



MARIS STELLA HIGH SCHOOL (PRIMARY)

END-OF-YEAR EXAMINATION

27 OCTOBER 2025

PRIMARY 4 SCIENCE

BOOKLET A

Name: \_\_\_\_\_ ( )

Class: Primary 4 ( )

**Additional Materials: Optical Answer Sheet (OAS)**

**Total Time for booklets A and B: 1 hour 30 minutes**

**INSTRUCTIONS TO CANDIDATES**

1. Write your name, class and index number on the cover page of this Question Paper.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Use a 2B pencil to shade your answers on the Optical Answer Sheet (OAS).

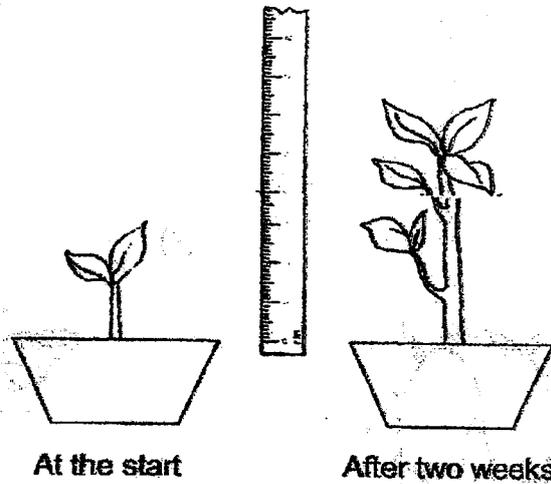
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This booklet consists of 22 printed pages and 2 blank pages.



For each question from 1 to 30, 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. [60 marks]

1. Isaac found a plant in the garden and measured its height. After two weeks, he measured its height again.



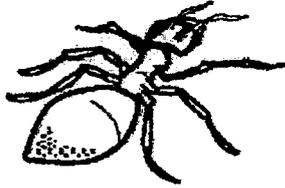
From his observation, Isaac concluded that the plant is a living thing because it can \_\_\_\_\_.

- (1) grow
- (2) breathe
- (3) respond
- (4) reproduce

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2. Which one of the animals shown below is **not** an insect?

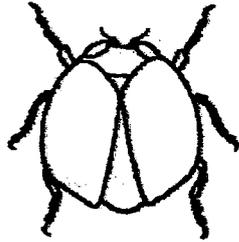
(1)



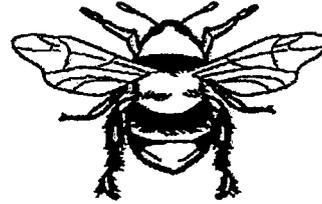
(2)



(3)

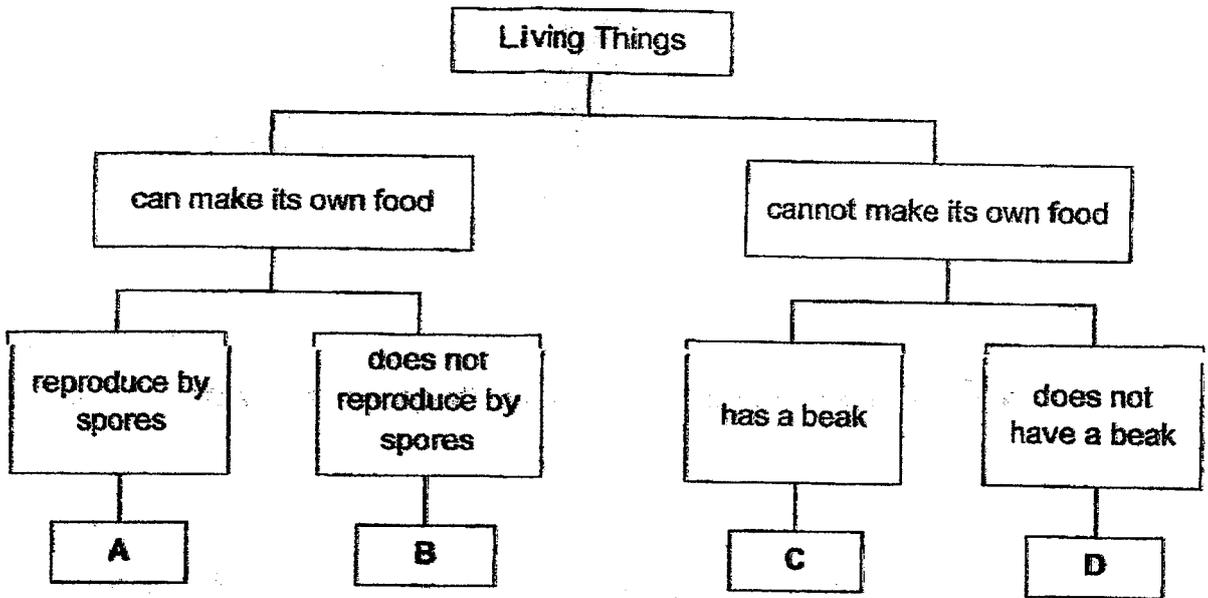


(4)



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3. Four living things, A, B, C and D, are grouped according to the classification chart below.

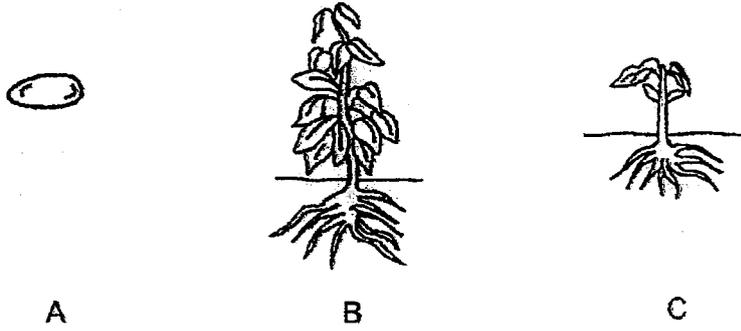


Based on the classification chart, which of the following statements is **not** correct?

- (1) D can be fungi.
- (2) C can be a bird.
- (3) Only A and D are plants.
- (4) B is a non-flowering plant.

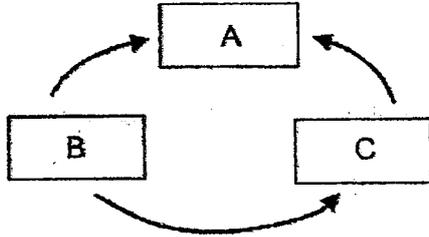
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4. A, B and C are stages in the life cycle of a plant.

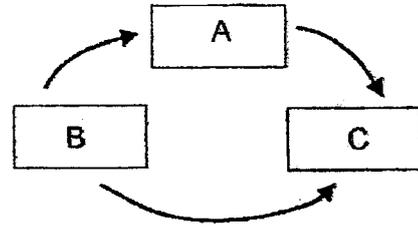


Which of the following shows the correct life cycle of the plant?

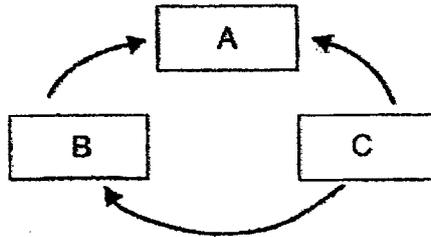
(1)



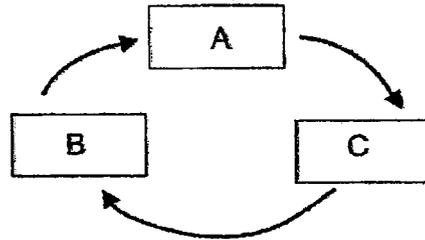
(2)



(3)



(4)

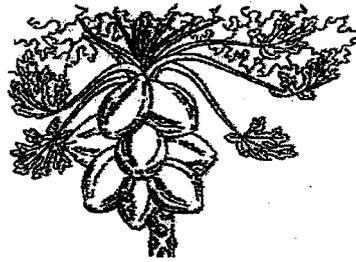


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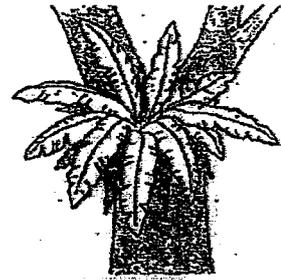
5. The diagram below shows some plants.



