Anglo-Chinese School (Junior)

END-OF-YEAR EXAMINATION (2025)

PRIMARY 3

SCIENCE

BOOKLET A

Thursday 30 October 2025 1 hr 30 min

Name: _____ ( ) Class: 3.( )

INSTRUCTIONS TO PUPILS

1 Do not turn over the pages until you are told to do so.

2 Follow all instructions carefully.

3 There are 24 questions in this booklet.

4 Answer ALL questions.

5 Shade your answers in the Optical Answer Sheet (OAS) provided.

This question paper consists of 15 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) and shade your answer on the Optical Answer Sheet.

(48 marks)

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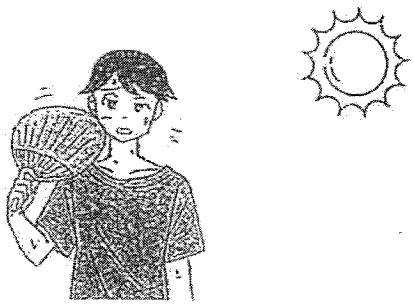
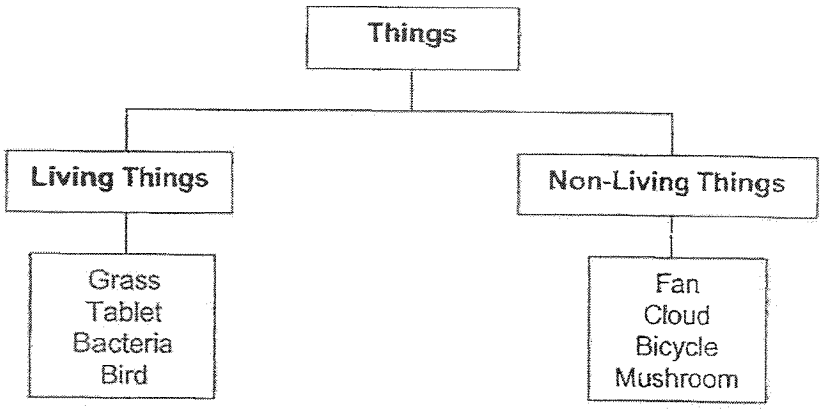
1. Jonathan fans himself on a hot, sunny day.



Which characteristic of living things is Jonathan showing?

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

2. Study the classification chart.



Which two things are classified **wrongly?**

(1) grass and fan
(2) bird and bicycle
(3) bacteria and cloud
(4) tablet and mushroom

3. Study the table of four living things A, B, C and D. A tick (✓) indicates that the characteristic is present.

Living thing	Reproduce by spores	Can only be seen under a microscope	Make its own food
A	✓		
B	✓		✓
C		✓	
D		✓	✓

Which of the following living things best describes a Bird's-nest fern?

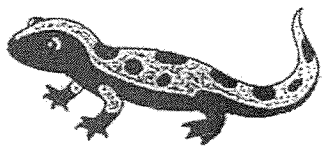
(1) A
(2) B
(3) C
(4) D

4. Read the riddle on animal Z.

> I live on both land and water. I can swim.
> I am covered with scales. I reproduce by laying eggs.

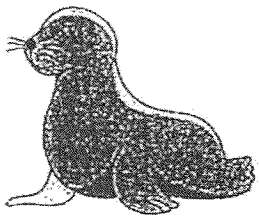
Which of the following animals is most likely to be animal Z?

(1)



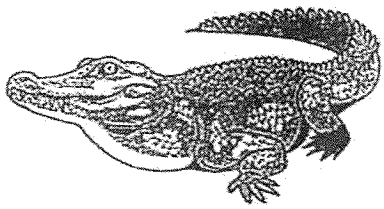
Salamander

(2)



Seal

(3)

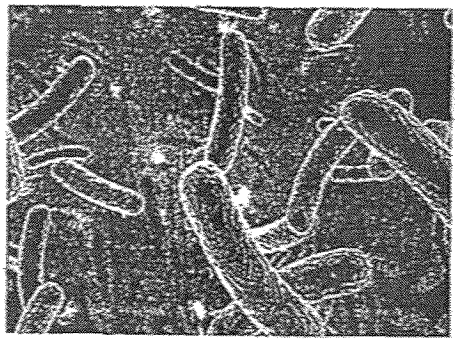
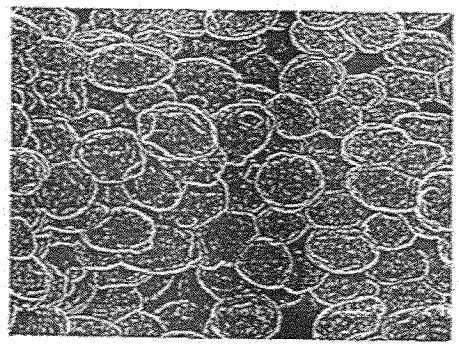


Crocodile

(4)

Penguin

5. Miss Ng studied the characteristics of bacteria K and yeast.

	
Bacteria K (found in yoghurt)	Yeast

She made the following conclusions:

A Yeast reproduces by seeds.
B Both bacteria K and yeast are useful.
C Yeast can be seen with the naked eye.
D Bacteria are used in baking bread to make dough rise.

Which of the following conclusion(s) is/are correct?
(1) B only
(2) A and C only
(3) A and D only
(4) B, C and D only

6. Which statement about the life cycles of a mosquito and a plant is correct?

(1) Both have four stages.
(2) Both start with an egg stage.
(3) Both are repeated patterns of change.
(4) Both their young can make their own food.

7. Bala wanted to find out if using hand sanitiser is effective in killing bacteria. He placed the same amount of bacteria on two similar plates, X and Y, and added a few drops of hand sanitiser only onto plate Y. He left the plates on the table for ten minutes.

