Index No. | | | | | | – | |

ANGLO-CHINESE SCHOOL (JUNIOR)
ANGLO-CHINESE SCHOOL (PRIMARY)

COMBINED PRELIMINARY EXAMINATION 2014

SCIENCE

BOOKLET A

22 August 2014 1 hour 45 minutes

Name : _____.( )

Class : P6. _____

INSTRUCTIONS TO PUPILS

DO NOT TURN OVER THE PAGES UNTIL YOU ARE TOLD TO DO SO
Follow all instructions carefully.
There are 30 questions in this booklet.
Answer ALL questions.

INFORMATION FOR PUPILS

The total marks for this booklet is 60.
The total time for Booklets A and B is 1 hour 45 minutes.
This question paper consists of 17 printed pages (inclusive of cover page).

For each question from 1 to 30, four options are given. One of them is the correct answer. Make your choice and shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet.

(60 marks)

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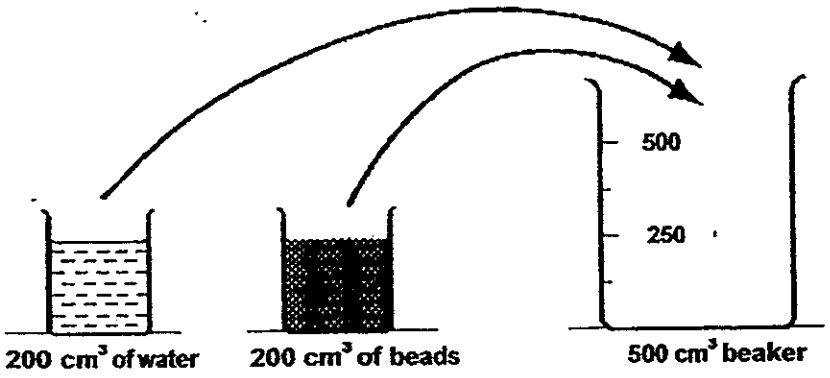
1 Study the information below about two substances, A and B.

Substance A	It occupies space. It has no definite shape.
Substance B	It has mass. It has no definite volume.

Which one of the following shows what A and B are **most** likely to be?

	Substance A	Substance B
(1)	Ice	Oil
(2)	Air	Ice
(3)	Oil	Water
(4)	Water	Air

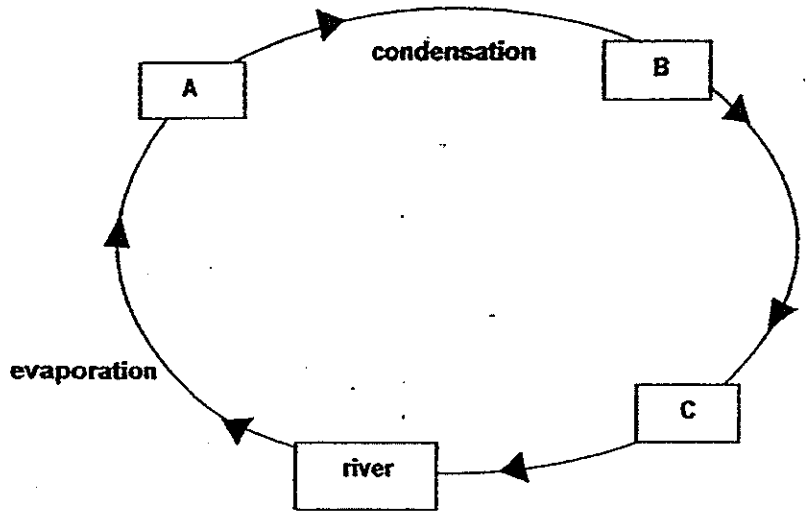
2 Susan had a beaker of 200 cm^3 of water and another beaker of 200 cm^3 of small beads. She poured all the water and small beads into a 500 cm^3 beaker as shown below.



What is most likely the volume of the water and beads in the 500 cm^3 beaker?

(1) 200 cm^3
(2) 400 cm^3
(3) More than 400 cm^3
(4) Between 200 cm^3 and 400 cm^3

3 The diagram below shows the water cycle.



Which one of the following represents A, B and C?

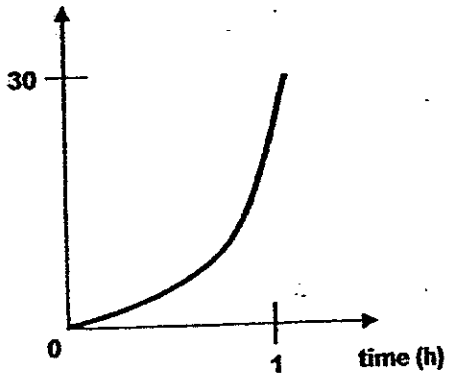
	A	B	C
(1)	Rain	Clouds	Water vapour
(2)	Water vapour	Clouds	Rain
(3)	Clouds	Rain	Water vapour
(4)	Water vapour	Rain	Clouds

4 The table below shows the characteristics of four flowers, A, B, C and D. Which flower is most likely to be self-pollinated?

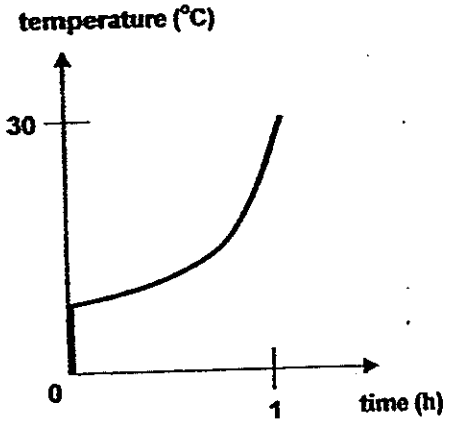
	Flower	Petals		Smell
		Size	Colour	
(1)	A	Small	White	Unscented
(2)	B	Small	White	Scented
(3)	C	Large	Brightly coloured	Scented
(4)	D	Small	Brightly coloured	Unscented

5 Paul took out some ice from the freezer and placed them in a glass cup. After an hour, the ice had changed its state completely. Which one of the following graphs best represents the temperature changes of ice over time within the one hour?

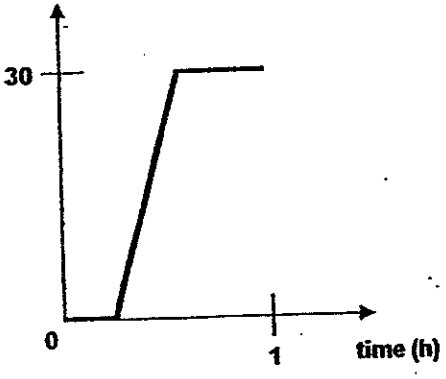
(1)



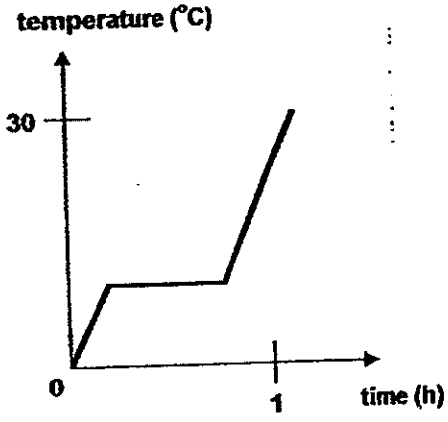
(2)



(3)



(4)



6 Which of the following statements about reproduction in humans are **correct**?

A One sperm can fertilise many eggs.

B The fertilised egg will develop in the womb.

C The umbilical cord carries digested food to the foetus.

D The sperms are transferred to the egg through the testes.

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

(Go on to the next page)

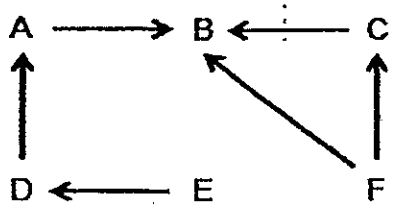
7 The table below shows some characteristics of William's parents.

Characteristic	Mother	Father
Height	Short	Tall
Hair	Straight and black	Curly and brown
Dimples	No dimples	No dimples
Skin Tone	Fair	Dark
Interest	Plays the piano	Plays tennis

Based only on the information above, which of the characteristics can William inherit from his parents?

