MAHA BODHI SCHOOL
2018 SEMESTRAL ASSESSMENT 1
PRIMARY 5 SCIENCE
(BOOKLET A)

Name : _____ ( )

Class : Primary 5 _____

Date : 8 May 2018

Total Duration for Booklets A and B : 1 h 45 min

INSTRUCTIONS TO CANDIDATES:

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

This booklet consists of 21 printed pages.

BOOKLET A : [28 x 2 marks = 56 marks]

For each question from 1 to 28, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). **Shade your answer on the Optical Answer Sheet.**

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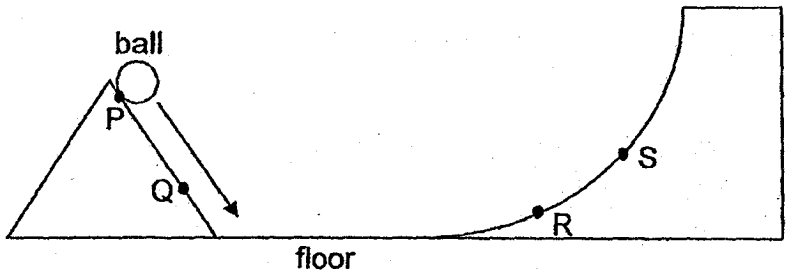
1. A ball at rest was released from the top of a slope at point P. It rolled down along the slope to Q, then to R before coming to a stop at S and sliding back down.



Which of the following statements about the ball is/are true?

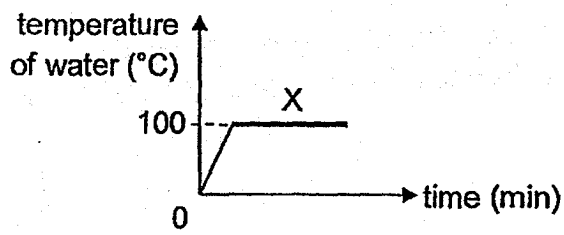
A. The ball had only kinetic energy at point P.
B. The ball had both potential and kinetic energy at point R.
C. The ball did not have kinetic energy when it reached point S.
D. The amount of potential energy the ball had at point P was larger than that at point Q.

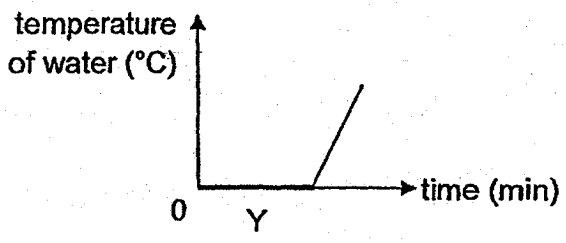
(1) A only
(2) A and D only
(3) B and C only
(4) B, C and D only

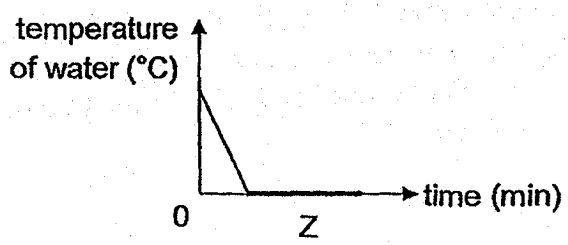
2. Which of the following correctly shows the useful form of energy when the energy source is used for the purpose as stated?

	Energy source	Purpose of usage	Useful form of energy
(1)	stretched rubber band	shoot an object	heat energy
(2)	battery	move a	kinetic energy
(3)	food	run a marathon	sound energy
(4)	charcoal	cook a fish	light energy

3. The graphs below show how the temperature of water changed over three different periods of time, X, Y and Z.







Which two periods of time show that water was melting and freezing?

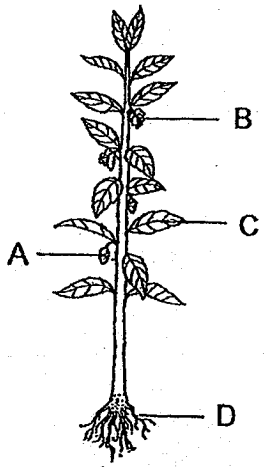
	melting	freezing
(1)	X	Y
(2)	Y	Z
(3)	Z	X
(4)	Z	Y

4. Substance E has a melting point of 15°C and a boiling point of 337°C.

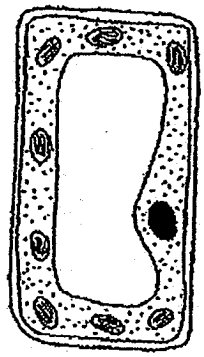
Which one of the following shows the correct state of substance E at 10°C and 100°C?

	10°C	100°C
(1)	solid	liquid
(2)	solid	gas
(3)	liquid	gas
(4)	liquid	liquid

5. The diagram below shows a plant and a cell that is taken from the plant.



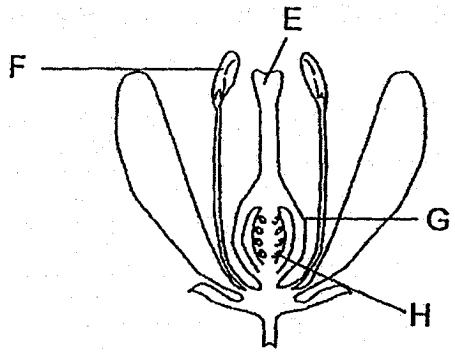
plant


plant cell

Which plant part, A, B, C or D, is the plant cell most likely to be taken from?

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

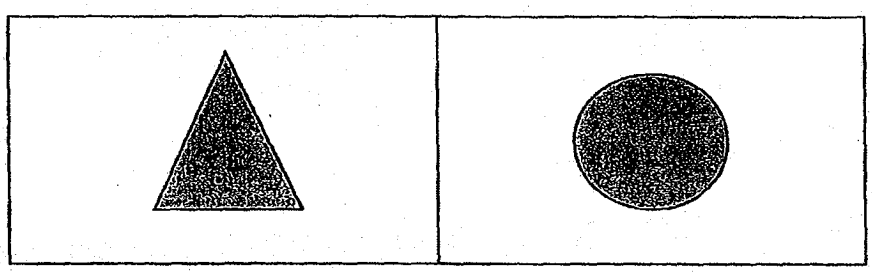
6. The diagram below shows the cross-section of a flower.



Which part of the flower represents the male part?

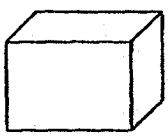
(1) E
(2) F
(3) G
(4) H

7. The diagram below shows the shadows cast by an object when light was shone at it from different sides.

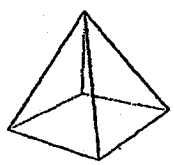


Which of the following objects below could produce such shadows?

(1)



(2)



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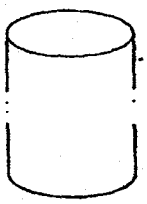
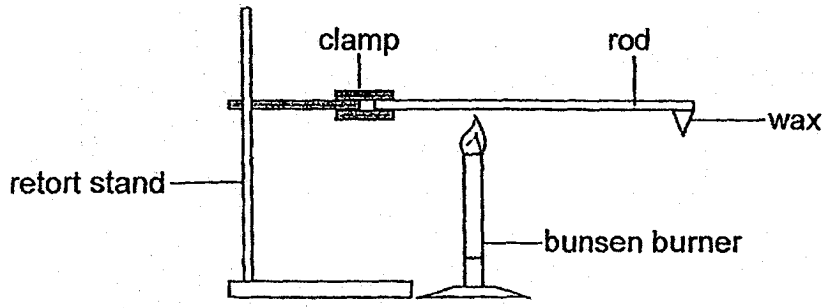


(4)

8. An experiment was conducted to find out how quickly heat was conducted through rods made of different materials. The set-up is as shown below.



Using rods of different materials, the time taken for the wax to start melting is shown in the table below.

Material of rod	Time taken for wax to start melting (s)
H	75
I	35
J	56
K	113

Based on the results, which of the following shows the correct order of the materials starting from the best conductor of heat to the poorest conductor of heat?

	Best conductor of heat ⟶ Poorest conductor of heat			
(1)	H	I	J	K
(2)	I	J	H	K
(3)	J	K	I	H
(4)	K	H	J	I

9. Nick filled two balloons with equal volume of air and hung them onto a stick as shown in Diagram 1.

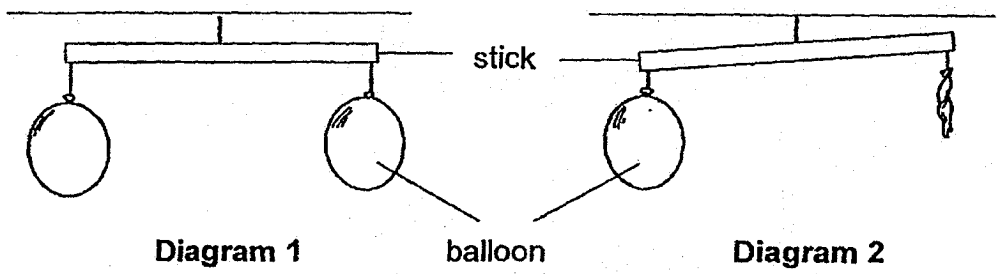


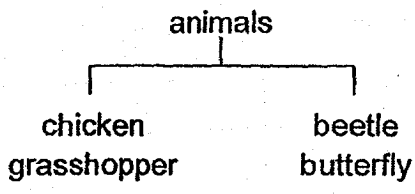
Diagram 1 **Diagram 2**

Diagram 2 shows the position of the stick after Nick had released all the air from one balloon.