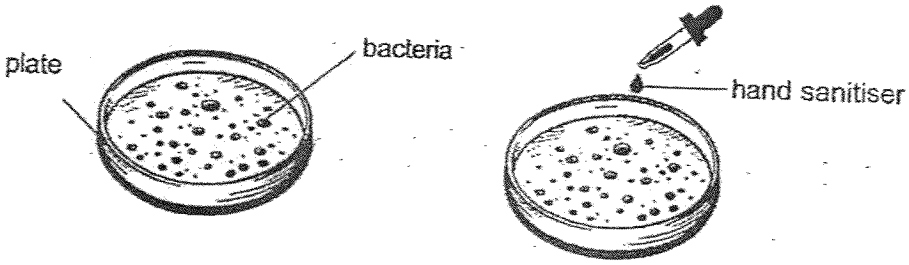


Plate X Plate Y

Bala concluded that hand sanitiser is effective in killing bacteria.

What did he measure at the end of the experiment to make his conclusion?

(1) Type of bacteria
(2) Mass of the plates
(3) Amount of hand sanitiser
(4) Amount of bacteria on the plates

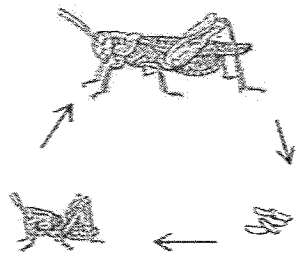
8. Tim wanted to find out if light is needed for the germination of seeds. He placed the same number of similar seeds in each of the four set-ups, A, B, C, and D, under the conditions shown in the table. A tick (✓) indicates that the condition(s) are present.

Set-up	Conditions			
	Air	Water	Light	Temperature (°C)
A	✓	✓	✓	30
B		✓	✓	2
C	✓	✓		30
D	✓			2

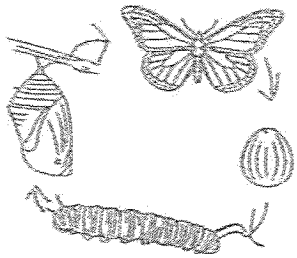
Which two set-ups should he use to test his aim?

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

9. The diagrams show the life cycles of a grasshopper and a butterfly.



Life cycle of a grasshopper



Life cycle of a butterfly

Which of the following correctly compares their life cycles?

	Similarity	Difference
(1)	Both the young moult.	The grasshopper reproduces by laying eggs but the butterfly gives birth.
(2)	Both the adults lay eggs on land.	The young of the grasshopper resembles its adult but the young of the butterfly does not.
(3)	Both the adults have wings.	The young of the grasshopper does not moult but the young of the butterfly moults.
(4)	Both the young look like their adults.	The grasshopper has a three-stage life cycle while the butterfly has a four-stage life cycle.

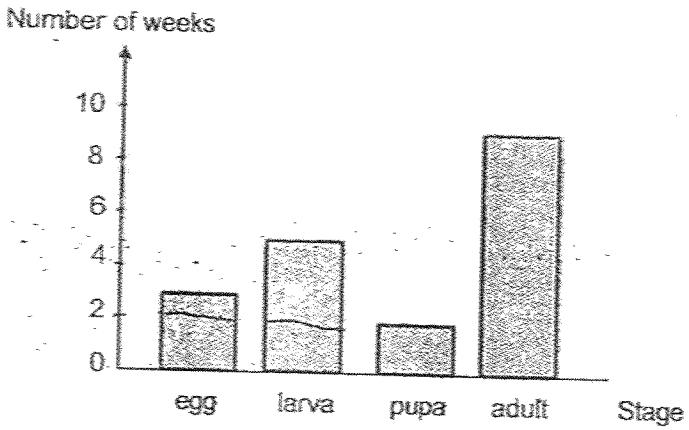
10. The characteristics of the stages in the life cycles of two animals, E and F, are shown in the table. A tick (✓) shows the presence of the characteristics.

Characteristic	Animal E	Animal F
Lay eggs on land	✓	✓
Four-stage life cycle	✓	
Young looks like adult		✓

Which of the following represents animals, E and F, correctly?

	Animal	
	E	F
(1)	cockroach	chicken
(2)	cockroach	beetle
(3)	beetle	cockroach
(4)	chicken	cockroach

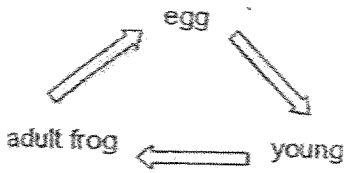
11. The graph shows the length of time spent in each stage in the life cycle of animal X.

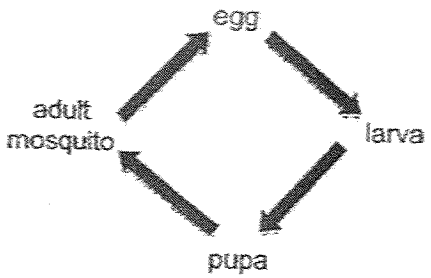


How many weeks will animal X take to become an adult after its egg hatches?

(1) 7
(2) 8
(3) 10
(4) 19

12. The diagrams show the life cycles of a frog and a mosquito.





Some students made statements about the life cycles of the animals.

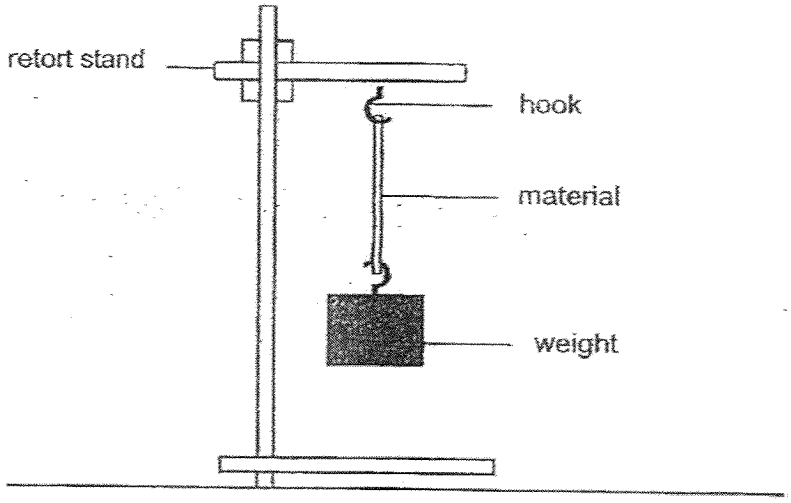
Amy: Part of their life cycle occurs in water.
Joey: Both their life cycles have three stages.
May: The young in both life cycles look different from the adults.

