# Northland Primary School

## End-of-Year Examination
## Science
## Primary Three
## Booklet A

**Name:** _____ (  )

**Class:** P3____

**Date:** 23 October 2025

**Total duration for Booklets A & B: 1 hour 30 minutes**

**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 21 printed pages.

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). Shade your answer on the Optical Answer Sheet.

(48 marks)

1 Which characteristic can be used to tell birds and mammals apart?

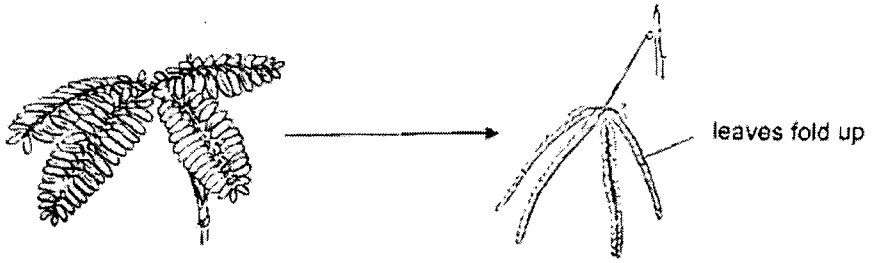
(1) number of legs

(2) where they live

(3) presence of wings

(4) type of body covering

2 The diagram shows a mimosa plant. When Lena touched the mimosa plant, its leaves fold up as shown.




Lena's observation shows that living things _____.

(1) grow

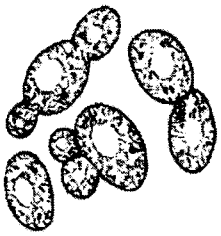
(2) reproduce

(3) need air, food and water

(4) respond to changes around them

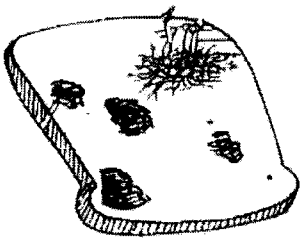
3 Which of the following is **not** a type of fungi?

(1)



yeast

(2)

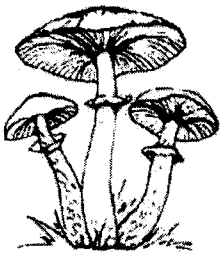


bread mould

(3)

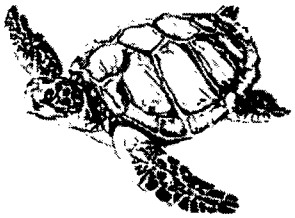
fern

(4)



mushroom

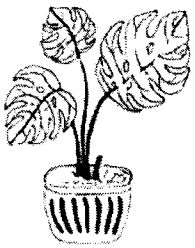
4 Study the classifcation table.

| Group P | Group Q |
| --- | --- |
|   |   |

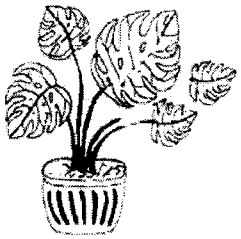
Which of the following are suitable headings for groups P and Q?

| | Group P | Group Q |
| --- | --- | --- |
| (1) | Can fly | Cannot fly |
| (2) | Lay eggs | Give birth to young alive |
| (3) | Live on land | Live in water |
| (4) | Have feathers on their bodies | Have fur or hair on their bodies |

5 Benjamin conducted an experiment to find out if two similar plants, X and Y, needed water to grow. He watered plant X daily but did not water plant Y at all. He observed the plants daily.



plant X



plant Y

Which of the following explain(s) why the test is not fair?

A Plant X grew taller than plant Y.

B Plant X had fewer leaves than plant Y.

C Plants X and Y were not given the same amount of water daily.

(1) A only

(2) B only

(3) A and C only

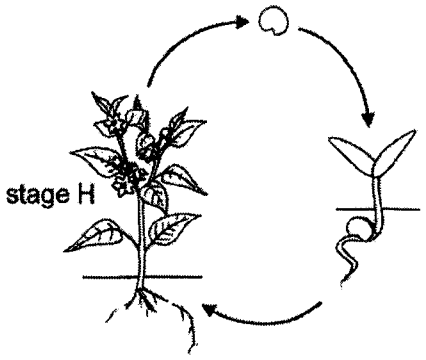
(4) B and C only

6 Which of the following statement(s) is/are true about bacteria?

A Bacteria do not reproduce.
B All bacteria cause diseases.
C Bacteria are tiny living things.
D Some bacteria are useful, but others are harmful.

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

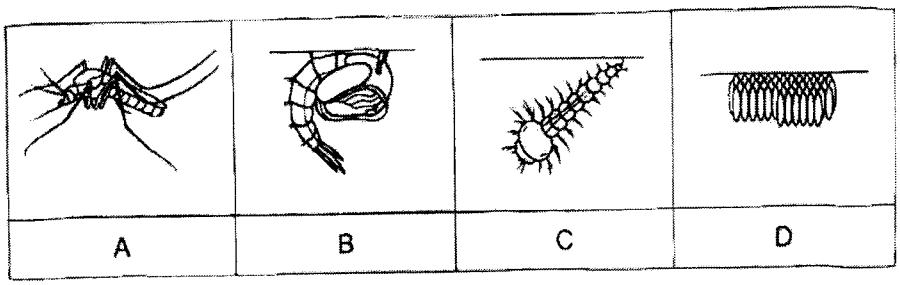
7 The diagram shows the life cycle of a flowering plant.




