

MAHA BODHI SCHOOL
2020 SEMESTRAL ASSESSMENT 2
PRIMARY THREE SCIENCE
(BOOKLET A)

Name : _____ ()

Class : Primary 3 _____

Date : 5 November 2020

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

INSTRUCTIONS TO CANDIDATES:

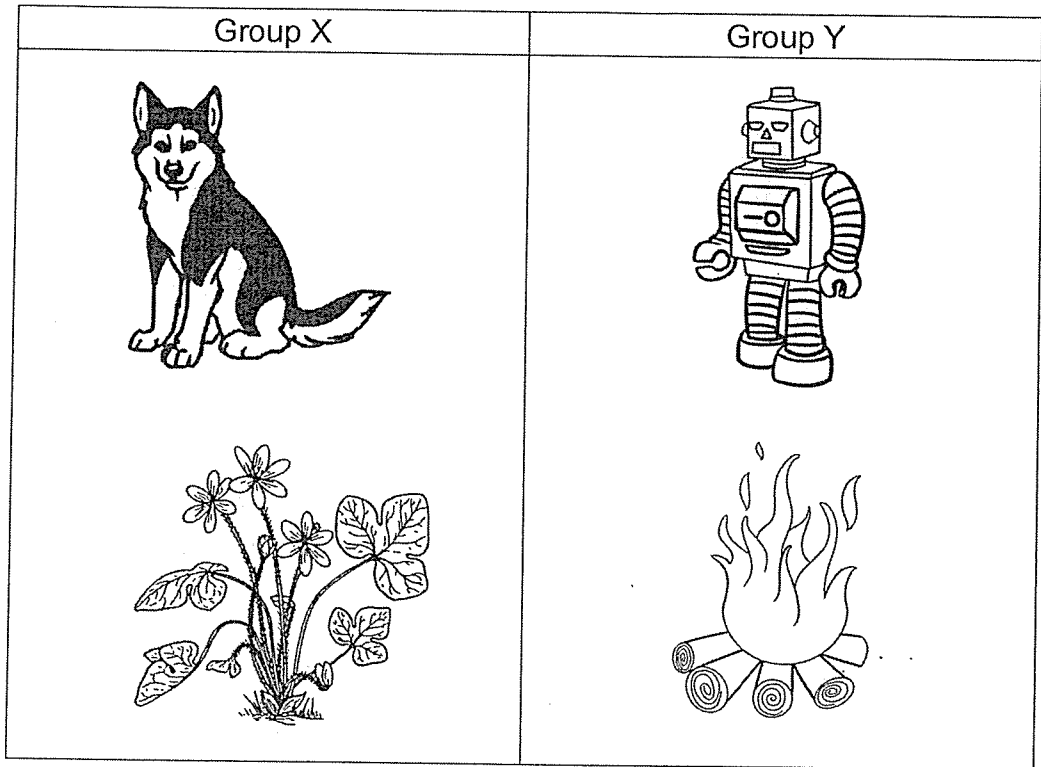
1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Shade your answers in the Optical Answer Sheet (OAS) provided.

This booklet consists of **13** printed pages.

BOOKLET A : [21 x 2 marks = 42 marks]

For each question from 1 to 21, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). **Shade your answer on the Optical Answer Sheet.**

1. Study the two groups shown below.



Which of the following statements is correct?

- (1) Group X can respond to changes.
- (2) Group Y needs air, food and water.
- (3) Both Group X and Group Y can grow.
- (4) Both Group X and Group Y can reproduce.

2. Three pupils made the following statements about plants.

Ariel : Ferns are not plants.

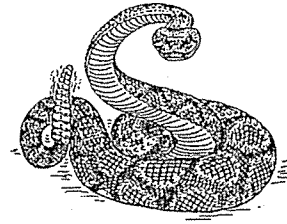
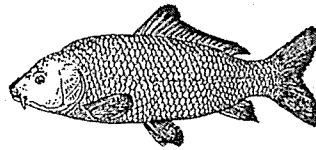
Ben : Plants can make their own food.

Cathy : Plants come in different shapes and colours.

Who made the correct statements about plants?

- (1) Ariel and Ben only
- (2) Ariel and Cathy only
- (3) Ben and Cathy only
- (4) Ariel, Ben and Cathy

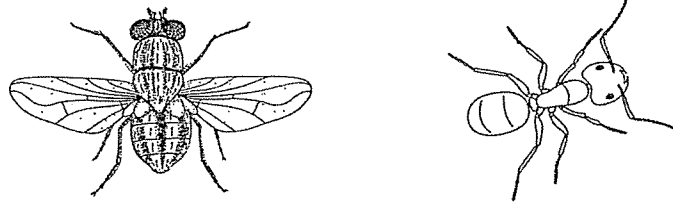
3. Study the two animals shown below.



What similarity can you observe between these two animals?

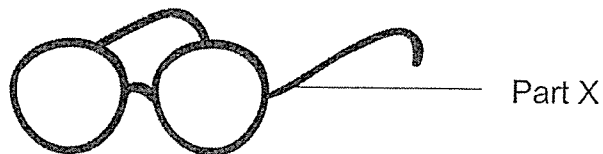
- (1) Both have fins.
- (2) Both give birth to young.
- (3) Both breathe through gills.
- (4) Both have scales as body covering.

4. Study the diagram below.



Which of the following characteristics can be used to tell that the animals are insects?