Based on the observation, what could Nick conclude about the property of air?

(1) It has mass.
(2) It can be compressed.
(3) It has no definite shape.
(4) It has no definite volume.

10. Some animals are classified as shown below.



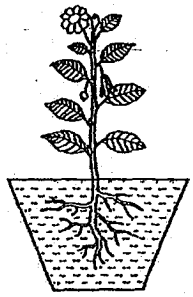
Which of the following characteristics is used to classify the animals?

(1) the number of legs
(2) the way they reproduce
(3) the number of body parts
(4) the number of stages in their life cycles

11. Which of the following organ systems is wrongly matched to the function?

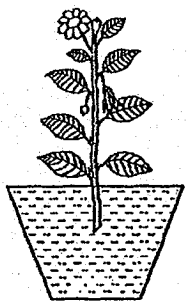
	Organ system	Function
(1)	skeletal	supports our body
(2)	muscular	moves different parts of our body
(3)	respiratory	takes in and removes air from our body
(4)	circulatory	removes undigested food from our body

12. Lionel wanted to find out if the presence of leaves on a plant would affect the amount of water absorbed. He used the following set-up in his experiment.

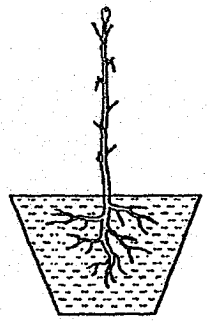


Which of the following set-ups should he use to compare so as to confirm the results of his experiment?

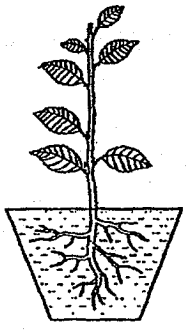
(1)



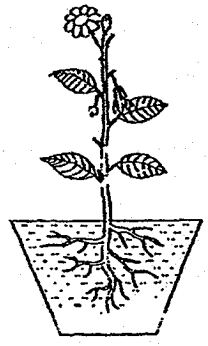
(2)



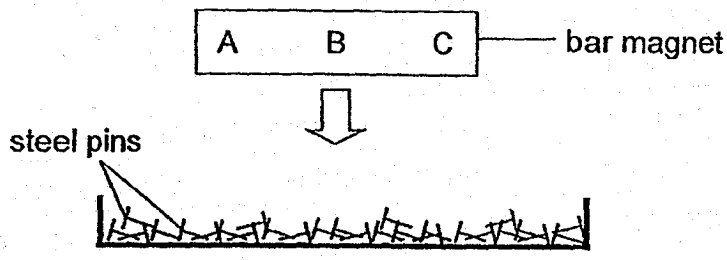
(3)



(4)



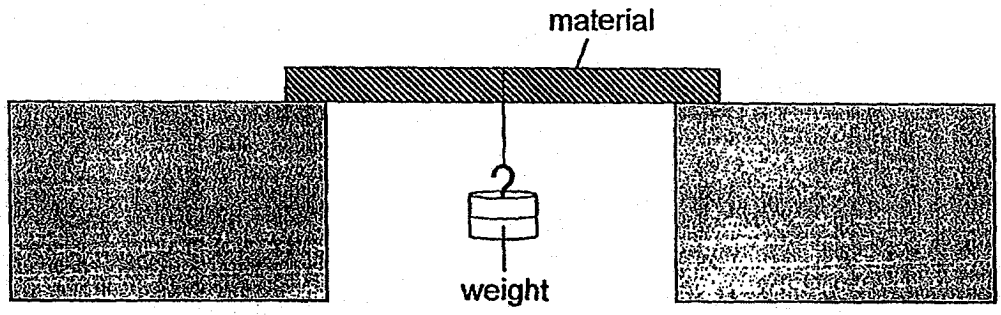
13. A bar magnet is lowered onto a tray of steel pins.



Which of the following most likely shows the number of pins attracted to the magnet at positions A, B and C?

	A	B	C
(1)	4	14	5
(2)	8	10	13
(3)	9	9	9
(4)	12	2	13

14. Aden conducted an experiment using the set-up shown below.

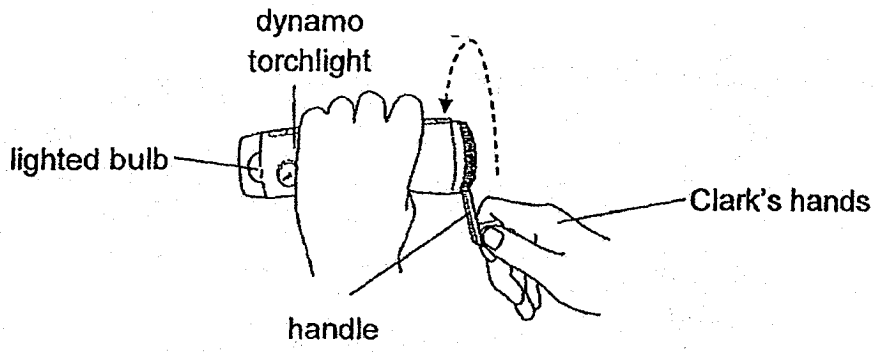


Weights were added until the material broke. He repeated the experiment using other materials.

Which property of the materials was Aden trying to test?

(1) strength
(2) flexibility
(3) waterproof
(4) transparency

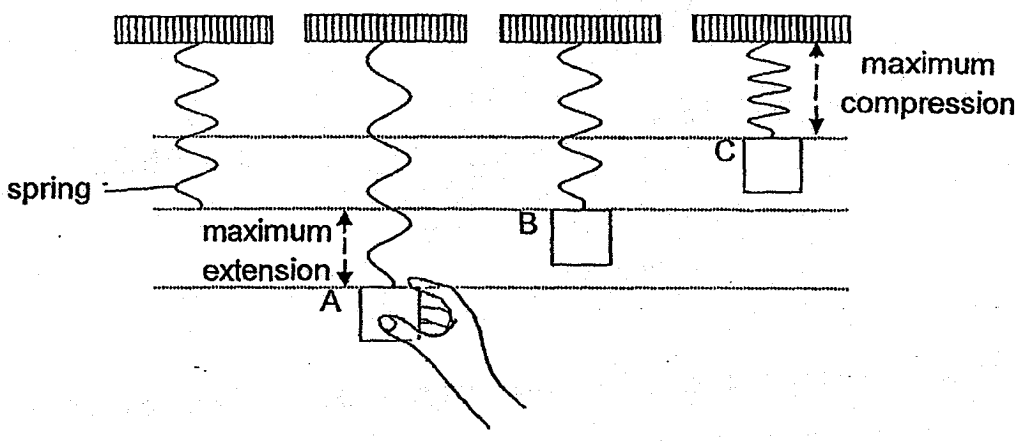
15. As Clark turned the handle of the dynamo torchlight quickly, the torchlight warmed up and then lighted up.



Which of the following shows the energy possessed by the objects correctly?

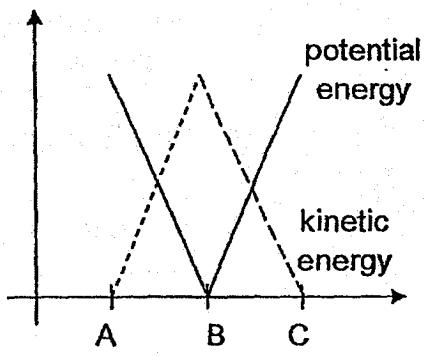
	Clark's hands	Handle	Lighted bulb
(1)	potential energy	kinetic energy	light energy
(2)	potential energy	kinetic and potential energy	sound and heat energy
(3)	potential and kinetic energy	kinetic energy	heat and light energy
(4)	kinetic energy	kinetic and heat energy	light energy

16. A block was hung on a spring. When the block was pulled downwards until it reached point A, and then released, the block rose to point B and then to point C.

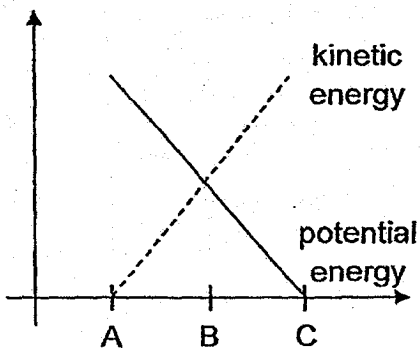


Which of the following graphs correctly shows how the potential energy and kinetic energy in the spring changed as it was compressed when the block moved from point A to C?