What is stage H?

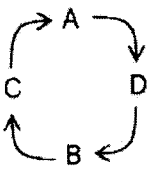
(1) egg
(2) seed
(3) adult plant
(4) young plant

8 A, B, C and D are the different stages in the life cycle of a mosquito as shown.

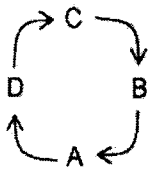



Which of the following correctly shows the life cycle of a mosquito?

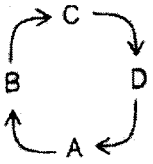
(1)



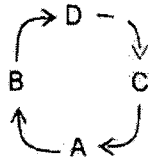

(2)




(3)




(4)



9 The table shows some information on the life cycle of two animals, X and Y.

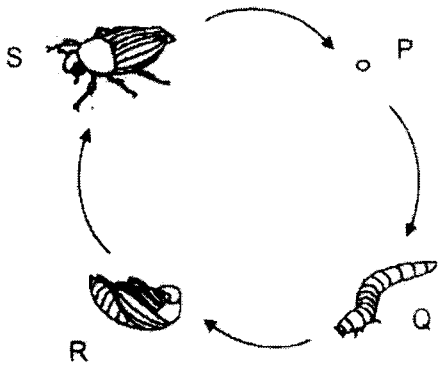
A tick (✓) shows that the animal has the characteristic.

| | X | |
|---|---|---|
| Has three stages in its life cycle | | |
| Young looks like its adult | | |
| Adult lays eggs in water | | |
| Has six legs | | |

Which of the following best represents animals X and Y?

| | X | |
|---|---|---|
| (1) | chicken | beetle |
| (2) | cockroach | frog |
| (3) | butterfly | mealworm |
| (4) | grasshopper | mosquito |

10 The diagram shows the life cycle of a mealworm beetle.




Which of the following statements is correct?

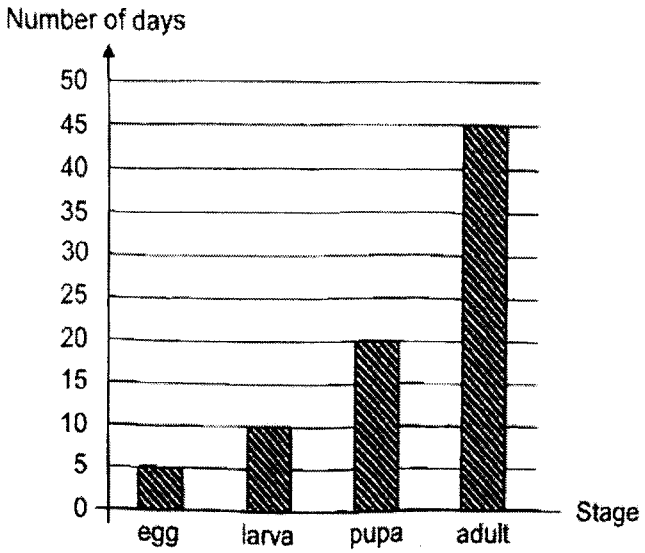
(1) It can fly at stages Q and S.

(2) Its young looks like the adult.

(3) It moults several times at stage Q.

(4) It does not need food at stages S and R.

11 The bar graph shows the number of days that animal Z spends at each stage of its life cycle.




How many days does it take for animal Z to become a pupa after hatching from its egg?

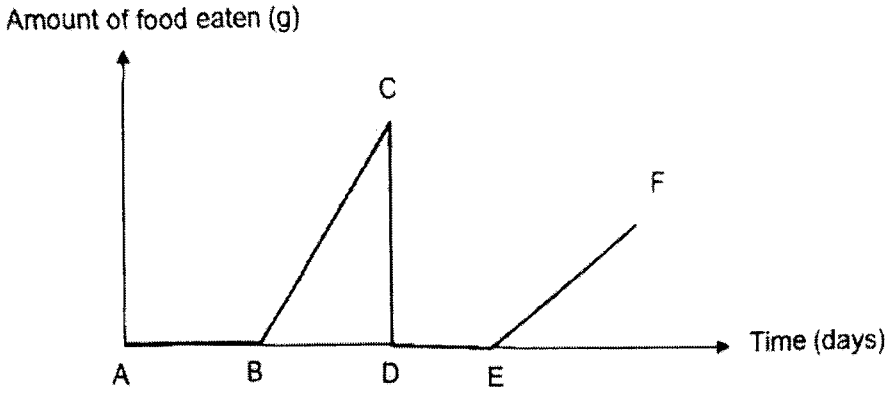
(1) 10

(2) 15

(3) 30

(4) 35

12 The graph shows the amount of food eaten by animal Q at various stages of its life cycle. At A, the animal is at the egg stage.




The line BC shows the _____ stage in the life cycle of animal Q.

