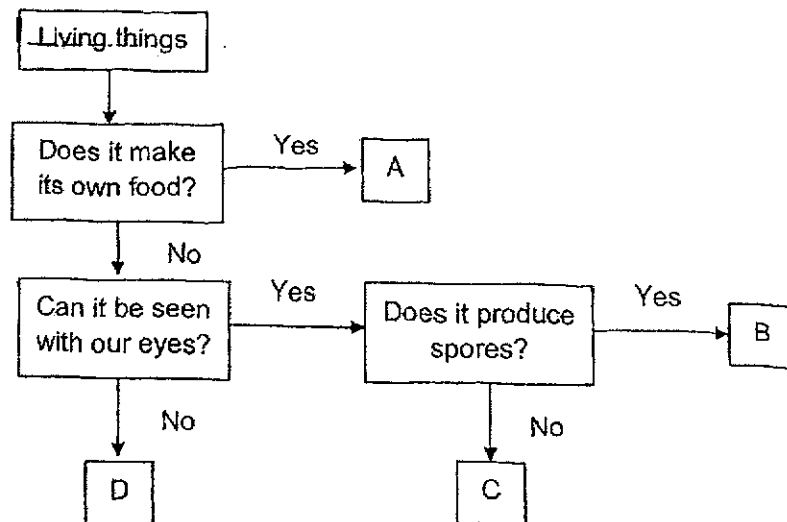
- (1) S
- (2) T
- (3) U
- (4) W

19. A scientist kept an equal number of bacteria in four locations. He recorded the number of bacteria at the start and after one week. The graph below shows his results.



Based on the results, which location is most suitable for bacteria to grow?

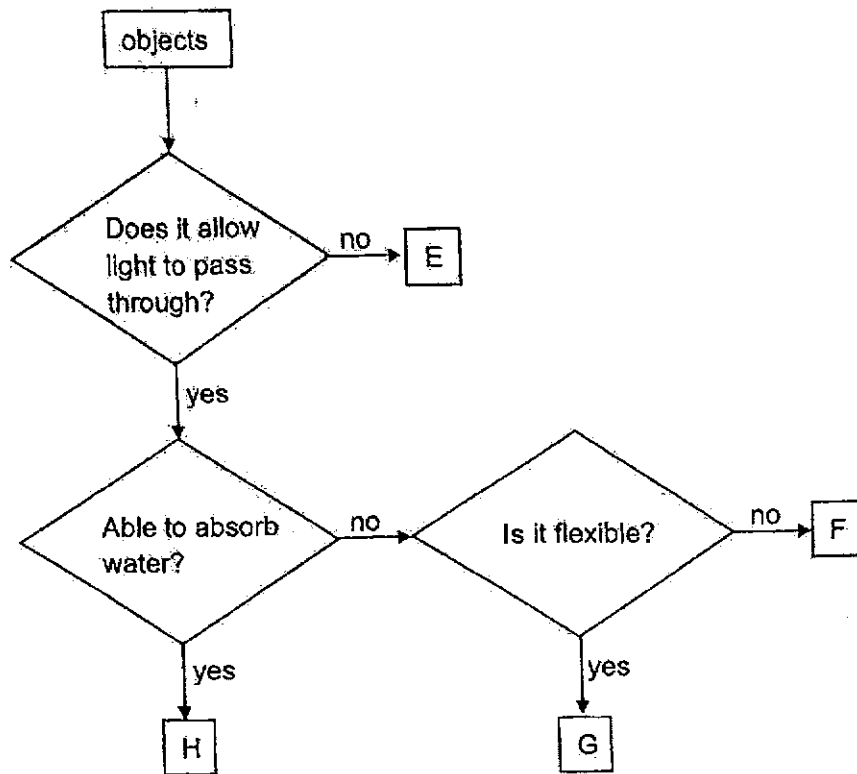
- (1) Location 1
 - (2) Location 2
 - (3) Location 3
 - (4) Location 4
20. Study the flow chart below. A, B, C and D are living things.