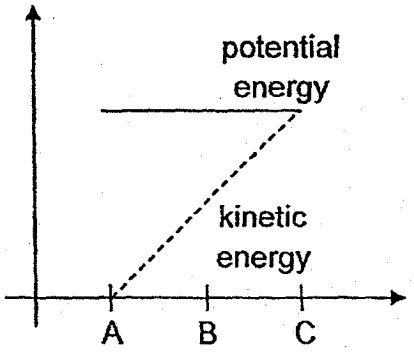
(1) Energy in the spring



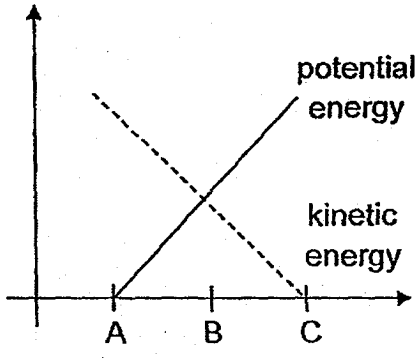
(2) Energy in the spring



(3) Energy in the spring



(4) Energy in the spring



17. Abu prepared four set-ups P, Q, R and S using equal volumes of water. The table below shows the different conditions of the set-ups at the start of the experiment.

	Set-up			
	P	Q	R	S
Temperature of water (°C)	60	30	60	30
Material of container	steel	plastic	plastic	steel

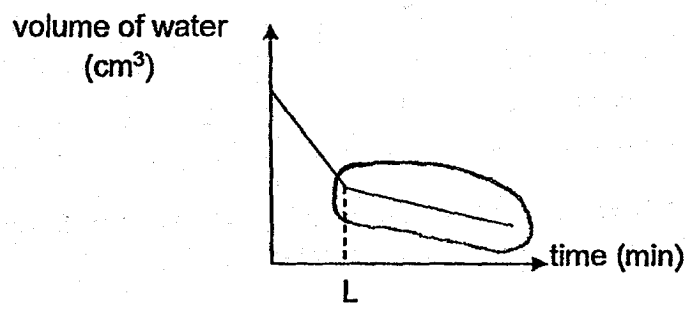
Abu wanted to investigate how the rate of evaporation of water would depend on the material of container and the temperature of water.

Which pairs of set-ups should he use in his investigations?

	To find out if the rate of evaporation depends on	
	material	temperature
(1)	P and R	Q and R
(2)	P and S	R and S
(3)	Q and R	P and S
(4)	Q and S	P and Q

18. Belle carried out an activity to find out what would affect the rate of evaporation of water. She left a cup of water near the window of her room. After L minutes, Belle made a change to the set-up.

The graph below shows the change in the volume of water left in the cup over the period of time.



Which of the following is a possible change made by Belle after L minutes?

(1) Changed the cup into a wider plate.
(2) Placed the set-up near a heat lamp.
(3) Changed the location to a hot and dark room.
(4) Placed the set-up away from her room window.

19. Four types of plants, G, H, I and J, were planted in an area as shown in Diagram A below.

A few years later, more of the four types of plants were found growing at different parts of the area as shown in Diagram B.

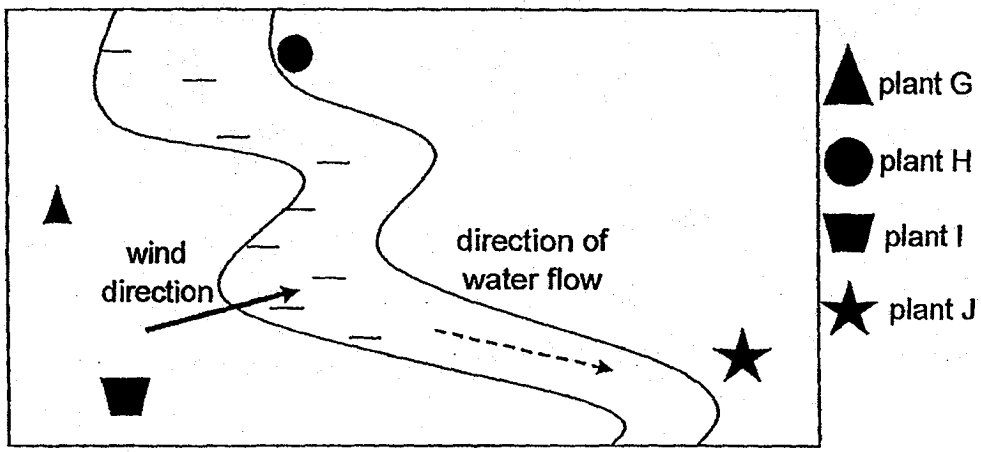


Diagram A

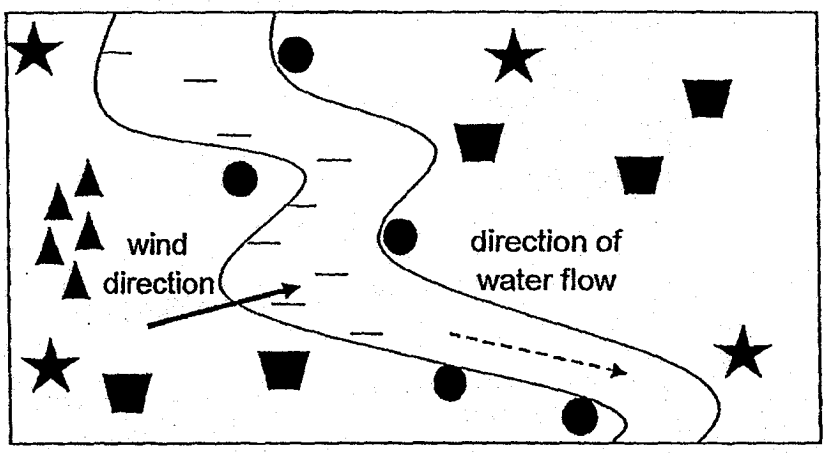
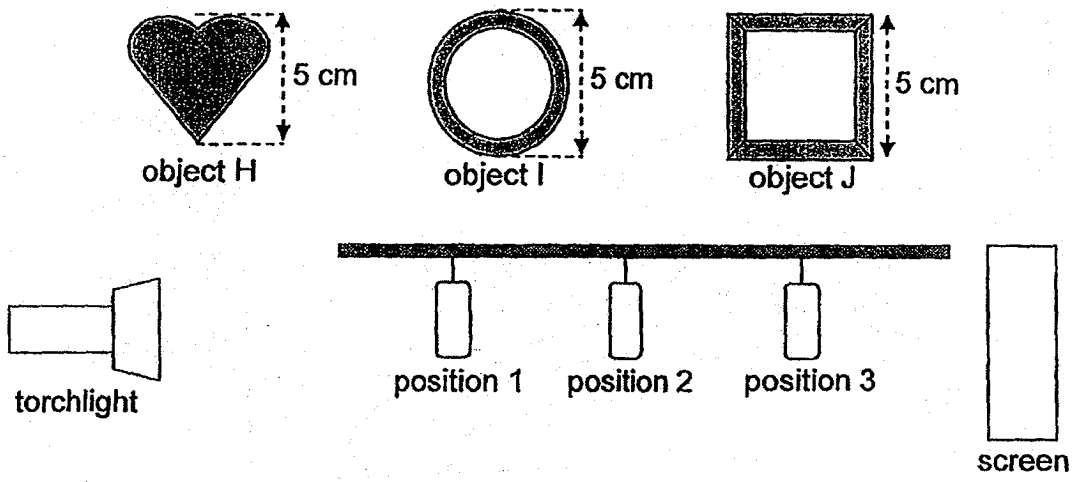


Diagram B

Based on the information given above, how are the fruits or seeds of each type of plant dispersed?

	Plant G	Plant H	Plant I	Plant J
(1)	wind	water	animal	splitting
(2)	splitting	water	wind	animal
(3)	water	animal	splitting	wind
(4)	animal	splitting	water	wind

20. Trevor set up the experiment as shown below. He shone light at the objects H, I and J which were placed at different positions. These objects were made of cardboard.

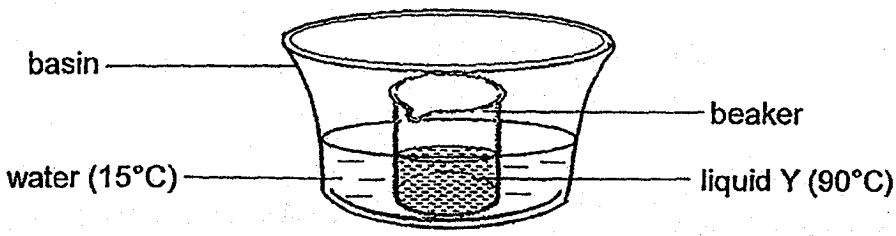


The diagram below shows the shadows that were seen on the screen.