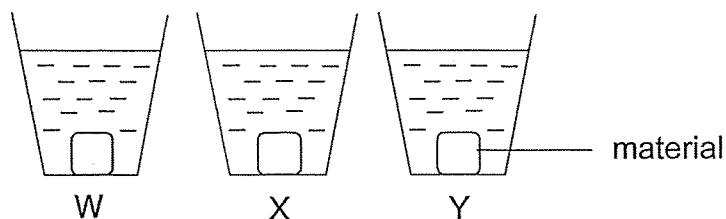
- (1) They have wings.
 - (2) They have four legs.
 - (3) They have three body parts.
 - (4) They have scales as body covering.
5. Which of the following statements about bacteria and fungi are true?
- A. Both reproduce by spores.
 - B. Both come in different shapes and sizes.
 - C. Both can only be seen with a microscope.
 - D. Both feed on other organisms, dead or alive.
- (1) A and B only
 - (2) A and D only
 - (3) B and C only
 - (4) B and D only
6. The diagram below shows a pair of spectacles.



Which of the following best describes the most important property in choosing a material to make part X?

- (1) It must be shiny.
- (2) It must be strong.
- (3) It must be able to float on water.
- (4) It must allow light to pass through.

7. Charles conducted an experiment on three different materials W, X and Y. He placed the materials W, X and Y into three identical containers as shown below. The containers contained the same amount of water and the materials were of the same size.



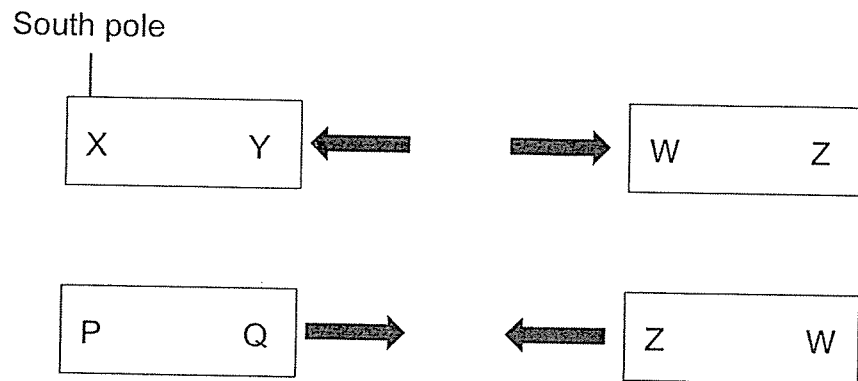
He recorded the volume of the water in the containers before the experiment. After 30 minutes, he removed the materials and recorded the volume of water left in the containers. The results are shown in the table below.

| Material | Amount of water in container (ml) | |
|----------|-----------------------------------|------------------|
| | Before experiment | After experiment |
| W | 100 | 52 |
| X | 100 | 86 |
| Y | 100 | 100 |

What property of the materials is he testing?

- (1) strength
 - (2) flexibility
 - (3) waterproof
 - (4) ability to sink or float
8. Which of the following objects can be attracted by a magnet?
- (1) iron ball
 - (2) plastic ball
 - (3) rubber ball
 - (4) aluminium ball

9. John has three magnets. The diagram below show how one of the magnets, WZ, interacts with the other two magnets, XY and PQ.



Which of the following shows the poles Q and W?

| | Q | W |
|-----|-------|-------|
| (1) | south | south |
| (2) | south | north |
| (3) | north | north |
| (4) | north | south |

10. The diagram below shows a boy playing soccer.



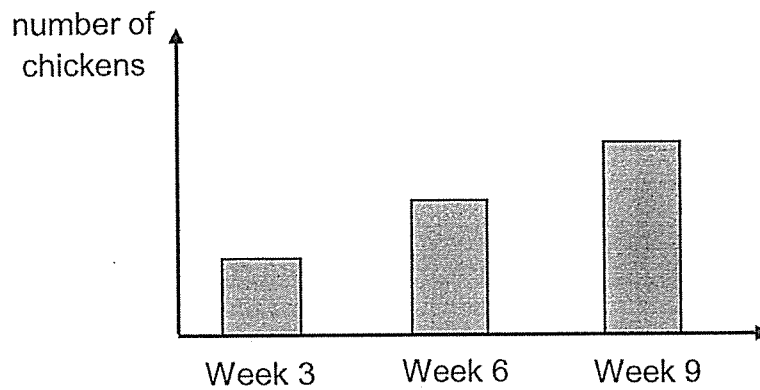
Which system(s) is/are involved when he is playing soccer?

- A. Skeletal
 - B. Muscular
 - C. Respiratory
- (1) B only
 - (2) A and B only
 - (3) A and C only
 - (4) A, B and C

11. What is the function of our teeth in the digestion of food?

- (1) They help to soften the food.
- (2) They produce digestive juices.
- (3) They help us to swallow our food.
- (4) They cut food into smaller pieces.

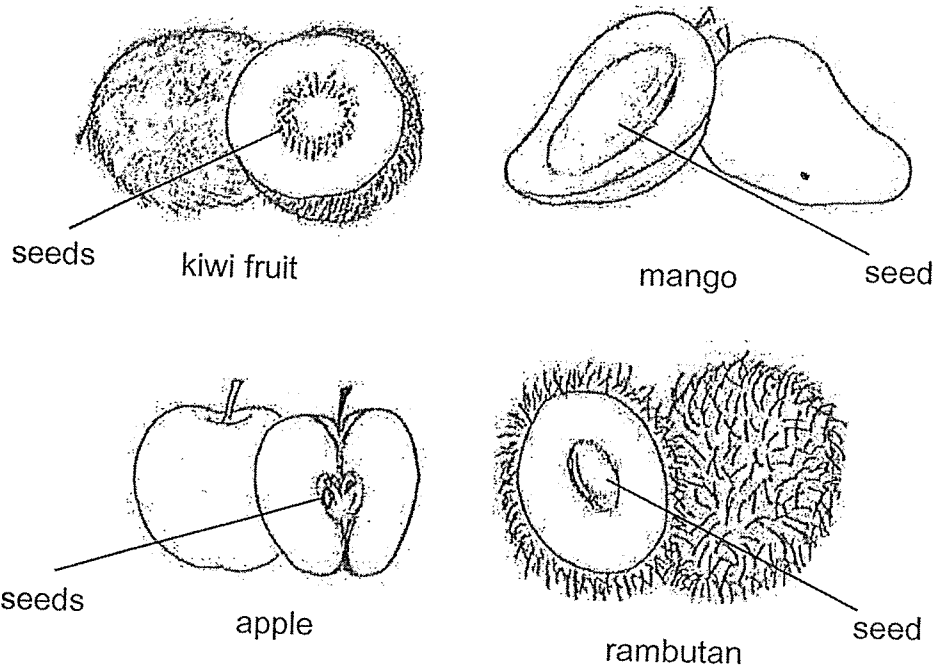
12. Study the graph below.