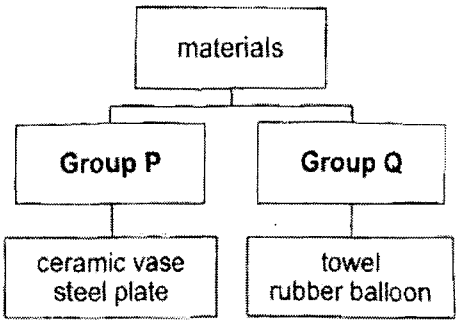
(1) egg

(2) pupa

(3) larva

(4) adult

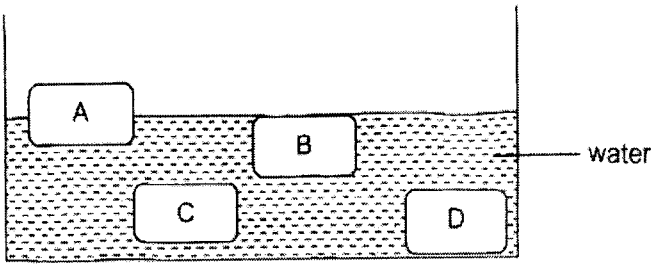
13 Study the classification chart.



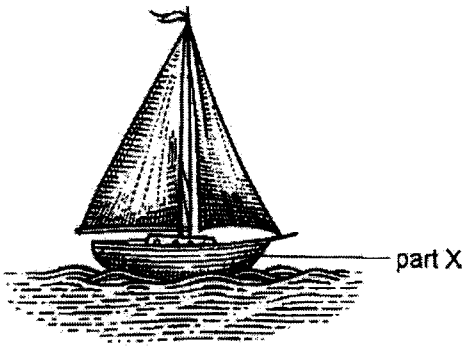

Which of the following are suitable headings for groups P and Q?

| | Group P | Group Q |
|---|---|---|
| (1) | not flexible | flexible |
| (2) | magnetic | non-magnetic |
| (3) | waterproof | not waterproof |
| (4) | can break easily | cannot break easily |

14 Joshua placed four different materials, A, B, C and D, in a container of water as shown.




The picture shows a sailboat in a river.




Which material, A, B, C or D, is most suitable for making part X of the sailboat?

(1) A

(2) B

(3) C

(4) D

15 The diagram shows a magnet and an iron nail.

iron nail magnet

What is most likely to happen when the magnet is brought close to the iron nail?

(1) The iron nail will stay where it is.

(2) The iron nail will move towards the magnet.

(3) The iron nail will move away from the magnet.

(4) Both the magnet and iron nail will move away from each other.

16 Peter was given three objects to classify. He used a magnet to test the objects and classified them into two groups.

| Magnetic objects | Non-magnetic objects |
|---|---|
| A, B | C |

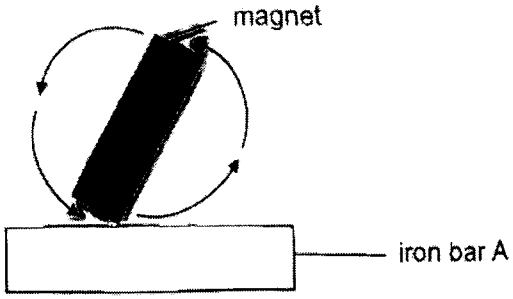
What materials could objects, A, B and C, be made of?

| | A | B | C |
|---|---|---|---|
| (1) | wood | steel | glass |
| (2) | iron | plastic | rubber |
| (3) | steel | wood | iron |
| (4) | steel | iron | plastic |

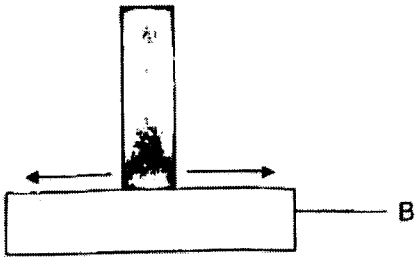
17 Martin tried to magnetise iron bars, A, B, C, and D, using the stroking method as shown. The arrow (→) shows the direction of movement of the magnet during the process.

Which one of the iron bars will be magnetised?

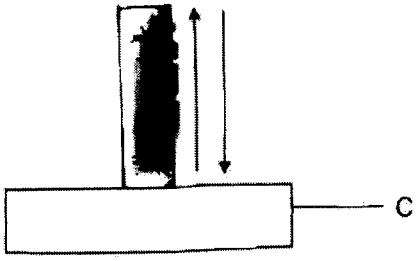
(1)



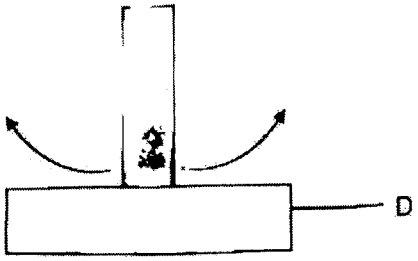

(2)




(3)



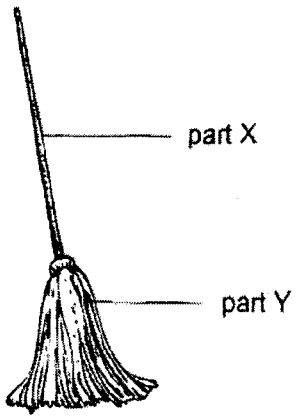

(4)



18 The properties of three materials, R, S and T, are shown in the table.

| Property | Material | | |
|---|---|---|---|
| | R | S | T |
| Strong | Yes | Yes | Yes |
| Flexible | Yes | Yes | No |
| Waterproof | No | Yes | Yes |

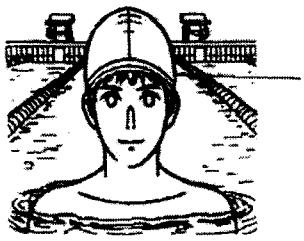
The picture shows a mop that is used to keep floors dry when wet.