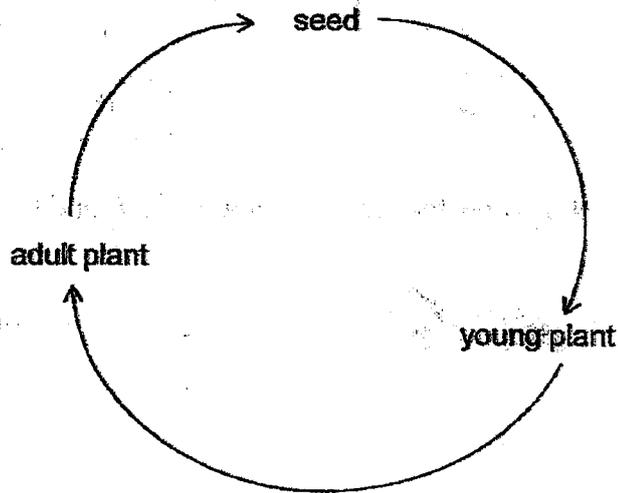
Plant A



Plant B



Plant C



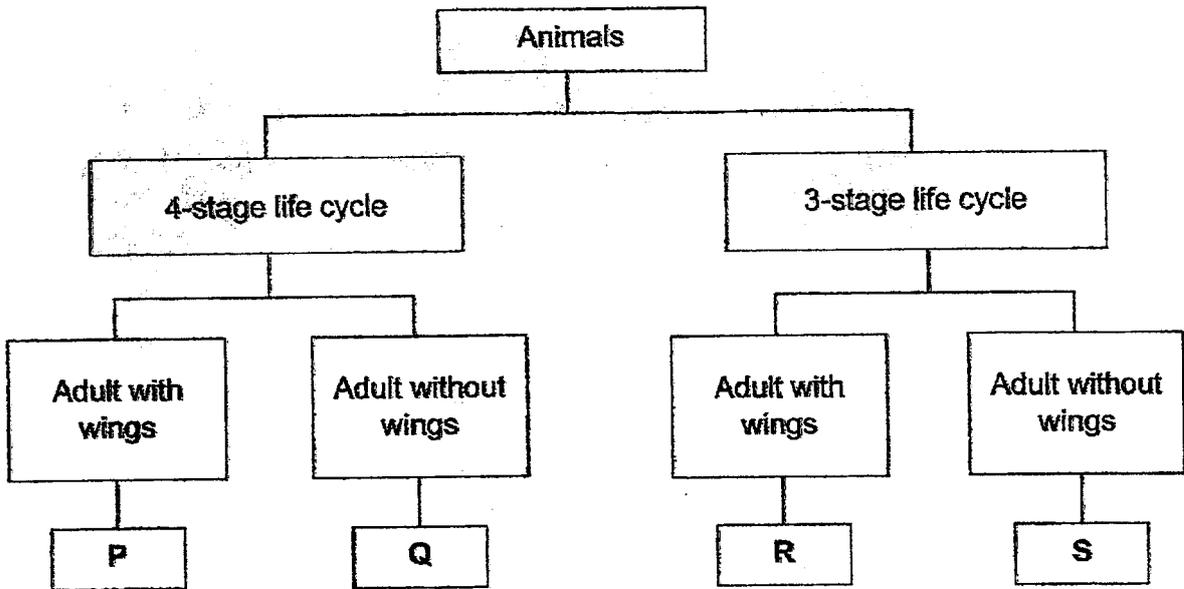
life cycle X

Which of the plants will have the life cycle X as shown above?

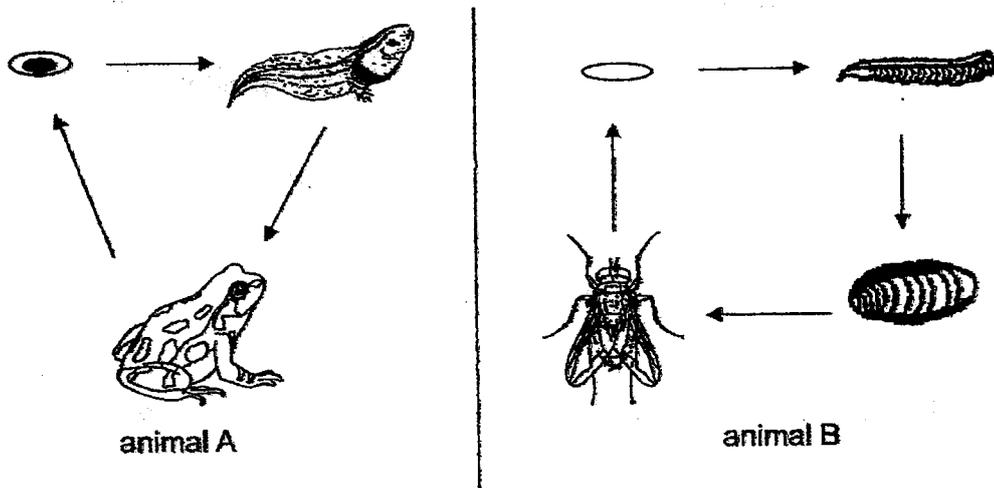
- (1) A and B only
- (2) A and C only
- (3) B and C only
- (4) A, B and C

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6. Study the classification chart below.



The diagrams below show the life cycle of animals A and B.

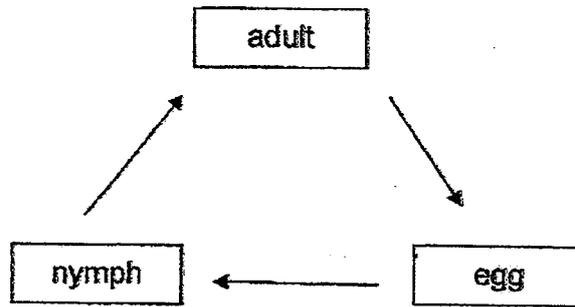


Which group, P, Q, R or S do animals A and B belong to?

	animal A	animal B
(1)	Q	P
(2)	Q	R
(3)	S	R
(4)	S	P

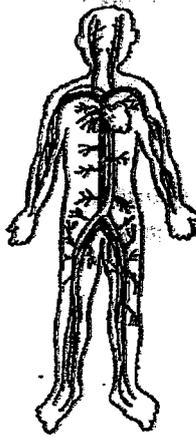
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7. The diagram below shows the life cycle of an animal.



Which animal is likely to have the life cycle as shown above?

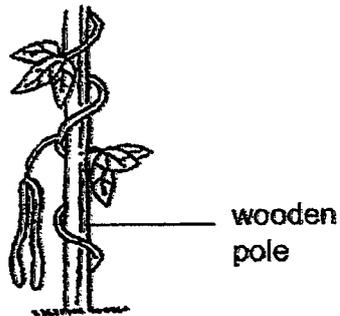
- (1) beetle
  - (2) chicken
  - (3) butterfly
  - (4) cockroach
8. Which human system is shown in the diagram?



- (1) skeletal system
- (2) muscular system
- (3) circulatory system
- (4) respiratory system

(Go on to the next page)

9. In which part of the digestive system is digested food absorbed into the blood?
- (1) gullet
  - (2) stomach
  - (3) small intestine
  - (4) large intestine
10. Jeryl observed a plant in the garden.

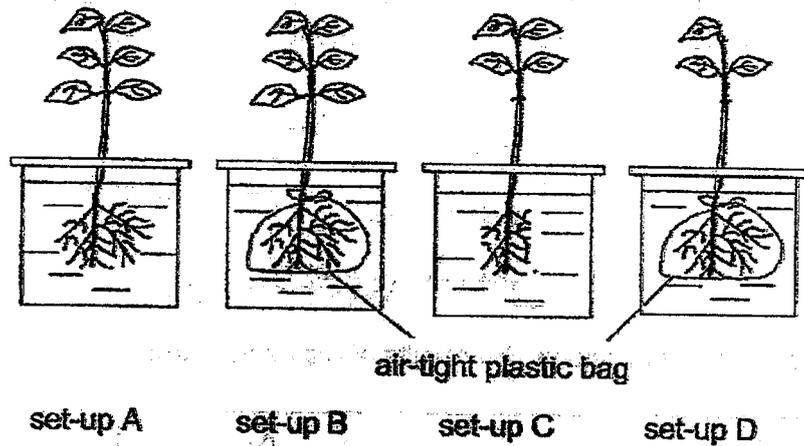


He noticed that plant X grew upwards on the wooden pole. This helped plant X to \_\_\_\_\_.

- (1) trap more light to make food
- (2) take in more air to make food
- (3) anchor itself more firmly to the ground
- (4) take in more water and mineral salts

(Go on to the next page)

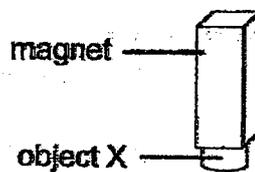
11. Lucius wanted to find out if plants take in water through their roots.



The roots of the plants in set-up B and set-up D were tied with air-tight plastic bag at the start of the experiment before they were placed into the beaker of water. Each set-up had the same amount of water.

Which two set-ups should he use to conduct a fair test?

- (1) A and B
  - (2) A and D
  - (3) B and C
  - (4) C and D
12. Object X was attracted to a magnet as shown in the diagram below.