(1) Being tall, fair and with dimples
(2) Being short, dark and playing tennis
(3) Being tall, having brown hair and with no dimples
(4) Being short, having black hair and playing the piano

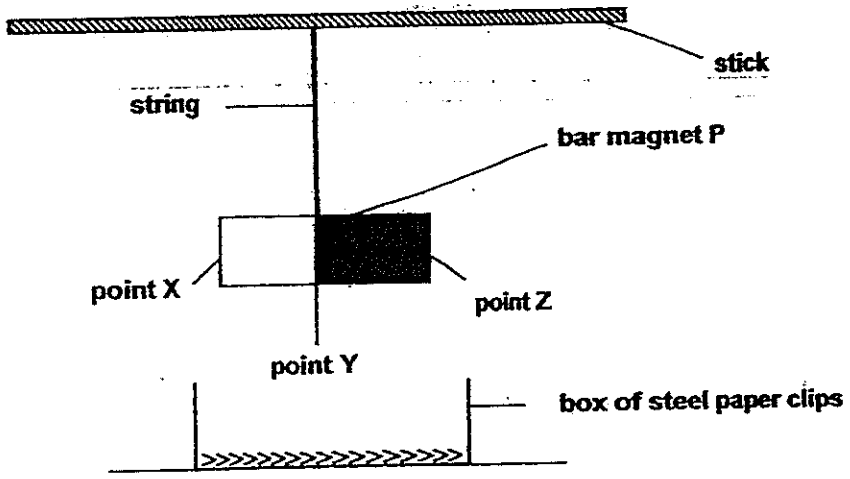
8 The diagram below shows a food web where A to F represent living things.



Which one of the following is true about the living things in the food web?

	Food Producer	Prey only	Predator Only	Prey and Predator
(1)	E	C, D, F	A, B	None
(2)	E	C, D, F	B	A
(3)	E, F	C, D	None	A, B
(4)	E, F	C, D	B	A

9 Amanda conducted an experiment by lowering a bar magnet, P, into a box of steel paper clips. She labelled each part of the bar magnet as points X, Y and Z as shown in the diagram below.



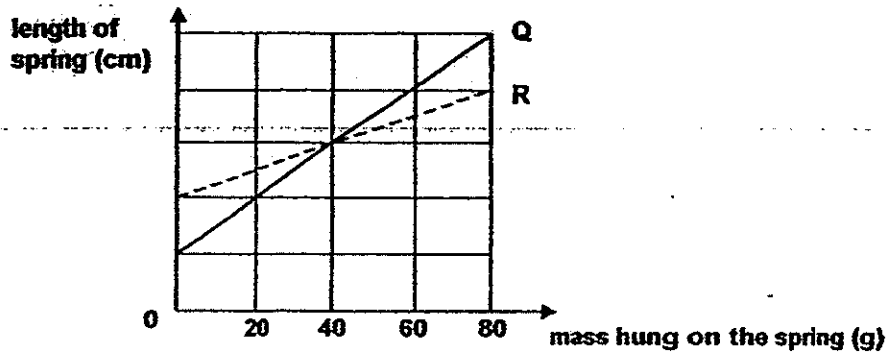
She then repeated the experiment using two other magnets of the same size, Q and R, and recorded the number of paper clips attracted in the table below.

	Number of paper clips attracted at...		
	point X	point Y	point Z
Magnet P	15	4	15
Magnet Q	7	1	7
Magnet R	11	5	11

Based on the results above, which one of the following conclusions is most likely true?

(1) Magnet R is the weakest.
(2) Magnet Q is the strongest.
(3) The magnetic force is stronger at Point X than at Point Z of the magnets.
(4) The magnetic force is stronger at Point Z than at Point Y of the magnets.

10. The graph below shows how the length of two springs, Q and R, changed when different amounts of mass were added to each spring.



Based on the graph above, which of the following statements are correct?

A The original length of Spring R is longer than the original length of Spring Q.

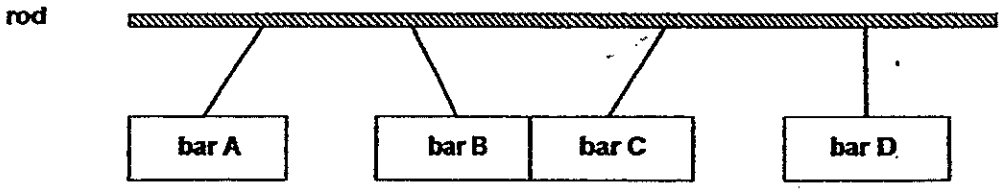
B The original length of Spring R is shorter than the original length of Spring Q.

C When a 40 g mass was hung on both springs, their lengths became the same.

D When a 40 g mass was hung on both springs, the length of Spring Q was more than the length of Spring R.

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

11 Tom stroke four metal bars, A, B, C and D, with a magnet 20 times each. He then hung them next to one another from a rod. It was observed that only one of the bars remained stationary while the rest either swung away from or towards one another as shown in the diagram below.



Based on the above diagram, which one of the following shows the most likely materials that bars A, B, C and D are made of?

	bar A	bar B	bar C	bar D
(1)	Copper	Nickel	Aluminium	Iron
(2)	Iron	Aluminium	Steel	Copper
(3)	Iron	Steel	Nickel	Copper
(4)	Nickel	Aluminium	Steel	Iron

12 Carrie wanted to find out which part of her school has the most polluted air. She prepared three pieces of glass coated with a thin layer of adhesive and placed one each in the canteen, carpark and school field. After some time, Carrie collected the pieces of glass and observed them under a microscope. She observed that the piece of glass which was placed in the carpark collected the most dust particles and concluded that the carpark has the most polluted air.

Which of the following variables should Carrie keep constant so that her experiment is fair?

A The size of the glass pieces

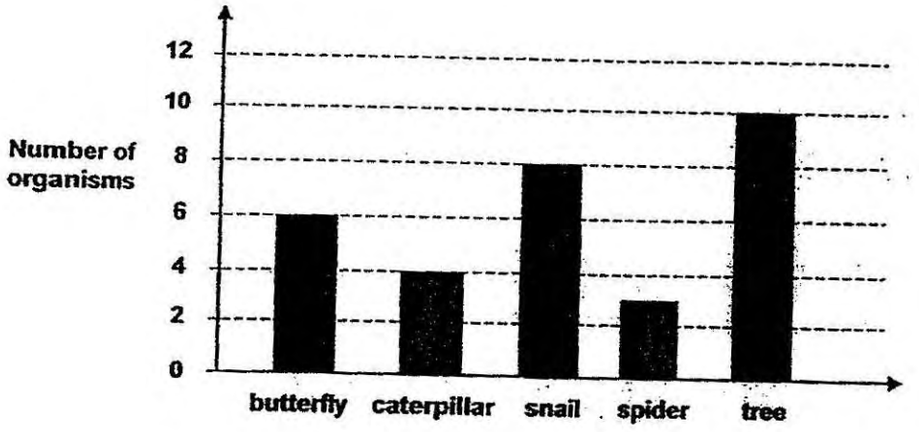
B The duration of the experiment

C The start time of the experiment

D The number of cars in the carpark

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

13 Benedict observed the organisms found in a garden and recorded the number of each organism in a graph as shown below.



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

A The garden is the habitat of the organisms.

B There are ten populations of trees in the garden.

C There is a total of 31 populations of organisms in the garden.

D There are only three populations of animals living in the garden.

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

(Go on to the next page)

14 The following information is extracted from the website of National Wildlife Federation.

"Scientists are still assessing the effects of the estimated 640 million litres of oil that flooded into the sea after the explosion of an oil rig. Thousands of seabirds, which feed on fishes in the region, were found dead in the six months after the spill."

Which of the following reason(s) is/are likely cause(s) of the death of the seabirds?

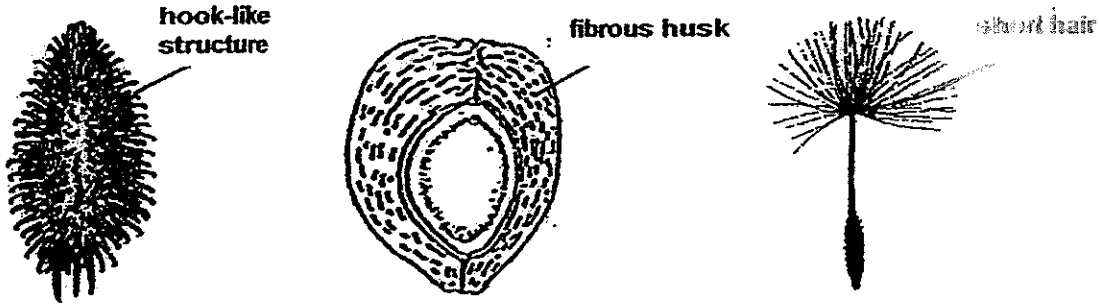
A The seabirds were unable to find suitable mates for reproduction.

B The seabirds were unable to find any fish as the surface of the sea was covered by the oil spill.

C The seabirds' feathers were stained with oil which made their feathers stick together and causing the seabirds unable to fly.

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

15 The diagrams below show three different samples taken from three different plants.

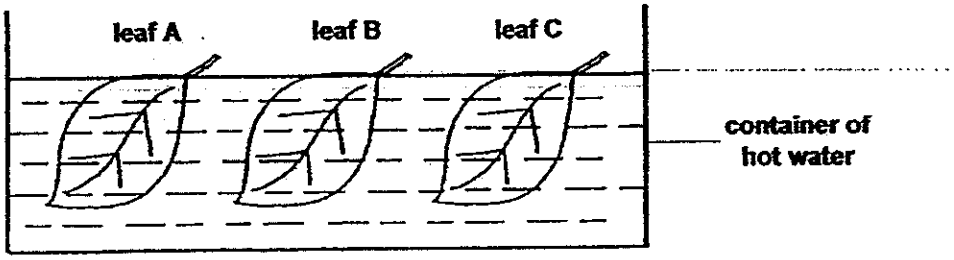


Sample A Sample B Sample C

Which one of the following best matches the samples to their method of dispersal?