Which of the following shows the correct positions of the objects during the experiment?

	Position 1	Position 2	Position 3
(1)	Object H	Object I	Object J
(2)	Object I	Object H	Object J
(3)	Object I	Object J	Object H
(4)	Object J	Object I	Object H

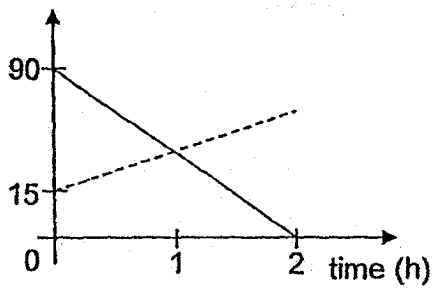
21. Xavier placed a beaker containing liquid Y at 90°C into a basin of cold water at 15°C as shown below. The set-up was left in a room for two hours. The temperature of both liquids was measured during this time.



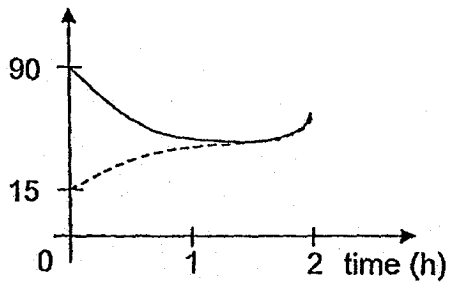
Room temperature: 25°C

Which of the following graphs correctly shows the change in temperature of liquid Y and water during the two hours?

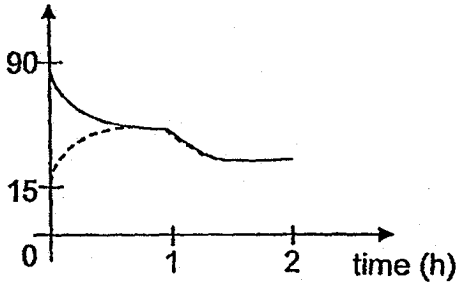
(1)



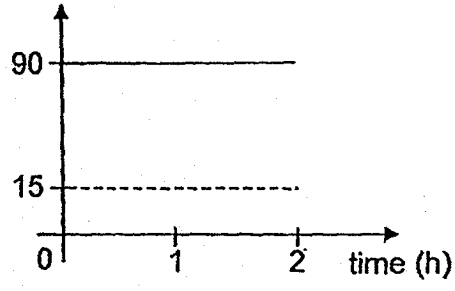
(2)



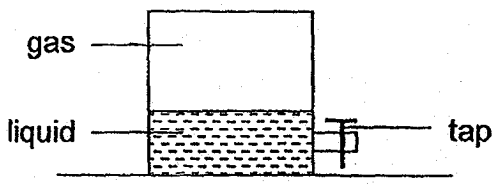
(3)



(4)



22. A sealed metal container as shown below stores some liquid and gas.

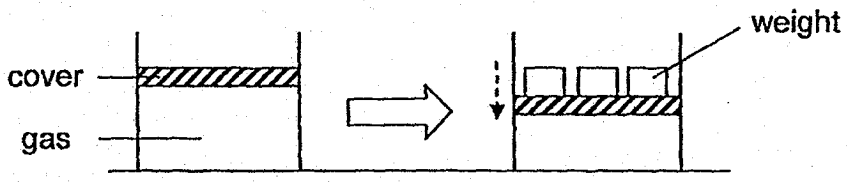


When some liquid is removed from the container, which one of the following is correct about the remaining gas in the container?

	Mass of gas	Volume of gas
(1)	increased	increased
(2)	increased	remained the same
(3)	remained the same	increased
(4)	remained the same	remained the same

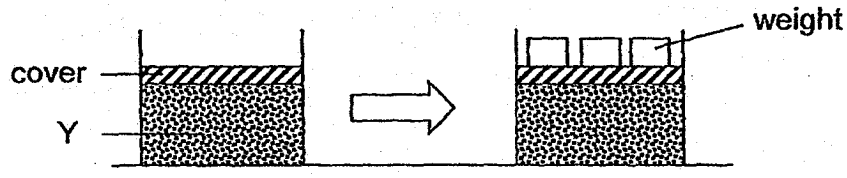
23. Cheshire conducted an experiment to find out the characteristics of two substances.

In set-up P, she observed that the cover moved downwards after she had placed weights on top of it.



set-up P

In set-up Q, Cheshire placed substance Y into a similar container. She observed that the cover did not move after weights were placed on top of it.



set-up Q

Based on her observations, what can Cheshire conclude about substance Y?

A. It occupies space.

B. It can be compressed.

C. It has a definite shape.

D. It has a definite volume.

(1) B only

(2) A and B only

(3) A and D only

(4) A, C and D only

24. The table below shows how temperature affects the amount of time spent by insect F in different stages of its life cycle.

	Duration (h)		
Temperature (°C)	**Egg stage**	**Larval stage**	**Pupal stage**
25	14	180	192
30	10	132	108
35	8	84	84

Based on the information, which of the following statements are correct?

A. Insect F has a three-stage life cycle.

B. As the temperature increases, more insect F dies.

C. The duration spent in larval stage is longer than egg stage.

D. As the temperature decreases, insect F takes a longer time to hatch.

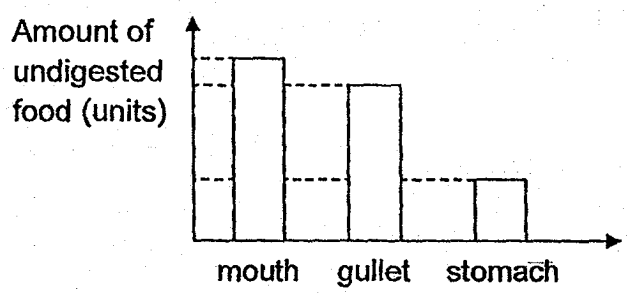
(1) A and B only

(2) B and C only

(3) C and D only

(4) B, C and D only

25. Donald ate some food. The graph shows the amount of undigested food left at each part before it moved to the next part of his digestive system



Based on the information, which of the statement(s) is/are correct?

A. Some food is digested in the gullet.

B. Further digestion takes place in the stomach.

C. The gullet and stomach produce digestive juices.

D. Undigested food is absorbed in the gullet and stomach.

(1) B only

(2) A and B only

(3) C and D only

(4) A, B and C only

26. Two metal bars, X and Y, and a bar magnet could be arranged as shown in Diagram 1.

Diagram 2 shows the observation when the three bars were rearranged. Bar Y dropped when the ends G and H were placed together.

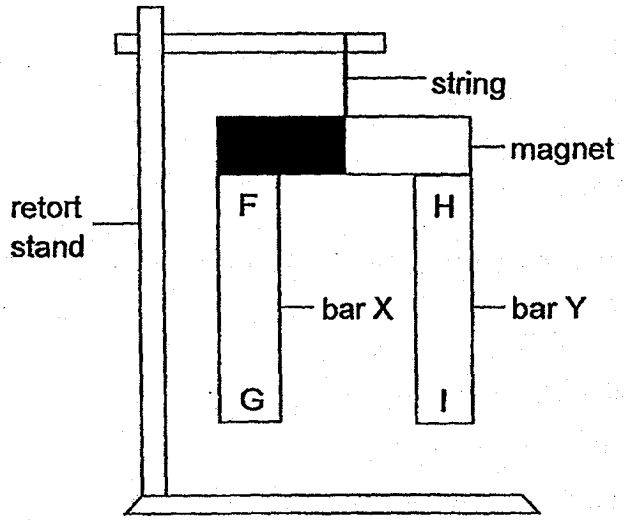


Diagram 1

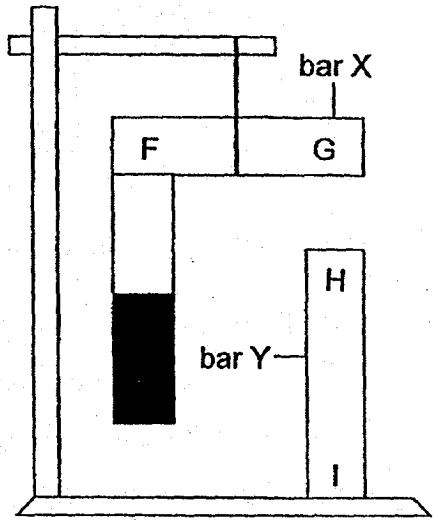


Diagram 2

Based on the observations, which of the following statements are correct?