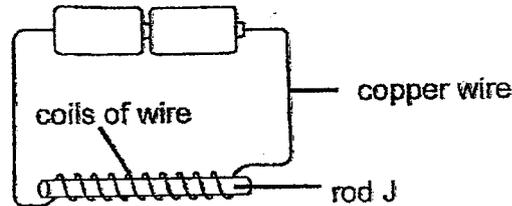


Object X is made of \_\_\_\_\_

- (1) steel
- (2) wood
- (3) rubber
- (4) plastic

(Go on to the next page)

13. Nathan coiled a copper wire around rod J several times and connected it to the batteries as shown below. He recorded the number of steel pins attracted by the rod. He then repeated the experiment using rods K, L and M.

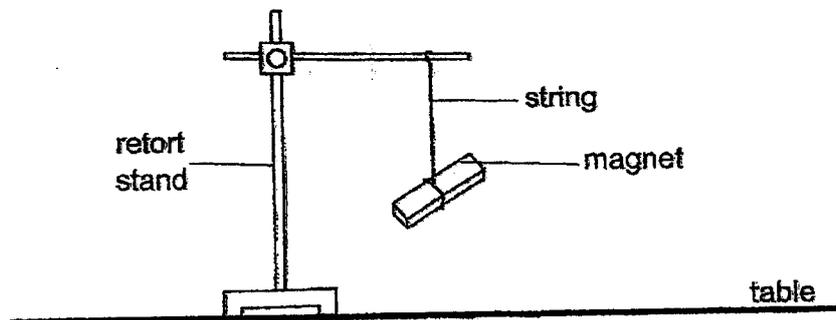


The table below shows the results of his experiment.

Rod	J	K	L	M
Number of steel pins attracted	19	12	7	0

Based on his results above, which rod could be made of glass?

- (1) J
  - (2) K
  - (3) L
  - (4) M
14. Travis tied a string to a magnet and attached it to the retort stand. He pushed the magnet and let it swing until it came to rest.

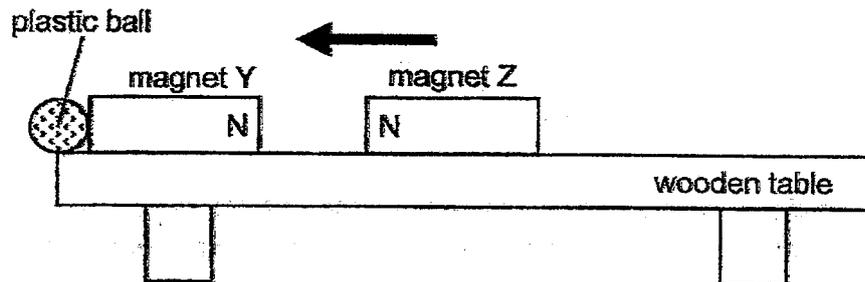


Which direction would the magnet be facing when it comes to rest?

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

(Go on to the next page)

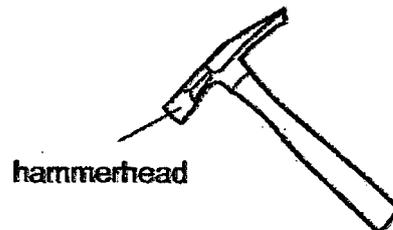
15. Janice placed two strong bar magnets, Y and Z, and a plastic ball on the wooden table as shown below. One pole of each magnet is given.



What would happen when Janice brought magnet Z towards magnet Y?

The plastic ball would \_\_\_\_\_.

- (1) move towards magnet Y
  - (2) be repelled by magnet Y
  - (3) be magnetised by magnet Y
  - (4) be pushed off the table by magnet Y
16. The diagram below shows a hammer.

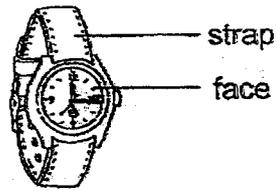


Metal is used to make the hammerhead of the hammer because metal \_\_\_\_\_.

- (1) is waterproof
- (2) does not break easily
- (3) can bend without breaking
- (4) does not allow light to pass through

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17. The picture below shows a watch.



Jay decided to carry out some tests on a few materials to find out which material is most suitable for making the strap of his watch for him to wear to school daily.

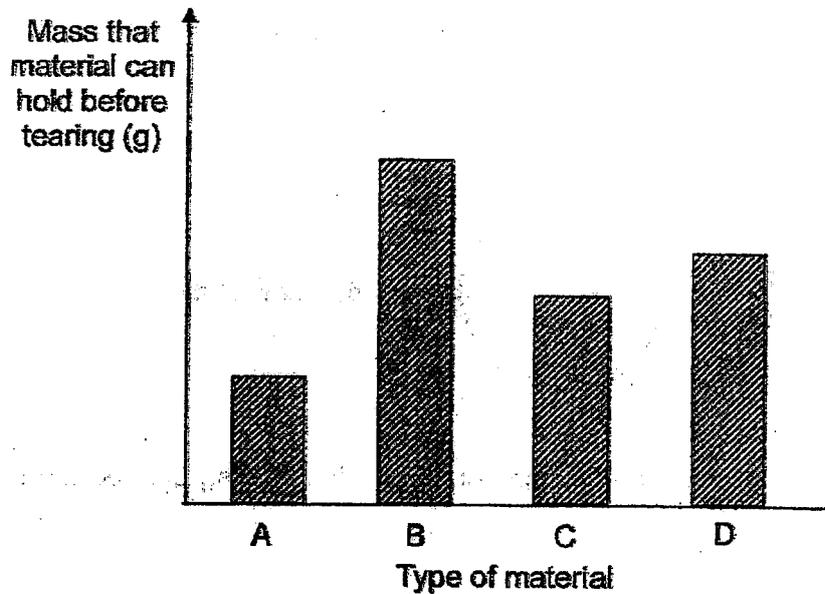
Test	Property to be tested
A	whether it is flexible
B	whether it floats on water
C	whether it breaks easily
D	whether it allows light to pass through

Which of the following two tests must he carry out to help him decide the most suitable material to make the strap?

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

(Go on to the next page)

18. The bar graph below shows the masses that four different types of materials, A, B, C and D, can hold just before it tears.



Based on the graph above, which one of the following statements about the materials is correct?

- (1) Material A is the most flexible.
  - (2) Material D is the least flexible.
  - (3) Material C is weaker than Material B.
  - (4) Material D is stronger than Material B.
19. Jeff's puppy has the same mass as a bag of beans.



Jeff's puppy



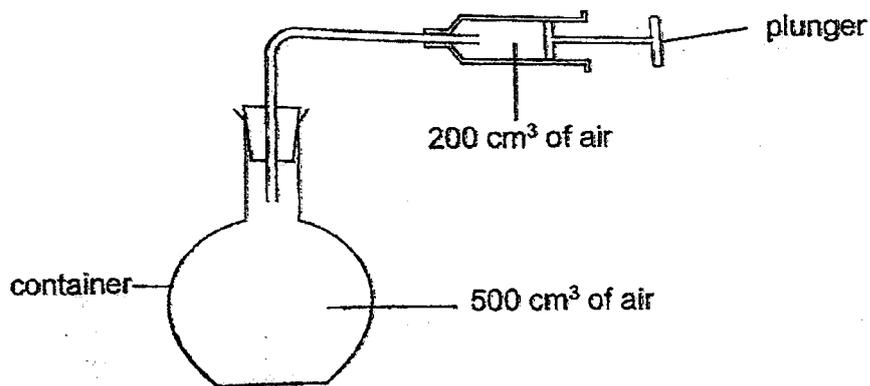
bag of beans

Which one of the following statements about Jeff's puppy and the bag of beans is definitely correct?

- (1) Both have the same shape.
- (2) Both have the same volume.
- (3) Both have the same amount of matter.
- (4) Both occupy the same amount of space.

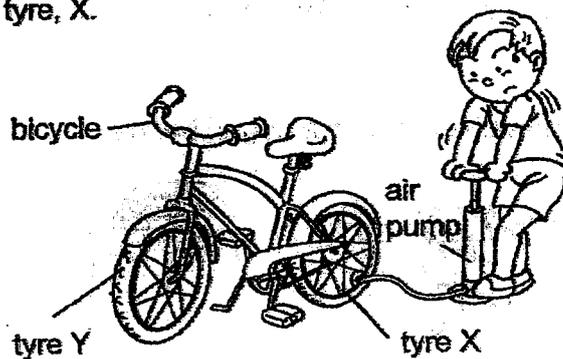
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20. Huling prepared the set-up as shown below.



What is the volume of air in the container after Huling pushed the plunger in fully?

- (1) 200 cm<sup>3</sup>
  - (2) 300 cm<sup>3</sup>
  - (3) 500 cm<sup>3</sup>
  - (4) 700 cm<sup>3</sup>
21. Farhan's bicycle had two inflated tyres. He used an air pump to pump more air into his back tyre, X.