	Sample A	Sample B	Sample C
(1)	By wind	By animals	By water
(2)	By water	By wind	By splitting
(3)	By animals	By water	By splitting
(4)	By animals	By water	By wind

16 Mr Lim placed three different leaves of the same size into a container of hot water at the same time as shown in the diagram below. He asked Avi, Ben, and Carl to observe whether more bubbles gathered on the upper surface or lower surface of each leaf.

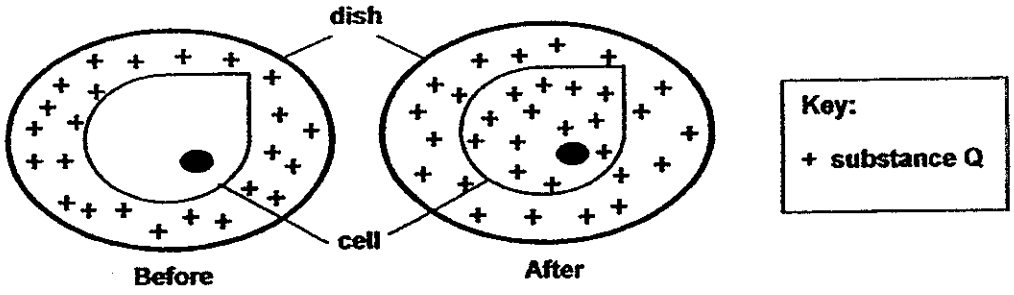


Avi : Leaf A had more bubbles on the upper surface.
Ben : Leaf B had more bubbles on the lower surface.
Carl : Leaf C had more bubbles on the lower surface.

Based on the observations of Avi, Ben and Carl, which one of the following is the most accurate conclusion?

(1) Stomata are found on both surfaces of the leaves.
(2) Stomata are found only on the lower surfaces of the leaves.
(3) Stomata are found only on the upper surfaces of the leaves.
(4) Stomata are found more on the upper surfaces than lower surfaces of the leaves.

17 The diagram below shows a cell before and after it was placed into a dish of substance Q.

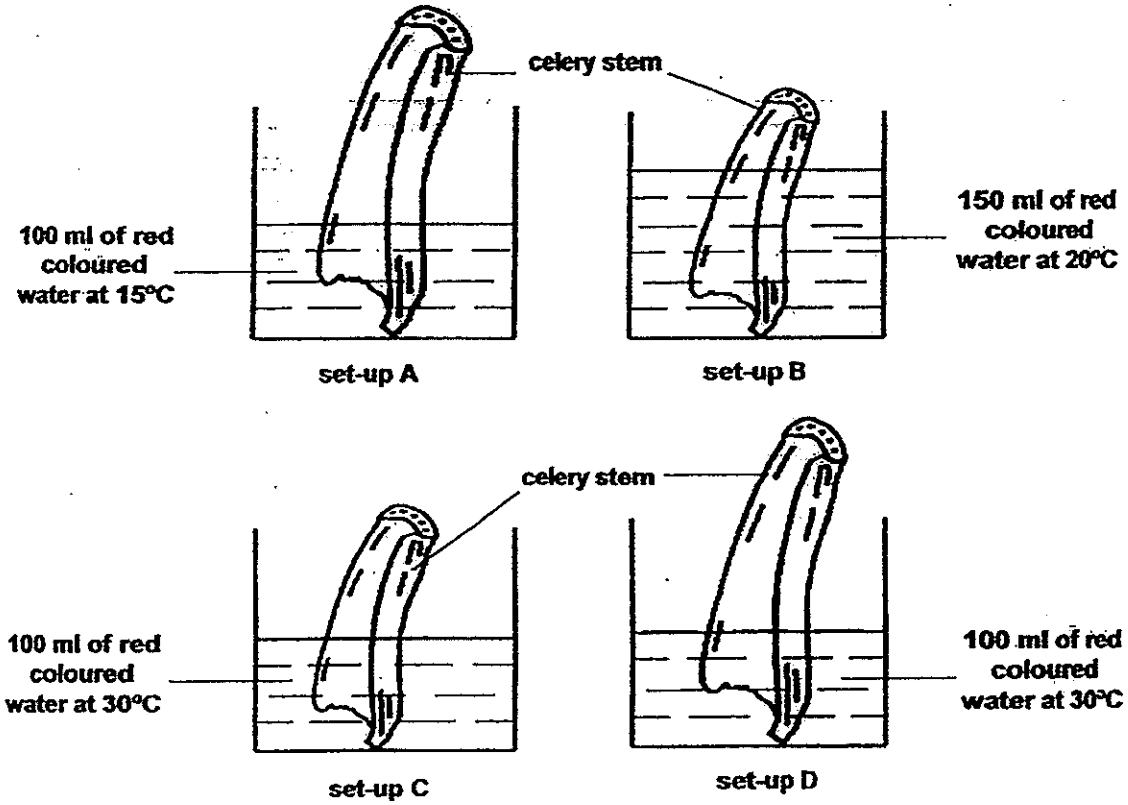


Which of the following conclusion(s) is/are correct?

A Substance Q could move in and out of the cell.
B The nucleus controls Substance Q moving into the cell.
C The cell membrane allows Substance Q to go into the cell.

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

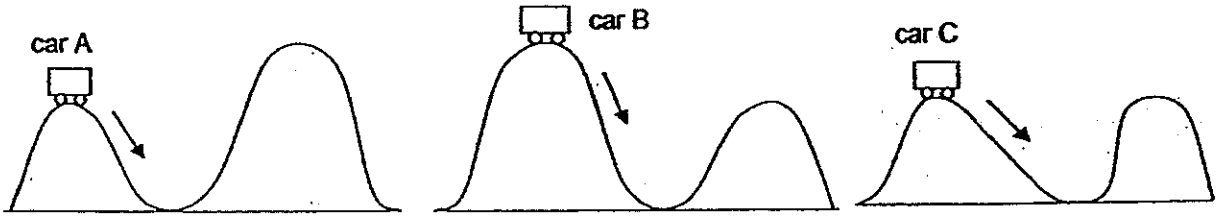
18 James conducted an experiment to find out if celery stems transport warm water faster than cold water.



Which of the following set-ups are suitable for his experiment?

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

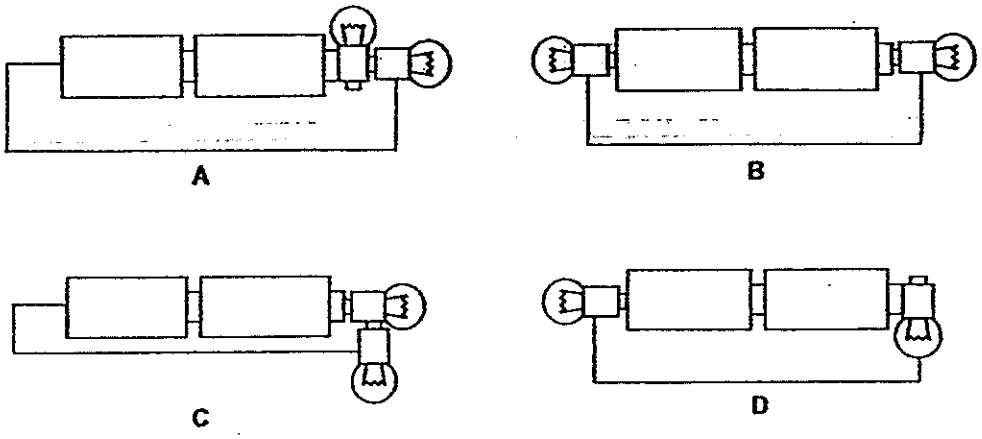
19 The diagram below shows three identical toy cars being released from three different heights.



Which car(s) will definitely <u>not</u> have enough kinetic energy to go over the second hill?

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

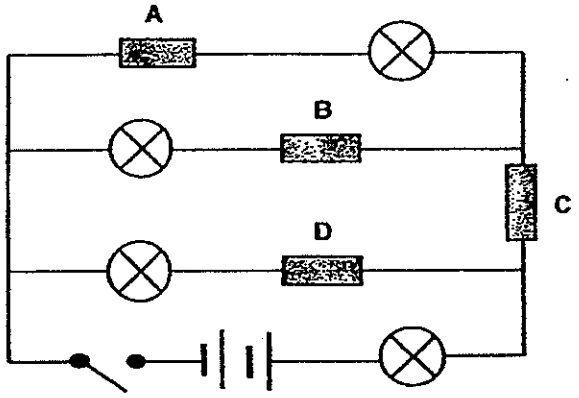
20 Peter arranged four circuits using similar bulbs and batteries as shown below. All bulbs and batteries are functioning well.