Who made an **incorrect** statement?

(1) Amy only
(2) Joey only
(3) Amy and May only
(4) May and Joey only

Use the information below to answer questions 13 and 14.

13. Tyler conducted an experiment using materials, P, Q and R, with the set-up as shown.



He increased the mass of weight until each material broke.

Which property of materials was he testing?

(1) Strength
(2) Flexibility
(3) Waterproof
(4) Ability to sink or float

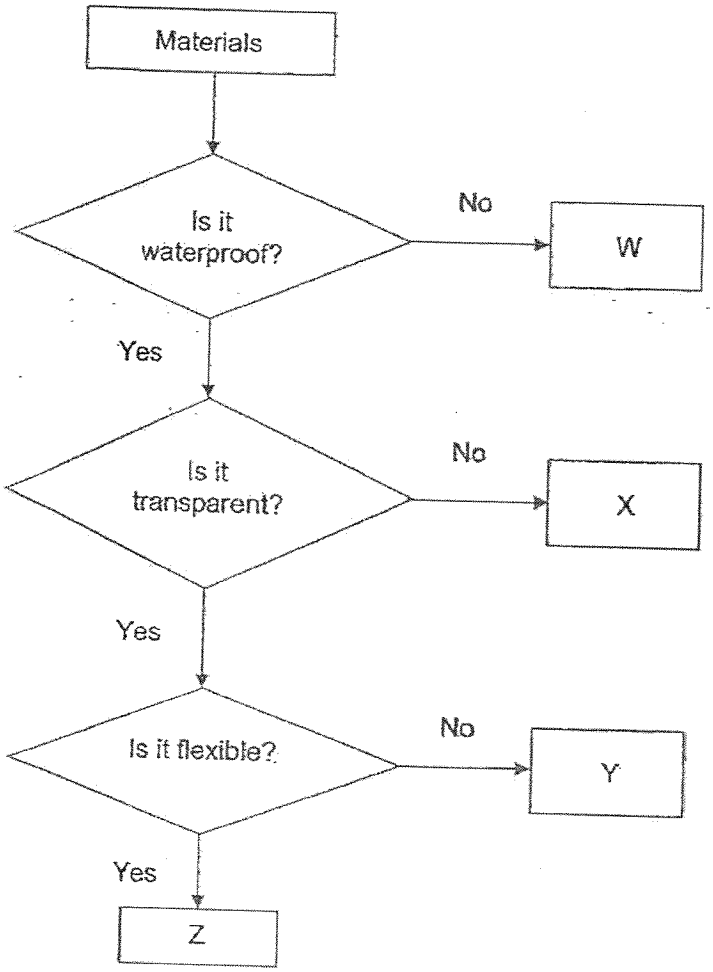
14. The table shows the results of his experiment.

Material	Mass of weight until material broke (kg)
P	15
Q	20
R	5

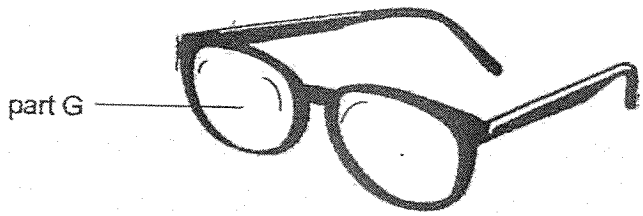
Which material(s) should he use to make a shelf that can hold books of 18 kg?

(1) P only
(2) Q only
(3) P and Q only
(4) Q and R only

15. Study the flowchart.

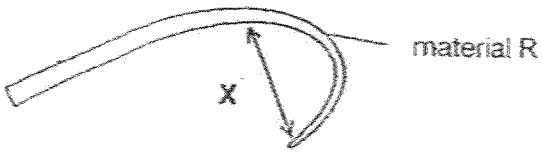


Which of the following material, W, X, Y or Z, is most suitable to make part G of the pair of glasses shown?

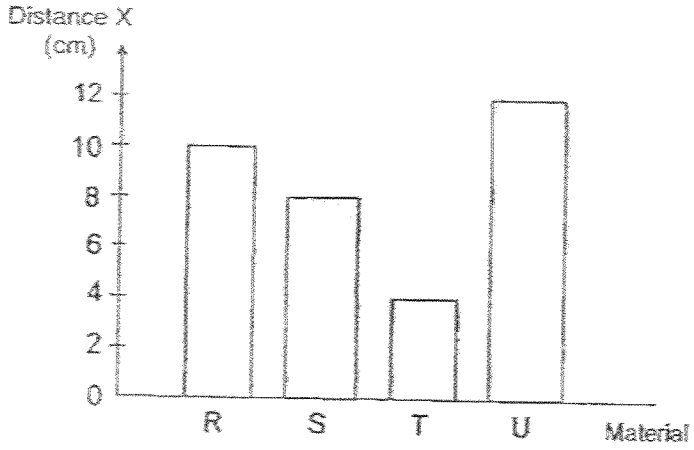


(1) W
(2) X
(3) Y
(4) Z

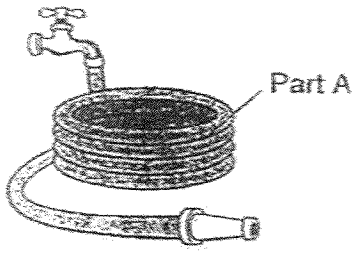
16. Mical bent a pole made of material R and measured the distance X as shown. He then repeated the experiment for poles made of materials S, T and U.



He recorded his results in the graph as shown.