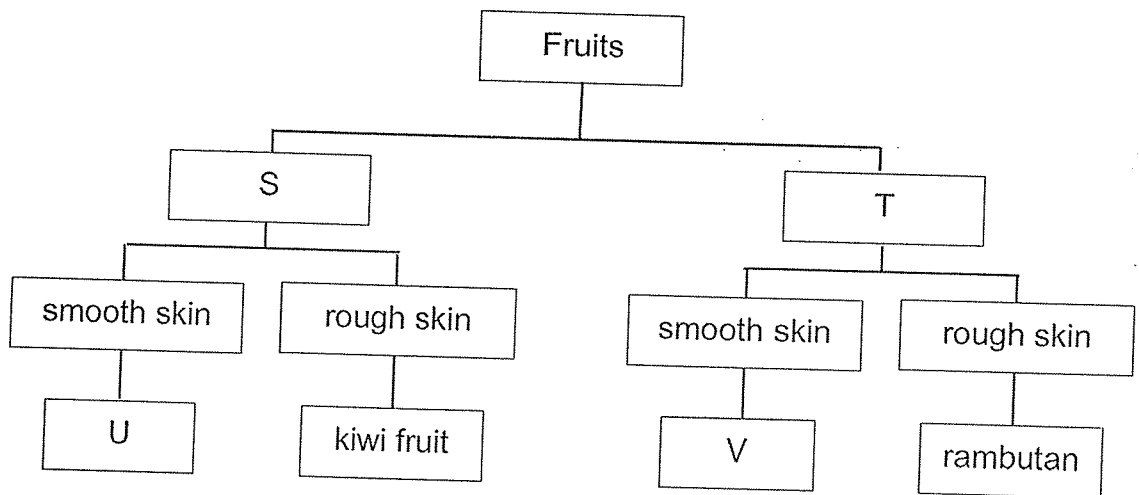
Which characteristic of living things does the graph show?

- (1) Living things can grow.
- (2) Living things can reproduce.
- (3) Living things can respond to changes.
- (4) Living things need air food and water to survive.

13. Linda bought some fruits as shown below.



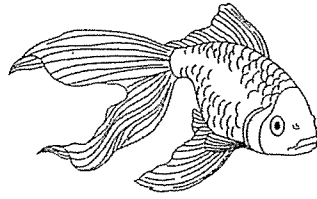
Study the classification chart of fruits as shown below.



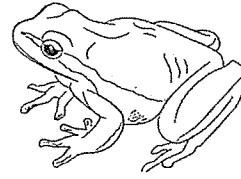
Which of the following shows correctly what the letters S, T, U and V represent in the classification chart?

| | S | T | U | V |
|-----|------------|------------|-------|-------|
| (1) | one seed | many seeds | apple | mango |
| (2) | one seed | few seeds | mango | apple |
| (3) | many seeds | one seed | apple | mango |
| (4) | few seeds | many seeds | mango | apple |

14. The goldfish and the frog belong to different groups of animals.



goldfish



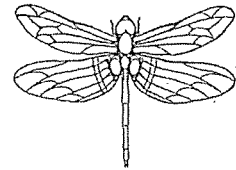
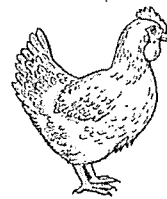
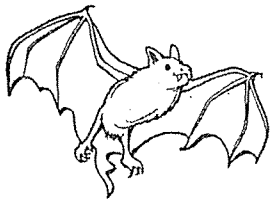
frog

Which of the following characteristics are different in a fish and a frog?

- A. body covering
- B. the way they move
- C. method of reproduction

- (1) A and B only
- (2) A and C only
- (3) B and C only
- (4) A, B and C

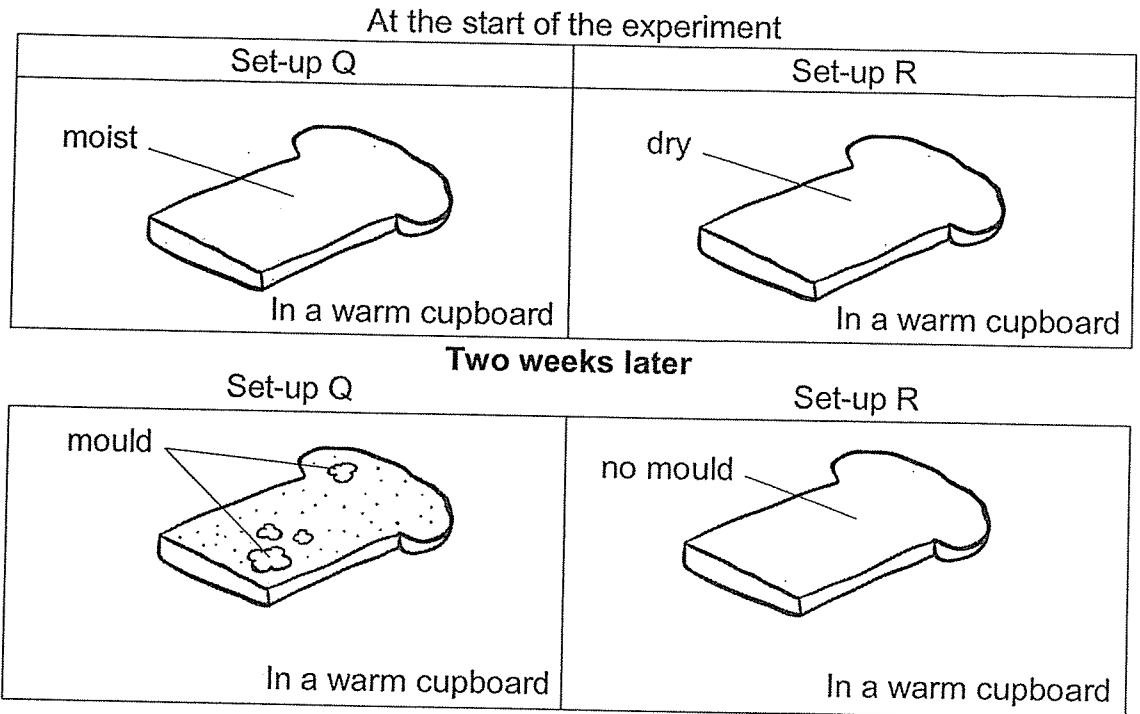
15. Study the animals below.