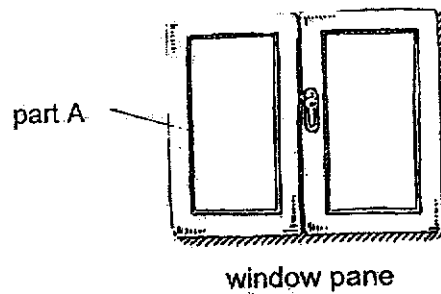
Which of the following is a mushroom?

- (1) A
- (2) B
- (3) C
- (4) D

21. Study the flowchart below.



Study the windowpane shown below.



Based on the flowchart, which object represents part A of a window pane?

- (1) E
- (2) F
- (3) G
- (4) H

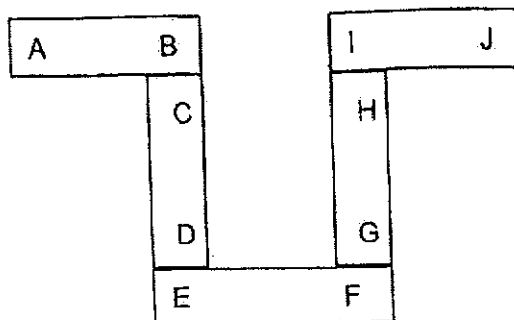
22. The table below shows how much weight each bag can hold before it tears.

Bags	Weight before bag tears (kg)
J	3
K	1
L	6
M	4

Which of the following shows the correct arrangement of the strongest bag to the weakest bag?

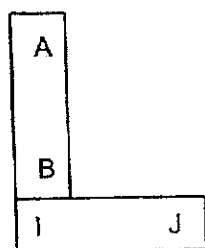
	strongest	→		weakest
(1)	K	J	M	L
(2)	L	J	M	K
(3)	L	M	J	K
(4)	K	L	M	J

23. Five bar magnets with their poles marked A to J can be arranged as shown below.

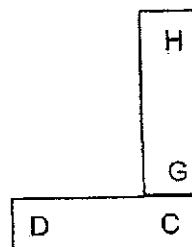


Which one of the following diagrams shows a possible arrangement of two of the magnets?

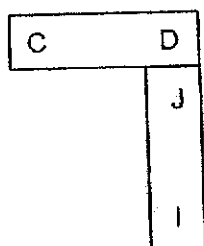
(1)



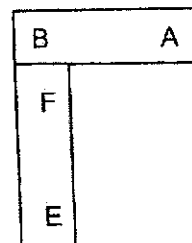
(2)



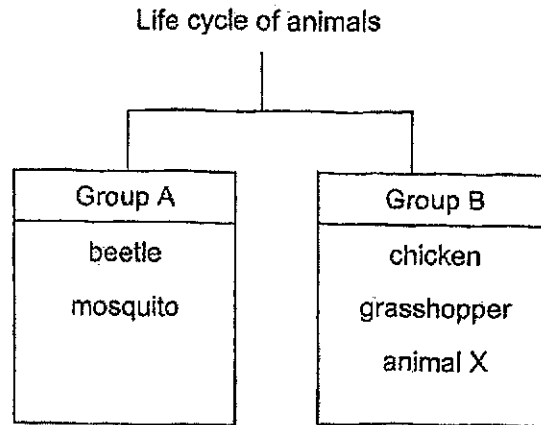
(3)



(4)



24. Study the classification chart below.



Which of the following animals can possibly represent animal X?