Which circuit(s) will allow both bulbs to light up?

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

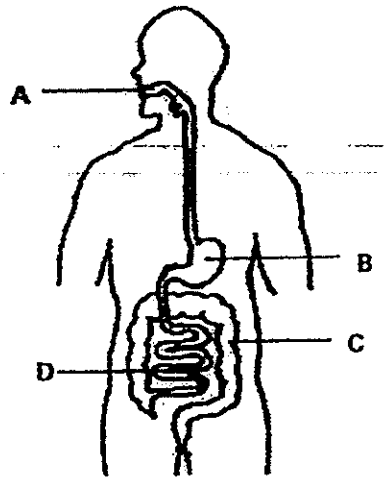
21 Study the circuit diagram below carefully.



There are four objects A, B, C and D. Only one of the objects is an insulator of electricity, while the others are conductors of electricity. When the switch is closed, only two bulbs light up. Which one of the objects is an insulator of electricity?

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

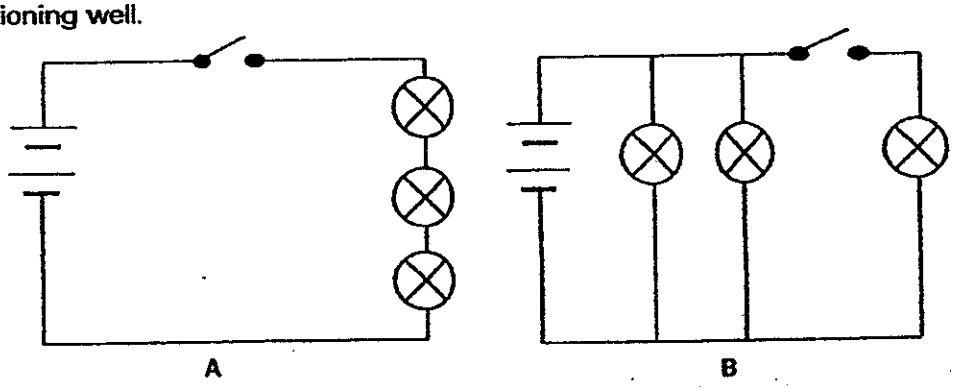
22 The diagram below shows the digestive system of the human body.



Which one of the following best describes the function of parts A, B, C and D?

	Digestion takes place at ...	Absorption of water takes place at ...	Absorption of digested food takes place at ...
(1)	A	B and C	C and D
(2)	B and D	A and C	C
(3)	A, B and D	C	D
(4)	A, B and D	C	C and D

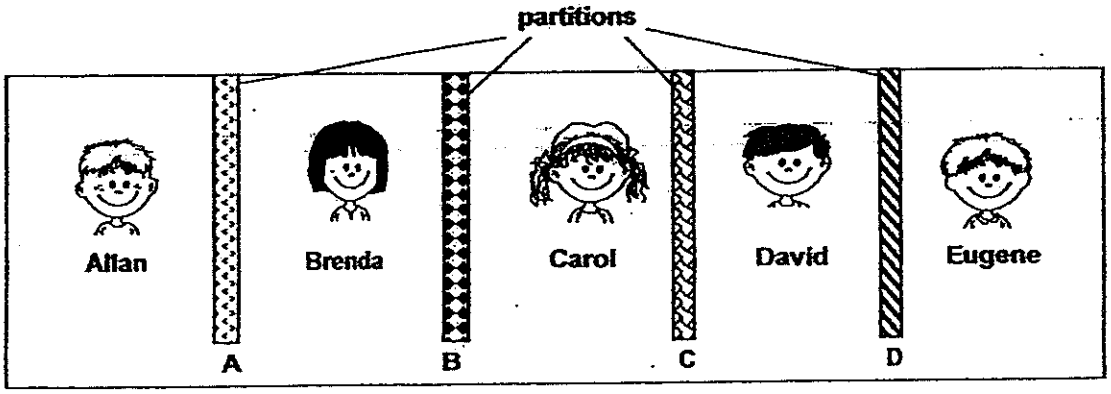
23 The two circuits below use the same type of bulbs and batteries. All bulbs and batteries are functioning well.



Which one of the following statements about the circuits is correct?

(1) Only one bulb in Circuit B will light up when the switch is open.
(2) All the bulbs in Circuit A will not light up when the switch is open.
(3) If one bulb in Circuit A fuses, the other bulbs will continue to light up.
(4) The bulbs in Circuit A are brighter than the bulbs in Circuit B when their switches are closed.

24 The diagram below shows five children in a playroom separated by four partitions made from different materials.



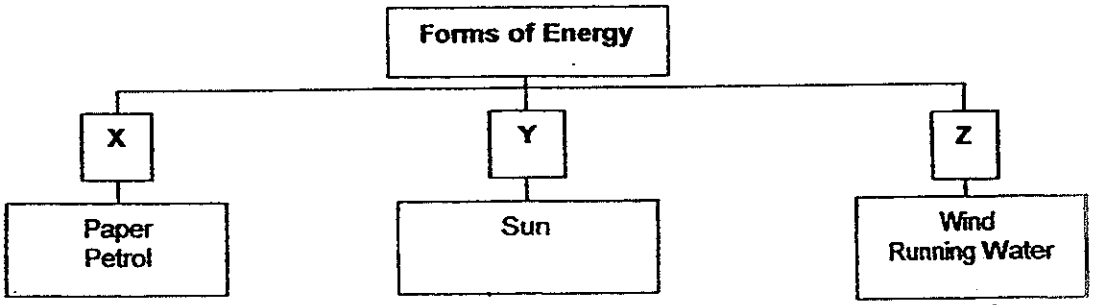
Some children noted their observations below.

Allan : I can only see Brenda.
Carol : I can see David clearly but I am not sure who is beside him.

What materials could the partitions possibly be made of?

	A	B	C	D
(1)	Tracing paper	Clear glass	Wood	Tracing paper
(2)	Clear glass	Wood	Clear glass	Tracing paper
(3)	Tracing paper	Wood	Tracing paper	Clear glass
(4)	Clear glass	Clear glass	Tracing paper	Wood

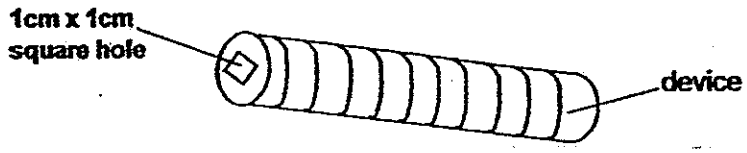
25 Study the classification table.



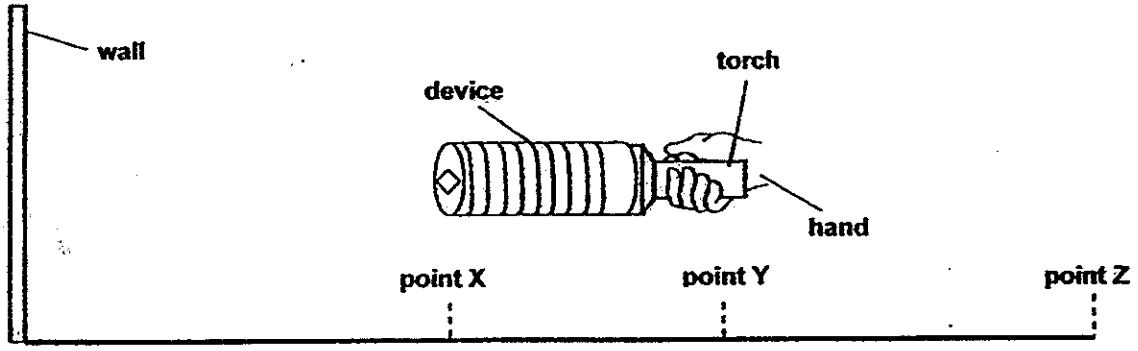
Match X, Y and Z to the forms of energy they represent.

	X	Y	Z
(1)	Potential	Heat and Light	Kinetic
(2)	Heat	Heat	Potential
(3)	Potential	Heat and Light	Potential
(4)	Heat	Light	Kinetic

26 Shaun, Aoden and Danny made a device as shown below.



Next, they inserted a torch into the device. They then drew the curtains in the room and switched off all the lights and the room was in total darkness. They then switched on the torch. They shone their lighted device at 3 different distances, X, Y and Z, in front of a wall as shown below.



The boys saw a patch of light on the wall and made the statements below.

Aoden	The further the device was from the wall, the bigger the patch of light on the wall.
Danny	The patch of light looks equally clear from Points X and Y.
Shaun	When I held the device at Point Y, the patch of light was clearer than at Point Z.

Which boys made correct observations about the patch of light on the wall?