How are the animals similar?

- (1) They have wings.
- (2) They have feelers.
- (3) They have six legs.
- (4) They have feathers.

16. Susan wanted to find out if mould needs water to grow. She conducted an experiment using two set-ups, Q and R, over two weeks as shown below.



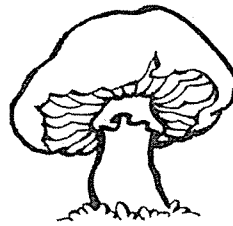
Based on her observation above, what can she conclude about her experiment?

- (1) Mould needs air to grow.
- (2) Mould needs water to grow.
- (3) Mould needs air and water to grow.
- (4) Mould needs air, food and water to grow.

17. The characteristics of four living things D, E, F and G are shown below. A tick (✓) shows that the living thing has that characteristic.

| Characteristics | Living things | | | |
|-------------------------------------|---------------|---|---|---|
| | D | E | F | G |
| makes its own food | | | ✓ | |
| reproduce by spores | | ✓ | ✓ | ✓ |
| can only be seen under a microscope | ✓ | | | ✓ |

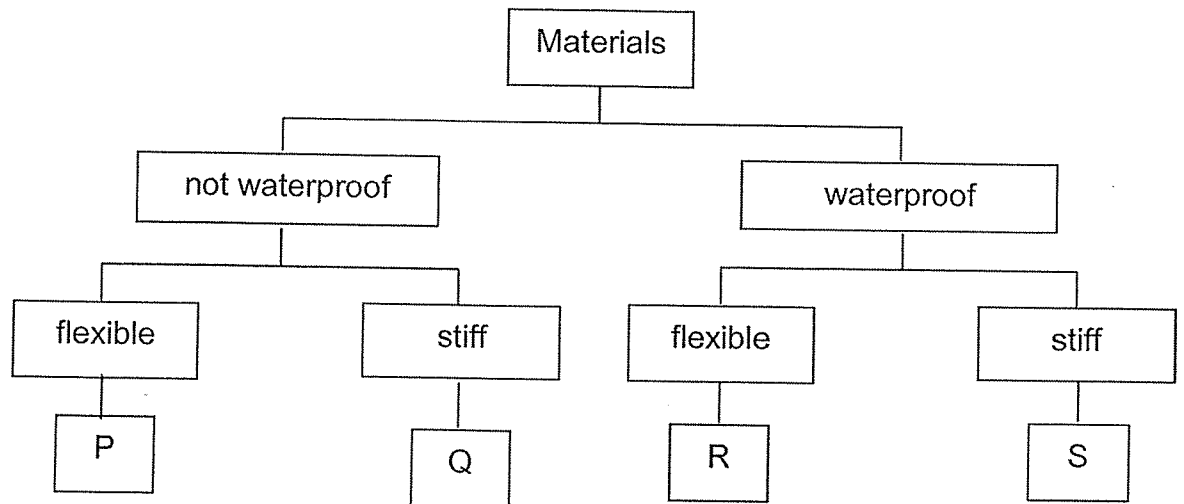
The diagram below shows a mushroom.



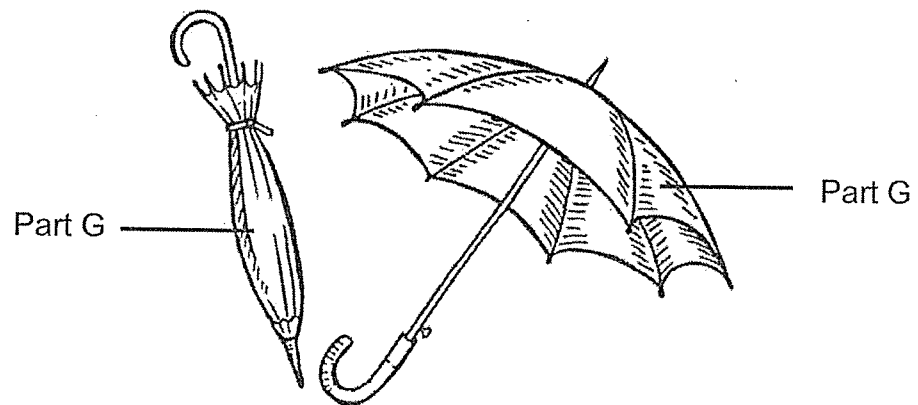
Which living thing best represents the mushroom?