A. X is a magnet.

B. Y is a magnet.

C. X is not a magnet but its material is magnetic.

D. Y is not a magnet but its material is magnetic.

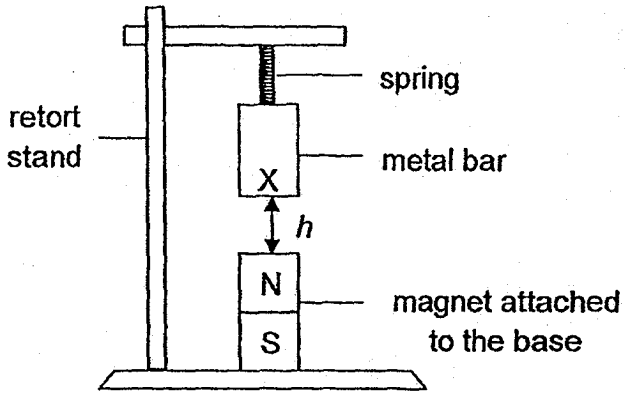
(1) A and B only

(2) A and D only

(3) B and C only

(4) C and D only

27. A metal bar was hung on a retort stand by a spring as shown below.



Which of the following predictions is most likely to be incorrect?

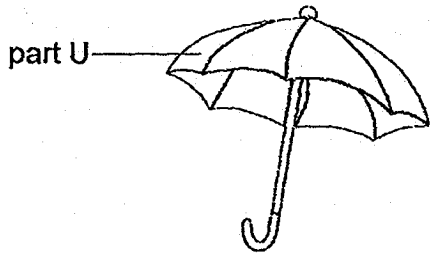
(1) If the metal bar is made of iron, *h* will decrease.

(2) If the metal bar is made of copper, *h* will increase.

(3) If X is the north pole of a bar magnet, *h* will increase.

(4) If X is the south pole of a bar magnet, *h* will decrease.

28. John wishes to design an umbrella to shelter him from the rain.



Which of the following materials shown in the table below is most suitable for making part U of the umbrella?

	Material	Able to tear easily	Able to absorb water	Allows light to pass through
(1)	J	✓	✓	✓
(2)	K	✓	×	×
(3)	L	×	✓	✓
(4)	M	×	×	✓

END OF BOOKLET A
GO ON TO BOOKLET B

MAHA BODHI SCHOOL
2018 SEMESTRAL ASSESSMENT 1
PRIMARY 5 SCIENCE
(BOOKLET B)

Name : _____ ( )

Class : Primary 5 _____

Date : 8 May 2018

Total Duration for Booklets A and B : 1 h 45 min

INSTRUCTIONS TO CANDIDATES:

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Write all your answers in this booklet.

Booklet	Marks Obtained	Max Marks
A		56
B		44
Total		**100**

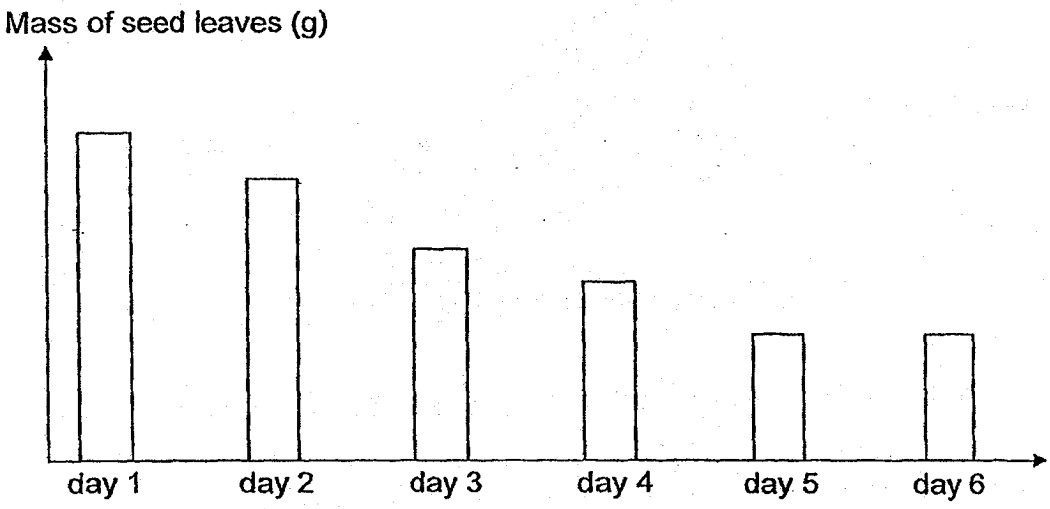
Parent's Signature : _____

This booklet consists of 19 printed pages.

BOOKLET B : [44 marks]
For questions 29 to 41, write your answers in this booklet.

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

29. The graph below shows how the mass of the seed leaves changed after the seed germinated.

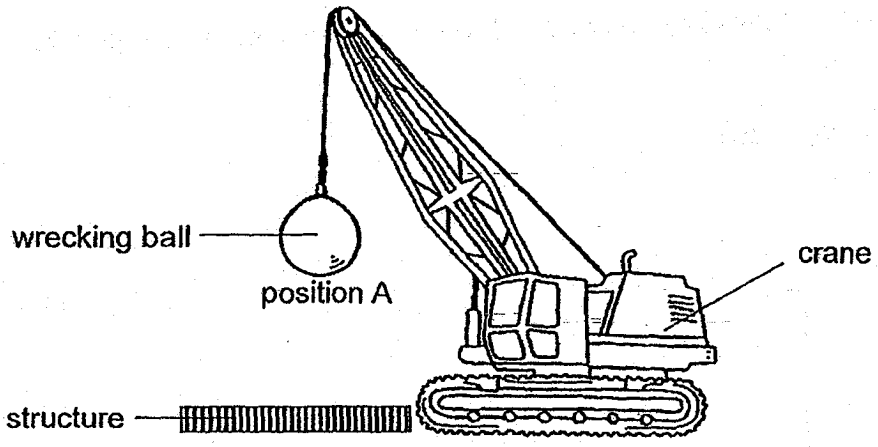


(a) State how the mass of the seed leaves changed as the number of days passed from day 1 to day 4. [1]

(b) What do you notice about the mass of the seed leaves from day 5 onwards? Explain why this happened. [2]

Marks : / 3

30. Wrecking balls are used at construction sites to break structures. The ball is lifted up by the crane to position A, as shown in the diagram, before it is allowed to drop freely to the structure.



(a) Name the energy possessed by the ball when it is at position A. [1]

_____

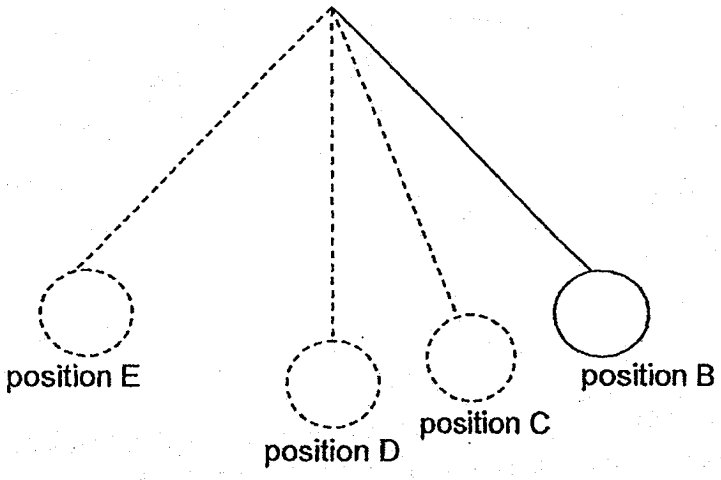
(b) Suggest how the set-up can be improved in order for the ball to break the structure faster. [1]

_____

_____

Marks : / 2

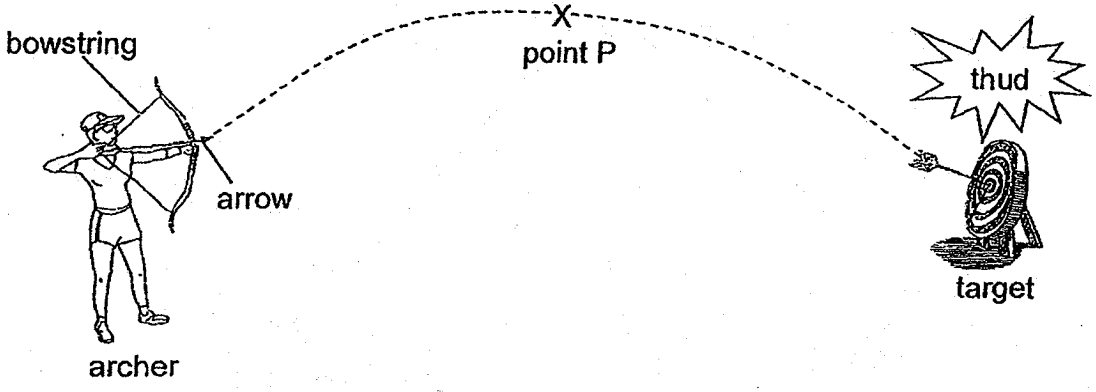
The ball can also be used in another manner shown in the diagram below. When the ball is raised and released at position B, it swings to position C, position D and then position E.



