Anglo-Chinese School
(Primary)
A Methodist Institution
(Founded 1886)

END-OF-YEAR EXAMINATION 2025
SCIENCE
PRIMARY FOUR
BOOKLET A

Name: _____ ( ) **Class: Primary 4** ____

Date: 30 October 2025 **Total Time for Booklets A and B: 1 h 45 min**

Additional Materials: Optical Answer Sheet (OAS)

INSTRUCTIONS TO CANDIDATES

1. Write your name, index number and class in the spaces provided.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Shade your answers on the Optical Answer Sheet (OAS) provided. Only the OAS will be marked.

This booklet consists of 22 printed pages including this cover page.

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)

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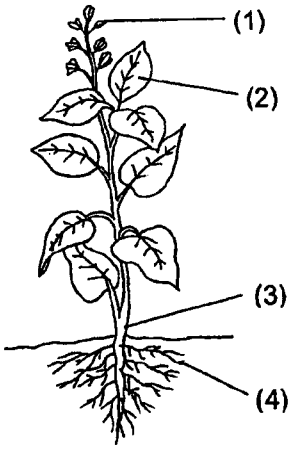
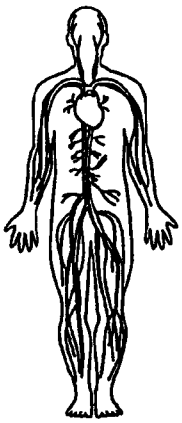
1 Which part, (1), (2), (3) or (4), holds the plant upright?



2 Which human system is shown in the diagram?



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

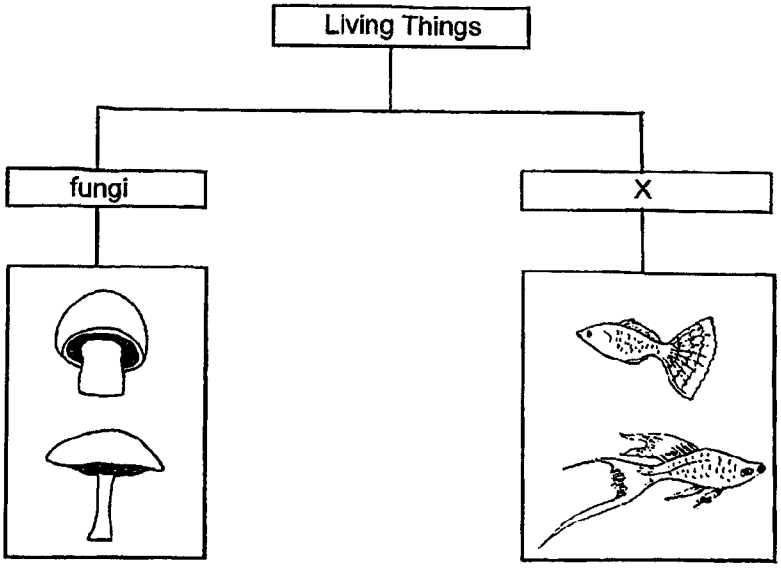
3 Which one of the following properties is true for both air and a pen?

(1) They can be seen.
(2) They take up space.
(3) They have fixed shapes.
(4) They have fixed volumes.

4 Which is **not** a characteristic of animals?

(1) They can grow.
(2) They can move.
(3) They can reproduce.
(4) They can make food.

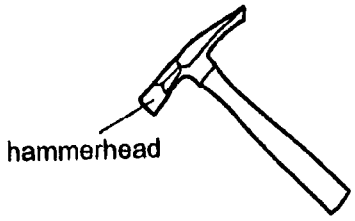
5 The table below shows how some living things can be grouped.



Which one of the following is the most suitable heading for group X?

(1) fish
(2) insects
(3) bacteria
(4) mammals

6 The diagram shows a hammer.

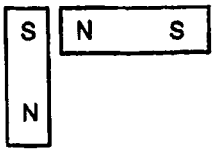


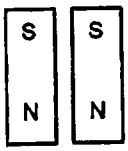
Metal is used to make the hammerhead of the hammer because metal _____.

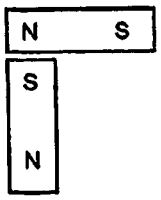
(1) can reflect light
(2) does not break easily
(3) can bend without breaking
(4) does not allow light to pass through

7 In which one of the following will the two magnets push each other away?

(1) 

(2) 

(3) 

(4) 

8 Which one of the following is not a source of heat?

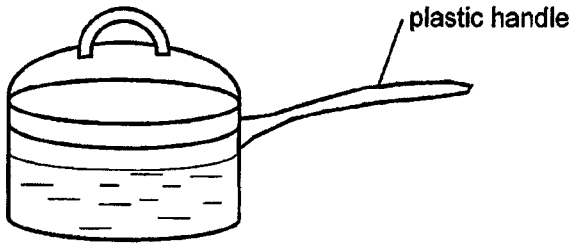
(1) The Sun

(2) A lighted bulb

(3) A woollen cap

(4) A candle flame

9 Andy boiled some water in a pot.



He is able to hold the pot of boiling water using the plastic handle.
This is because plastic is a _____.

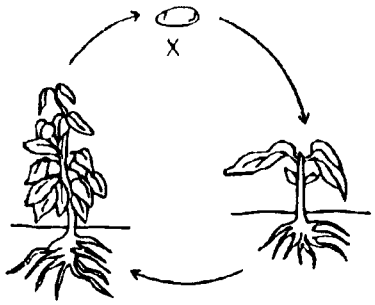
(1) light material

(2) strong material

(3) good conductor of heat

(4) poor conductor of heat

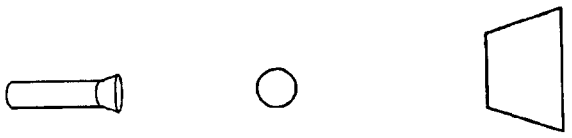
10 The diagram shows the life cycle of a plant.



What is the stage marked X?

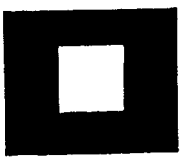
(1) egg
(2) seed
(3) adult plant
(4) young plant

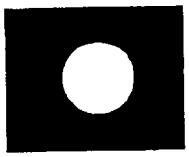
11 The set-up shows light shining on a wooden ball.



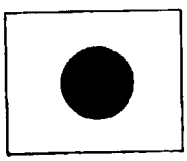
torch wooden ball screen

Which one of the following would likely be seen on the screen?