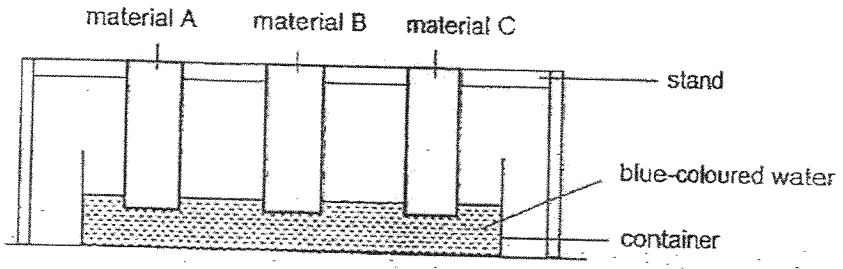


Which material is most suitable for making part A of the water hose shown?



(1) R
(2) S
(3) T
(4) U

17. A group of students conducted an experiment using materials, A, B and C, of the same size. One end of each material was dipped into a container with blue-coloured water as shown.



They measured the distance that the blue-coloured water travelled up each material at the end of experiment.

Which of the following is a possible aim of their experiment?

(1) To find out which material is the most absorbent.
(2) To find out the time taken for the blue-coloured water to travel up each material.
(3) To find out the amount of water left in the container at the end of experiment.
(4) To find out how the size of the material affects the distance the blue-coloured water travels up each material.

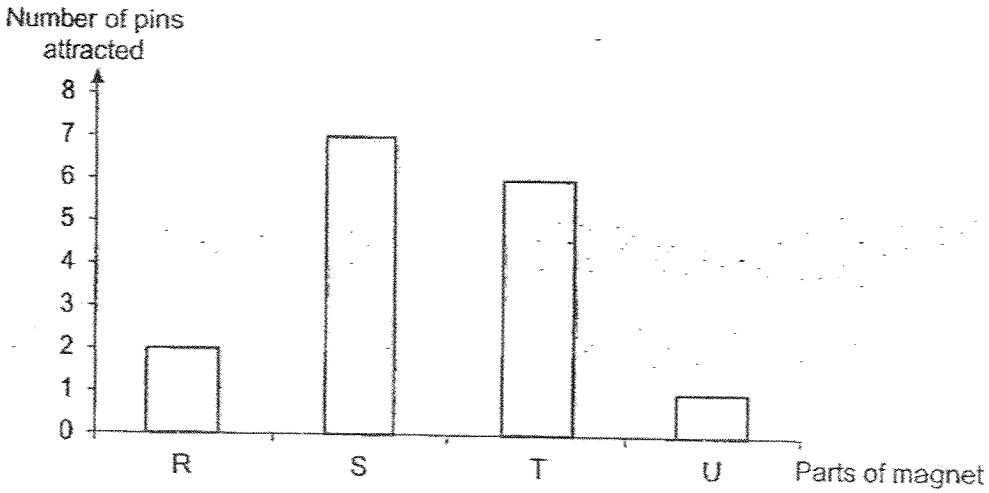
18. The table shows the different properties of objects, E, F and G. A tick (✓) indicates that the object has the property.

	Objects		
Property	**E**	**F**	**G**
Flexible	✓	✓	✓
Ability to float on water			✓
Waterproof		✓	✓

Which of the following could objects E, F and G be?

	Objects		
	E	F	G
(1)	raincoat	towel	rubber ball
(2)	raincoat	rubber ball	towel
(3)	towel	raincoat	rubber ball
(4)	towel	rubber ball	raincoat

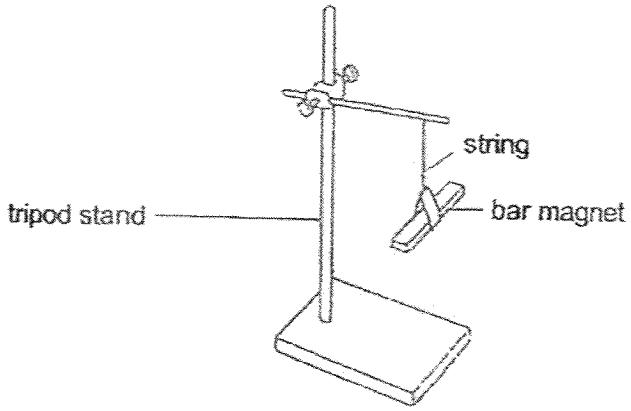
19. Ali lowered a magnet into a tray of steel pins and then counted the number of pins attracted to parts R, S, T and U, of the magnet. He then plotted his results in a bar graph shown.



Based on his experiment, which two parts, R, S, T and U, are most likely the poles of the magnet?

(1) R and S
(2) R and U
(3) S and T
(4) T and U

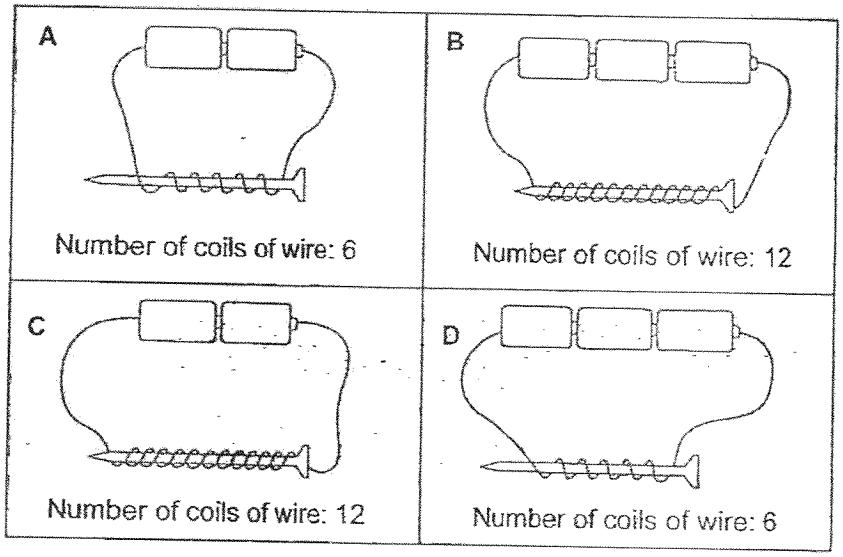
20. The picture shows a freely suspended magnet.