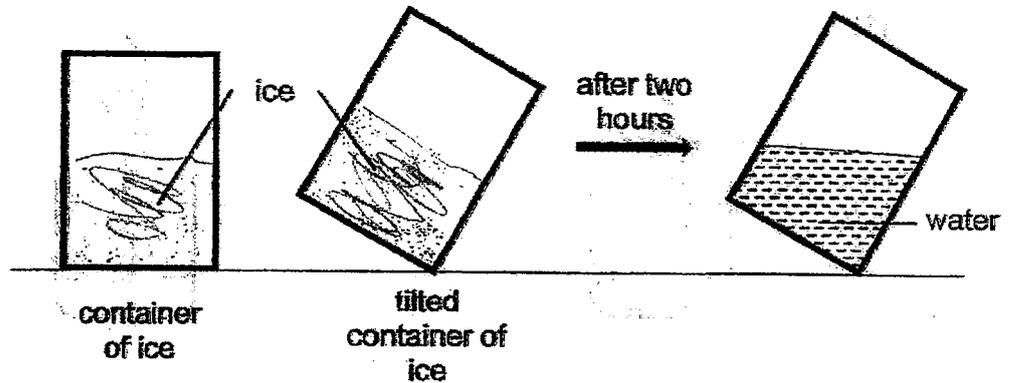


What can he conclude about the mass of tyres X and Y after he pumped in more air?

- (1) Both the tyres will not have any mass.
- (2) Tyre X will have less mass than tyre Y.
- (3) Tyre X will have more mass than tyre Y.
- (4) Both the tyres will have the same mass.

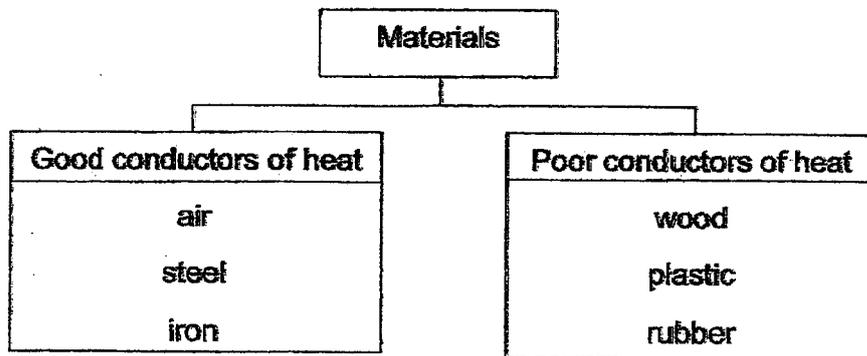
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22. Tasha took out a container of ice from the freezer. She placed the container of ice tilted on the table for two hours. The diagram below shows what happened to the ice after two hours.



Based on the experiment above, what was a possible conclusion that Tasha made?

- (1) Ice and water have mass.
  - (2) Water has definite shape but ice does not.
  - (3) Ice and water do not have definite volume.
  - (4) Ice has a definite shape but water does not.
23. Study the classification table below.



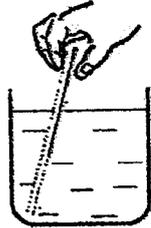
What one of the following has been classified incorrectly?

- (1) air
- (2) iron
- (3) wood
- (4) rubber

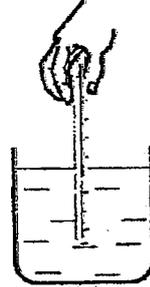
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24. Jasmine wants to measure the temperature of hot water in a beaker. Which one of the following diagrams shows the correct position of the thermometer when taking the temperature reading?

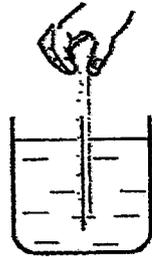
(1)



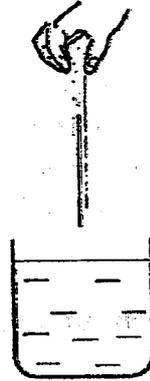
(2)



(3)

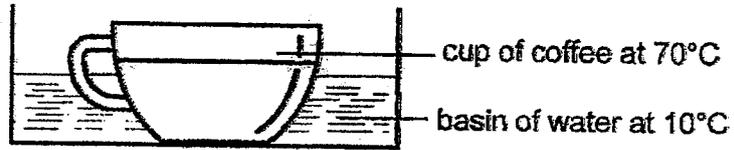


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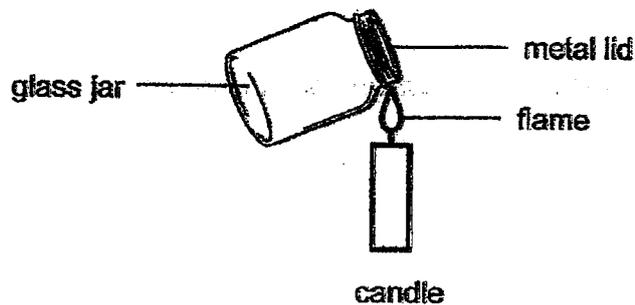
25. Siti put a cup of hot coffee that was at  $70^{\circ}\text{C}$  into a basin of cold water which was at  $10^{\circ}\text{C}$  as shown in the diagram below. She then left it in the kitchen for three hours. The surrounding temperature was  $28^{\circ}\text{C}$ .



What would be the likely temperatures of the coffee and the water in the basin after three hours?

	Temperature of coffee ( $^{\circ}\text{C}$ )	Temperature of water in basin ( $^{\circ}\text{C}$ )
(1)	70	70
(2)	10	10
(3)	10	28
(4)	28	28

26. Asher had a glass jar with a tight metal lid. He held the glass jar near the candle flame as shown in the diagram below.

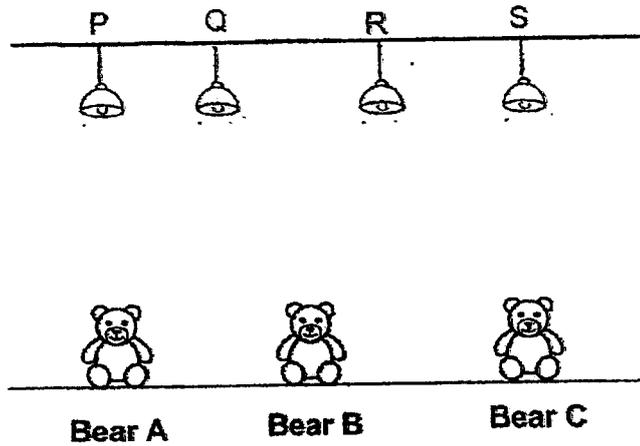


Why was Asher able to open the metal lid easily after heating it for a few minutes?

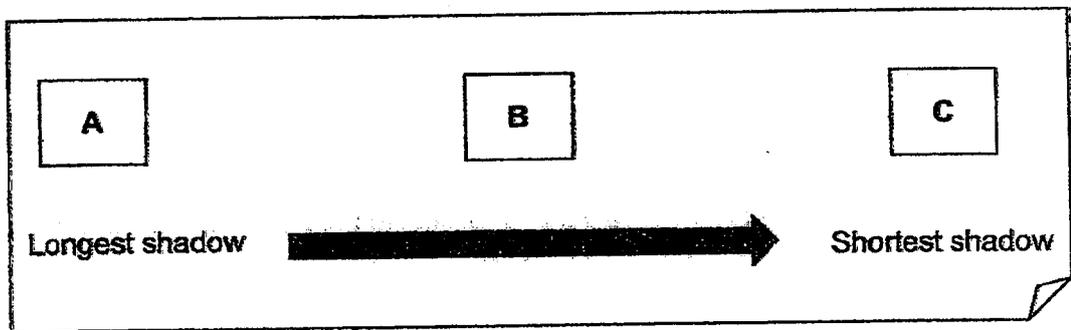
- (1) The glass jar had lost heat and expanded more than the metal lid.
- (2) The metal lid had lost heat and contracted more than the glass jar.
- (3) The metal lid had gained heat and expanded more than the glass jar.
- (4) The glass jar had gained heat and contracted more than the metal lid.

(Go on to the next page)

27. Tristan put three identical teddy bears on the floor below four lamps, P, Q, R and S, in a dark room.



He switched on only one lamp and made the following observations about the shadows of bears A, B and C as shown below.

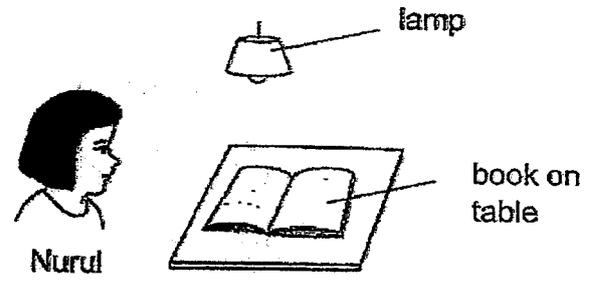


Based on Tristan's observations, which lamp, P, Q, R or S, did he switch on?