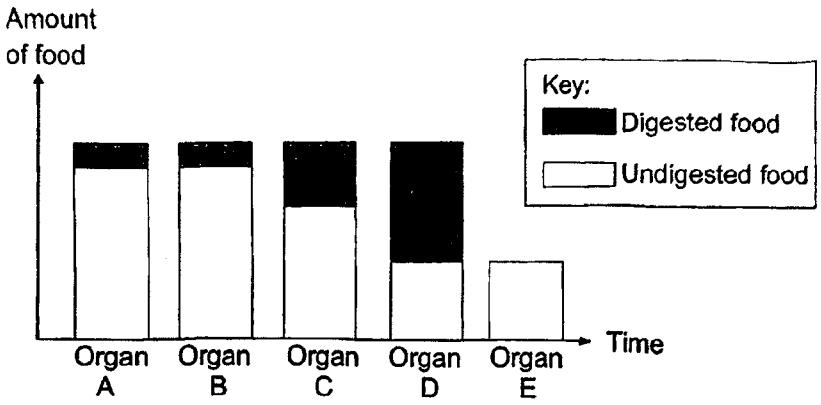
(1) 

(2) 

(3) 

(4) 

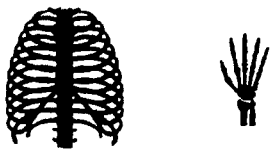
12 Kate ate some food in the morning. The bar graph shows the amounts of digested and undigested food that move from organs A to E of the digestive system.



In which organ(s) is/are digestive juices produced?

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

13 The diagrams below show parts of a system in a human body.

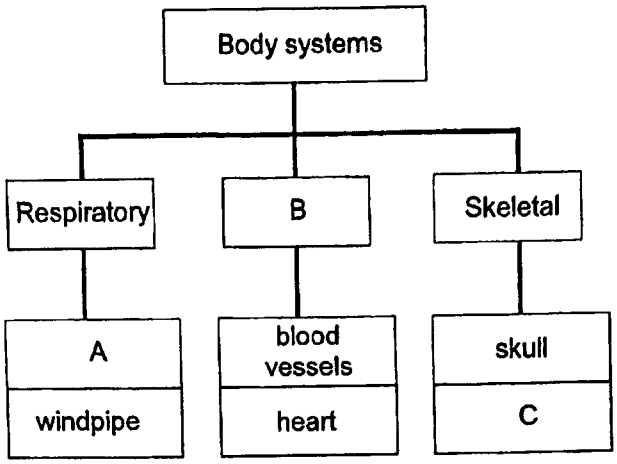


Which of the following are functions of this system?

A They give the body shape.
B They provide protection to important organs.
C They break down food into simpler substances.
D They carry oxygen, water, and food to all parts of the body.

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

14 Study the classification chart below.

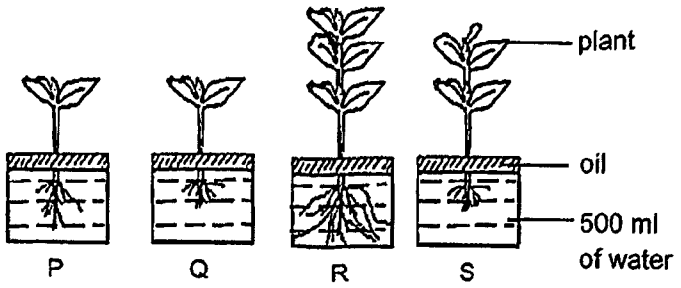


Based on the chart above, which of the following best represents A, B and C?

	A	B	C
(1)	lungs	Circulatory	bones
(2)	gullet	Digestive	muscles
(3)	lungs	Digestive	bones
(4)	gullet	Circulatory	muscles

15 Jenny set up an experiment as shown. She used the same type of plants and placed them into four similar containers P, Q, R and S with an equal amount of water and a layer of oil.

Three days later, she measured the volume of water left in each container.



Based on the experiment, which one of the following conclusions is correct?

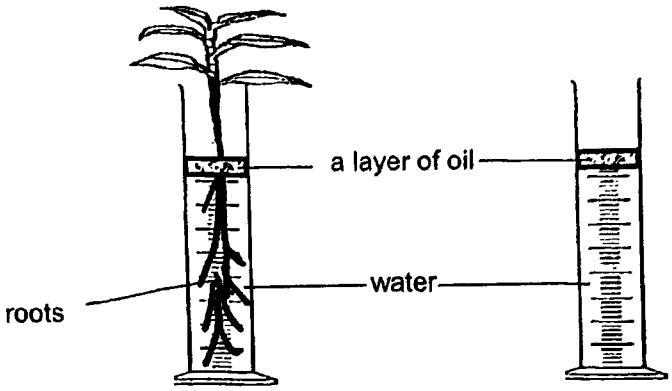
(1) There will be the most amount of water left in P.

(2) There will be the least amount of water left in R.

(3) The plant in Q will take in more water than the plant in P.

(4) The plant in S will take in the same amount of water as the plant in R.

16 Wei Loon wanted to find the amount of water taken in by a plant. He placed a plant in a measuring cylinder as shown in set-up A.



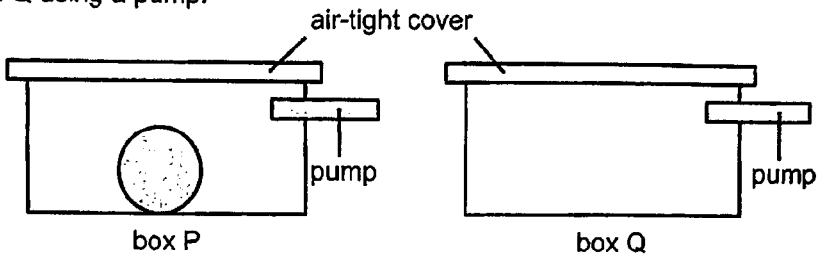
The results of his experiment were recorded in the table as shown.

set-up	amount of water in the measuring cylinder (cm^3)			
	day 1	day 2	day 3	day 4
A	500	350	200	50
B	500	500	500	500

The purpose of set-up B is to _____.

(1) prevent water loss to the surroundings
(2) control the amount of water loss in both set-ups
(3) ensure that the loss of water is due to the plant only
(4) measure the volume of water in the measuring cylinder

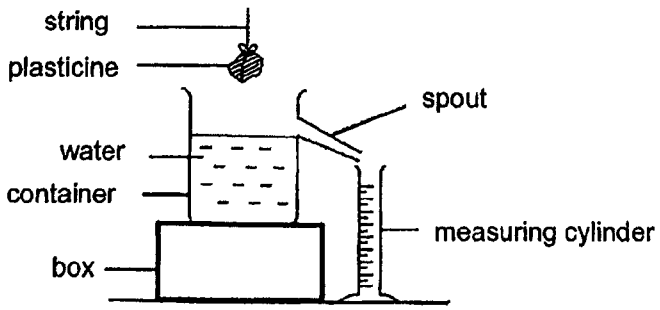
17 Two similar boxes, P and Q, have a volume of 400 cm^3. A metal ball of volume 100 cm^3 was placed inside box P only. Both boxes were then sealed with an air-tight cover. An additional 200 cm^3 of air was pumped into both boxes P and Q using a pump.