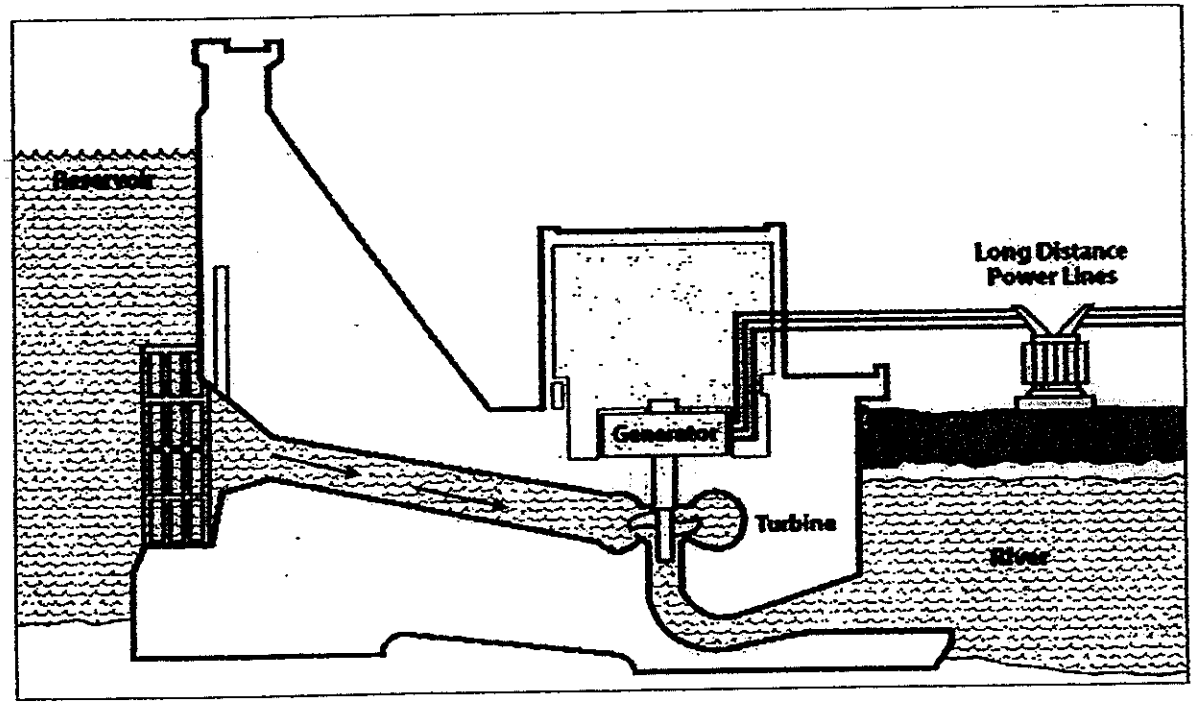
(1) Aoden and Danny
(2) Aoden and Shaun
(3) Danny and Shaun
(4) Aoden, Danny and Shaun

27 Which of the following statement(s) is/are true?

A All living things depend directly on plants for food.
B The Sun is the main source of energy for all living things.
C Energy is transferred from the Sun to plants during photosynthesis.
D Oxygen, water and sunlight are combined in a green leaf to make food.

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

28 The diagram below shows a hydro-electric power station.

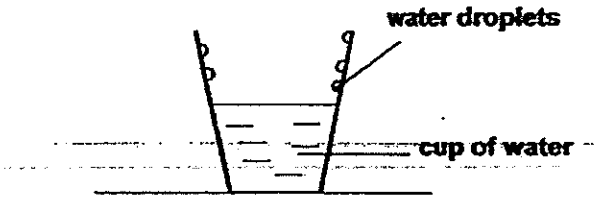


Hydroelectricity is electricity generated through the use of the gravitational force of falling or flowing water.

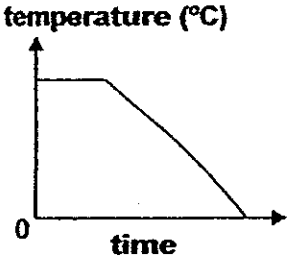
Which one of the following correctly shows the forms of energy at the various locations in the hydro-electric power station?

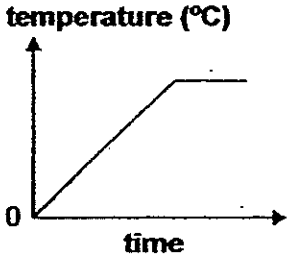
	Reservoir	Turbine	Generator
(1)	Gravitational potential energy	Kinetic energy	Electrical energy
(2)	Gravitational potential energy	Kinetic energy	Kinetic energy
(3)	Kinetic energy	Kinetic energy	Electrical energy
(4)	Kinetic energy	Electrical energy	Sound energy

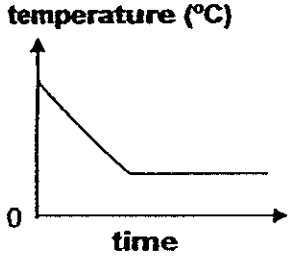
29 Ryan placed a cup of water on the table as shown below.

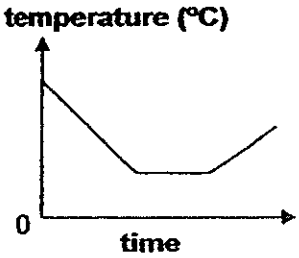


Which one of the following graphs correctly shows the change in temperature of the cup of water over time?

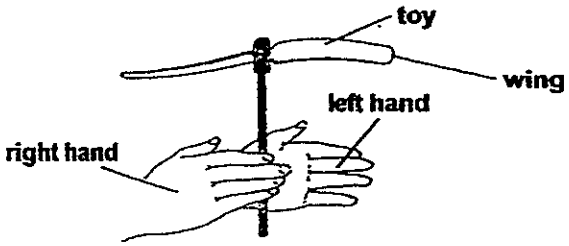
(1)


(2)


(3)


(4)


30 Isaac held a toy between his hands as shown below. He rotated the toy by sliding his right hand forward and his left hand backwards at the same time before releasing it. The toy flew to a high height after it left his hands.



He rotated the same toy at the same starting point again. However, he noticed that the toy flew to a lower height than the first try. Which one of the following best explains why the toy could fly higher the first time?

(1) The toy had a smaller mass.
(2) The toy was spun more slowly.
(3) The toy had more kinetic energy.
(4) The toy had more gravitational potential energy.

End of Booklet A

Index No. | | | | | | – | |

ANGLO-CHINESE SCHOOL (JUNIOR)
ANGLO-CHINESE SCHOOL (PRIMARY)

COMBINED PRELIMINARY EXAMINATION 2014

SCIENCE

BOOKLET B

22 August 2014 1 hour 45 minutes

Name : _____ ( )

Class : P6. _____

INSTRUCTIONS TO PUPILS

DO NOT TURN OVER THE PAGES UNTIL YOU ARE TOLD TO DO SO

Follow all instructions carefully.

There are ~~16~~ 14 questions in this booklet.

Answer ALL questions.

INFORMATION FOR PUPILS

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

The total marks for this booklet is 40.

The total time for Booklets A and B is 1 hour 45 minutes.

This question paper consists of 14 printed pages (inclusive of cover page).

BOOKLET A	/ 60
BOOKLET B	/ 40
TOTAL	/ 100
Parent's signature/ Date:	

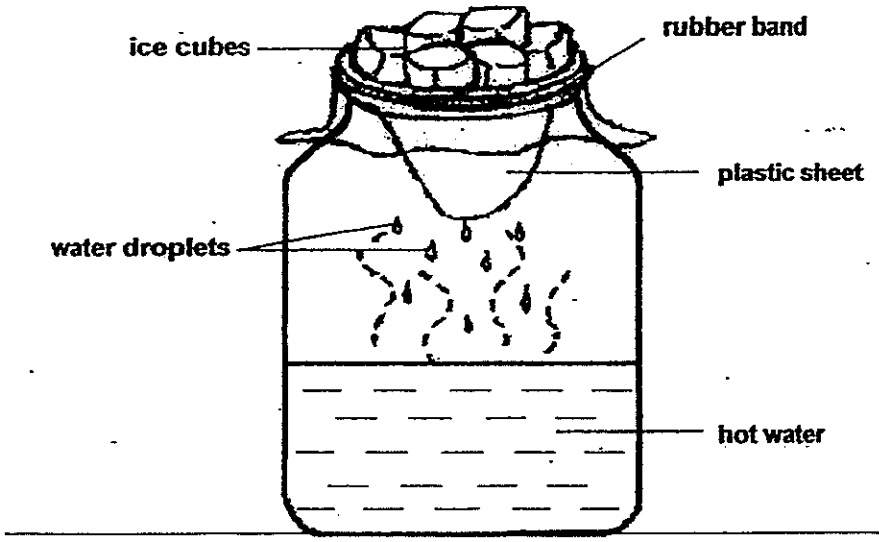
For questions 31 to 44, write your answers in the spaces provided in this booklet.