- (1) frog and butterfly
- (2) frog and cockroach
- (3) butterfly and cockroach
- (4) frog, butterfly and cockroach

END OF BOOKLET A

GO ON TO BOOKLET B



MAHA BODHI SCHOOL
2024 END OF YEAR EXAMINATION
PRIMARY THREE SCIENCE
(BOOKLET B)

Name: _____ ()

Class: Primary 3 _____

Date : 24 Oct 2024

Total Duration for Booklets A and B: 1 h 30 min

INSTRUCTIONS TO CANDIDATES:

1. Do not turn over this page until you are told to do so.
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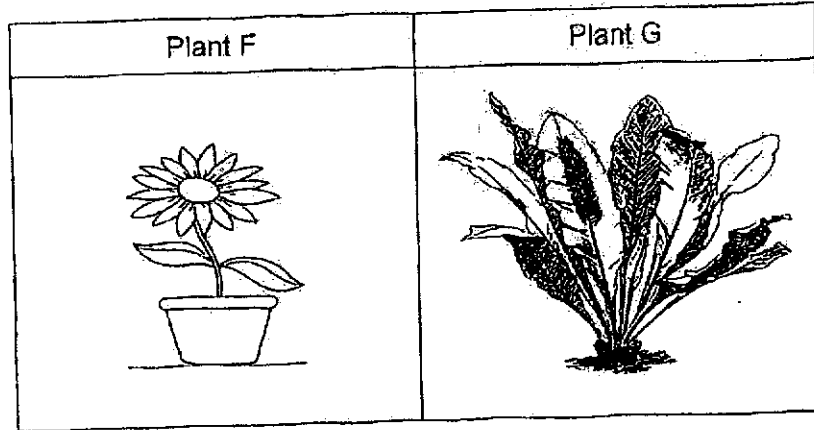
Booklet	Marks Obtained	Max Marks
A		48
B		32
Total		80

Parent's signature: _____

This booklet consists of 11 printed pages.

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26. Riley observed two plants as shown below.

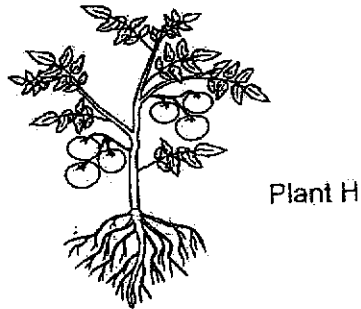


(a) State how Plant F and Plant G reproduce. [2]

Plant F: _____

Plant G: _____

Study Plant H as shown below.

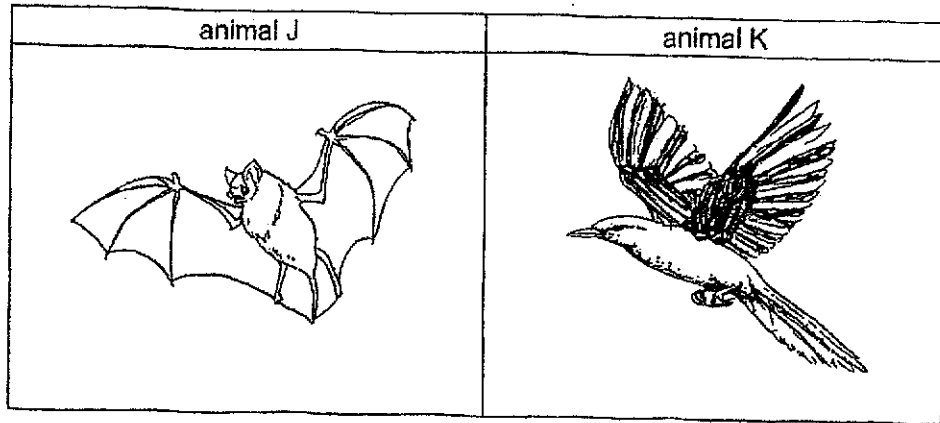


Riley observed plant H closely but could not find flowers. He concluded that Plant H was a non-flowering plant.