Which one of the following shows the final volume of air in each box?

	Volume of air in Box P (cm^3)	**Volume of air in Box Q (cm^3)**
(1)	300	400
(2)	400	400
(3)	500	600
(4)	700	600

18 Amy set up an experiment as shown below to find the volume of the plasticine.



Which one of the following steps is **not** necessary for her to obtain an accurate result?

(1) Collect the water displaced by the plasticine.

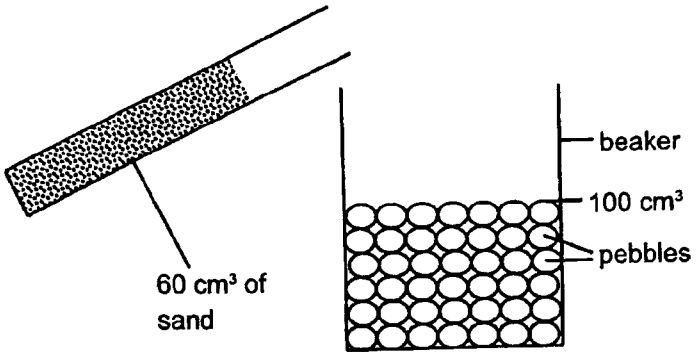
(2) Lower the plasticine until it is completely submerged in water.

(3) Measure the mass of the plasticine before placing it into the water.

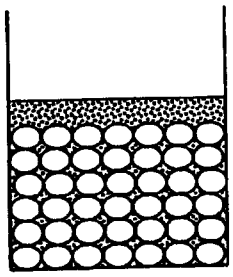
(4) Before lowering the plasticine into the container, make sure that no water is flowing out of the spout.

19 Jane filled a beaker with pebbles up to the 100 cm^3 mark. Next, she poured 60 cm^3 of sand into that beaker. She then shook the beaker gently.

Before pouring the fine sand



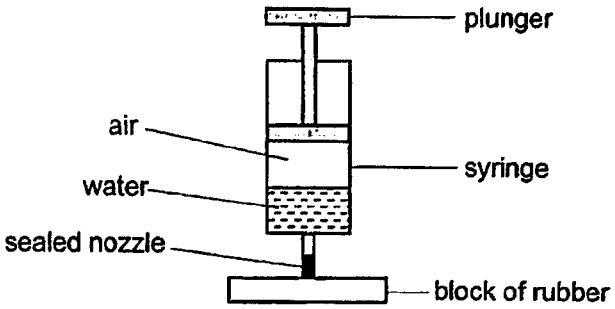
After pouring the fine sand



What will be the new volume of pebbles and sand in the beaker?

(1) 60 cm^3
(2) 100 cm^3
(3) 130 cm^3
(4) 160 cm^3

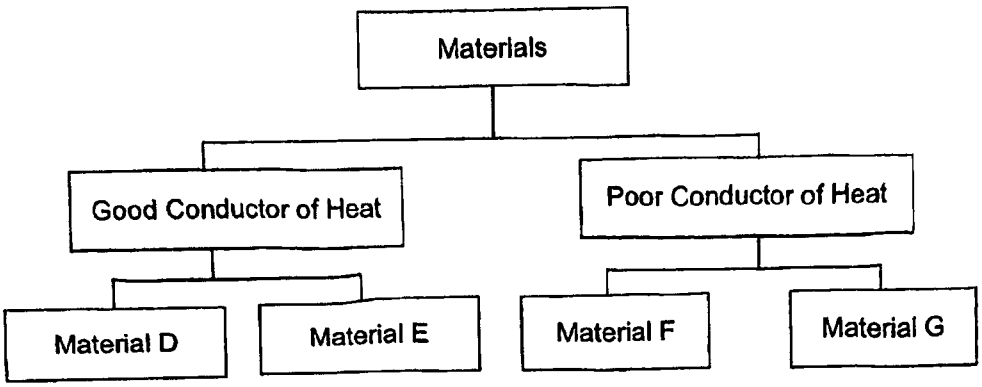
20 Hui Ying set up an experiment as shown. She filled the syringe with some water.



What will happen to the volume of air and water when the plunger is pushed down?

	Volume of air	Volume of water
(1)	decreases	remains the same
(2)	decreases	decreases
(3)	increases	increases
(4)	remains the same	decreases

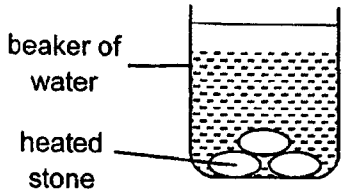
21 Study the classification chart below carefully.



Which of the following correctly shows the materials that are represented by the letters D, E, F and G?

	D	E	F	G
(1)	steel	rubber	wood	copper
(2)	steel	copper	wood	rubber
(3)	wood	copper	steel	rubber
(4)	wood	rubber	steel	copper

22 Mr Lim heated some identical stones to 90°C and placed different number of stones into four beakers of water.

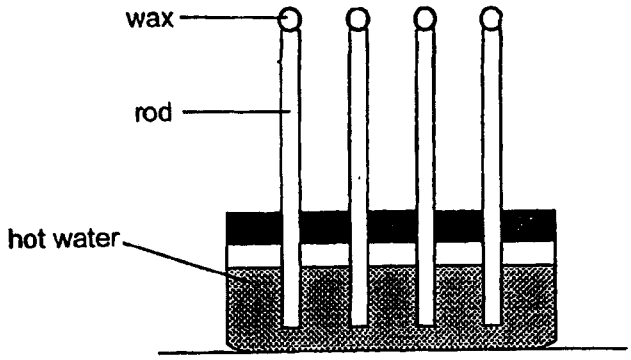


Beaker	Volume of water (ml)	Number of stones
A	100	2
B	100	3
C	200	1
D	400	3

Which beaker of water will record the highest temperature?

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

23 Dave wanted to find out which rod was the best conductor of heat. He placed four different rods in a container of hot water. Next, he placed a ball of wax at the top of each rod. Then, he recorded the time taken for the wax to melt.

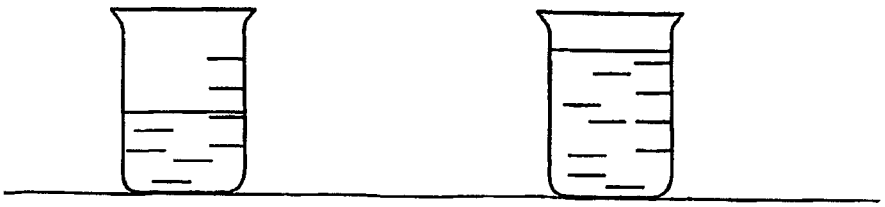


To conduct a fair test, which of the following variables must he keep the same?