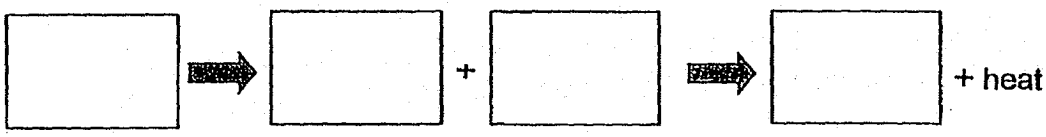
(c) Which position (C, D or E) should the swinging ball be at for it to break down a vertical wall most easily? Explain your answer. [2]

Marks: /2

31. An archer shot an arrow as shown in the diagram below. He pulled back the bowstring, together with the arrow, and then released it, allowing the arrow to hit the target.



(a) Fill in the boxes below to show the energy conversion involved in this activity starting from the time the bowstring was pulled. [2]



energy in the bowstring

energy in the arrow at point P

energy as the arrow hits the target

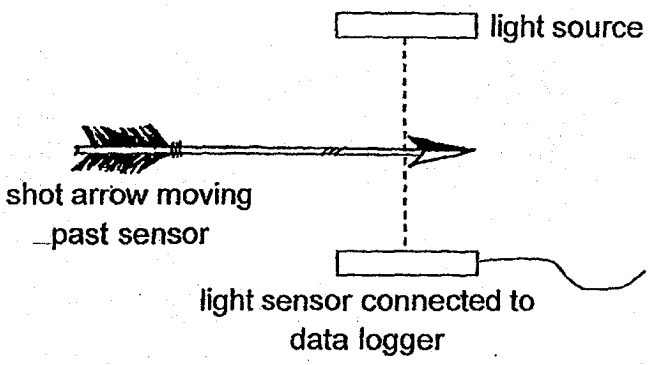
(b) An experiment was conducted to find out about the relationship between the distance the bowstring was pulled back and the distance travelled by the arrow. The results are shown below.

Distance the bowstring was pulled back (cm)	Distance travelled by the arrow (m)
45	15
50	18
55	25
60	30

(i) Based on the results above, state the relationship between the distance the bowstring was pulled back and the distance travelled by the arrow. [1]

Marks : / 3

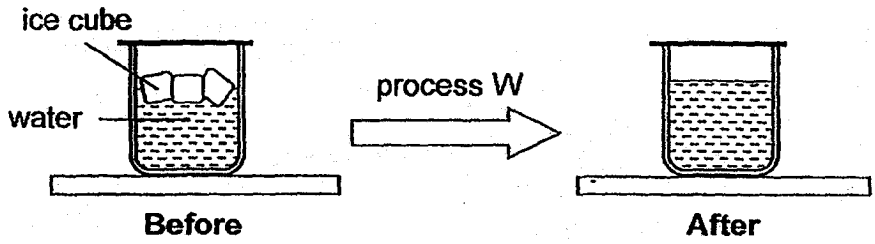
(b) (ii) In a separate competition, the archer measured how fast his arrow moved using a light source and a light sensor as shown in the diagram below.



Using the same bow and arrow, what should the archer do to allow his arrow to move faster? Explain your answer. [2]

Marks : / 2

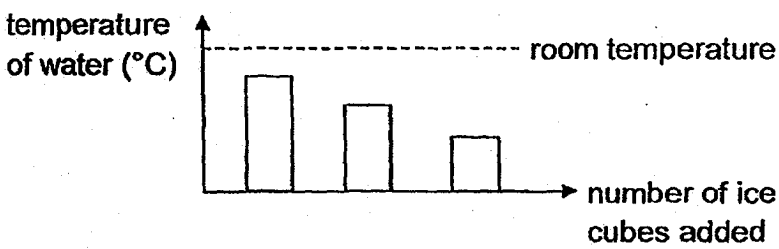
32. Some ice cubes were placed into a container of water at room temperature. The container was then left on a table in a room. The diagram below shows the observations of the set-up before and after process W had taken place.



(a) Name process W that had caused the ice cubes to change state. [1]

(b) How did heat flow between the ice cubes and water during process W? [1]

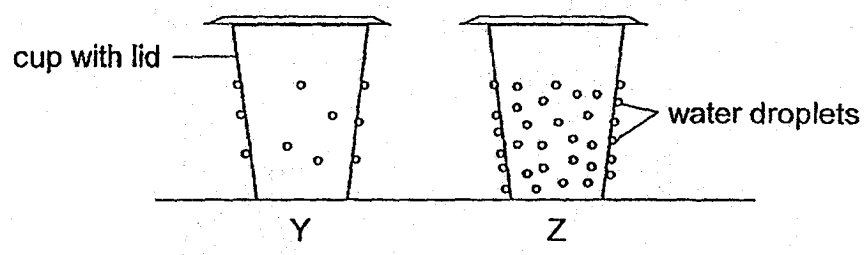
Rachel wanted to find out how the temperature of water was affected by the number of ice cubes added to it. She placed different number of ice cubes into containers of water. She measured the temperature of the iced water after some time. Her results are shown in the graph below.



(c) How would using containers of the same material ensure a fair test? [1]

Marks : /3

Rachel left two cups of iced water, Y and Z, on a table in a room. The diagram below shows her observation of the cups after some time.



(d) Based on the observation above, explain why we could conclude that the water in cup Z had more ice cubes. [2]

Marks : /2

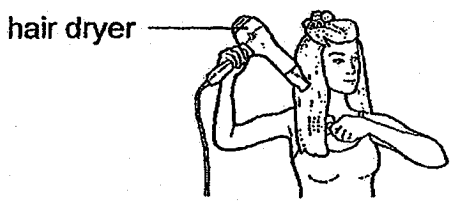
33. (a) (i) The diagram below shows two different hairstyles of Ai Swee.

Hairstyle J

Hairstyle K

Explain why hairstyle J would cause Ai Swee's wet hair to dry slower than hairstyle K. [1]

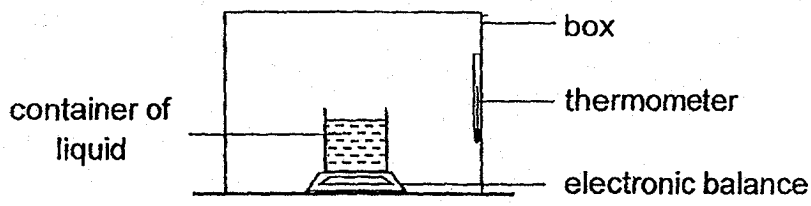
(ii) A hair dryer that gives out hot moving air is used to dry wet hair.



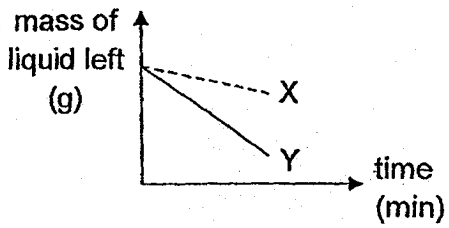
Explain how the hot moving air can dry Ai Swee's wet hair quickly. [1]

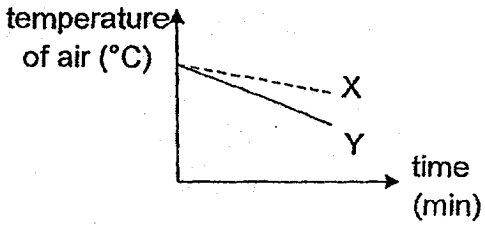
Marks : / 2

(b) Tom wanted to find out how the type of liquid could affect its surrounding temperature. He placed a container of liquid X in a sealed box as shown below.



He recorded how the mass of liquid left and the temperature of air in the box changed over a period of time. He repeated the experiment with liquid Y. His results are shown in the graphs below.

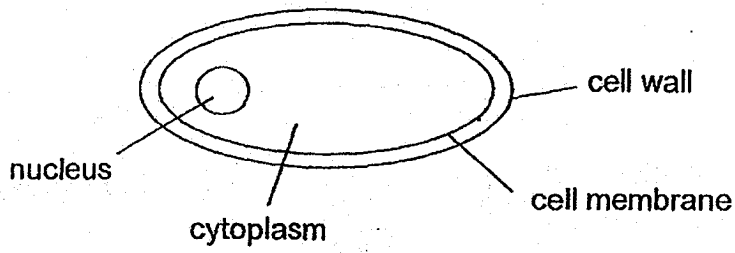




Based on the results, explain how liquid Y is better in cooling its surroundings. [2]

Marks : / 2

34. Study the diagram of cell F below.



(a) Based on the diagram, state one difference between cell F and a typical animal cell. [1]

(b) The diagram below shows a mushroom and a fern.

mushroom

fern

Explain why cell F is more likely to be taken from the mushroom than from a leaf of the fern. [1]

(c) The spores of mushroom will develop over time to look like their parent mushrooms.
State the cell part and its function that allows this characteristic of the spores. [1]

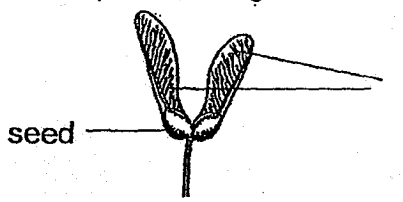
Marks : / 3

35. (a) Why is it important for plants to disperse their seeds? [1]

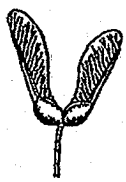
_____

_____

(b) Paul saw some fruits from a plant in the garden.