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

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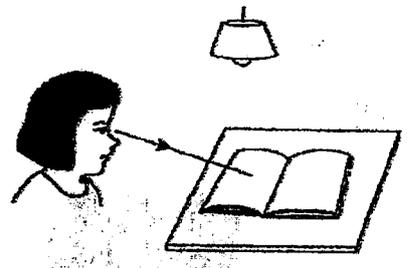
28. Look at the picture below.



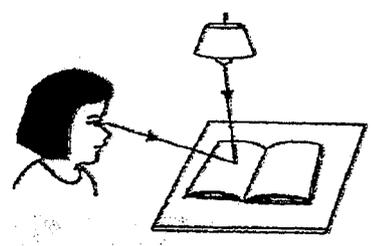
Which one of the following explains why Nurul could see the book on the table?

→ direction of light

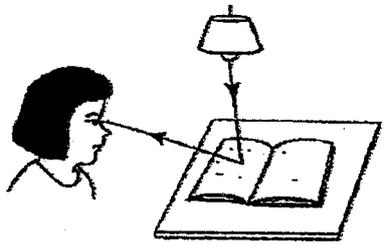
(1)



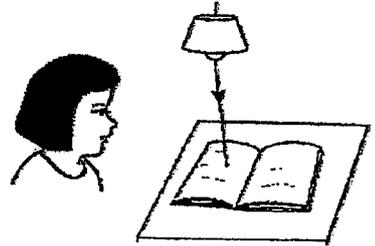
(2)



(3)

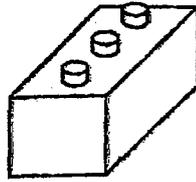


(4)



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29. Azman shone a torch on a piece of toy brick at different positions and recorded the shadows cast by it.



Which one of the following is **not** a possible shadow cast by the toy brick?

(1)



(2)



(3)

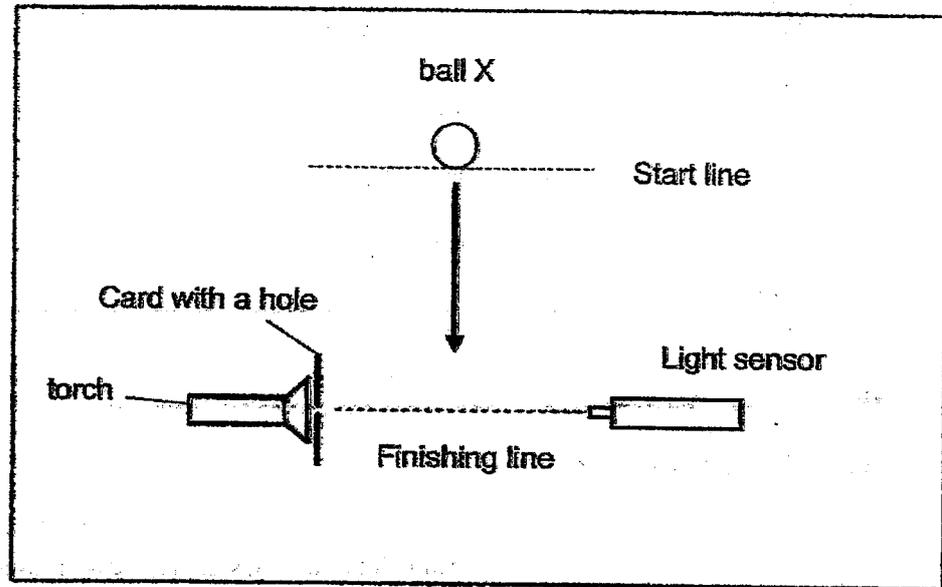


(4)



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30. Jovan conducted an experiment in a completely dark room as shown below. He gave ball X a push, such that it moved past the finishing line.



Top view of set-up

Jovan repeated the experiment with ball Y, pushing it the same way as before. He recorded the amount of light detected by the light sensor when the balls were at different positions in the table below.

Position of ball	Amount of light detected by light sensor (units)	
	ball X	ball Y
At start line	1000	1000
At finishing line	0	950

Based on the results above, which one of the following statements is correct?

- (1) Ball X travels faster than ball Y.
- (2) Ball X allows most light to pass through.
- (3) Ball Y is made of a transparent material.
- (4) Ball Y reflects away all the light from the torch.

END OF BOOKLET A

(Go on to Booklet B)



MARIS STELLA HIGH SCHOOL (PRIMARY)

END-OF-YEAR EXAMINATION

27 OCTOBER 2025

PRIMARY 4 SCIENCE

BOOKLET B

Name: \_\_\_\_\_ ( )

Class: Primary 4 ( )

Total Time for booklets A and B: 1 hour 30 minutes

Booklet A	/ 60
Booklet B	/ 40
<b>Total Marks</b>	<b>/ 100</b>

Parent's Signature: \_\_\_\_\_

**INSTRUCTIONS TO CANDIDATES**

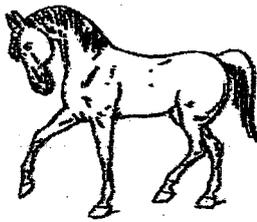
1. Write your name, class and index number on the cover page of this Answer Booklet.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Use a dark blue or black ballpoint pen to write your answers in the space provided for each question.
6. Do not use correction fluid / tape or highlighters.

This booklet consists of 18 printed pages and 2 blank pages.

For question 31 to 41, write your answers in this booklet.

The number of marks available is shown in brackets [ ] at the end of each question or part question. [40 marks]

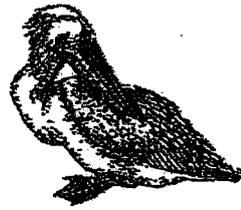
31. Mr Tan observed four different animals, A, B, C and D, as shown in the diagrams below.



A



B

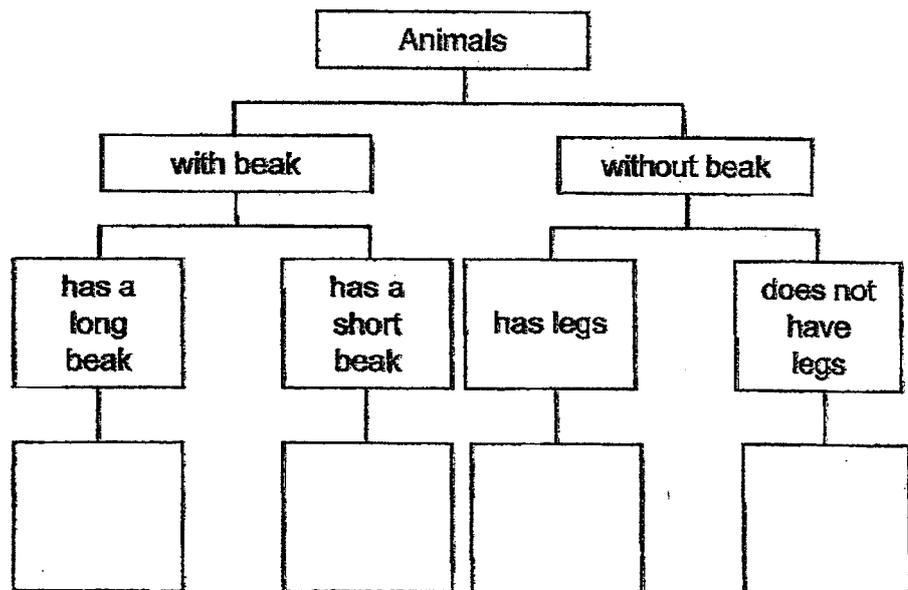


C



D

- (a) Mr Tan grouped all the animals in the classification chart below based on some of the characteristics shown. Write the letters, A, B, C or D, in the boxes below. [2]



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SCORE	2
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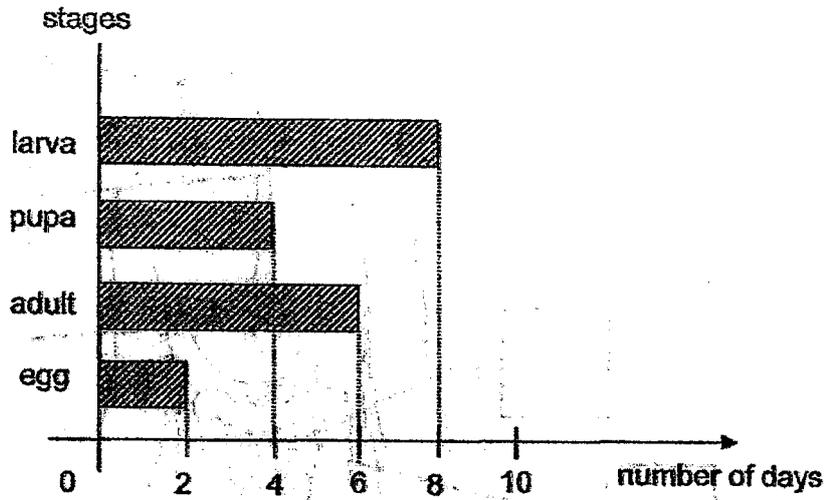
- (b) Mr Tan then re-grouped animals A, B, C and D based on their body coverings. Complete the table below by writing A, B, C or D. [2]