A Size of wax
B Length of rod
C Material of rod
D Time taken for the wax to melt

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

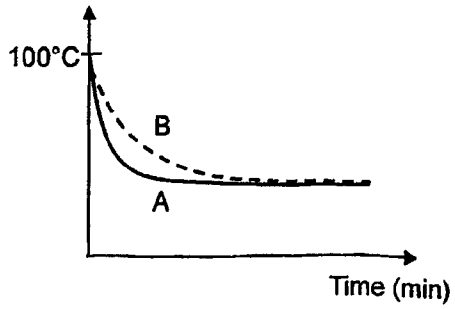
24 Mark placed two empty identical containers, A and B, on a table. Both containers were at room temperature initially. He poured 500 cm^3 of boiling water into container A and 1000 cm^3 of boiling water into container B.



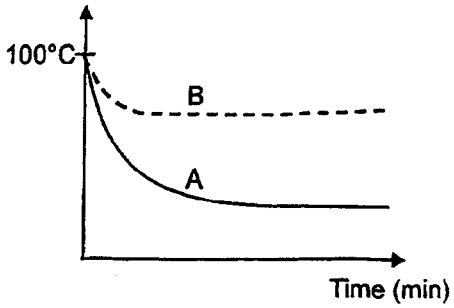
container A container B

The temperatures of the water in A and B were recorded every minute for some time. Which of the following shows the correct graph for his results?

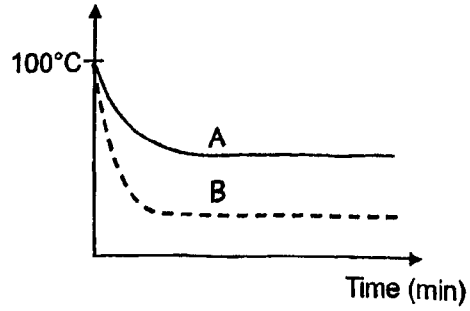
(1) Temperature



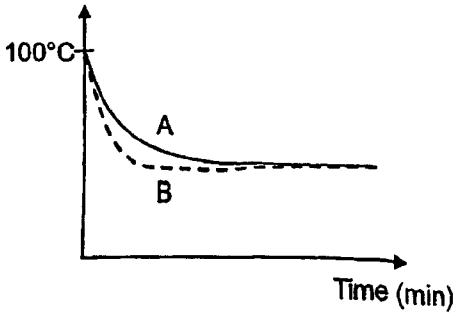
(2) Temperature



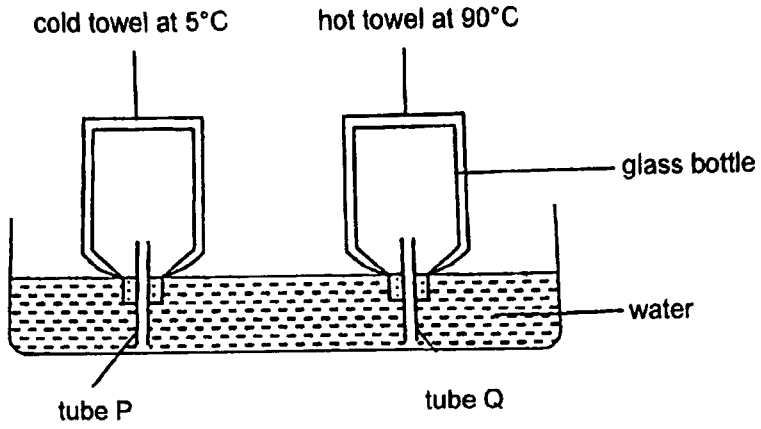
(3) Temperature



(4) Temperature



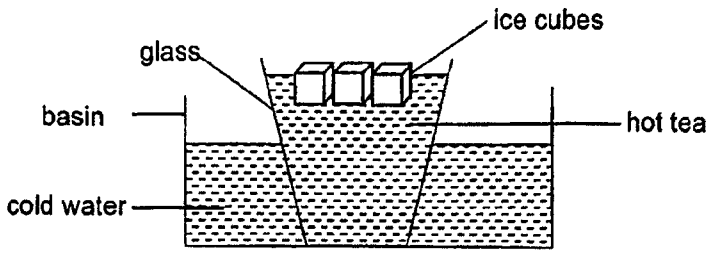
25 Ali wrapped two empty glass bottles with identical towels of different temperatures. He then set up the experiment using the bottles as shown.



What would Ali observe after 5 minutes?

	Observations	
(1)	Water entered tube P.	Water entered tube Q.
(2)	Bubbles escaped from tube P.	Water entered tube Q.
(3)	Water entered tube P.	Bubbles escaped from tube Q.
(4)	Bubbles escaped from tube P.	Bubbles escaped from tube Q.

26 Ron wanted to cool his glass of hot tea. He added ice cubes into the glass and put it into a basin of cold water as shown.

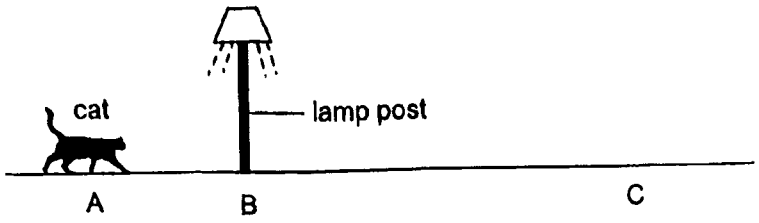


Ron observed the set-up until all the ice cubes had melted.
Which item(s) gained heat during the experiment?

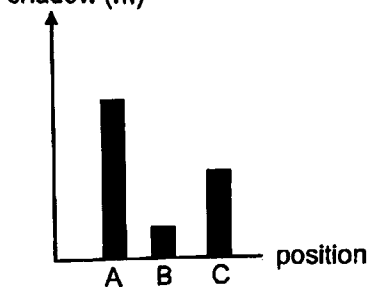
A ice
B hot tea
C cold water

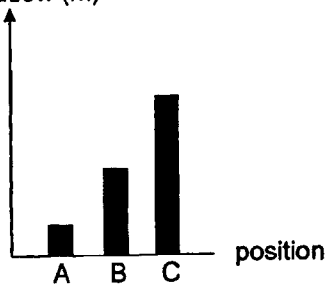
(1) A only
(2) A and C only
(3) B and C only
(4) A, B and C

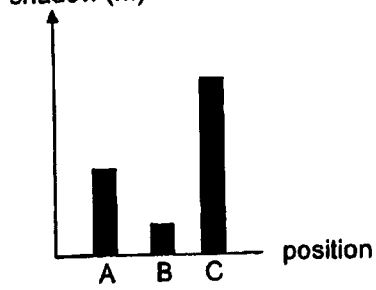
27 A cat walked along a street on a dark night from position A to position C as shown below. There was only one lit lamp post on the street at position B.