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

(40 marks)

---

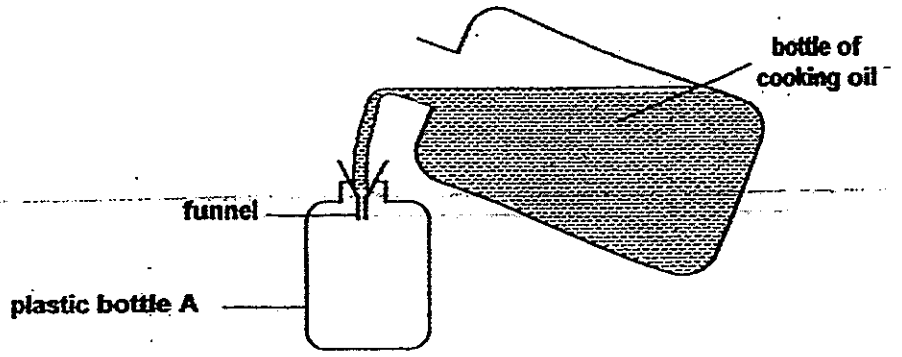
31 Roy set up a model to show the water cycle. He poured some hot water into a bottle and covered it with a plastic sheet. Then, he placed some ice cubes on top of the plastic sheet as shown in the diagram below and observed the set-up for five minutes.



(a) He observed water droplets dripping from the plastic sheet into the bottle. Explain how the water droplets were formed on the plastic sheet in the bottle. [2]

(b) Roy repeated the experiment and replaced the hot water with cold water at 5°C. This time, he did not observe any water droplets forming inside the bottle. Give a reason for his observation. [1]

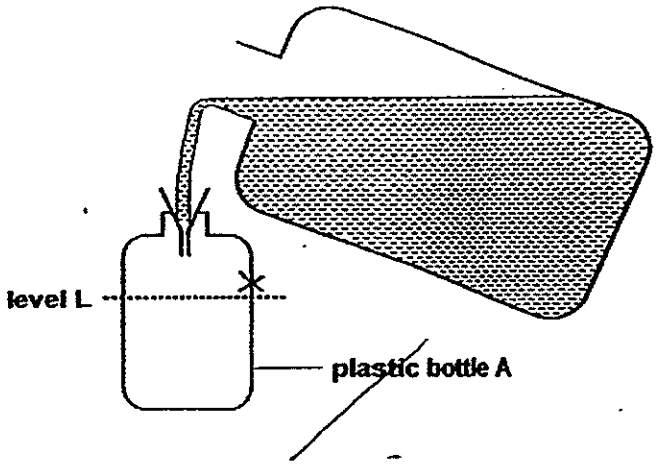
32 Lionel transferred some cooking oil into a plastic bottle, A, as shown in the diagram below.



He started to pour the cooking oil carefully into plastic bottle A using a funnel. At first, he noticed some cooking oil flowing into the plastic bottle A. However, after a while, the cooking oil did not flow into the bottle but overflowed instead even though bottle A was not yet full.

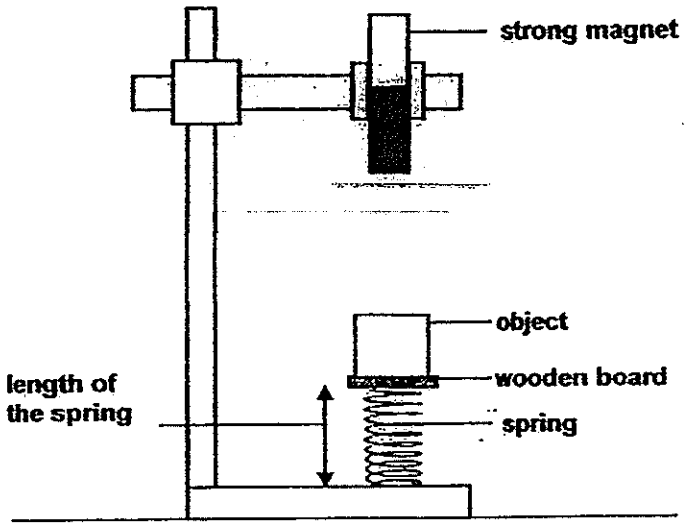
(a) Explain why the cooking oil overflowed even though plastic bottle A was not yet full. [1]

(b) Lionel decided to make a small hole in the plastic bottle A so that the cooking oil can flow in up to level L faster. Mark on the diagram below with a letter "X" to indicate where he should create the small hole. [1]



(c) Suggest another method Lionel can use to fill up plastic bottle A faster without changing the bottle. [1]

33 Alex set up an experiment as shown in the diagram below.



He attached three different objects, X, Y and Z of the same mass and shape to the spring (by fastening them to a piece of wooden board using some tape) one at a time and recorded his observations as shown in the table below. The original length of the spring was 10 cm.

Object	Length of spring (cm)
X	15
Y	5
Z	9

(a) If object Z is made of plastic,

(i) What material could object X be?

X: _____ [1]

(ii) What is object Y likely to be?

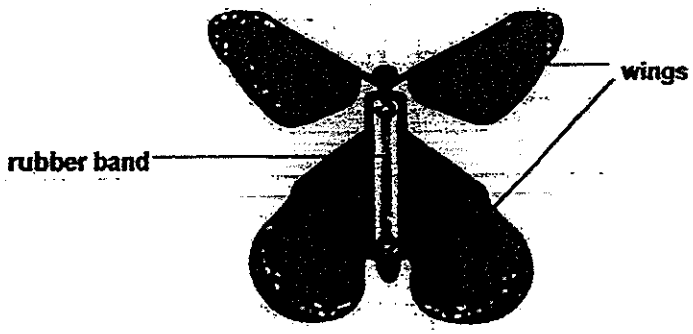
Y: _____ [1]

(b) Give a reason for your answer in (a) part (ii). [1]

_____

_____

34 Nathan bought a toy butterfly as shown in the diagram below.



He turned the rubber band a few times before releasing the toy into the air. The toy then flew a short distance before falling to the ground. He measured the distance travelled by the toy and recorded it in a table as shown below.

He repeated the activity by increasing the number of turns made on the rubber band each time.

Number of turns on the rubber band	5	10	15	20	25	30
Distance travelled by the toy (cm)	50	100	150	200	200	200

(a) State the force that causes the toy to flap its wings when released. [1]

_____

(b) Based on the results in the table above, what is the relationship between the number of turns on the rubber band and the distance travelled by the toy? [1]

_____

_____

_____

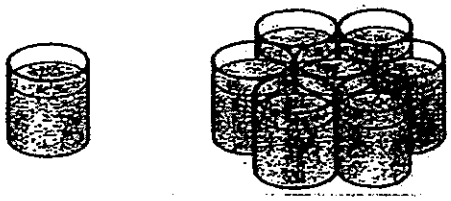
_____

(c) Suggest one modification that can be done to the wings of the toy so that it can travel a distance of more than 200 cm. [1]

_____

_____

35 Matthew carried out an investigation as shown below. All the beakers used are identical.



beaker P

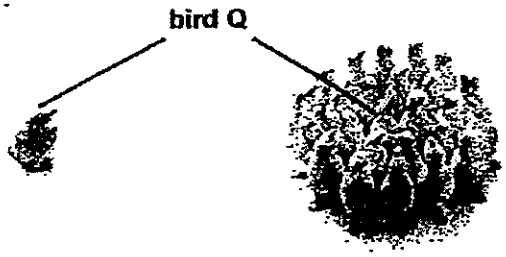
beaker Q in center, surrounded by six other similar beakers of water

He filled beaker P with 200 ml water at 90°C. He measured the temperature of water in beaker P every 5 minutes for 20 minutes. Next, he also filled beaker Q with 200 ml water at 90°C and surrounded beaker Q with six other similar beakers, each also filled with 200 ml water at 90°C. He recorded his results in a table below.