Has hair as its body covering	Does not have hair as its body covering

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SCORE	2
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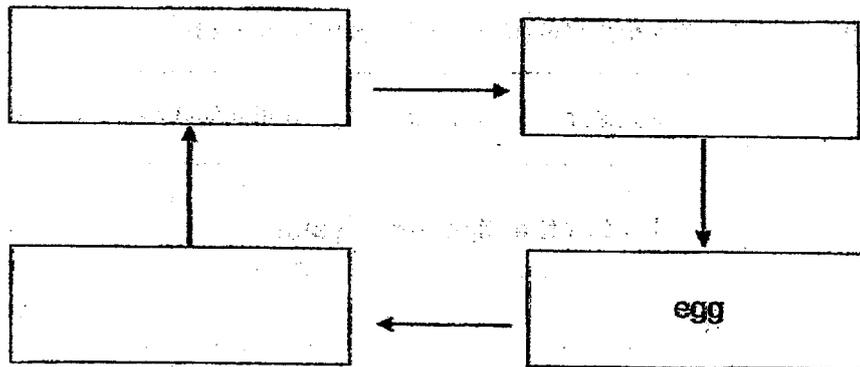
32. Arif studied the life cycle of insect A. He recorded the number of days for each stage of its life cycle in a bar graph below.



- (a) Based on the graph above, how many days does insect A stay as a pupa? [1]

days

- (b) State, in words, the life cycle stages of insect A in the boxes below. [1]



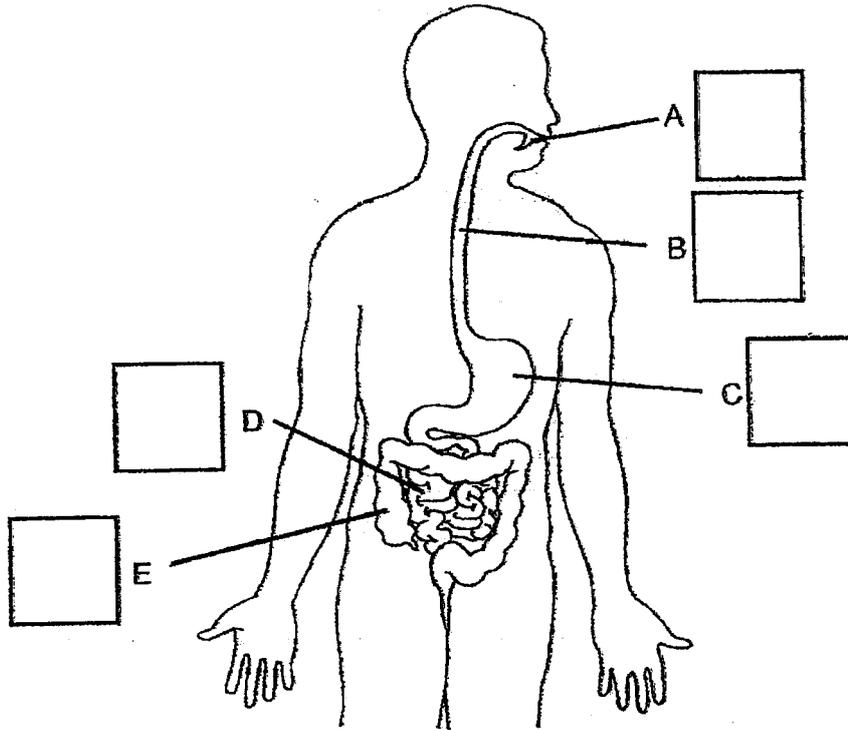
- (c) Circle one living thing from the table below that has the same number of stages as insect A. [1]

frog	grasshopper	mosquito
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SCORE	3
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33. Study the diagram of the human digestive system.



(a) Put ticks ( ✓ ) in the boxes  above to show where digestion takes place. [1]

(b) Fill in the table below with the words in the box. [3]

stomach
mouth
small intestine
large intestine

Part of the digestion system	Function
(i) _____	Food is cut and ground into smaller pieces.
(ii) _____	Digestion ends here.
(iii) _____	Water is absorbed from undigested food.

(Go on to the next page)

SCORE	4
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34. Leo kept some plants.

(a) Fill in the correct parts of a plant in the table below.

[2]

Function of plant part	Name of plant part
It holds the plant upright.	(i) _____
It obtains water for the plant.	(ii) _____

Leo filled two beakers with an equal amount of water each. He placed plant P in one beaker. He removed some leaves from another similar plant Q and placed it in another beaker. He placed the two beakers in his garden for two weeks.



plant P



plant Q

(b) Will plant P or Q grow better after two weeks? Explain your answer.

[2]

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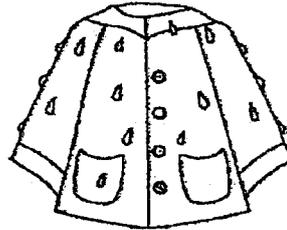


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SCORE	4
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35. Nathan has a raincoat as shown in the diagram below. It has water droplets on it.



Fill in the blanks using the correct words in the box.

repel	absorb	waterproof	magnetic
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- (a) The raincoat does not \_\_\_\_\_ water. [1]
- (b) The raincoat is made of a \_\_\_\_\_ material. [1]

Nathan then conducted some tests to find out the properties of materials A, B and C. The results are shown in the table below.

Property	Material		
	A	B	C
Allows water to pass through	No	No	No
Bends easily without breaking	No	Yes	No
Floats on water	No	No	Yes

(c) Based on the table above, state a similar property of materials A, B and C. [1]

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(d) Based on the table above, state a difference in property between material B and C. [1]

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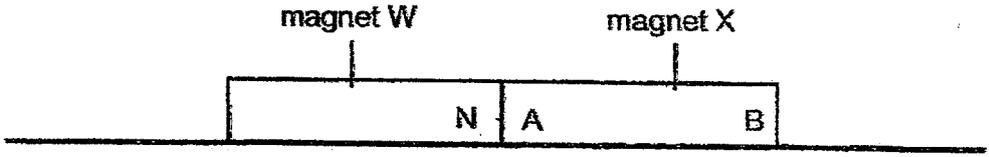


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SCORE	/
	4

36. Annie placed two magnets together as shown below.



The north pole of magnet W is labelled N.

(a) Name the poles labelled A and B of magnet X. [2]

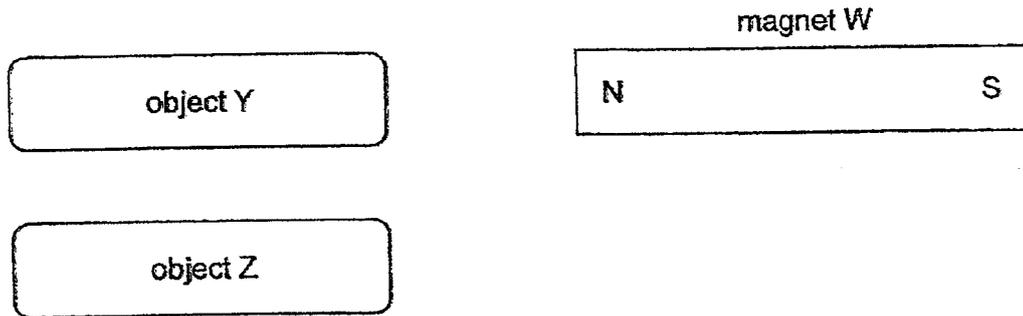
A: \_\_\_\_\_

B: \_\_\_\_\_

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SCORE	2
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Annie then brought both ends of magnet W near two objects, Y and Z.



She recorded the interactions between magnet W and the two objects Y and Z in the table as shown below.