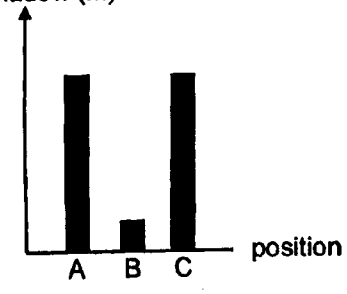


Which one of the following graphs shows the length of the cat's shadow as it walked from position A to position C?

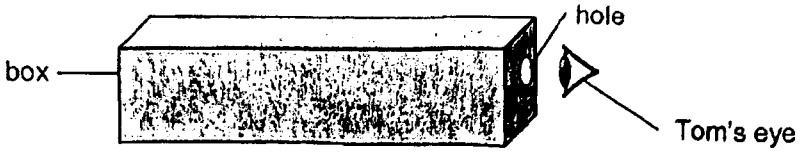
(1)


(2)


(3)


(4)


28 Tom placed a ball in a box and covered the box. He made a hole at the side of the box and light could only enter through the hole. Tom then looked through the hole but could not see the ball inside the box.



Which of the following statements explains why Tom was not able to see the ball in the box?

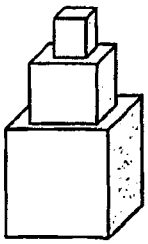
(1) The ball is a light source.

(2) The ball did not allow light to pass through.

(3) The ball allowed most light to pass through.

(4) There was not enough light from the ball entering Robert's eyes.

29 The diagram shows a wooden toy.



Which of the following are possible shadows formed by the wooden toy?

A 

B 

C 

D 

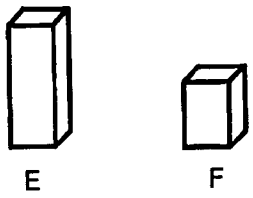
(1) A and B only

(2) A and C only

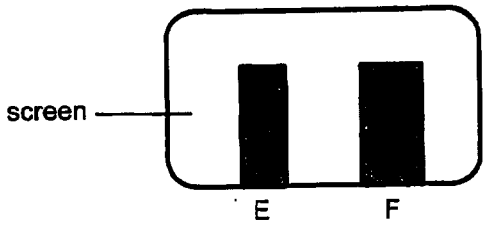
(3) C and D only

(4) A and D only

30 Danny conducted an experiment using two wooden blocks, E and F, of different heights to investigate the length of shadows.

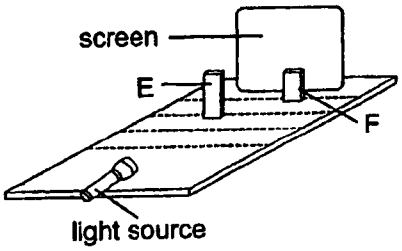


The diagram shows the shadows of E and F on a screen.

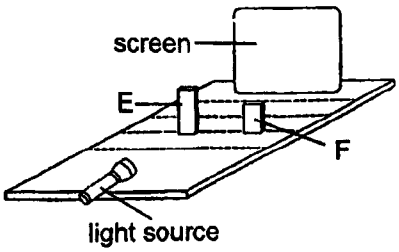


Based on the above diagram, which of the following shows the correct set-up that Danny used to form the shadows?

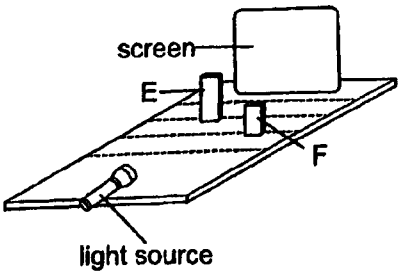
(1)



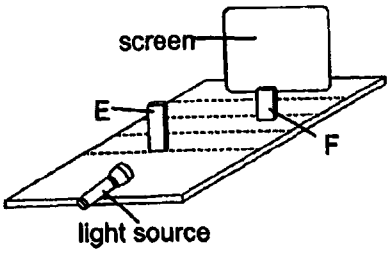
(2)



(3)



(4)



(Go on to Booklet B)

Anglo-Chinese School
(Primary)
A Methodist Institution
(Founded 1886)

END-OF-YEAR EXAMINATION 2025
SCIENCE
PRIMARY FOUR
BOOKLET B

Name: _____ ( ) **Class: Primary 4** ____

Date: 30 October 2025 **Total Time for Booklets A and B: 1 h 45 min**

_____
Parent's/Guardian's signature

INSTRUCTIONS TO CANDIDATES
1. Write your name, index number and class in the spaces provided.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Write your answers in this booklet.

BOOKLET	MAX MARKS	MARKS OBTAINED
A	60	
B	40	
Total	**100**	

This booklet consists of 12 printed pages including this cover page.

For questions **31 to 42**, 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 Draw a line to match each part of the digestive system to its function. [3]

Part	Function
	• absorbs digested food into the blood
small intestine •	• chews food into smaller pieces and mixes them with saliva
gullet •	
	• pushes food from the mouth to the stomach
large intestine •	
	• absorbs water from undigested food

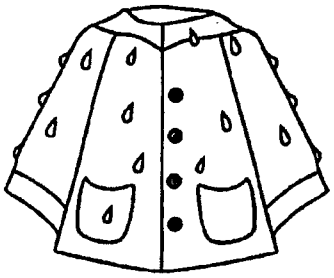
32 Classify the following into matter and non-matter. [3]

shadow	sand	air

matter	non-matter

SCORE	/ 6

33 The diagram shows a raincoat. It has water droplets on it.



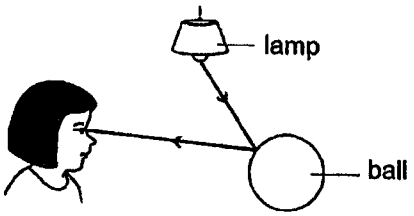
Fill in the blanks using the correct words in the box.

magnetic	absorb	repel	waterproof

(a) The raincoat does not _____ water. [1]

(b) The raincoat is made of a _____ material. [1]