Based on the table, which material is the most suitable for making parts X and Y of the mop?

| | Part X | Part Y |
|---|---|---|
| (1) | R | S |
| (2) | S | T |
| (3) | T | S |
| (4) | T | R |

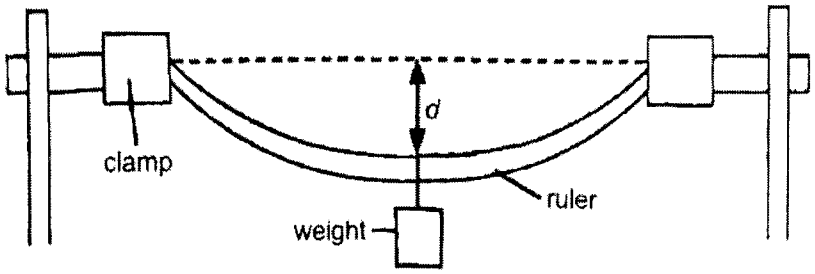
19 Swimmers wear swimming caps to prevent their hair from getting wet as shown.



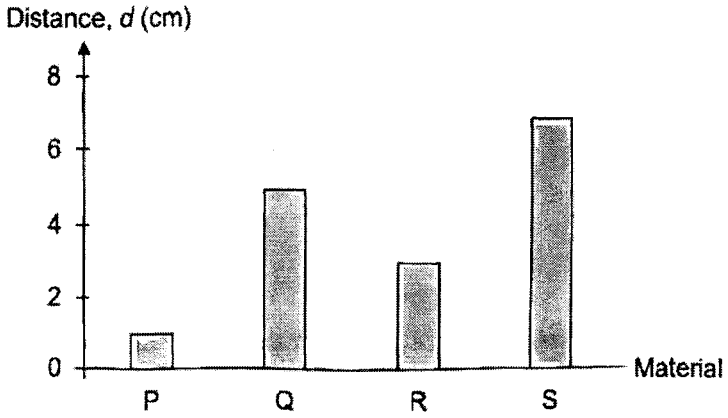

Based on the properties in the table, which material is most suitable for making the swimming cap?

| | | Properties of material | | |
|---|---|---|---|---|
| | **Material** | **Is it strong?** | **Is it flexible?** | **Is it waterproof?** |
| (1) | A | No | No | No |
| (2) | B | No | No | Yes |
| (3) | C | Yes | Yes | Yes |
| (4) | D | Yes | Yes | No |

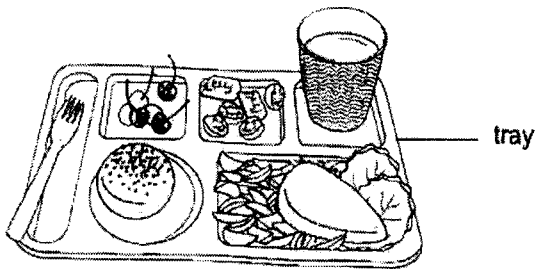
**20** The setup was used to compare four similar rulers made of different materials, P, Q, R and S. A weight was hung on each ruler and the ruler bent as shown.




When the ruler bent, distance, *d*, was measured. The results for each material are shown in the graph.




Based on the results, which material is most suitable for making a tray used for carrying food?



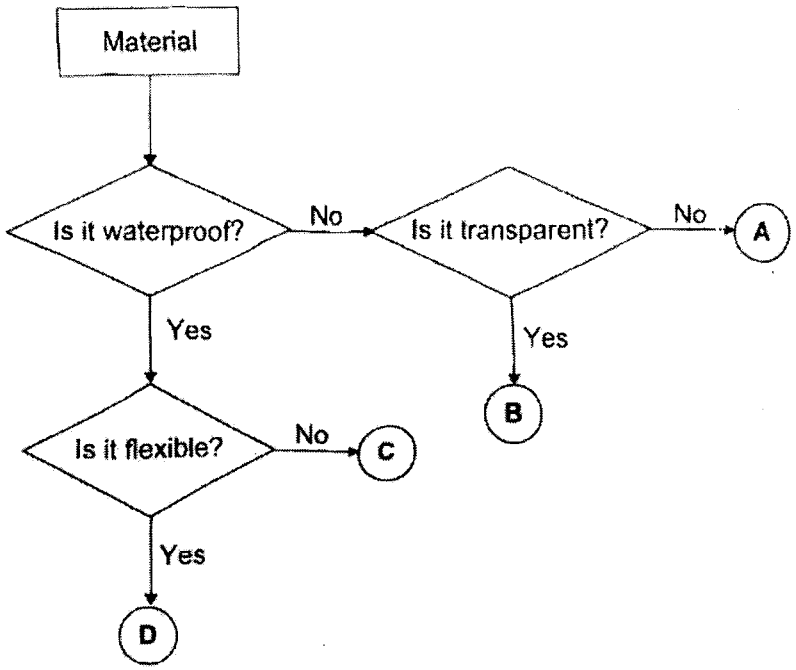

(1) P

(2) Q

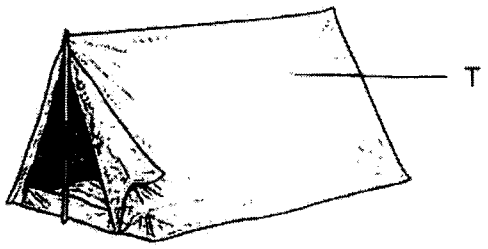
(3) R

(4) S

21 Study the flowchart.




Which material, A, B, C or D, is most suitable for making part T of the outdoor tent as shown?