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

18. Below is a classification chart that shows the properties of materials P, Q, R and S.



Joseph wants to choose a material P, Q, R or S to make part G of an umbrella to shelter him from rain. He should be able to keep the umbrella when not in use.



Based on the classification chart above, which of the following materials is most suitable for making part G of the umbrella?

- (1) P
- (2) Q
- (3) R
- (4) S

19. The table below shows the properties of materials X and Y.

| Property | Material X | Material Y |
|--------------------------------------|------------|------------|
| Is it flexible? | No | Yes |
| Is it waterproof? | Yes | No |
| Does it allow light to pass through? | Yes | No |

Which of the following correctly shows what objects could be made of using materials X and Y?

| | Material X | Material Y |
|-----|-----------------|-------------|
| (1) | ice-cream stick | metal cup |
| (2) | rope | raincoat |
| (3) | glass cup | towel |
| (4) | ceramic bowl | rubber band |

20. Diagram 1 shows a balance with two objects, P and R. Diagram 2 shows what happens when Object X is placed under Object P.

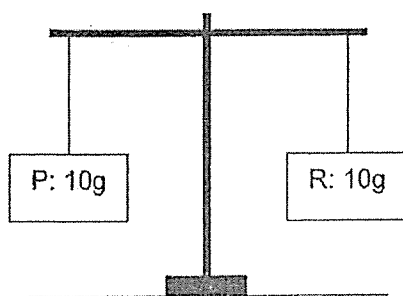


Diagram 1

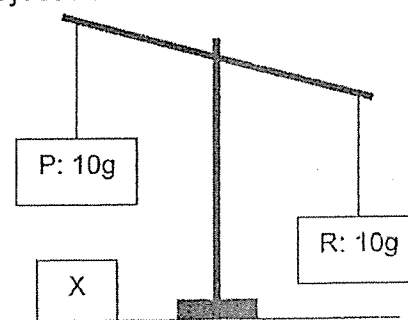


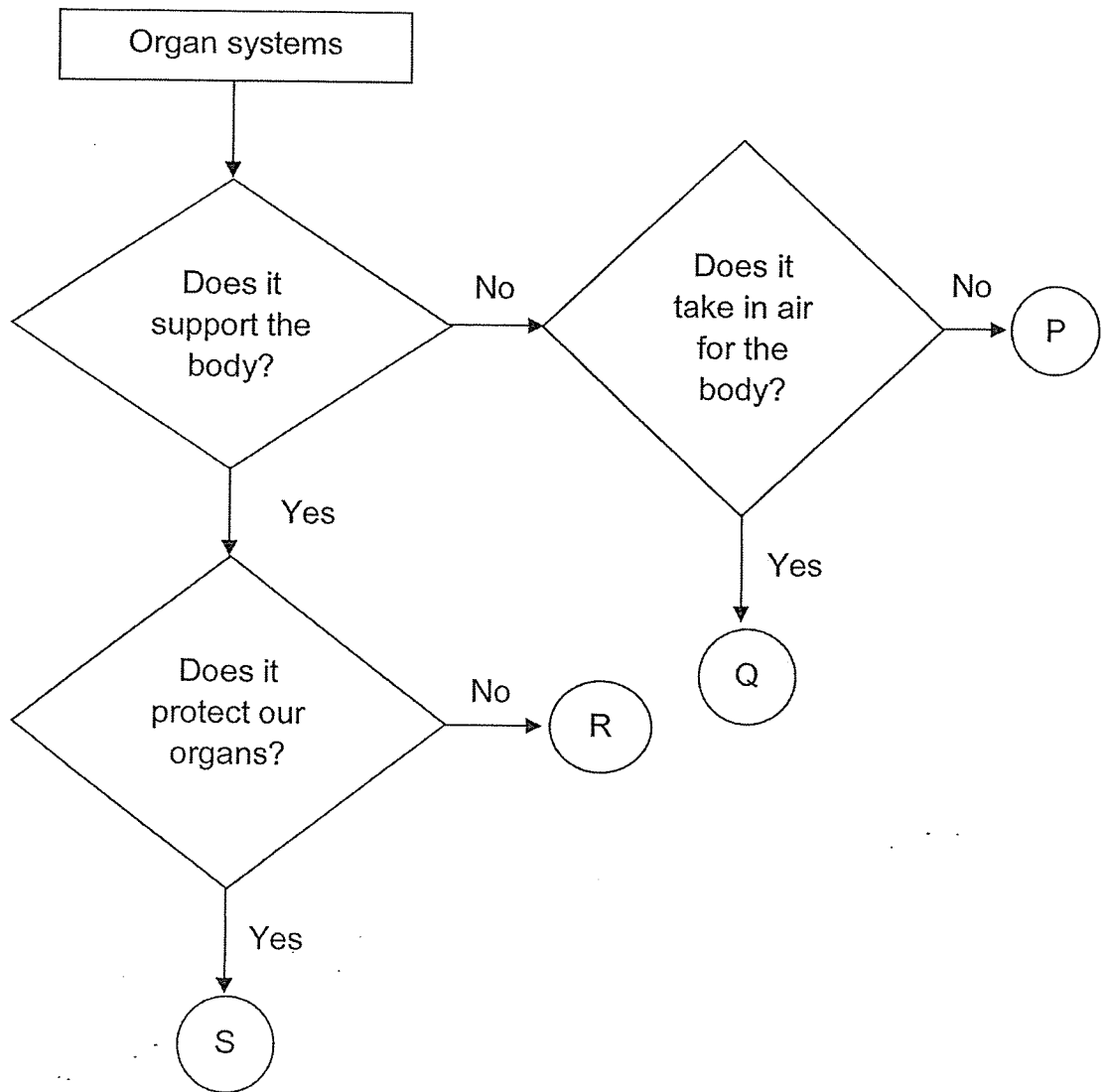
Diagram 2

Which of the following statements about the above objects are correct?