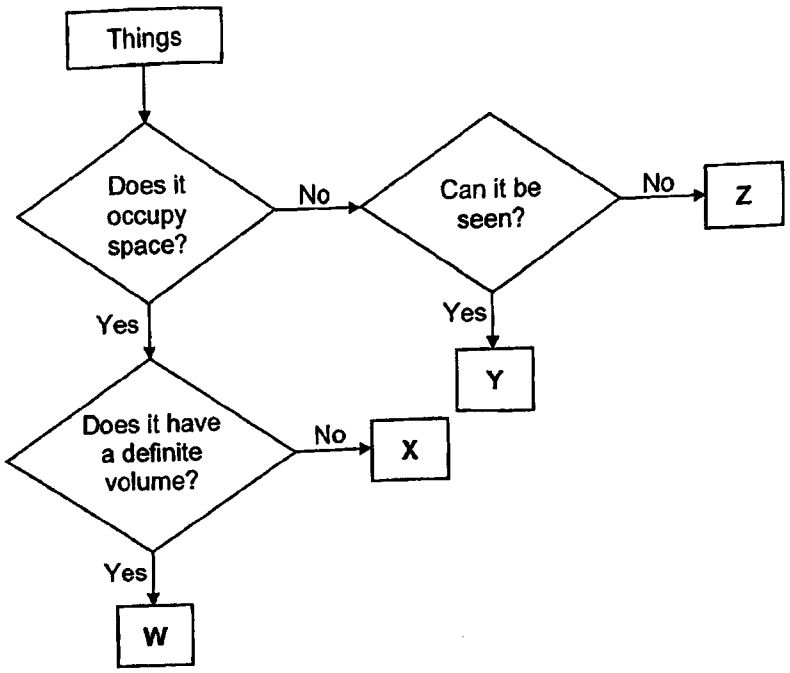
34 The diagram below shows how Jane sees the ball.



The _____ from the lamp is _____ by the ball and enters Jane's eye. [2]

SCORE	/ 4

35 Study the flow chart below carefully.

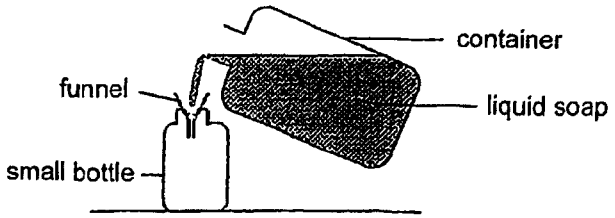


(a) In which group (W, X, Y or Z) would the following items be classified? [1]

Item	Group
coffee	
sound	

5

Jane wanted to transfer some liquid soap from a container into a small bottle as shown.



She started pouring the liquid soap carefully into the small bottle using a funnel. At first, she noticed that the soap entered the small bottle easily. After some time, she noticed that the soap flowed into the bottle slowly and it started to overflow from the funnel.

(b) Explain why some soap was able to enter the small bottle easily at first. [1]

_____

_____

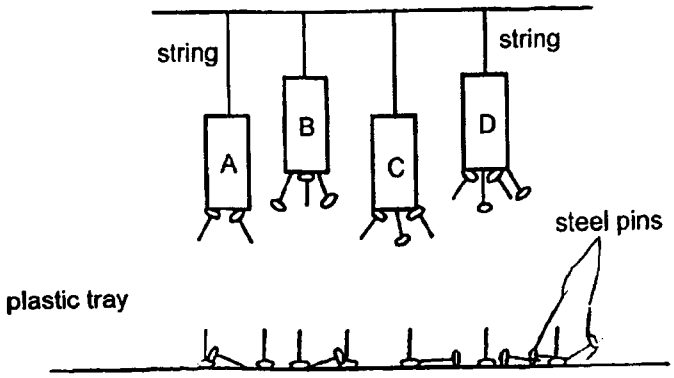
(c) Explain why the soap did not flow easily into the small bottle after some time and overflowed the funnel. [1]

_____

_____

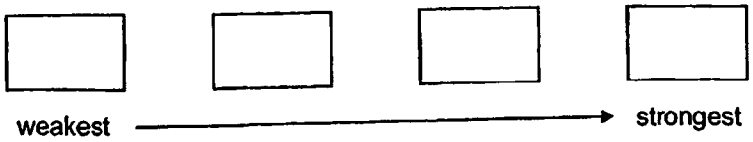
SCORE	3

36 John hung magnets A, B, C and D from strings of two different lengths as shown.



He placed a plastic tray of steel pins directly below the magnets and different numbers of pins were attracted to the magnets.

(a) Based on the diagram above, arrange the magnets, A, B, C and D, according to their magnetic strength from the weakest to the strongest. [1]

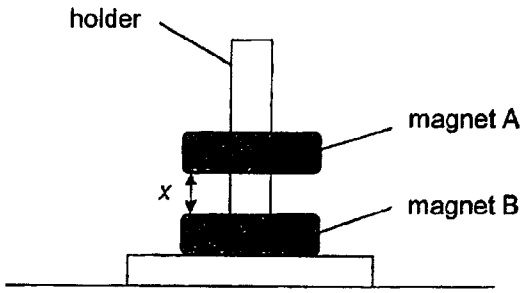


(b) John changed all the steel pins to copper pins and conducted the same experiment. Would he be able to determine the strength of the magnets? Explain why. [1]

_____

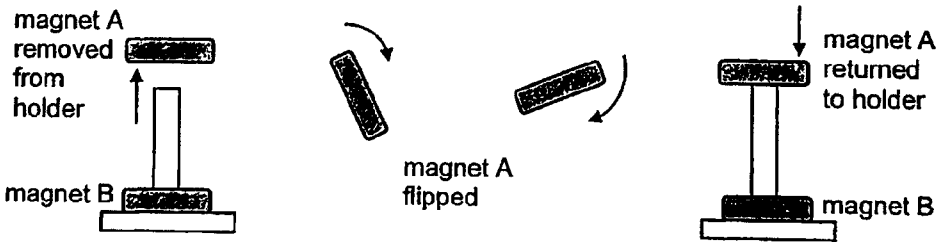
_____

John conducted another experiment by placing two ring magnets, A and B, through a holder as shown. Magnet A was observed to float above magnet B at a distance, *x*.



(c) How would the distance between the magnets, *x*, change when magnet B was replaced with a stronger magnet. Explain why. [2]

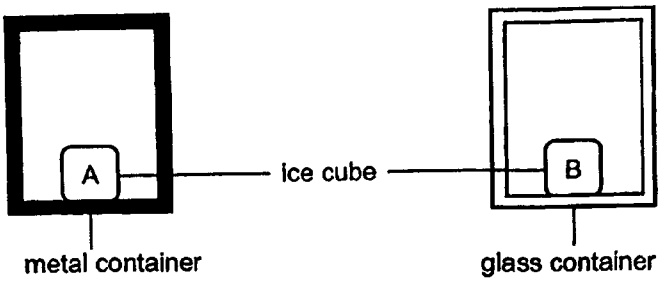
John removed magnet A from the holder. He flipped and returned it to the holder as shown.