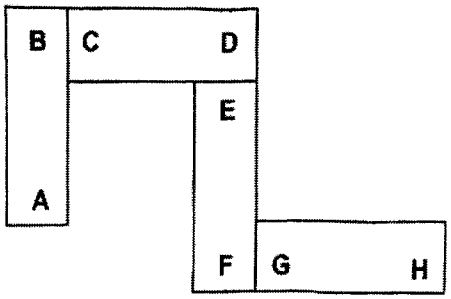

(1) A

(2) B

(3) C

(4) D

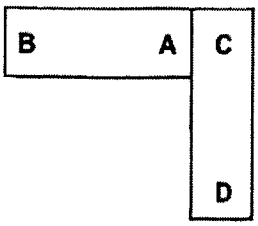
**22** Four bar magnets can be arranged as shown.



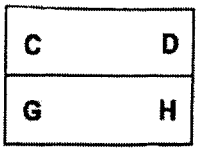

Which of the following arrangements is possible?

(1)

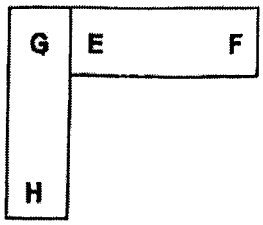

(2)



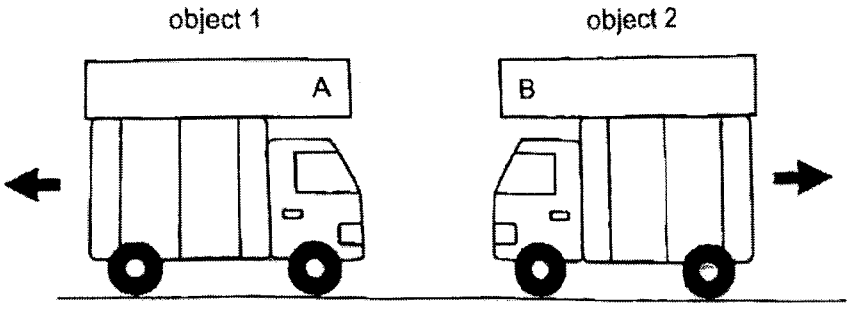

(3)




(4)



**23** Two identical toy trucks, each with an unknown object attached, were held close together. When the two trucks were released, they moved away from each other as shown.




Which statement about the two unknown objects is correct?

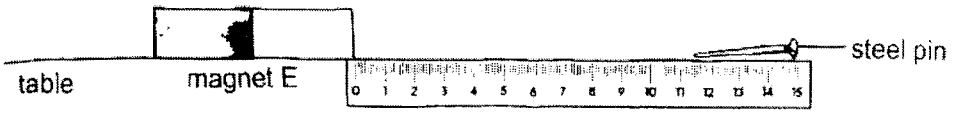
(1) Object 1 attracted object 2.

(2) Objects 1 and 2 are magnets.

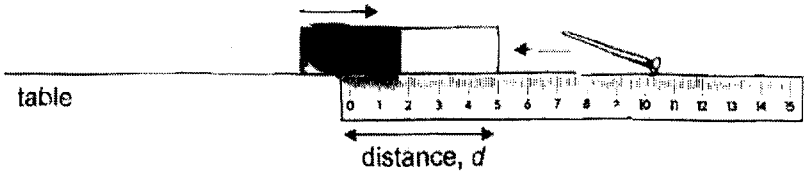
(3) A and B are unlike poles of the magnets.

(4) Object 1 is a magnet and object 2 is a magnetic material.

**24** Linda placed magnet E and a steel pin at the end of a ruler on the table as shown.




She moved magnet E slowly towards the pin until it attracted the pin from a distance.




She then recorded the distance, *d*, of how far she has moved the magnet towards the steel pin to attract it. She repeated the experiment with three other magnets, F, G and H, and recorded the results in the table.

| **Magnet** | **E** | **F** | **G** | **H** |
|---|---|---|---|---|
| **Distance, *d* (cm)** | 5 | 9 | 2 | 7 |

Based on the results, which magnet, E, F, G or H, has the greatest magnetic strength?

(1) E

(2) F

(3) G

(4) H

---------- **End of Booklet A** ----------

# Northland Primary School

## End-of-Year Examination
## Science
## Primary Three
## Booklet B

**Name:** _____ (  )

**Class:** P3____

**Date:** 23 October 2025

**Total duration for Booklets A & B: 1 hour 30 minutes**

**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 your answers in this booklet.

This booklet consists of 12 printed pages.