- A. Object P is a magnet.
- B. Object X is a magnet.
- C. Object P is made of non-magnetic material.
- D. Object R becomes heavier than object P when object X is placed under object P.

- (1) A and B only
- (2) C and D only
- (3) A, B and D only
- (4) B, C and D only

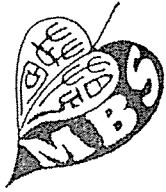
21. Study the flowchart below.



Which of the following correctly represents the skeletal system and respiratory system?

| | Skeletal system | Respiratory system |
|-----|-----------------|--------------------|
| (1) | S | P |
| (2) | R | Q |
| (3) | R | P |
| (4) | S | Q |

**END OF BOOKLET A
GO ON TO BOOKLET B**



MAHA BODHI SCHOOL
2020 SEMESTRAL ASSESSMENT 2
PRIMARY THREE SCIENCE
(BOOKLET B)

Name: _____ ()

Class: Primary 3 _____

Date : 5 November 2020

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. Write all your answer in this booklet.

| Booklet | Marks Obtained | Max Marks |
|---------|----------------|-----------|
| A | | 42 |
| B | | 28 |
| Total | | 70 |

Parent's signature: _____

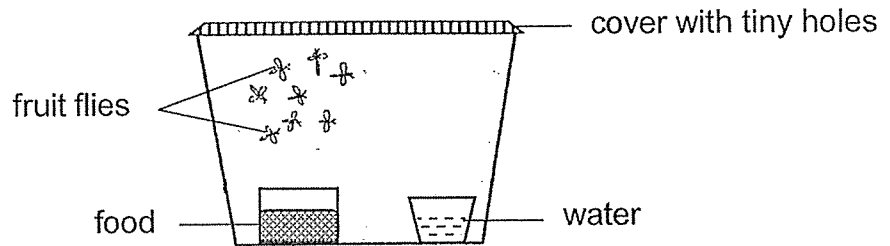
This booklet consists of **8** printed pages.

BOOKLET B : [28 marks]

For questions 22 to 29, write your answers in this booklet.

The number of marks available is shown in the brackets [] at the end of each question or part-question.

22. Timmy placed some fruit flies in a tank as shown below. Food and water were added daily. After a few weeks, he noticed that the number of fruit flies increased.



- (a) From his observations after a few weeks, what characteristic of living things did he observe? [1]

- (b) (i) Why did Timmy use a cover with tiny holes instead of a cover with no holes? [1]

- (ii) Explain your answer in (i). [1]

Marks :

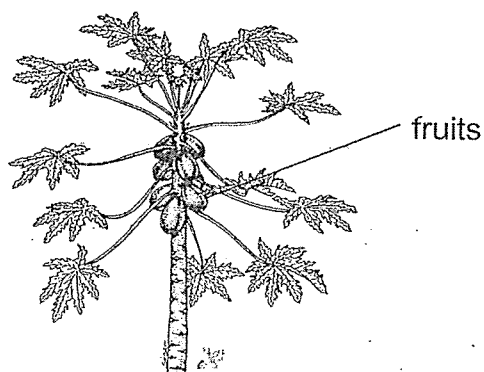
| |
|-----|
| / 3 |
|-----|

23. The following table shows the characteristics of plants Q and R. A tick (✓) indicates that a characteristic is observed and a cross (x) means it is not.

| Characteristics | Plant Q | Plant R |
|----------------------------|---------|---------|
| It bears fruits. | ✓ | x |
| It has a strong stem. | x | ✓ |
| It reproduces from spores. | x | ✓ |

- (a) Based on the table, state one difference between the stems of plants Q and R. [1]

- (b) Study Plant T shown below.



Plant T

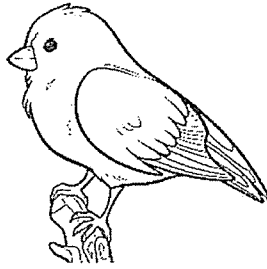
- (i) Which group of plants does Plant T belong to? [1]

- (ii) Give a reason for your answer in (i). [1]

Marks :

/ 3

24. (a) Study the pictures of a bird and a dog.

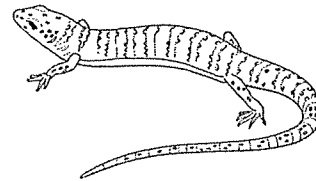
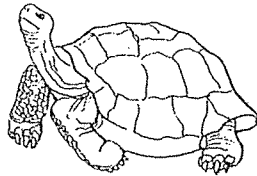


Based on the pictures only, state the body covering of the bird and the dog. [2]

(i) Bird : _____

(ii) Dog : _____

(b) The two animals shown below belong to the same group of animals.