(b) Do you agree with Riley? Explain your answer. [2]

Marks : / 4

27. Study the animals below.



(a) State the animal groups of. [1]

Animal J: _____

Animal K: _____

(b) Based on the diagrams above, put a tick (✓) in the correct boxes in the table below to show that the animal has the characteristics. [1]

Animal	has feathers	has a beak
J		
K		

(c) Based on the diagrams above, state a similarity between animals J and K. [1]

Marks :

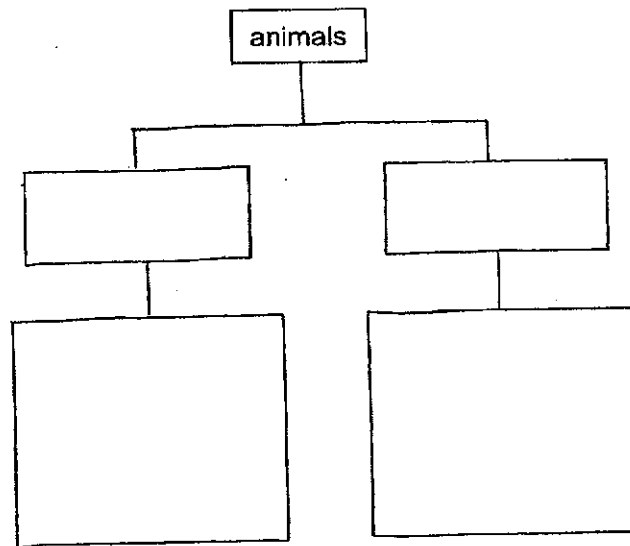
/ 3

28. Study the groups of animals below.

Group L	Group M
cat	shark
lizard	guppy
monkey	goldfish

- (a) Based on where the animals live, state a difference between the animals in Group L and Group M. [1]
-
-

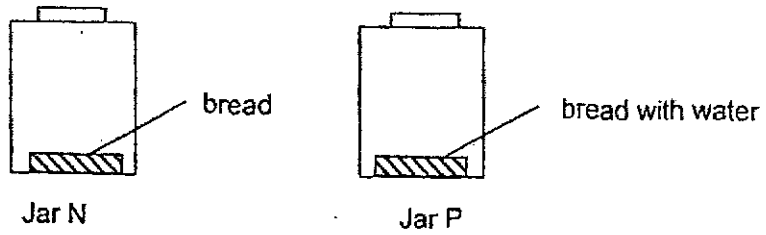
- (b) Based on how the animals reproduce, regroup the animals in Group L only in the diagram below. Provide the headings clearly. [2]



Marks :

13

29. Liping left two pieces of bread in two identical jars, N and P.
A few drops of water were added to the bread in jar P only.



- (a) After a few days, she observed mould growing on the bread in Jar P and not in Jar N.

Why did mould grow on the bread in jar P only?

[1]

- (b) (i) What was the changed variable in this experiment?

[1]

- (ii) State why Liping only changed one variable in the experiment. [1]

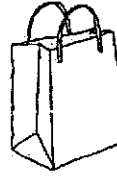
Marks :

13

30. Aston had two similar bags, Q and R.



Q



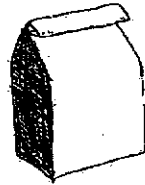
R

He made some observations and recorded the properties of the bags in the table below.

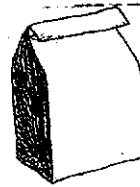
Q	R
tears easily absorbs water	waterproof strong

- (a) Based on the observations above, state one difference between bags Q and R. [1]

He decided to use one of the bags below to hold some ice and a few wet fish.



plastic



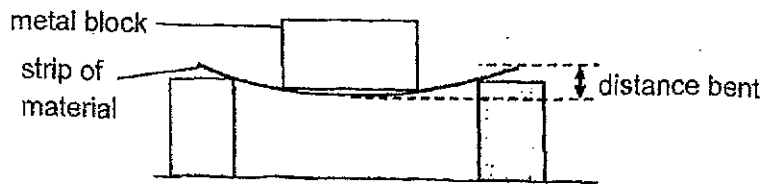
paper

- (b) Which one of the bags above should he use to carry his wet fish? Explain your answer. [1]

Marks :

12

31. Jaden conducted an experiment as shown below. He placed a heavy metal block on strips made of four different materials, D, E, F and G.