Which direction will the freely suspended magnet come to rest?

(1) East-West
(2) North-East
(3) North-South
(4) South-West

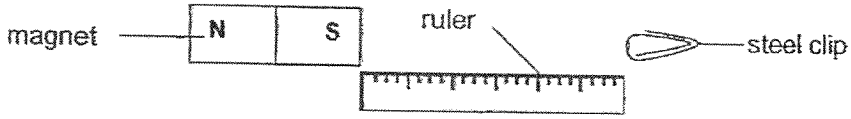
21. Sarah wants to find out if the number of batteries affect the strength of an electromagnet.



Which two set-ups shown should she use for her investigation?

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

22. Shiqi wanted to find out the strength of magnets, A, B, C and D. She placed each magnet at one end of a ruler and a steel clip at the other end. She moved each magnet slowly towards the steel clip until the steel clip is attracted by the magnet.



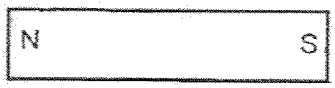
She measured the distance from which each magnet attracted the steel clip and recorded the results in the table shown.

Magnet	Distance the steel clip was attracted from (cm)
A	7
B	5
C	8
D	2

Which of the following shows the strength of magnets A, B, C and D from the weakest to the strongest?

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

23. Michael conducted an experiment using objects J, K, L and M with one end of each object labelled as X.



magnet

object

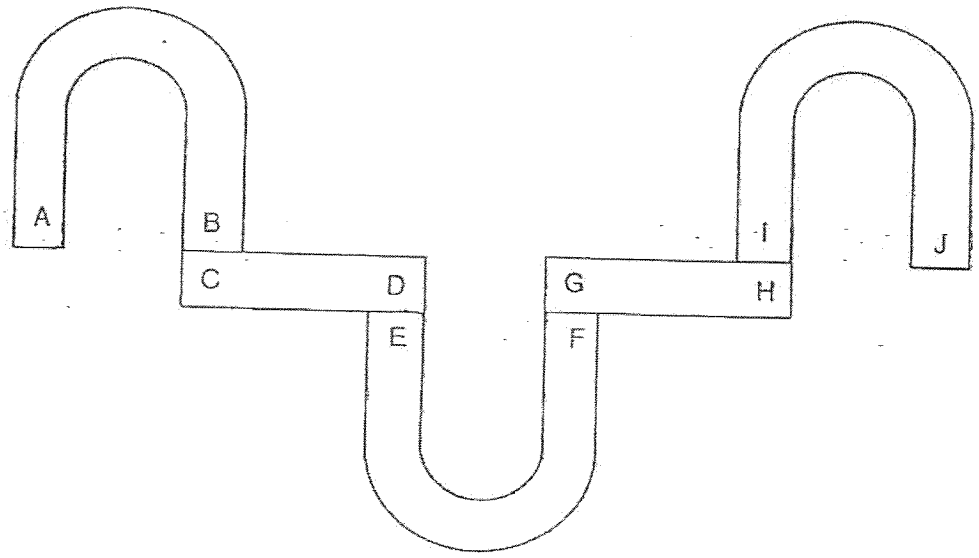
He brought each pole of a magnet near end X of each object and recorded their interactions in the table as shown.

Object	North pole	South pole
J	Attracted	Attracted
K	No interaction	No interaction
L	Attracted	Repelled
M	Repelled	Attracted

Which of the following describes J, K, L and M correctly?

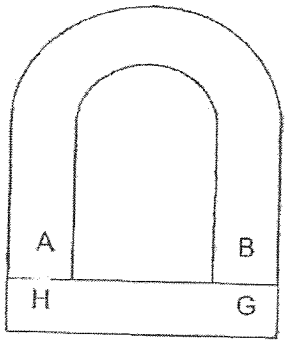
	J	K	L	M
(1)	Magnet	Non-magnetic	Magnetic	Magnet
(2)	Magnetic	Magnetic	Magnet	Non-magnetic
(3)	Magnetic	Non-magnetic	Magnet	Magnet
(4)	Magnet	Magnetic	Magnet	Magnetic

24. The diagram shows the arrangement of five magnets.

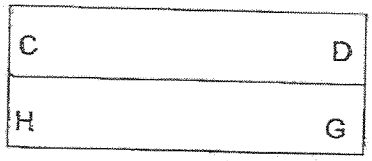


Which of the following arrangements is **not** possible?

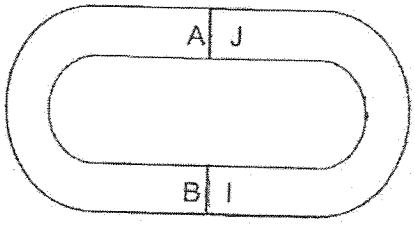
(1)



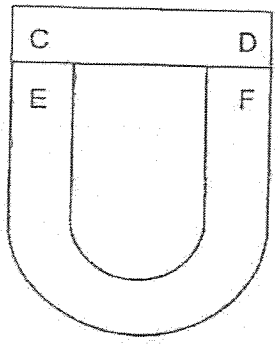
(2)



(3)



(4)



End of Booklet A

Anglo-Chinese School (Junior)

END-OF-YEAR EXAMINATION (2025)