Object	North pole of magnet W brought near to object	South pole of magnet W brought near to object
Y	did not move at all	did not move at all
Z	attract	attract

- (b) Based on the results above, study the statements below and put a tick (✓) in the correct boxes. [2]

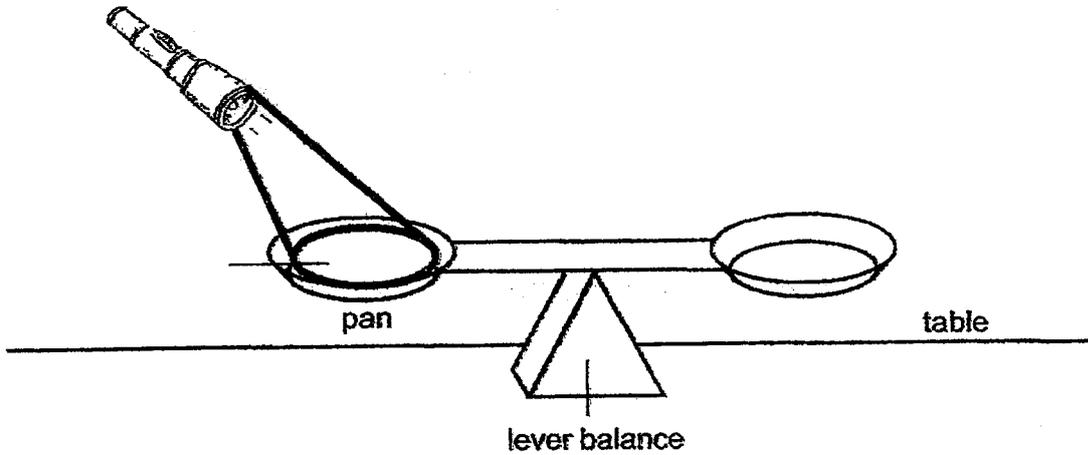
	Statement	True	False	Not possible to tell
(i)	Object Y is a magnet.			
(ii)	Object Z is made of a magnetic material.			
(iii)	Object Y is made of rubber.			
(iv)	Object Y will repel object Z.			

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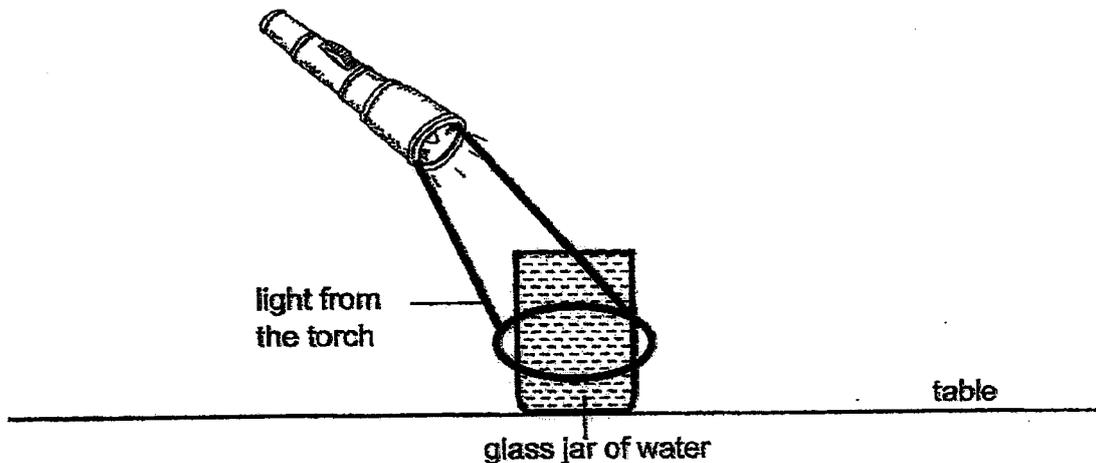
SCORE	2
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Ada then shone a torch on one pan of a lever balance as shown in diagram below. She observed that the lever balance remained balanced and there was a bright light on the pan.



Ada then filled a glass jar with water to the brim. She then shone the torch onto the jar and observed that the water in the jar did not flow out.



- (c) Based on the experiments above, give 2 reasons why Ada was able to conclude that light is not a matter. [2]

Reason 1:

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Reason 2:

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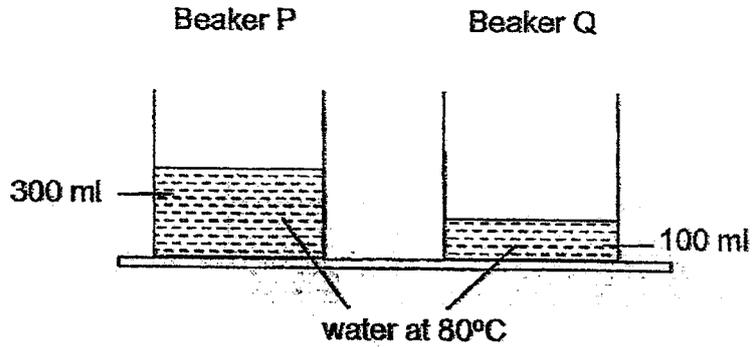


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SCORE	2
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38. Teddy poured different amounts of water at  $80^{\circ}\text{C}$  into two identical beakers, P and Q.



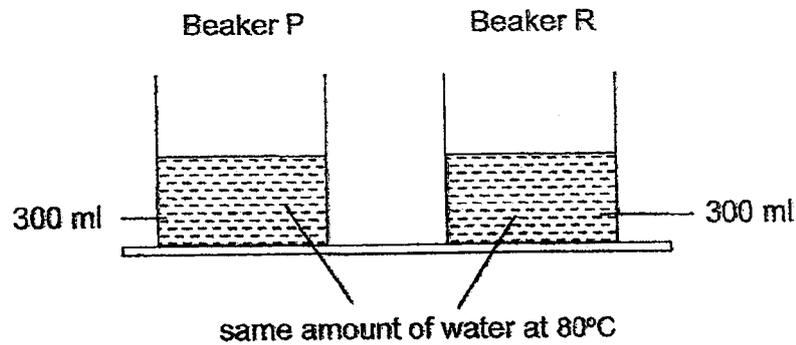
- (a) Circle the correct word.

There is ( *less* / *more* / *same amount of* ) heat in the water of beaker P than water in beaker Q. [1]

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SCORE	1
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Teddy conducted another experiment with beaker P and another beaker R of different materials. Both beakers are of the same size and shape. Both beakers contain the same amount of water at the same temperature.



Teddy recorded the temperature of the water in each beaker after 15 minutes in the table shown below.

Beaker	Temperature of water at the start of experiment ( $^{\circ}\text{C}$ )	Temperature of water after 15 minutes ( $^{\circ}\text{C}$ )
P	80	70
R	80	50

(b) Which beaker is more likely to be made of metal? Explain your answer.

[2]

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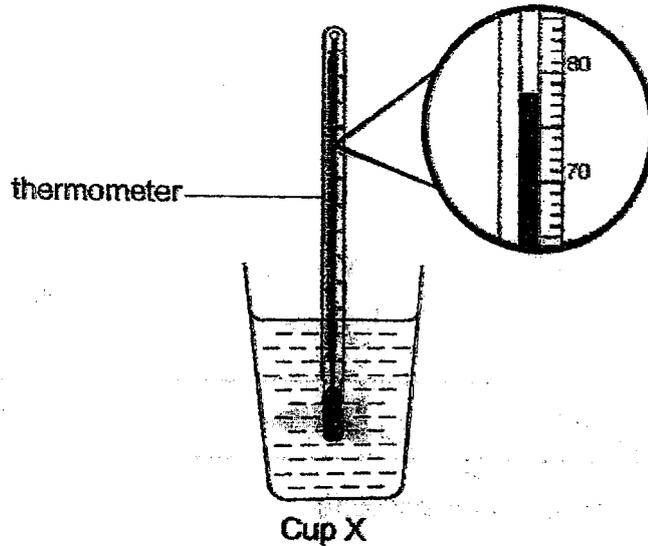


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SCORE	2
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39. Matthew placed a laboratory thermometer into a cup of water as shown below.



(a) Based on the diagram above, what is the reading of the temperature of the water in Cup X? [1]

°C

(b) Without changing the thermometer or anything in the set-up above, how should Matthew position his eyes to take the temperature reading accurately? [1]

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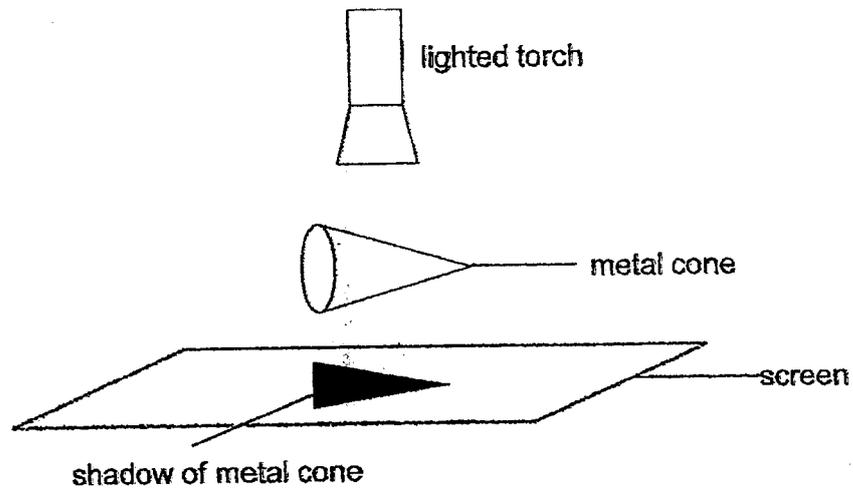
(c) Matthew then put some ice cubes in Cup X. In the table below, tick (✓) the changes in terms of heat transfer that took place when the ice cubes were placed into Cup X. [2]

Item	Gain heat	Lose heat
Ice cubes		
Water in Cup X		

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SCORE	4
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40. Ian shone a lighted torch at a metal cone to cast a dark shadow on a screen as shown below.