(d) Would magnet A still float above magnet B? Explain why. [1]

SCORE	5

37 Gary had a metal container and a glass container of the same thickness as shown. He placed a similar ice cube into each of the containers. Both containers were left in the same room.



(a) Which ice cube, A or B, would more likely be the first to melt completely? [1]

_____

(b) Explain your answer in part (a). [2]

_____

_____

_____

(c) Gary wanted to conduct another experiment to find out if the size of the container affects how fast the ice melts.

Suggest the two changes he should make to the set-ups. [2]

(i) _____

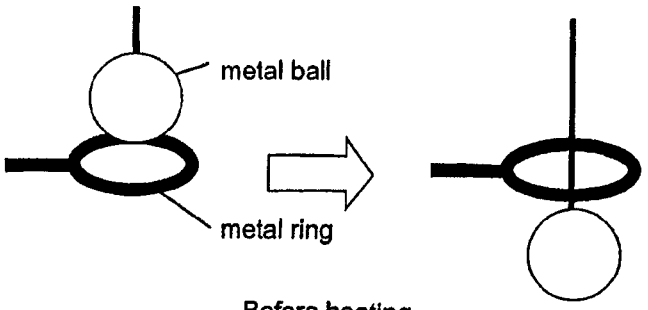
_____

(ii) _____

_____

SCORE	/ 5

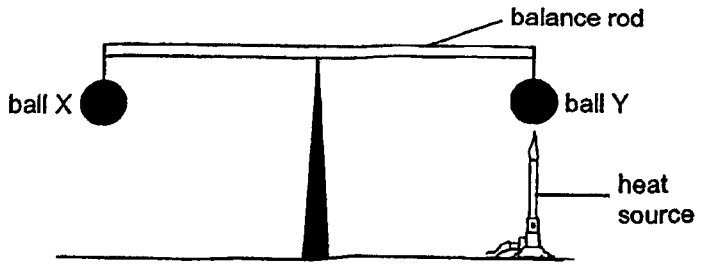
38 James had a metal ball and a metal ring. Before he heated the metal ball over a flame, the ball could pass through the metal ring as shown.



Before heating

(a) State what happens when he tried to put the metal ball through the metal ring after heating the metal ball for five minutes. Explain why. [2]

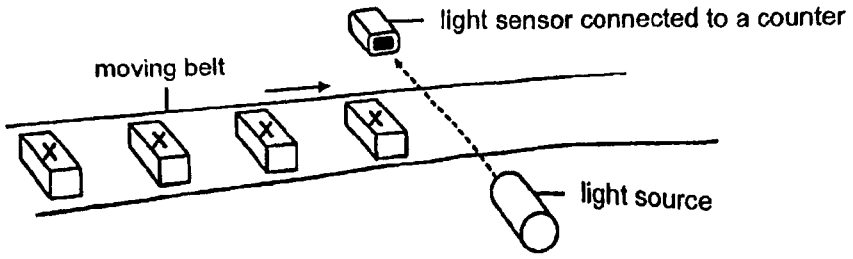
James then hung two identical metal balls, X and Y, on a balance rod. A heat source was placed under ball Y.



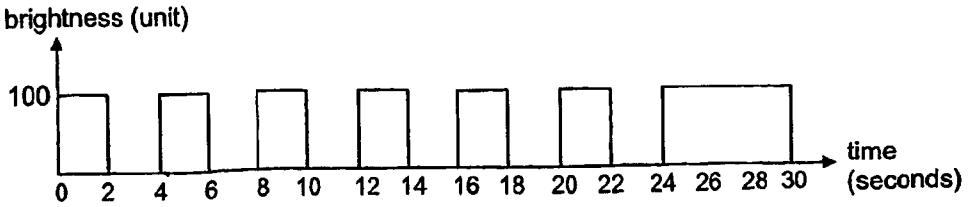
(b) How would the balance of the balls change after five minutes? Explain why. [2]

SCORE	/4

39 The set-up shows how a factory uses a light sensor to count the number of identical objects X on a moving belt.



Whenever object X comes between the light source and light sensor, object X completely blocks the light from reaching the sensor. The graph below shows the amount of light detected by the light sensor over 30 seconds.



(a) Based on the graph, how many objects passed the sensor in the first 12 seconds? [1]

_____

(b) Explain your answer in part (a). [2]

_____

_____

_____

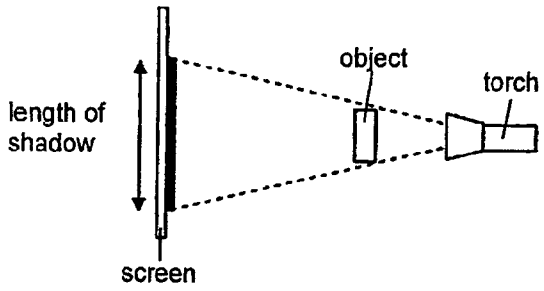
(c) Give a reason why the reading stayed at 100 units from 24 to 30 seconds. [1]

_____

_____

SCORE	/ 4

40 When an object was placed between a torch and a screen, a shadow was formed as shown.



(a) Explain how the shadow is formed on the screen. [2]

_____

_____

(b) State how the length of the shadow changed when the torch is moved nearer to the object. [1]

_____

(c) Without changing the apparatus and the distance between the object and the torch, suggest a way to decrease the length of the shadow. [1]

_____

41 Refer to the following statement:

> The mouth does not help with digestion.

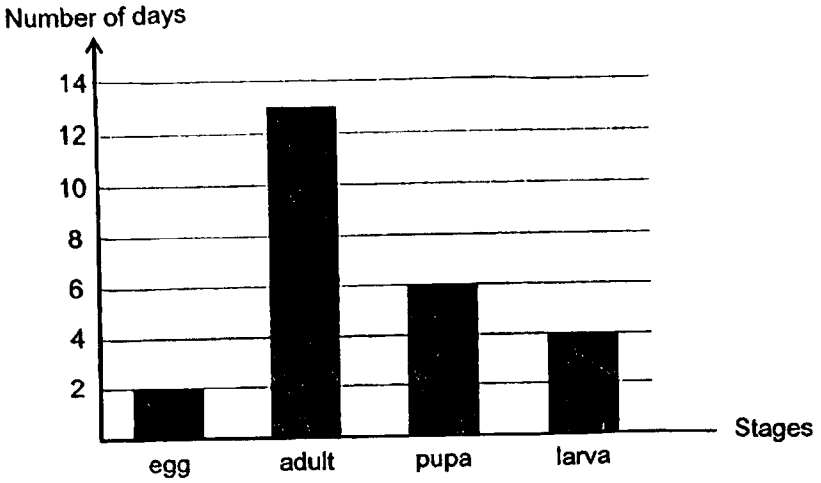
Do you agree with the above statement? Explain your answer. [2]

_____

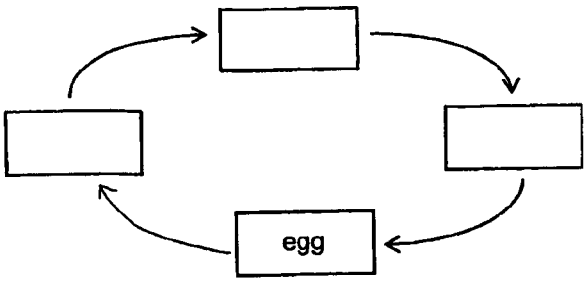
_____

SCORE	/ 6

42 The graph below shows the number of days in each stage of the life cycle of organism X. The stages of the life cycle are not in the correct order.