Paul wanted to find out if the presence of the wing-like structure would affect the time taken for the fruit to reach the ground. He took two similar fruits, A and B, from the plant and removed the wing-like structure from fruit B. He then dropped the two fruits, as shown below, from the same height and measured the time taken for them to reach the ground.



fruit A
mass of fruit : 25g

fruit B
mass of fruit : 25g

The results were shown in the table below:

	Time taken to reach the ground (s)			
	Try 1	Try 2	Try 3	Average
Seed A	15.6	14.8	15.2	15.2
Seed B	3.5	4.2	3.9	3.9

(i) Based on the results, what can Paul conclude from his experiment? [1]

_____

_____

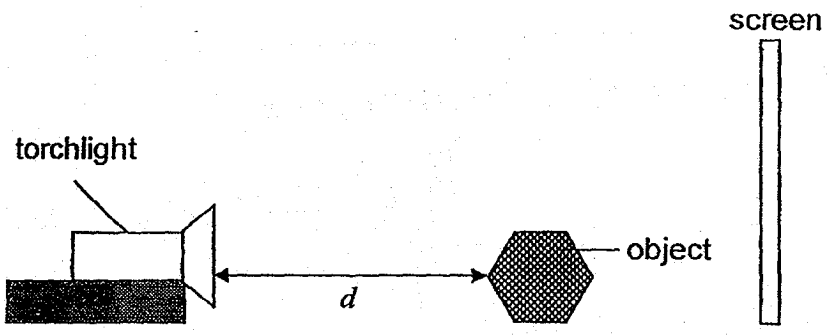
(ii) State how your answer in part (i) helps in the dispersal of the fruit. [1]

_____

_____

Marks : ____ / 3

36. Phillip conducted an experiment to investigate how the distance between the torchlight and object, *d*, would affect the height of the shadow. He used the set-up shown below.



He measured the height of the shadow formed on the screen and repeated the experiment three times before changing the distance. The results are shown in the table below.

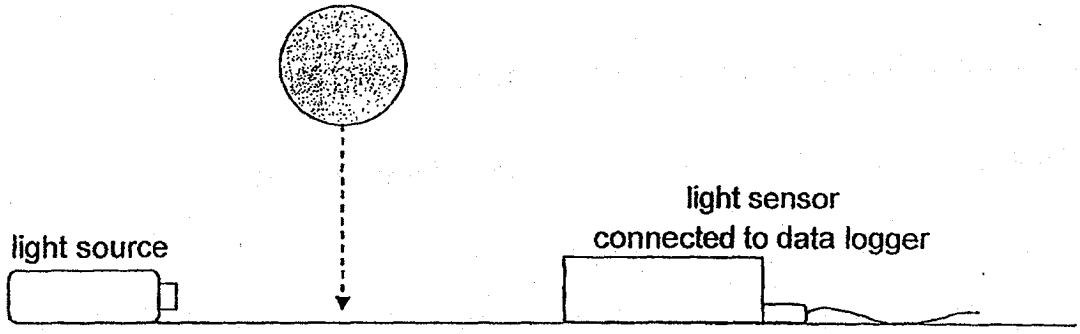
	Height of shadow (cm)			
***d* (cm)**	**Try 1**	**Try 2**	**Try 3**	**Average**
10	8.3	8.5	8.6	8.5
15	5.4	5.2	5.1	5.2
20	3.5	3.1	3.3	3.3

(a) Why did Phillip repeat his experiment three times for each distance? [1]

(b) If Phillip kept distance *d* at 10cm, how would the height of the shadow change if the screen was moved further away from the object? [1]

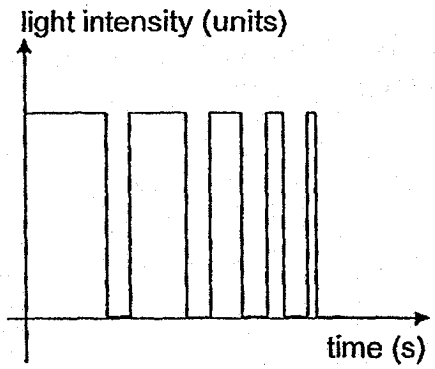
Marks : /2

In a separate experiment, a ball was dropped in between a light source and a light sensor as shown in the diagram below.

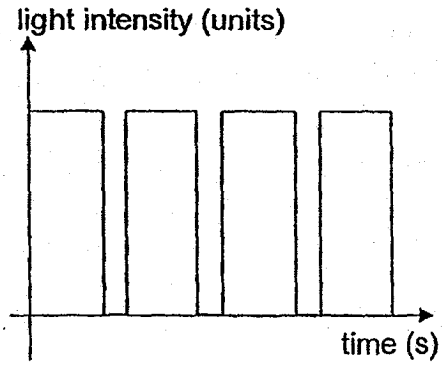


As the ball bounced, the amount of light detected by the light sensor was recorded.

(c) Which of the graphs, E or F, correctly shows the results of the experiment? Explain your answer. [1]



Graph E

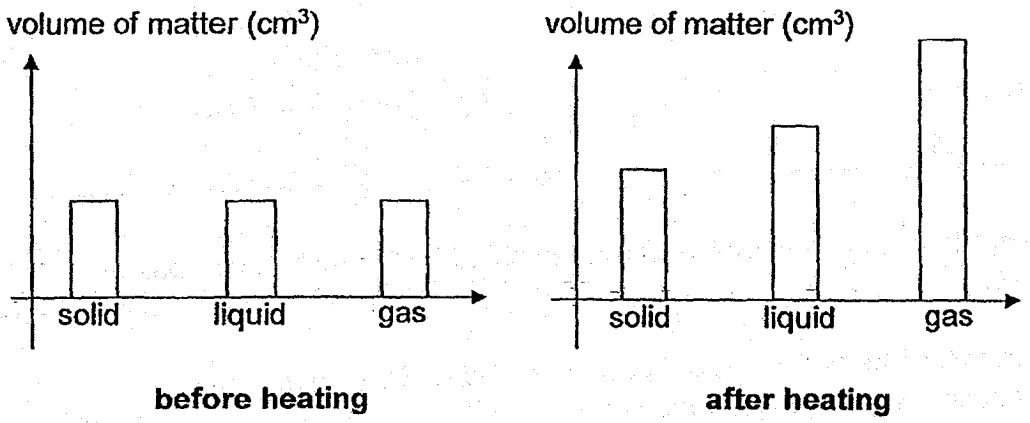


Graph F

Marks : /

37. An experiment was conducted to investigate how different states of matter would expand when they were provided with the same amount of heat over a fixed period of time.

The results of the experiment are shown in the graph below.



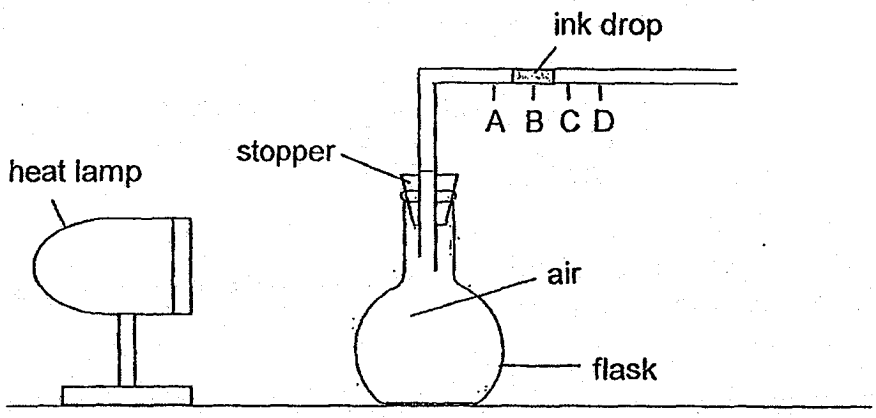
(a) What does the results above tell you about the expansion of gas as compared to the other states of matter upon heating? [1]

_____

_____

Marks : / 1

(b) Faith conducted an experiment using the set-up shown below.



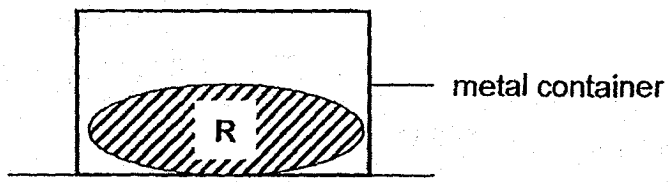
(i) When the heat lamp was switched on for two minutes, the ink drop moved to position D. Describe how this happened. [2]

(ii) Faith repeated the experiment by filling the flask completely with a liquid before switching on the heat lamp.