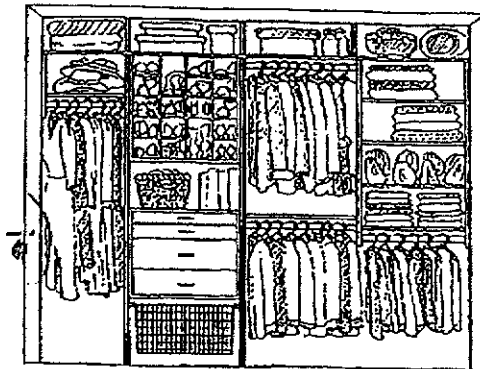


He measured the distance of how much each material bent and recorded them in the table below.

materials	distance bent (cm)
D	2
E	6
F	4
G	8

- (a) Which property of materials was he testing? [1]

He wanted his cupboard to hold many heavy clothes as shown below.

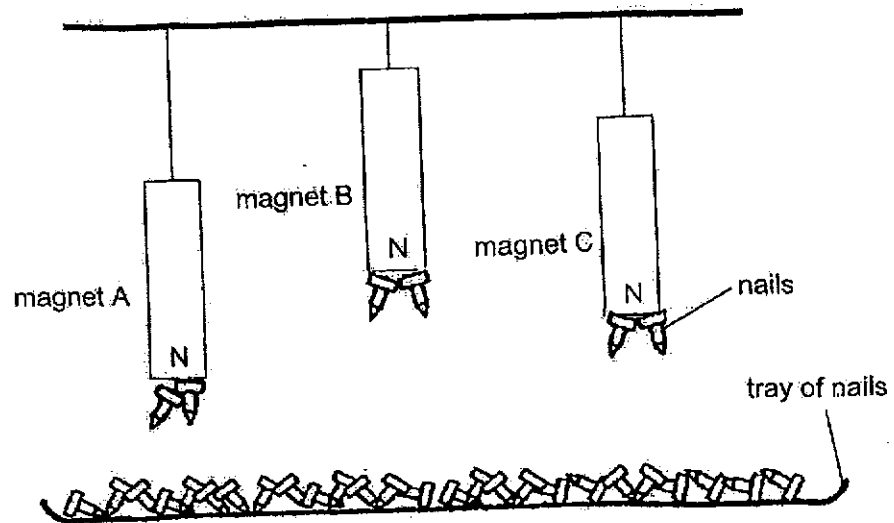


- (b) Based on the results, which materials D, E, F or G, should he use to make the cupboard? Explain your answer. [2]

Marks : / 3

32. Jenny set up an experiment to find out which magnet, A, B or C, has the strongest magnetic pull.

Each magnet was hung at different heights above a tray which contained nails. The results are shown below.



- (a) Why did Jenny use the poles of the magnets to attract the nails? [1]

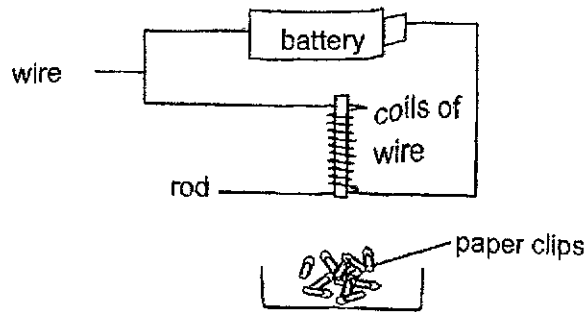
- (b) Based on the results, what could Jenny conclude about magnet B? Explain your answer. [2]

- (c) State how the strength of the magnets affected the distance the magnets could attract the nails. [1]

Marks :

14

33. Lilin made three electromagnets using rods made of different materials X, Y and Z. The electromagnet was placed near a pile of paperclips as shown below.