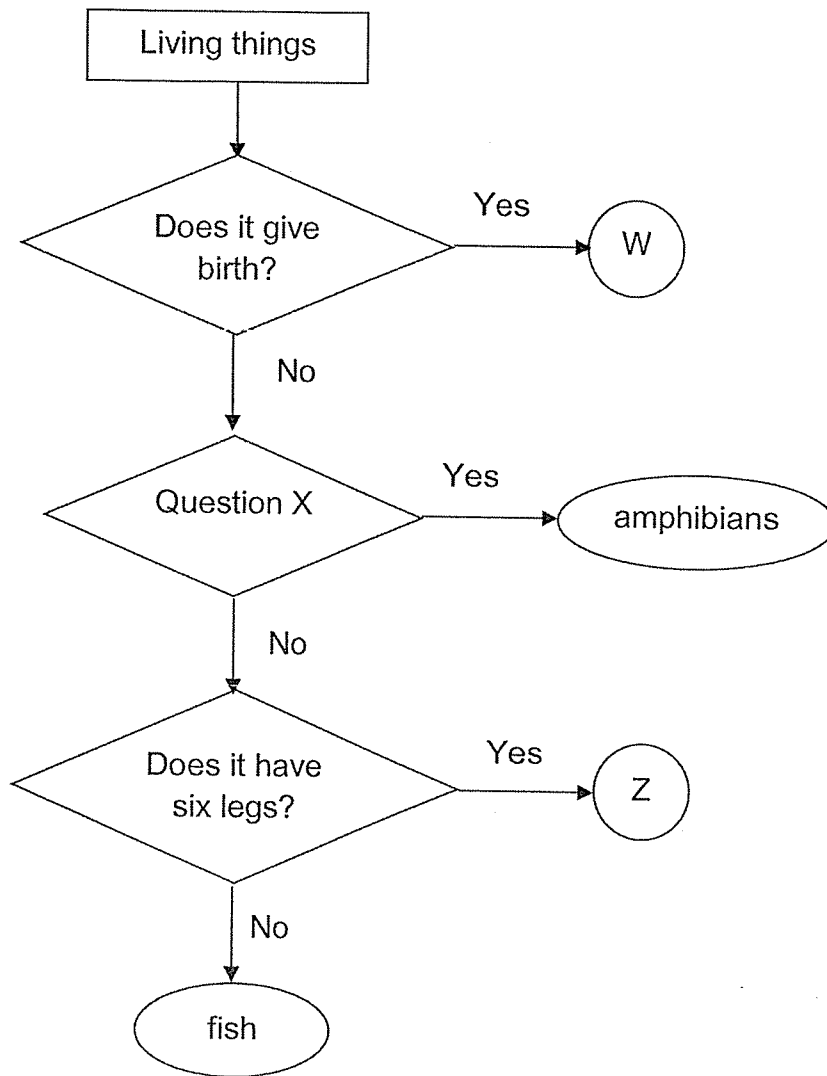
(i) Which group of animals do they belong to? [1]

(ii) State the method of reproduction of this group of animals. [1]

Marks :

| |
|-----|
| / 4 |
|-----|

25. Study the flowchart below.



(a) Based on the flowchart, which animal group do W and Z belong to? [2]

W : _____

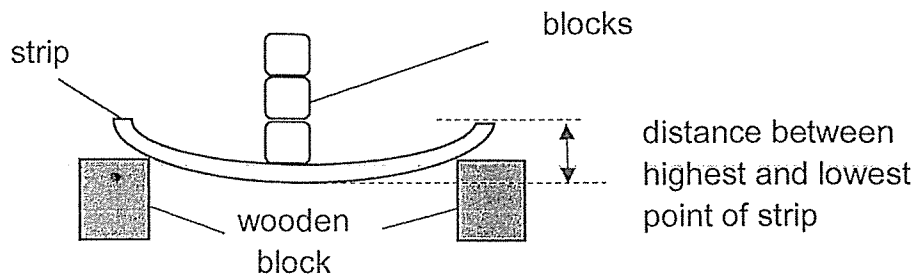
Z : _____

(b) Based on the common characteristics of amphibians, what can Question X possibly be? [1]

Does it _____ ?

Marks : / 3

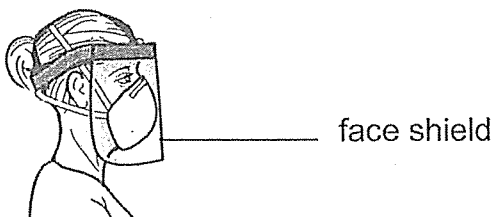
26. Pamela carried out an experiment using strips made of four different types of materials, C, D, E and F. She placed blocks on each strip of material to see how many blocks it can hold till the distance between the highest and lowest point of the strip is 4 cm.



She recorded her results in the table below.

| Material | C | D | E | F |
|--|---|---|---|---|
| Number of blocks it can hold before it bends till 4 cm | 5 | 3 | 1 | 2 |

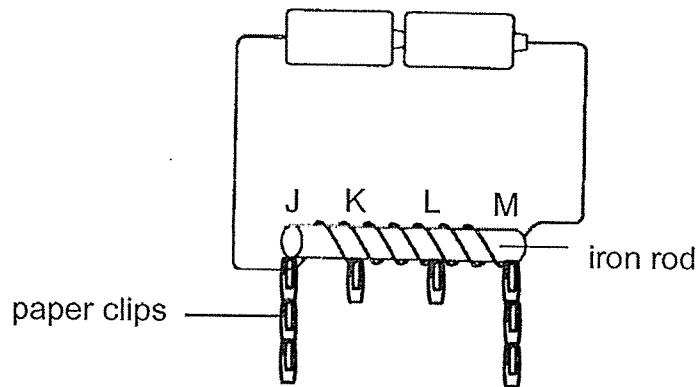
- (a) What property of the material was she testing? [1]
-
- (b) One of the materials was used for making a face shield.



- (i) Pamela wants to use material C to make the face shield. Based on the results, explain why material C is not suitable to make the face shield. [2]
-
- (ii) Pamela wants to see her surroundings when she wears the shield. Which other property of the material allows her to do so? [1]
-

Marks : / 4

27. Kenneth made an iron rod into an electromagnet using the set-up shown in the diagram below. When he brought the electromagnet near some paper clips, he noticed that different numbers of paper clips were attracted to parts J, K, L and M of the iron rod.