PRIMARY 3

SCIENCE

BOOKLET B

Thursday **30 October 2025** **1 hr 30 min**

Name: _____ ( ) Class: 3.( ) Parent's Signature:_____

INSTRUCTIONS TO PUPILS

1 Do not turn over the pages until you are told to do so.

2 Follow all instructions carefully.

3 There are 10 questions in this booklet.

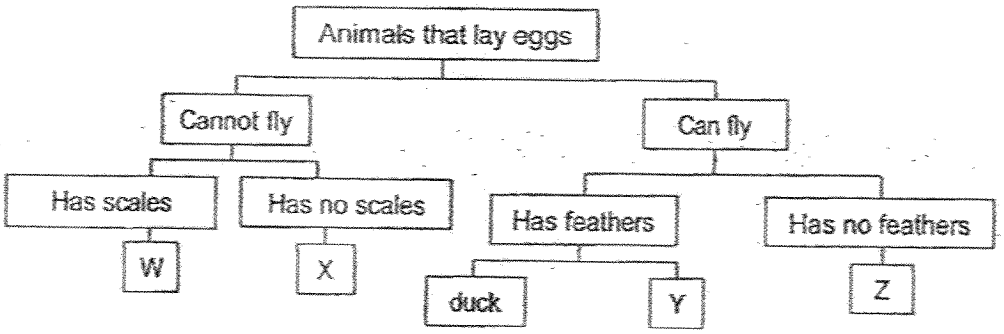
4 Answer ALL questions.

5 The marks are given in the brackets [ ] at the end of each question or part question.

Booklet	Possible Marks	Marks Obtained
A	48	
B	32	
Total	80	

For questions 25 to 34, write your answers in this booklet. The number of marks available is shown in brackets [ ] at the end of each question or part question. (32 marks)

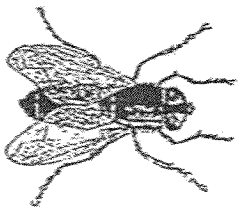
25. Study the classification table.



(a) Based on the information in the chart, state all the characteristics of a duck. [1]

(b) Based on the information in the chart, state a difference between animals W and Y. [1]

(c) Study the animal shown.



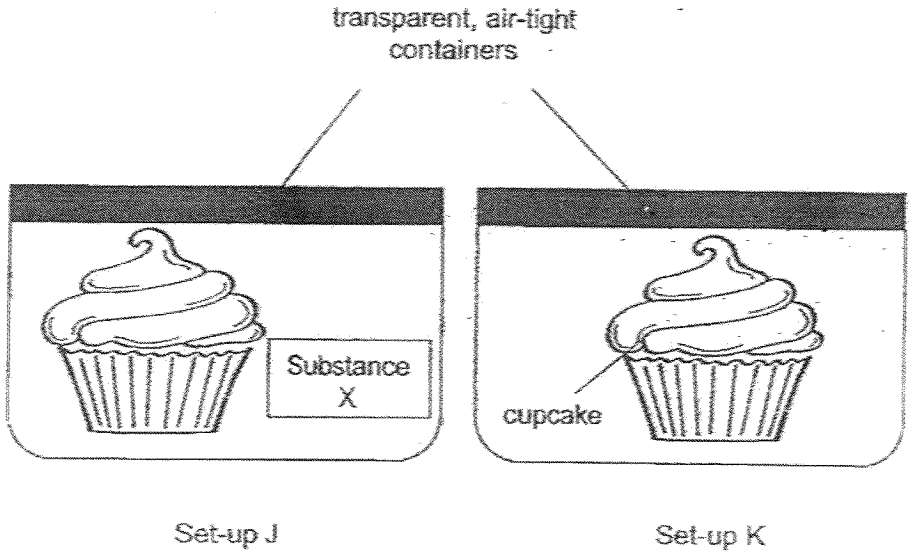
housefly

Which letter W, X, Y or Z best represents a housefly? [1]

(Go on to the next page)

SCORE / 3

26. Siti prepared two set-ups, J and K, using similar cupcakes and transparent air-tight containers in a dark cupboard. She then placed a packet of substance X, which removes moisture, in set-up J as shown.



After two weeks, he noticed mould growing on only one of the cakes.

(a) Which group of living things does mould belong to? [1]

_____

(b) Which set-up, J or K, contained the cake that had mould? Explain your answer. [1]

_____

_____

(c) Siti wants to find out if mould needs sunlight to grow. What two changes should she make to set-up J to test this new aim? [1]

Change 1: _____

Change 2: _____

(Go on to the next page)

SCORE 3

27. John left four similar plants, P, Q, R and S, in the sun for different number of hours each day. He watered them daily. He recorded the height of the plants after two weeks in the table as shown.

Plants	P	Q	R	S
Number of hours each plant is in the sun each day (hour)	1	3	5	7
Height of plant after two weeks (cm)	6	10	?	16

(a) State the changed variable in John's experiment. [1]

_____

(b) Predict the height of plant R after two weeks. [1]

Height of plant R: _____ cm

John stopped watering plants P, Q, R and S, after two weeks. The weather was also very hot and dry, with no rain. John noticed that a month later, all the plants died.

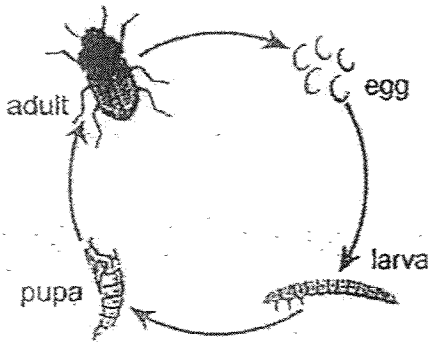
(c) Which characteristic of living things does this show? [1]

_____

(Go on to the next page)

SCORE 3

28. The diagram shows the life cycle of animal P with information provided.



- The adult does not feed on wood but the larva does.
- The adult lays its eggs in the cracks of wood.

(a) State a difference between the larva and the pupa. [1]

_____

_____

(b) Based on the information, give a reason why the adult lays its eggs in the cracks of wood? [1]

_____

_____

A group of scientists studied the effect of temperature on the life cycle of animal P.