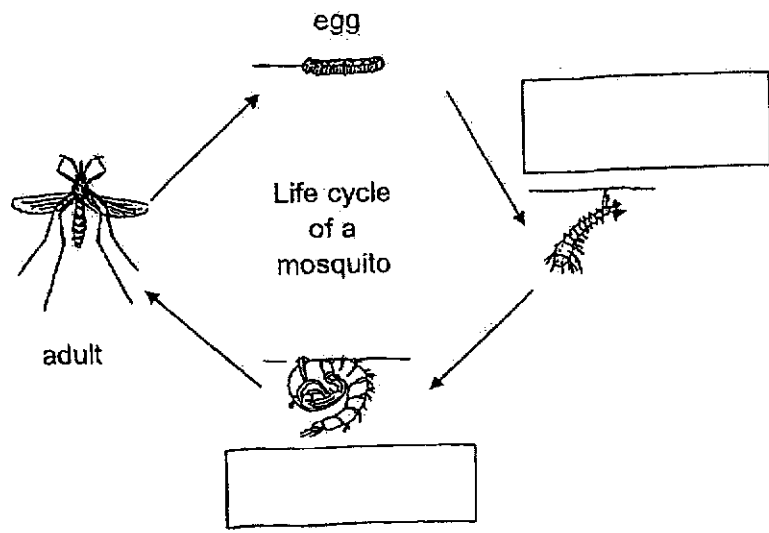
The table below shows the result of the experiment.

Rod	Material of rod	Number of paperclips attracted to the magnet
X	iron	6
Y	steel	8
Z	wood	0

- (a) State a reason why the paperclips were not attracted to the electromagnet made of rod Z. [1]
-
-
- (b) Based on the results, which one of the electromagnets was the strongest? Explain your answer. [1]
-
-
- (c) State how the number of paper clips attract by X would change if more coils of wire were coiled around it. Explain your answer. [2]
-
-
-

Marks : / 4

34. (a) The diagram below shows the life cycle of a mosquito.

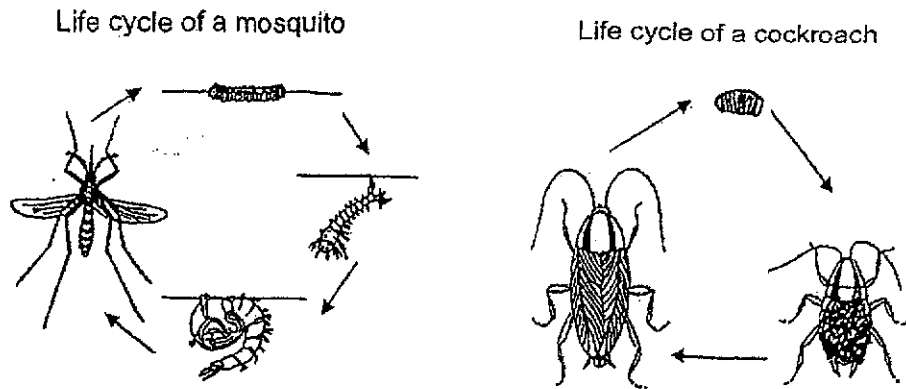


- (i) Label the 2 stages of the life cycle of the mosquito in the boxes above. [1]
- (ii) At which stage of the life cycle of the mosquito is it most difficult to kill? Explain your answer. [1]

Marks :

12

34. (b) The diagrams below show the life cycles of a mosquito and a cockroach.