Parent's Signature: _____

| | |
|---|---|
| **Booklet A** | /48 |
| **Booklet B** | /32 |
| **Total** | /80 |

For Questions 25 to 33, write your answers in the spaces provided. The number of marks available is shown in brackets [ ] at the end of each question or part-question.

(32 marks)

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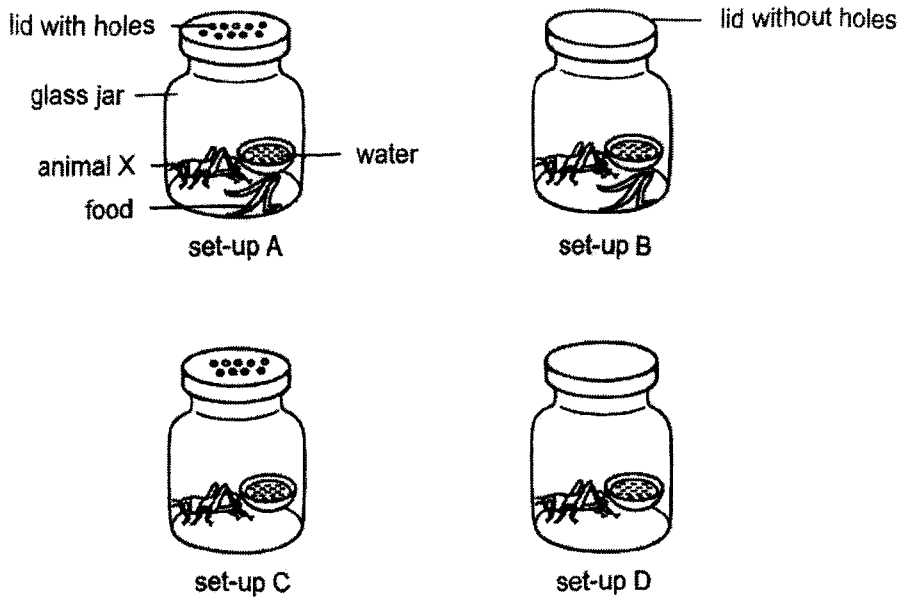
**25** Zack conducted an experiment. He left the following four set-ups in the classroom untouched for two weeks.




(a) In which set-up, A, B, C or D, would animal X most likely survive longest? [1]
Explain your answer.

_____

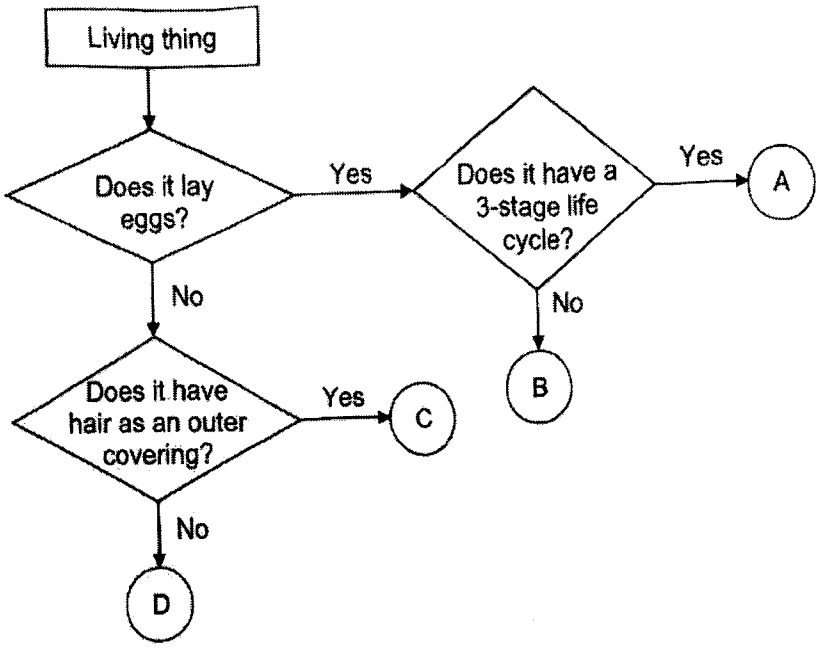
_____

(b) What is one thing that Zack can do to set-up C so that animal X can survive longer in the glass jar? [1]

_____

| Score | / 2 |
|---|---|

**26** Study the flowchart.




(a) Based on the flowchart, state one similarity between A and B. [1]

_____

_____

(b) State which group animal C belongs to. [1]

Animal group ☐

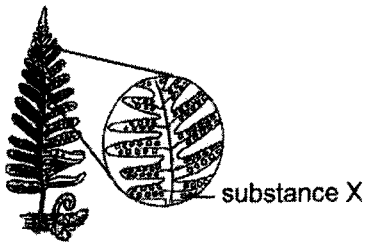
(c) Which letters, A, B, C or D, would best represent the following living things? [2]

Rose plant ☐

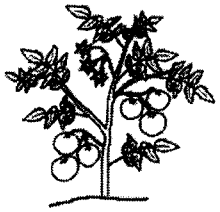
Chicken ☐

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

27 Rahim found two plants, P and Q, in his garden.




plant P



plant Q

(a) Other than their parts, state one similarity between plant P and Q, in terms of the way they obtain their food. [1]