	Time (minutes)				
	0	5	10	15	20
Temperature of water in beaker P (°C)	90	81	73	66	60
Temperature of water in beaker Q (°C)	90	89	88	86	85

(a) Based on the data recorded, what can Matthew conclude from his experiment? [1]

The birds shown below live in a cold environment and they behave in a special way in order to survive the cold weather.



situation A

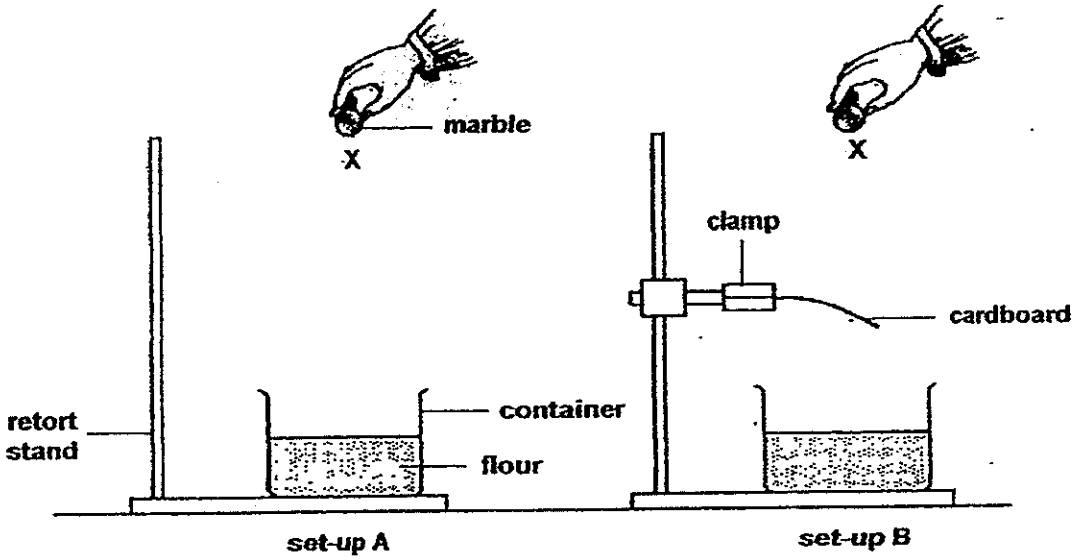
situation B

(b) Explain how bird Q in situation B has a higher chance of survival, as compared to if it is in situation A, when the temperature in the environment it lives in becomes low. [2]

(Go on to the next page)

SCORE /

36 Sean wanted to find out how to reduce the impact of a falling object. He set up an experiment as shown below.



Sean dropped the marble from point X as shown in set-up A. He then measured the depth of the depression in the flour made by the marble. Next, he placed a clamp holding a cardboard on the retort stand as shown in set-up B. He dropped the same marble from point X, making sure the marble hits the cardboard before landing on the flour.

(a) What difference would Sean observe in the depth of depressions made in the set-ups? [1]

Soil erosion occurs when a sloping ground becomes bare and exposed to the rain. One way to prevent this is to plant grass on the sloping ground.

(b) Other than having the grass to hold the soil together, based on Sean's experiment, explain how grass can help to prevent erosion when there is heavy rain. [2]

(Go on to the next page)

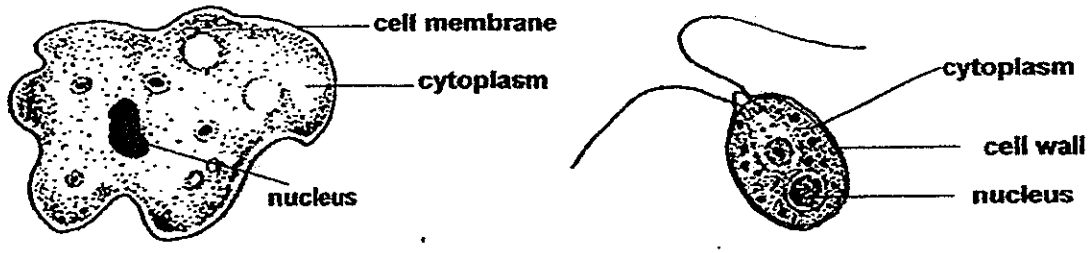
SCORE

37 Plant X produces seeds that have sweet fleshy structures attached to the seeds. These structures attract different species of ants to the seeds. The ants will carry the seeds back to their underground nest to feed their young. The young only feed on the sweet fleshy structures but not on the seed.

(a) State one benefit for the ants when they carry the seeds back to their underground nest. [1]

(b) State and explain a benefit for plant X when the different species of ants carry the seeds back to their underground nest. [2]

38 The following diagram shows two single-celled organisms that are found in ponds and streams.

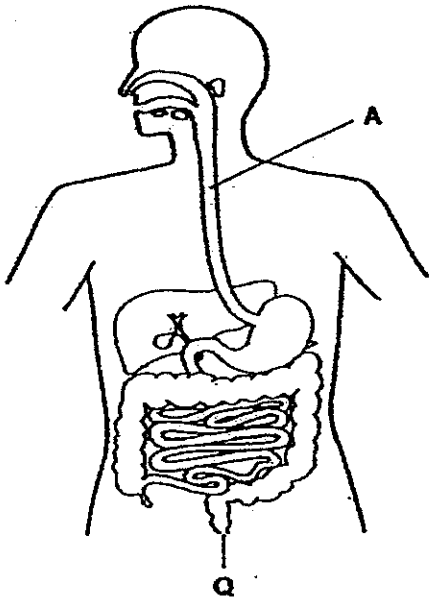


cell A cell B

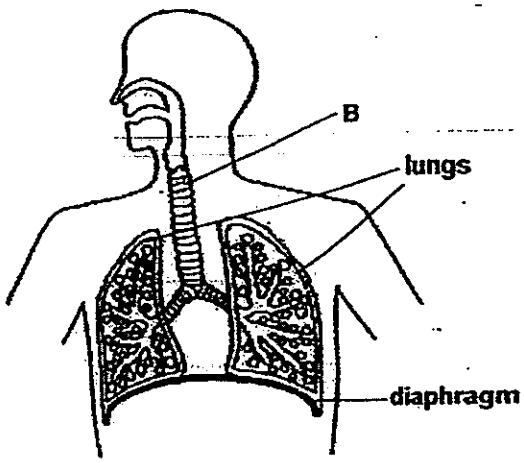
(a) Which cell is likely to be a plant cell? Give a reason for your answer. [1]

(b) What are the two main functions of a nucleus?

39 The diagrams below show the digestive and respiratory systems in a human.



Digestive system



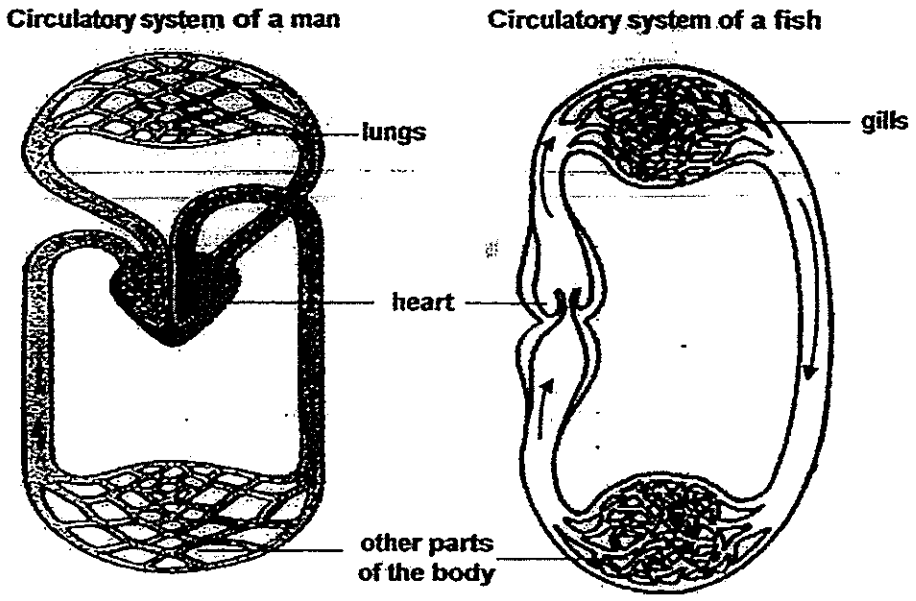
Respiratory system

(a) What is the difference in the function of parts A and B? [1]

(b) State the function of part Q. [1]

(c) Based on the diagram of the digestive system, what will happen if the small intestine is the same length as the large intestine? Give a reason for your answer. [1]

40 The diagrams below show the circulatory system of a man and that of a fish.



(a) Based on the diagrams above, state one difference between the direction of flow of blood in man and in fish. [1]

_____

_____

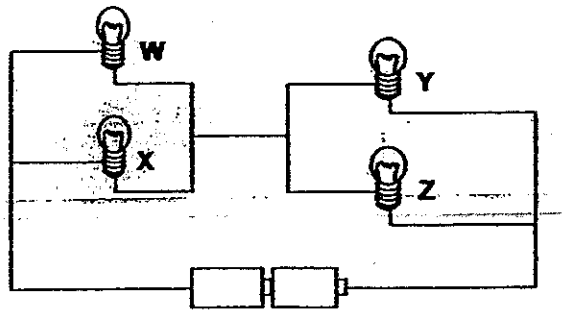
(b) Man and fish need oxygen for breathing. Describe how man and fish absorb oxygen into their blood stream. [1]

_____

_____

_____

41 Study the diagram below.



Circuit A

(a) Which bulb(s) will remain lit if bulb X in the circuit above blows? [1]

_____

(b) Draw a circuit diagram, Circuit B, below to show how three bulbs can be lit individually using appropriate number of switches. The batteries have been drawn for you. [1]