- (a) What property of the metal cone enables it to cast a shadow on the screen? [1]

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- (b) Tick (✓) the correct box. [1]  
In order to cast a smaller shadow, Ian should move the metal cone

nearer to the screen

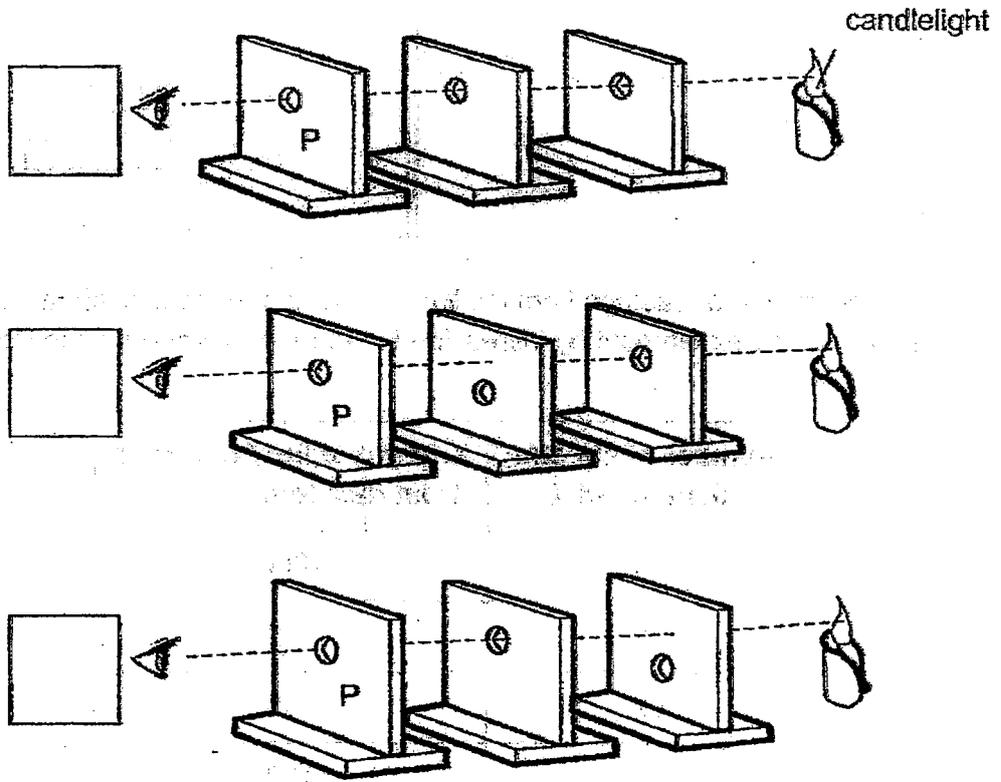
further away from the screen

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SCORE	2
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41. Isaiah conducts an experiment to investigate how light travels.

- (a) Tick (✓) the box for the set-up which allows Isaiah to see the candlelight when he looks through the hole at P. [1]



- (b) What can Isaiah conclude about how light travels? [1]

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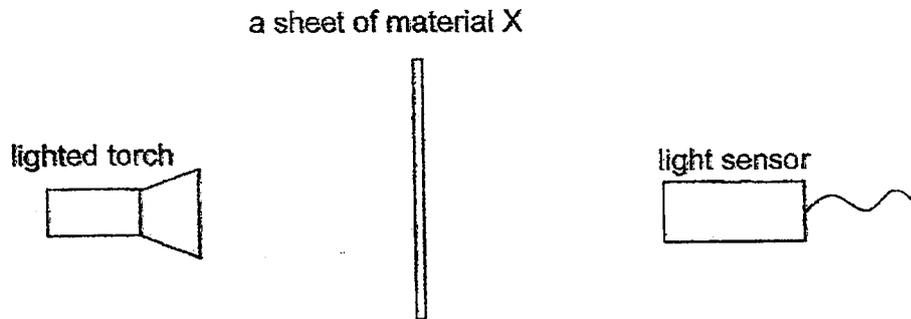


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SCORE	2
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Isaiah then conducted another experiment in a dark room to find out if the number of sheets of material X affects the amount of light passing through them. He placed one sheet of material X between a lighted torch and a light sensor that is used to measure the amount of light that passes through.



He recorded the readings from the light sensor in the table as shown below. He repeated the experiment by increasing the number of sheets each time.

Number of sheet(s) of material X	Amount of light detected from data logger (units)
0	1000
1	700
2	400
3	100
4	0

- (c) Based on the results above, what is the relationship between the number of sheet(s) of material X used and the amount of light detected by the light sensor? [1]

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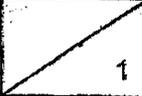
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SCORE	1
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- (d) To ensure a fair test, tick (✓) the variable(s) that must be kept the same.

[1]

Variable	Tick (✓) the variable(s) that must be kept the same
Amount of light from torch	
Number of sheets of material X	
Thickness of each sheet of material X	

SCORE	
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**END OF BOOKLET B**



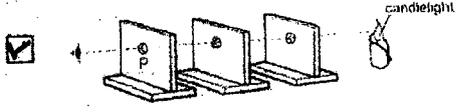
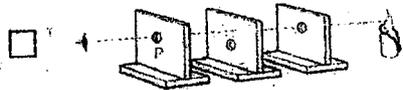
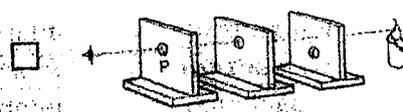
YEAR : 2025  
 LEVEL : PRIMARY 4  
 SCHOOL : MARIS STELLA HIGH SCHOOL (PRIMARY)  
 SUBJECT : SCIENCE  
 TERM : END OF YEAR EXAMINATION

**(BOOKLET A)**

Q1	1	Q2	2	Q3	3	Q4	4	Q5	1
Q6	4	Q7	4	Q8	3	Q9	3	Q10	1
Q11	1	Q12	1	Q13	4	Q14	3	Q15	4
Q16	2	Q17	2	Q18	3	Q19	3	Q20	3
Q21	3	Q22	4	Q23	1	Q24	3	Q25	4
Q26	3	Q27	4	Q28	3	Q29	1	Q30	3

**(BOOKLET B)**

Q31	a)	Has a long beak : C Has a short beak : D Has legs : A Does not have legs : B	
	b)	Has hair as its body covering : A Does not have hair as its body covering : B, C, D	
Q32	a)	4 days	
	b)	Pupa -> adult -> egg -> larva	
	c)	Mosquito	
Q33	a)	A, C, D	
	b)	i)	Mouth
		ii)	Small intestine
		iii)	Large intestine
Q34	a)	i)	Stem
		ii)	root
	b)	Plant P will grow better after two weeks as it has more leaves than Plant Q. Thus Plant P absorbed more air than Plant Q. Thus, Plant P can make more food than Plant Q.	
Q35	a)	Absorb	
	b)	Waterproof	
	c)	Materials A,B and C does not allow water to pass through.	
	d)	Material B bends easily without breaking while Material C does not bend easily without breaking.	
Q36	a)	A : South pole B : North pole	
	b)	i)	False
		ii)	True

		iii)	Not possible to tell
		iv)	False
Q37	a)	Liquid	
	b)	Solid	
	c)	Reason 1 : Light does not have mass. Reason 2 : Light does not occupy space.	
Q38	a)	more	
	b)	R. Temperature of water in R decreased more. Metal is a good conductor of heat. Water in beaker R loses heat faster to the surroundings.	
Q39	a)	78	
	b)	Bring his eye to the same level as the top of the liquid in the thermometer.	
	c)	Ice cubes gain heat Water in Cup X lose heat	
Q40	a)	The metal cone is opaque to cast a shadow on the screen.	
	b)	Nearer to the screen	
Q41	a)	<input checked="" type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/> 	
	b)	Light travels in a straight line.	
	c)	As the number of sheets of Material X increases, the amount of light detected from data logger decreased.	
	d)	Amount of light from torch Thickness of each sheet of material X	