_____

_____

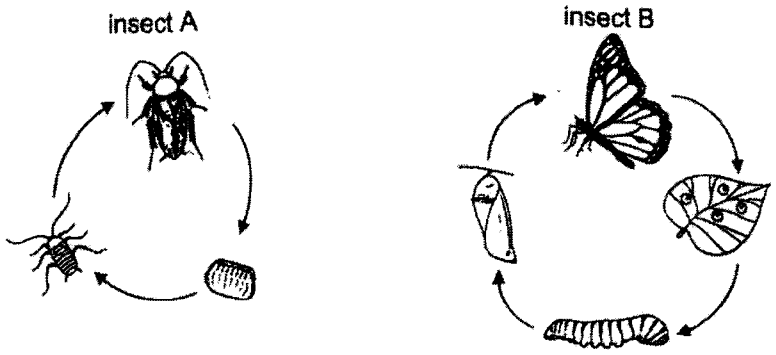
(b) Does plant P produce fruits? Explain your answer. [2]

_____

_____

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

28 The diagrams show the life cycles of two insects, A and B.




(a) State one characteristic that classifies A and B as insects. [1]

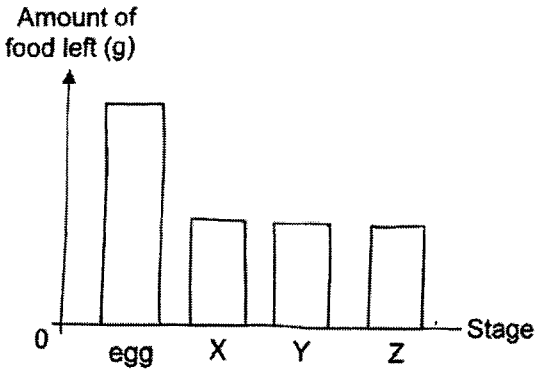
(b) Put a tick (✓) to indicate if each statement is true or false. [1]

| Statement | True | False |
|---|---|---|
| Both insects lay their eggs in water. | | |
| Both the adults of A and B have wings. | | |

(c) Based on the number of stages, state one difference between the life cycles of insects A and B. [1]

Question 28 continues to the next page

(d) Karen placed an egg of insect B in a tank with holes. She provided food at the start and recorded the amount of food left after each stage, as shown in the graph. Once insect B turned into an adult, she released it from the tank.




Explain why the amount of food left at the end of stages, Y and Z remained the same. [2]

_____

_____

| Score | 5 |
|---|---|

29 (a) Draw the life cycle of a flowering plant. [1]

(b) In an experiment, Sam wanted to find out if the amount of light that a plant receives affects its growth. He prepared some set-ups as shown.

| Set-up | Height of the plant at the start (cm) | Amount of water given to plant each day (ml) | Amount of light (units) |
|---|---|---|---|
| J | 10 | 50 | 4 |
| K | 15 | 50 | 4 |
| L | 15 | 20 | 2 |
| M | 15 | 50 | 2 |

(i) Which two set-ups should he choose to conduct the experiment? [1]

Set-ups ☐ and ☐

(ii) Put a tick (✓) to indicate the variable that Sam should measure to find the results to his experiment. [1]

☐ Amount of water given to the plant each day

☐ Height of the plant at the end of the experiment

☐ Number of leaves on the plant at the start of the experiment

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

30 The table shows the properties of three materials, P, Q and R.

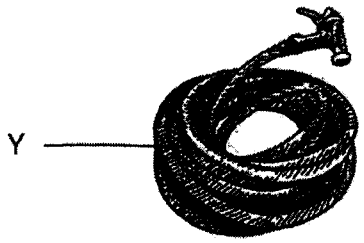
| Material | Property | | |
|---|---|---|---|
| | Waterproof | Allows light to pass through | Flexible |
| P | ✗ | | |
| Q | | | |
| R | | ✗ | |

Key:
Yes ✓
No ✗

(a) Based on the information in the table, state two properties of material Q. [1]

_____

(b) The diagram shows a water hose.



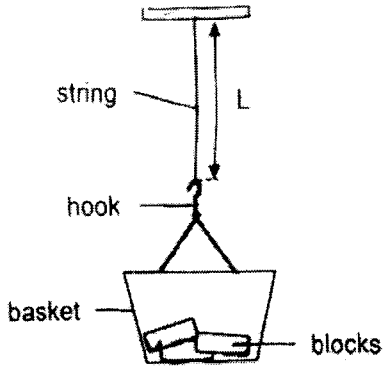

Based on the diagram, which material, P, Q or R, is the most suitable for making part Y of the water hose? Explain your answer. [2]