Predict where the ink drop would move from position B after two minutes. [1]

Marks : / 3

38. Substance R was placed into a sealed rectangular metal container as shown below.



(a) Based on your observation, what state of matter was substance R in? Give a reason for your answer. [1]

_____

_____

(b) The temperature in the container was raised to above the melting point of substance R, but below its boiling point, for some time.

What state of matter had substance R become? Explain your answer. [1]

_____

_____

(c) Next, the temperature in the container was finally lowered to be below the melting point of substance R for some time.

State the process that substance R underwent and suggest the final shape of substance R. [1]

Process: _____

Shape of substance R: _____

_____

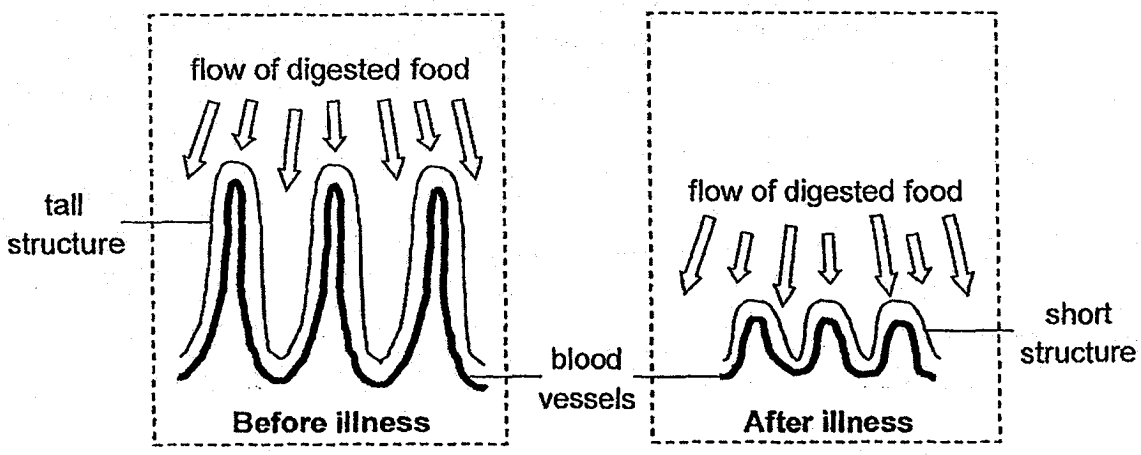
Marks : / 3

39. Pete wanted to find out how the area of a cloth would affect the amount of water being absorbed. He poured water on a cloth and measured the amount of water absorbed by the cloth. He repeated the experiment with another cloth of a different area. His results are shown in the table below.

Cloth	Area of cloth (cm^2)	Amount of water absorbed (cm^3)
P	100	50
Q	400	70

(a) Based on the results, how did the amount of water absorbed change with the area of the cloth? [1]

Food from the stomach goes into the small intestine before moving into the large intestine.
The diagram below shows the magnified view of the structures found on the walls of small intestine in a person before and after his illness.



(b) Based on the information, explain why the blood vessels carry less digested food after the person had the illness. [1]

Marks : /2

40. Diagram 1 shows rod X being suspended by a wire. Diagram 2 shows the observation made when an electromagnet was placed near rod X.

Diagram 1

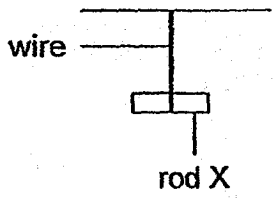
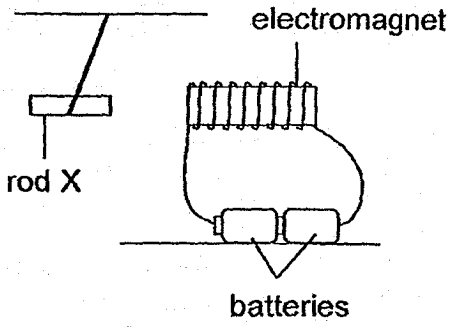


Diagram 2



(a) Based on the above information, explain why rod X was most likely to be a magnet? [1]

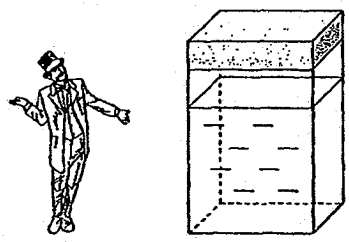
(b) Without replacing the electromagnet, suggest a change to the set-up so that the distance between rod X and the electromagnet could become shorter. [1]

(c) After removing the electromagnet set-up, rod X was suspended freely with a string.

What would be observe about rod X? [1]

Marks : / 3

41. A magician wished to find a suitable material to build a water tank for his magic trick.



He conducted a test to find out how different materials would affect the amount of light passing through them. He wanted his audience to see what happened in the tank clearly.

The results of the test are as shown below.

	Amount of light passing through (units)		
Material	**Try 1**	**Try 2**	**Average**
X	134	144	139
Y	40	52	46
Z	185	201	193

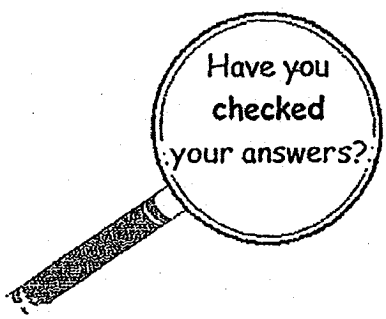
(a) The material used for the tank should allow light to pass through. State another property the material should also have. [1]

_____

(b) Which of the following materials X, Y or Z would be most suitable for making the tank? Explain your answer. [1]

_____

_____



~ END OF PAPER ~

Marks : /2

SCHOOL : MAHA BODHI PRIMARY SCHOOL
LEVEL : PRIMARY 5
SUBJECT : SCIENCE
TERM : 2018 SA1

SECTION A

Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
4	2	2	1	3	2	4	2	1	4
Q 11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
4	2	4	1	3	1	1	4	2	4
Q 21	Q22	Q23	Q24	Q25	Q26	Q27	Q28		
3	3	3	3	2	4	2	4		

SECTION B

Q29)	a) The mass of the seed leaves decreases as the number of days passed from Day 1 to Day 4. b) It remains the same. The young plant does not need to absorb food from the seed leaves as it can make its own food when it develop leaves.
Q30)	a) Gravitational potential energy b) Lift the wrecking ball using the crane higher than position A. c) Position D. Position D has the largest amount of kinetic energy as most amount of gravitational potential energy will be converted to kinetic energy as it is the lowest position.
Q31)	a) Elastic potential energy – Gravitational potential energy – Kinetic energy – Sound energy b) i) As the distance the bowstring was pulled back increases, the distance travelled by the arrow increases. ii) Pull the bowstring back even more. More elastic potential

	energy is converted to more kinetic energy. Therefore, the arrow will move faster.
Q32)	a) Melting b) The ice cube gains heat from the water and melts. c) The containers will conduct the same amount of heat d) There were water droplets on the outer surface of the cup. The water lost more heat to more ice cubes in the cup. The surface of the cup became cooler than cup Y as it lost more heat to the iced water. More water vapour can lose heat to cup Z and condense into water droplets.
Q33)	a) i) Hairstyle K has more exposed surface area than Hairstyle J. Therefore, the rate of evaporation of water in her wet hair is faster. ii) There is a larger amount of heat and presence of wind to increase the water's rate of evaporation. b) Liquid Y evaporates faster than Liquid X. When Liquid Y evaporates, more heat is gained by Liquid Y. Therefore, Liquid Y is better in cooling its surroundings.
Q34)	a) Cell F has a cell wall while typical animal cell doesn't b) Cell F doesn't have chloroplasts so it cannot make food. Mushrooms cannot make its own food but ferns can. c) Nucleus. It contains information that is passed on from parents to their young.
Q35)	a) The young plants will have less competition for space, water, sunlight and nutrients. b) i) Wing-like structure allows the seed to stay in the air for a longer period of time. ii) The seed can be carried further away from the parent plant.
Q36)	a) To ensure a reliable result. b) The height of the shadow will be larger. c) Graph E. As the ball bounces more, it bounces lower. The duration of the light captured by the light sensor decreases.
Q37)	a) Gas expanded the most when heated.

	b) i) The air in the flask gained heat and expanded. The air in the flask pushed the ink drop to position D. ii) C
Q38)	a) Solid. It has a fixed shape. b) Liquid. R melted to become a liquid c) Process : Freezing Shape of substance R : Rectangular
Q39)	a) As the area of cloth increased, the amount of water absorbed increases. b) The short structure have smaller exposed surface area. Less digested food would be absorbed.
Q40)	a) Rod X repelled from the electromagnet. Only magnets can repel magnets. b) Remove a battery from the electromagnet. c) It would point in a North-South direction.
Q41)	a) It is waterproof. b) Z. It allowed the most amount of light to pass through. The audience will be able to see through the tank most clearly.