Temperature (°C)	Length of the life cycle (days)
20	130
25	100
30	90

(c) How does the increase in temperature affect the length of the life cycle of animal P? [1]

_____

_____

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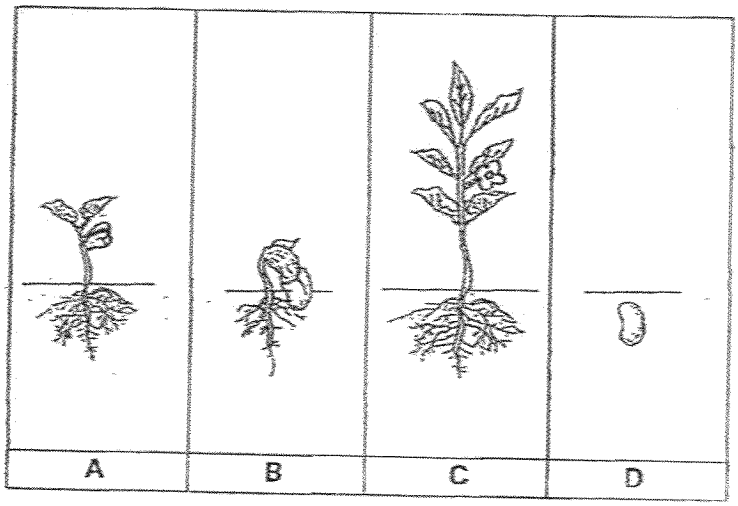
SCORE	/ 3

29. The following pictures show the development in the life cycle of a plant.



(a) Order the pictures to show the correct sequence of growth in the life cycle of the plant, starting with picture A. [1]

A ⟶ _____ ⟶ _____ ⟶ _____

(b) At which picture(s), A, B, C or D, can the plant make its own food? [1]

_____

(c) Name the stage of the plant in picture C. Explain your answer. [1]

_____

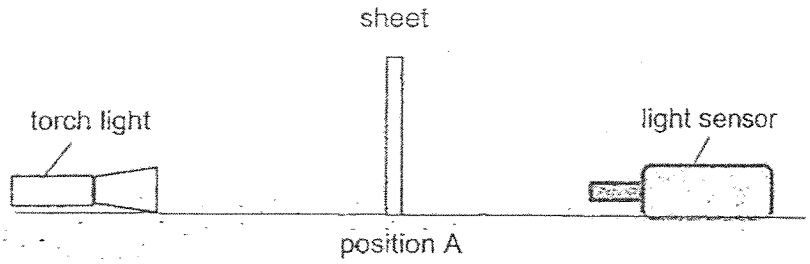
(d) State the conditions needed for seeds to germinate. [1]

_____

(Go on to the next page)

SCORE ____/4

30. Mr Tan carried out an experiment using the set-up as shown and three identical sheets X, Y and Z, made of different materials. He placed each sheet at position A between the lighted torch and a light sensor.



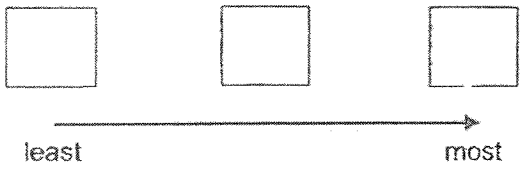
He recorded the amount of light detected by the light sensor for each sheet in the table.

Sheet	Amount of light detected by the light sensor (units)
X	400
Y	900
Z	150

(a) Name the property of materials tested by Mr Tan. [1]

_____

(b) Order the sheets, X, Y and Z, from the one that allows the least amount of light to pass through to the most. [1]



(c) Mr Tan works at night and sleeps during the day. Which sheet, X, Y or Z, would be the most suitable for making bedroom curtains to block the most amount of light? Explain your answer. [1]

_____

_____

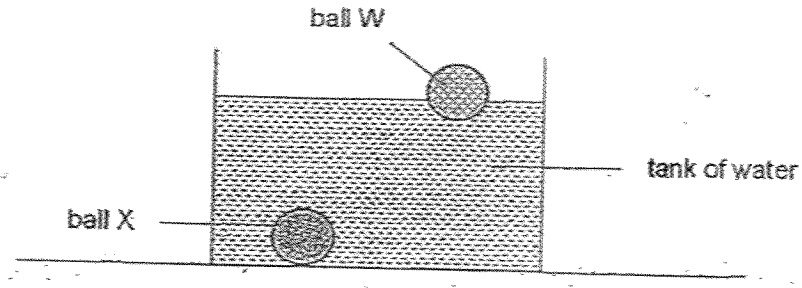
(d) State one other variable that must be kept the same for a fair test. [1]

_____

(Go on to the next page)

SCORE / 4

31. Peter placed two balls, W and X, made of different materials into a tank of water.



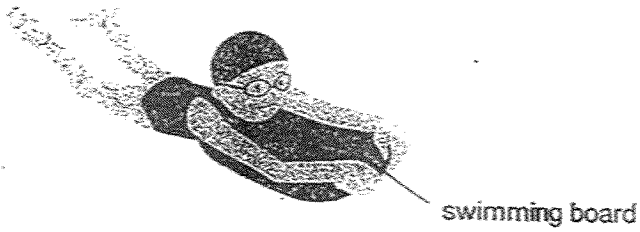
(a) Which ball, W or X, sank in the water? [1]

_____

(b) Name the property of materials tested by Peter. [1]

_____

The diagram shows a girl with a swimming board.



(c) Peter said that the swimming board is made of the same material as ball W. Do you agree? Explain your answer. [1]

_____

_____

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SCORE
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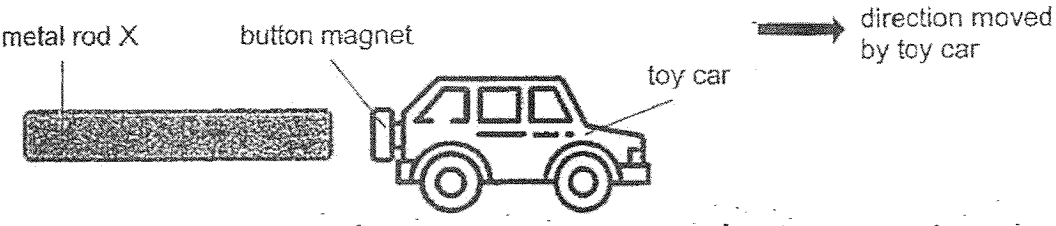
3

32. A button magnet is attached to Mark's toy car as shown. When he brought metal rod X close to the button magnet, the toy car moved forward.