- (i) At which stage in the life cycle of a cockroach does it moult several times? State a reason why it moults. [1]

- (ii) Based on the life cycles shown above, state a difference between the life cycles of the mosquito and the cockroach. [1]

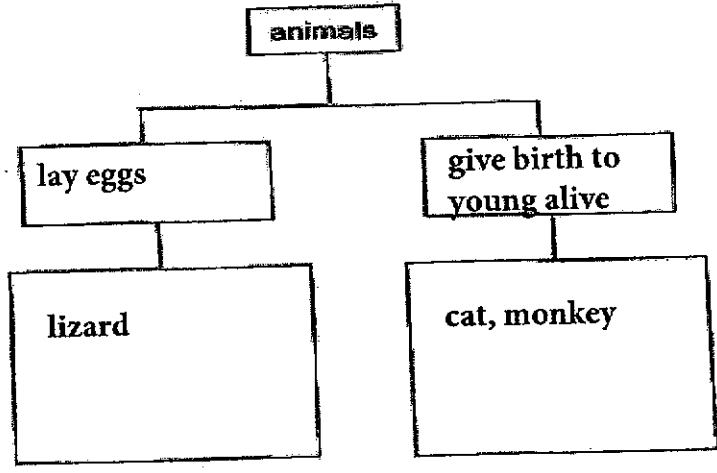
Marks : / 2

~ END OF PAPER

SCHOOL : MAHA BODHI PRIMARY SCHOOL
 LEVEL : PRIMARY 3
 SUBJECT : SCIENCE
 TERM : 2024 SA2

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
2	4	3	1	2	2	1	2	3	1
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
1	2	2	2	4	3	1	2	3	2
Q21	Q22	Q23	Q24						
2	3	1	2						

Q25	<p>a) Living things grow.</p> <p>b) Set-up C. Living things need air, food and water to live. As set-up C has all three conditions which is air, food and water the hamster in set-up C will stay alive the longest.</p>
Q26	<p>a) plant F: reproduce by seeds Plant G: reproduce by spores</p> <p>b) I do not agree with Riley. Only flowering plants have fruits. As Plant H has fruits, Plant H is a flowering plant.</p>
Q27	<p>a) Animal J: Mammal Animal K: bird</p> <p>b) K --- has feathers / has a beak</p> <p>c) Both animal J and K have wings.</p>

Q28	<p>a) Group L animals live on land whereas. Group M animal live in water,</p> <p>b)</p>  <pre> graph TD animals[animals] --> lay_eggs[lay eggs] animals --> give_birth[give birth to young alive] lay_eggs --> lizard[lizard] give_birth --> cat_monkey[cat, monkey] </pre>
Q29	<p>a) could grows on things that have water. As only Jar P' s bread has water, only Jar p' s bread grew mould.</p> <p>b) i)A few drop of water was added to the bread in Jar P only.</p> <p>ii)Liping only changed one variable in the experiment so that Liping could conduct a fair test.</p>
Q30	<p>a) Bag Q absorbs water whereas bag R is waterproof.</p> <p>b) Aston should use the plastic bag because plastic is waterproof.</p>
Q31	<p>a) Flexibility.</p> <p>b) D it bent the least distance so it is the most rigid.</p>
Q32	<p>a) The poles of a magnet is the strongest part of a magnet.</p> <p>b) Magnet B is the strongest magnet as it attracted the same number of nails at the furthest distance.</p> <p>c) The stronger the magnetic strength the further the distance of the nails attracted by the magnet.</p>
Q33	<p>a) Wood is not a magnetic material. Non-magnetic material cannot be magnetised.</p> <p>b) Rod Y. Y attracted the most number of paperclips.</p>

	<p>c) The number of paperclips will increase because the strength of the electromagnet will increase.</p>
Q34	<p>a)i)Pupa ii)The adult stage. The adult mosquito can fly, which makes the adult mosquito most difficult to kill.</p> <p>b)i)The nymph stage. The nymph moults several times to grow turn into the adult. ii)The life cycle of the mosquito has four stages whereas the life cycle of the cockroach has three stages.</p>