(a) Complete the diagram below to show the stages of the life cycle of organism X. [1]



(b) How many days would organism X take to become an adult after the egg has hatched? [1]

_____

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

_____

End of Paper

SCORE	/ 3

Anglo-Chinese School
(Primary)
A Methodist Institution
(Founded 1886)

2025 P4 End-Of-Year Examination Corrections Template

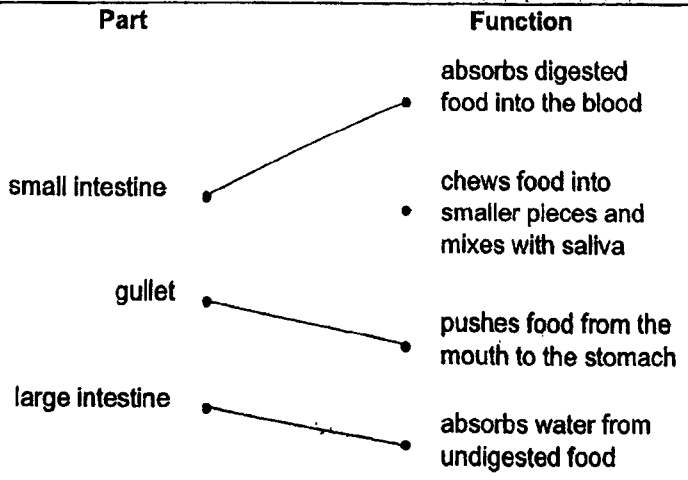
Name: _____ ( ) **Class: Primary 4** ____

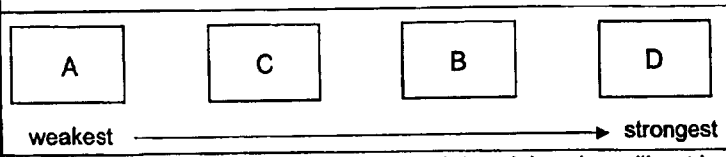
Date: _____

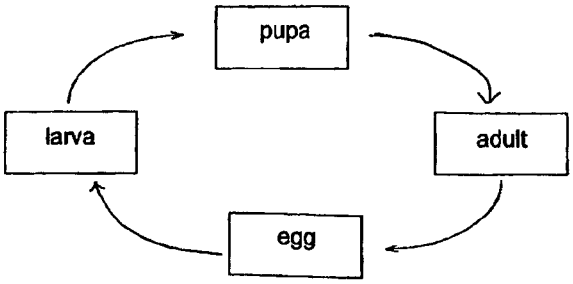
Booklet A [1 correct – 2 marks]

Qn	Ans	Qn	Ans	Qn	Ans	Qn	Ans	Qn	Ans	Qn	Ans
1	3	6	2	11	4	16	3	21	2	26	2
2	3	7	3	12	3	17	1	22	2	27	3
3	2	8	3	13	2	18	3	23	1	28	4
4	4	9	4	14	1	19	3	24	1	29	1
5	1	10	2	15	2	20	1	25	3	30	3

Booklet B

Qn/ Part	Suggested Answers
31	

<table>
<tr><td>32</td><td>Matter: air, sand
Non-matter: shadow</td></tr>
<tr><td>33(a)</td><td>absorb</td></tr>
<tr><td>33(b)</td><td>waterproof</td></tr>
<tr><td>34</td><td>The light from the lamp is <u>reflected</u> by the ball and enters Mary's eyes.</td></tr>
<tr><td>35(a)</td><td><table><tr><th>Item</th><th>Group</th></tr><tr><td>coffee</td><td>W</td></tr><tr><td>sound</td><td>Z</td></tr></table></td></tr>
<tr><td>35(b)</td><td>When the liquid soap was first poured into the funnel, some of the air in the bottle escaped making <u>space</u> for the soap to enter.</td></tr>
<tr><td>35(c)</td><td>As more soap is poured, the funnel is <u>blocked</u> by the soap, and the liquid soap cannot <u>displace</u> the air in the small bottle.</td></tr>
<tr><td>36(a)</td><td> 
</td></tr>
<tr><td>36(b)</td><td>No. Copper is a <u>non-magnetic</u> material and the pins will not be attracted to the magnets.</td></tr>
<tr><td>36(c)</td><td>Increase. Magnet B and magnet A will <u>repel</u> more.</td></tr>
<tr><td>36(d)</td><td>No. The unlike poles (of the magnets) are facing each other and are <u>attracted</u> to each other.</td></tr>
<tr><td>37(a)</td><td>Ice cube A</td></tr>
<tr><td>37(b)</td><td>Metal is a <u>better</u> conductor of heat than glass.
The ice in the metal container gained heat <u>faster</u> from the surrounding air and melted first.</td></tr>
<tr><td>37(c)</td><td>(i) Use both containers made of the <u>same</u> material.
(ii) Use a container that is larger or smaller than the other.</td></tr>
<tr><td>38(a)</td><td>The metal ball is <u>unable</u> to pass through the metal ring. The metal ball <u>expanded</u> after it gained heat from the flame.</td></tr>
<tr><td>38(b)</td><td>The balance will remain level. Ball Y gained heat and expanded, only its size increased, but the <u>mass</u> remained unchanged.</td></tr>
</table>

39(a)	3
39(b)	When object X blocks the light from the sensor, the sensor detects no light and brightness recorded as zero. The number of times the zero is recorded is the number of objects that passed the sensor and counted by the counter.
39(c)	There are no more objects X blocking the light source and sensor.
40(a)	Light travels in a straight line. Light cannot pass through the object.
40(b)	The length of the shadow increased.
40(c)	Move the screen towards the object.
41	No. The teeth break down food into smaller pieces, making swallowing easier. This allows more surface area of the food to be in contact with the digestive juices for faster digestion.
42(a)	
42(b)	10 days
42(c)	The larva can feed on food, but the pupa does not feed.