(a) Explain why the toy car moved forward when Mark brought metal rod X close to the button magnet attached to the car. [2]

_____

_____

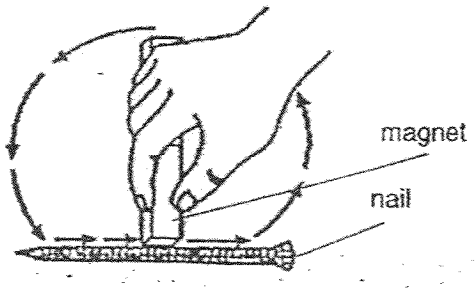
(b) The toy car did not move forward when Mark replaced metal rod X with object Y. Explain why. [1]

_____

(Go on to the next page)

SCORE	/ 3

33. Ravi wanted to find out how the number of strokes of a magnet on the nail affects its magnetic strength. He used the stroke method on four identical nails, A, B, C and D.



He recorded the results in the table.

Nail	Number of strokes	Number of paper clips attracted
A	15	2
B	30	4
C	45	5
D	60	7

(a) Name a material that the nails can be made of. [1]

_____

(b) Tick (✓) the variable(s) which must be kept the same for Ravi to carry out a fair test. [1]

Variables	Tick (✓)
Type of nail	
Type of magnet	
Number of strokes	
Direction of strokes	
Number of paper clips attracted	

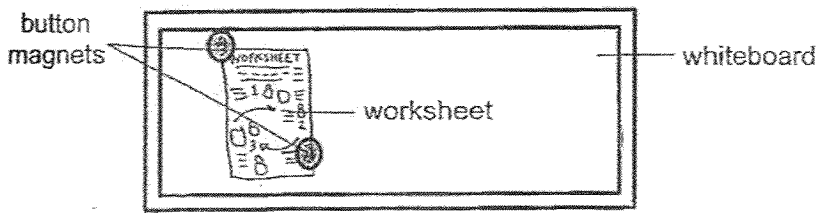
(c) Name another method that Ravi can use to make the iron nails into magnets. [1]

_____

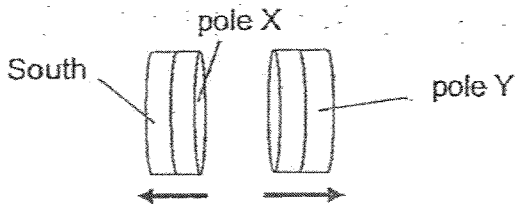
(Go on to the next page)

SCORE ___/3

34. Rami placed two button magnets over a worksheet on the whiteboard as shown.



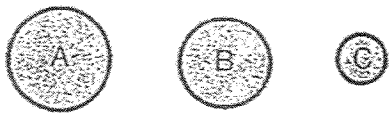
When she brought the two button magnets close to each other, they moved away.



(a) Name poles X and Y. [1]

X: _____ Y: _____

Rumi wanted to find out how the size of button magnets affects their magnetic strength. She conducted an investigation using three different-sized magnets, A, B and C as shown.



She kept adding more worksheets until both the worksheets and magnets fell off the whiteboard. She recorded her results in the table as shown.

Button magnets	A	B	C
Number of worksheets held before falling off	5	8	10

(b) Which magnet, A, B or C, is the strongest? Explain your answer based on the results. [1]

_____

_____

(c) Rumi concluded that the size of a magnet does not affect its magnetic strength. Explain why she made this conclusion based on the results for magnet A. [1]

_____

_____

End of Paper

SCORE	/ 3

YEAR : 2025
LEVEL : PRIMARY 3
SCHOOL : ANGLO-CHINESE SCHOOL (JUNIOR)
SUBJECT : SCIENCE
TERM : END OF YEAR EXAMINATION

(BOOKLET A)

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

(BOOKLET B)

Q25	a)	A duck lays eggs, can fly and has feathers.
	b)	W cannot fly but Y can fly.
	c)	Z
Q26	a)	Fungi.
	b)	K. As X removes moisture, mould will not grow on the cupcake in Set-up J. But K does not have X in the set-up so there would be moisture, making mould grow on the cupcake in Set-up K.
	c)	Change 1 : Remove Substance X inside J. Change 2 : Place J next to a window.
Q27	a)	Number of hours each plant is in the sun each day.
	b)	13cm
	c)	Living things need water to survive,
Q28	a)	The larva of P feeds but the pupa of p does not feed.
	b)	When the egg hatches, P will become a larva, and the larva of P feeds on wood, so when the egg hatches, the larva of P can start feeding immediately.
	c)	When the temperature increases, the length of the life cycle of P decreases.
Q29	a)	A -> C -> D -> B
	b)	C
	c)	Adult stage. The adult stage will have fully developed leaves and flowers, C has fully developed leaves and flowers.
	d)	Water, oxygen and warmth.
Q30	a)	Transparency.
	b)	Least : Z -> X -> Y Most
	c)	Z. It allows the least amount of light to pass through and a bedroom curtain should allow the least amount of light to pass through so Mr Tan can block most of the light when he sleeps.

	d)	The distance between the sheet and the torch light.
Q31	a)	X
	b)	Buoyancy
	c)	No. There are other materials that can float on water.
Q32	a)	X is a magnet, and the like poles of X and the ring magnet is facing each other, so they repelled.
	b)	Y is not a magnet.
Q33	a)	Cobalt
	b)	Type of nail Type of magnet Direction of strokes
	c)	Electrical method
Q34	a)	X : North Y : South
	b)	C. C held the most number of worksheets before falling off, therefore, C is the strongest.
	c)	Although A is the biggest, it held the least number of worksheets ~~before falling off~~. half the least number of worksheets before falling off.