_____

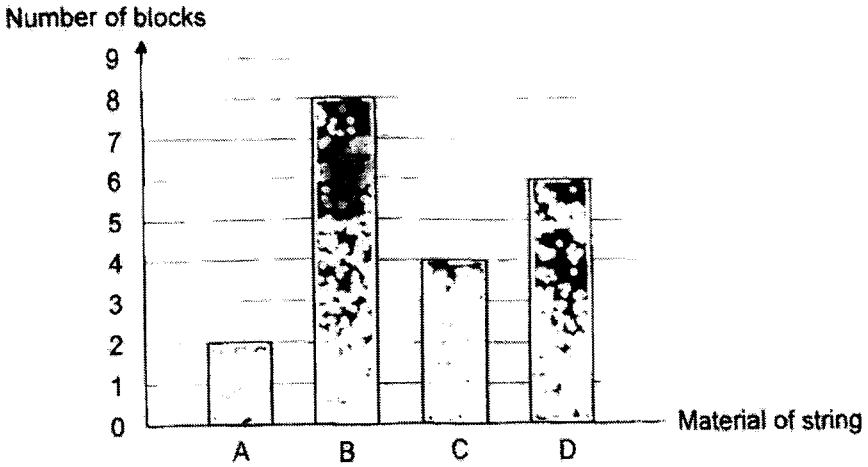
_____

Score 3

31 Michael wanted to investigate the strength of strings made of four different materials, A, B, C and D. He cut each string to a length, L, and added one block at a time into the basket until the string broke.




He repeated the experiment for each material and recorded the results on the graph.

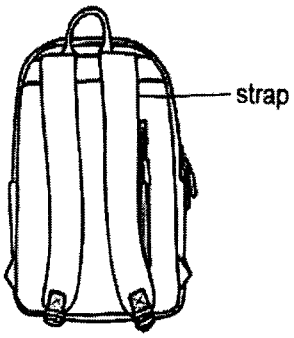



(a) Put a tick (✓) in the box(es), to indicate the variable(s) that Michael must keep the same to conduct a fair test. [1]

| Variables | To keep the same |
|---|---|
| type of material of strings used | |
| thickness of strings used | |
| mass of baskets | |

Question 31 continues to the next page

(b) The diagram shows the back view of a school bag.




Which material, A, B, C or D, would be most suitable to make the strap of a school bag? Explain your answer. [2]

_____

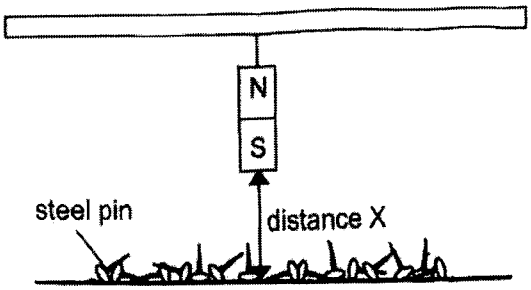
_____

(c) What is another property that is important to make the strap of the school bag? [1]

_____

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

32 Sue conducted an investigation by hanging a magnet above some steel pins at different distances, X.




For each distance, she counted the number of steel pins attracted to the magnet and recorded her results in the table.

| Distance X (cm) | Number of steel pins attracted |
|---|---|
| 1 | 8 |
| 3 | P |
| 5 | 5 |
| 8 | 1 |

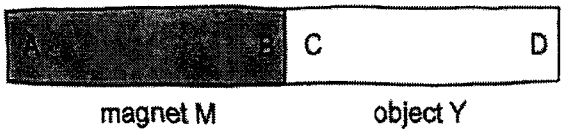
(a) Based on the results, suggest a possible value for P. [1]

(b) Circle the correct answers. [1]

As distance X ( increases / decreases ), the number of steel pins attracted to the magnet ( increases / decreases ).

Question 32 continues to the next page

(c) Sue observed that magnet M and object Y were attracted as shown.




Using only magnet M and object Y, what should Sue do to test if object Y is a magnet? Explain your answer. [2]

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

# Answers

| Question | Answer | Question | Answer |
|---|---|---|---|
| 1 | 4 | 13 | 1 |
| 2 | 4 | 14 | 1 |
| 3 | 3 | 15 | 2 |
| 4 | 2 | 16 | 4 |
| 5 | 2 | 17 | 1 |
| 6 | 3 | 18 | 4 |
| 7 | 3 | 19 | 1 |
| 8 | 2 | 20 | 1 |
| 9 | 2 | 21 | 4 |
| 10 | 3 | 22 | 1 |
| 11 | 1 | 23 | 2 |
| 12 | 3 | 24 | 3 |

# Answers

| Question | Answer |
|---|---|
| 25a | Setup A because it has air, food and water. Living things need air, food and water to survive. |
| 25b | Add some food in the jar. |
| 26a | Both of them lay eggs. |
| 26b | Mammal |
| 26c | Rose plant - D. Chicken - A |
| 27a | Both of them make their own food. |
| 27b | No because it reproduces by spores and it is a non-flowering plant. |
| 28a | They both have six legs. |
| 28b | False. True. |
| 28c | Insect B has 4 stages in its lifecycle but Insect A has 3 stages in its lifecycle. |
| 28d | Y is pupa and it does not need on food. Z is adult and it feeds on other food. |

| | |
|---|---|
| 29a | Seed -> young plant -> adult plant |
| 29b (i) | K and M |
| 29b (ii) | Height of plant at the end of experiment. |
| 30a | It is waterproof and allows light to pass through. |
| 30b | R because it is flexible and waterproof. |
| 31a | Thickness of strings used. Mass of baskets. |
| 31b | B because it is the strongest string of all. So it can withstand the books in the school bag without breaking. |
| 31c | Flexible. |
| 32a | 6 |
| 32b | Increases. Decreases. |
| 32c | Flip magnet M where A faces C and see if they will repel. |