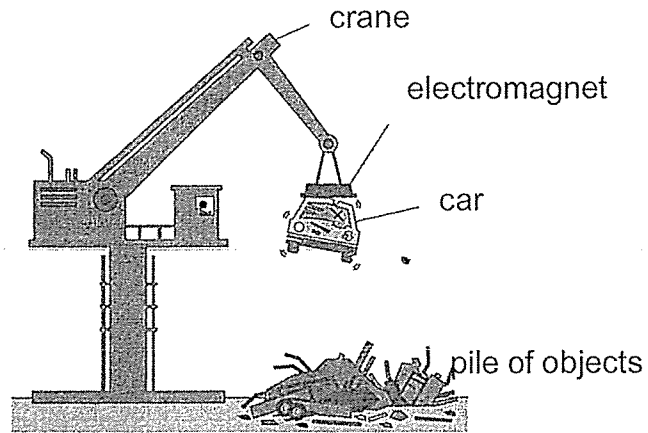


- (a) (i) Based on his observation, which part(s) of the electromagnet is/ are the poles. [1]
-
- (ii) Explain the observation in (i). [1]
-
- (b) State two changes he could he make to the above set-up if he wants to attract more paper clips. [2]
-
-
-

Marks :

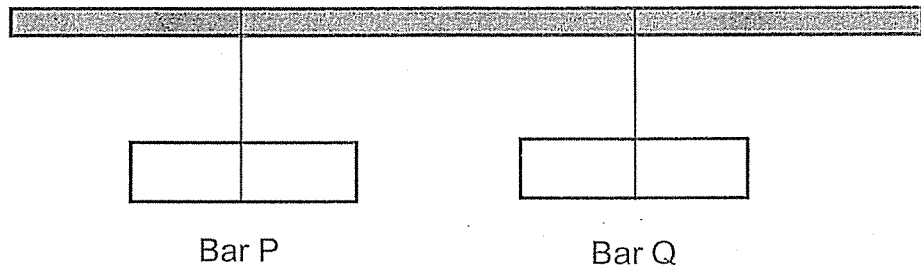
/ 4

28. (a) Mr Ng used an electromagnet to separate a pile of objects as shown in the diagram below.



Based on the diagram, what can you conclude about the property of the material of the car? [1]

- (b) Two bars, P and Q, are hung from a pole such that they can turn freely. Both bars do not attract or repel each other. They come to rest on their own as shown below.



When the bars come to a rest, bar P always points in the North-South direction but bar Q always points in different directions.

What could bars, P and Q, possibly be?

Explain your answer.

[2]

(i) Bar P is a _____

because _____

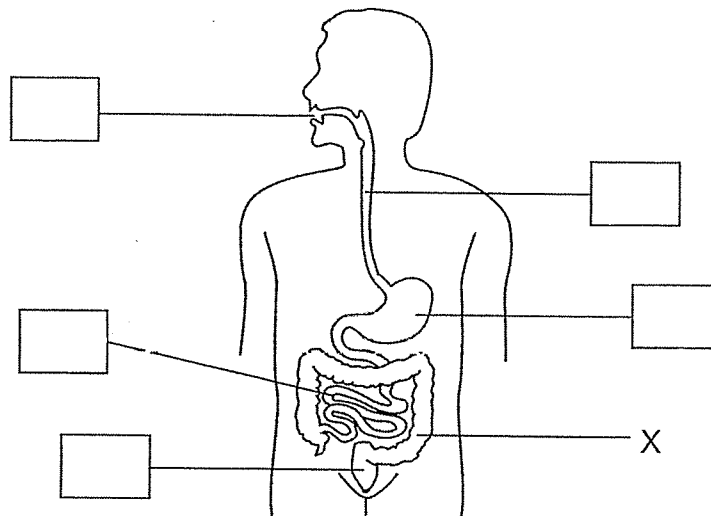
(i) Bar Q is a _____

because _____

Marks :

/ 3

29. (a) The diagram below shows the human digestive system.



(i) In the diagram above, pick a tick (✓) in the box(es) to show the part(s) of the system where digestion takes place. [2]

(ii) State the function of part X. [1]

(b) Explain how saliva in your mouth helps in digestion. [1]

Marks : / 4

~ END OF PAPER ~

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SCHOOL : MAHA BODHI SCHOOL

LEVEL : PRIMARY 3

SUBJECT : SCIENCE

TERM : 2020 SA2

SECTION A

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 |
|----|----|----|----|----|----|----|----|----|-----|
| 1 | 3 | 4 | 3 | 4 | 2 | 3 | 1 | 3 | 4 |

| Q11 | Q12 | Q13 | Q14 | Q15 | Q16 | Q17 | Q18 | Q19 | Q20 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 4 | 2 | 3 | 1 | 1 | 2 | 2 | 3 | 3 | 1 |

| |
|------|
| Q 21 |
| 4 |

SECTION B

| | |
|------|---|
| Q22) | (a) Living things can reproduce. (b) The cover with holes allows air to enter the tank. (c) Living things need air to survive. |
| Q23) | (a) Plant R has a strong stem but plant Q does not have a strong stem. (b) (i) Flowering plants (ii) Only flowering plants can bear fruits. |
| Q24) | (a) (i) feathers (ii) hair (b) (i) Reptiles (ii) Lay eggs |

| | |
|------|---|
| Q25) | <p>(a) W: mammal Z: insect</p> <p>(b) Have moist skin</p> |
| Q26) | <p>(a) Flexibility</p> <p>(b) (i) Material C needs the most number of blocks to bend till 4cm so it is the stiffest.</p> <p>(ii) allows light to pass through</p> |
| Q27) | <p>(a) (i) Parts M and J</p> <p>(ii) J and M attracted more papers clips than K and L. The pull of a magnet is strongest at its poles.</p> <p>(b) Add more batteries, coil more wire around the iron bar.</p> |
| Q28) | <p>(a) Magnetic material.</p> <p>(b) (i) Magnet. It points in the north – south direction.</p> <p>(ii) Aluminium bar. It does not point in the north – south direction.</p> |
| Q29) | <p>(a) Mouth, stomach, small intestine and large intestine.</p> <p>(ii) X absorbs water from undigested food.</p> <p>(b) Saliva makes food soft so it makes the food easier to swallow.</p> |