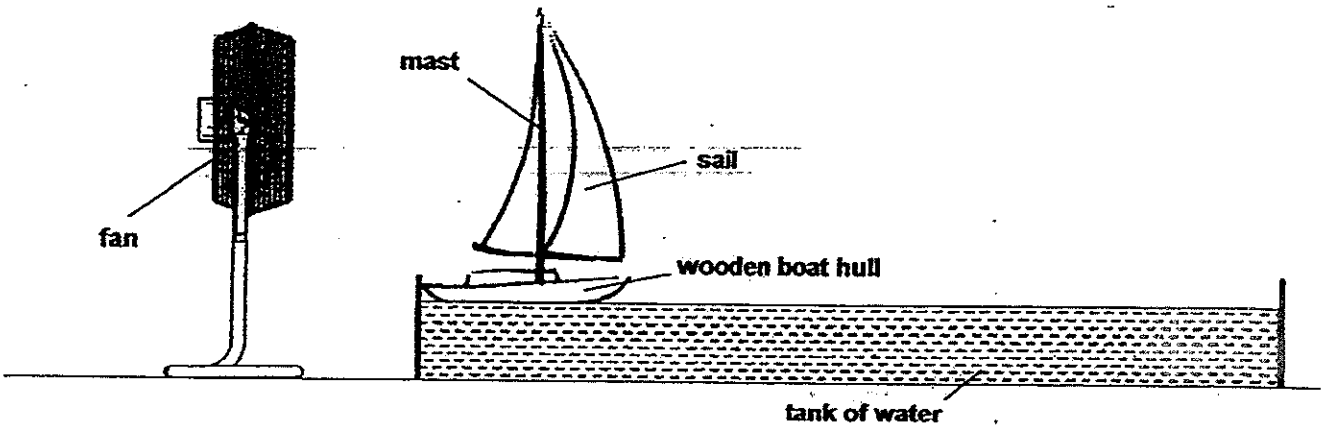
Circuit B

(c) Besides being able to control each bulb individually, state another advantage of Circuit B compared to Circuit A. [1]

_____

_____

42 Ivan wanted to find out how the area of the sail affects the time taken for the toy boat to move a certain distance. He made a toy boat as shown below.



He placed the toy boat in a large tank of water. He switched on the fan and recorded the time taken by the toy boat to travel a distance of 100 cm. He recorded his results in the table below.

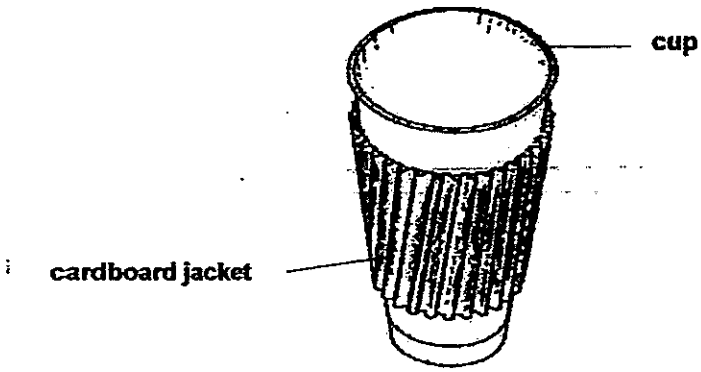
Area of the sail (cm^2)	Time taken to travel 100 cm (s)
20	32
30	20
40	12

(a) What conclusion can Ivan make from the results of his experiment? [1]

(b) Ivan kept the speed of the fan the same during his experiment. How would this ensure a fair test? [1]

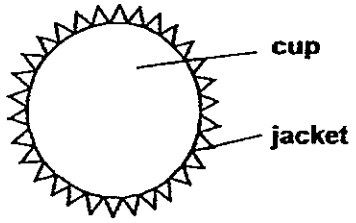
(c) Describe what Ivan should do to the current set-up to find out if the material of the sail affects the time taken for the toy boat to travel a distance of 100 cm. [1]

43 Regan noticed that coffee outlets usually wrap a cardboard jacket around the cup of hot coffee for their customers to take away as shown below.



(a) How does the cardboard jacket prevent customers from burning their hands? [1]

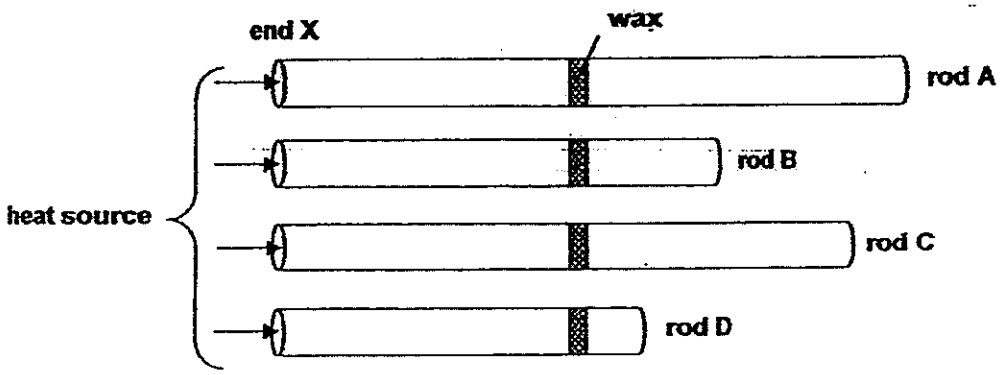
(b) Regan observed the structure of the jacket from the top view as shown below.



How does the structure of the cardboard jacket help to serve its purpose? [1]

(c) Other than your answer in (a), state two properties of cardboard that makes it suitable for making the jacket. [1]

44 Kenny used four rods of identical diameters for an experiment. The rods were made of different materials. He put a ring of wax around each of them and heated each rod at end X with the same amount of heat. He recorded the time it took for each ring of wax to melt off.



Rod	Time taken for wax to melt completely (minutes)
A	12
B	15
C	6
D	21

(a) Based on the results of Kenny's experiment, what was he trying to find out? [1]

(b) Compare the results for Rod B and Rod D. Which rod is a better conductor of heat? Give a reason for your answer. [1]

(c) If he increased the thickness of Rod C and repeated the experiment, would the time taken for the ring of wax to melt be longer or shorter? Explain your answer. [1]

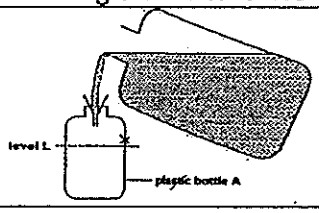
End of Booklet B

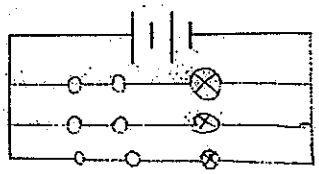
SCORE / 2

EXAM PAPER 2014

LEVEL : PRIMARY 6
SCHOOL : ACS (JUNIOR)/(PRIMARY)
SUBJECT : SCIENCE
TERM : PRELIMINARY

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

Q31	(a)	The hot water evaporated and formed the water vapour which rose and touched the cooler surface of the plastic sheet causing it to form water droplets.
	(b)	The temperature difference was smaller so condensation happened slower.
Q32	(a)	The air inside plastic bottle A occupied the space in the bottle not allowing the oil to enter.
	(b)	
	(c)	He can remove the funnel.
Q33	(a)	X : Iron Y: Magnet
	(b)	Like poles of 2 magnets will repel. Thus when the magnet repel, the spring will be compressed and so the length of the spring will be much shorter than the original length.
Q34	(a)	Elastic force
	(b)	The higher the number of tums on the rubber band, the further the toy butterfly travel in the air.
	(c)	Use bigger wings.
Q35	(a)	Beaker P is losing heat to the surrounding faster than Beaker B as Beaker Q is surrounded by six other similar beakers of water.
	(b)	In situation B, Q stays close together with other birds, hence its surrounding temp is higher and body loses heat slower than in situation A.
Q36	(a)	The depression in set up B will be shallower than that in set-up A.
	(b)	The grass helps to cushion the falling raindrops so the raindrops would not loosen the soil when they hit the ground.

Q37	(a)	They got to feed on the sweet flesh.
	(b)	The plants are dispersed further away from the parent plant so they do not have to compete for sunlight, water, nutrients and space to allow each plant to grow better.
Q38	(a)	Cell B. It Has a cell wall which only plant cells have.
	(b)	It controls activities with the cell.
Q39	(a)	Part A transports food from the mouth to the stomach while Part B transports air to and from the nose and the lungs.
	(b)	It removes the waste from the body.
	(c)	The small intestine would absorbs less digested food as the surface decreases.
Q40	(a)	The direction of flow of blood in a man forms an '8' while the direction of flow of blood for fish is in 1 direction.
	(b)	Man uses lungs while fish uses gills.
Q41	(a)	Bulb W, Y and Z
	(b)	
	(c)	If one light bulb fused, the other two bulbs will remain lit.
Q42	(a)	Ivan can conclude that a sail with larger area on a boat will use shorter amount of time to travel.
	(b)	The speed of the fan affects the results. Since the variable is the area of the sail, the speed of the fan should not be changed.
	(c)	Different materials should be used but the area for each material to remain the same.
Q43	(a)	The cardboard reduces the conductivity of heat from the hot coffee in the cup to our hands.
	(b)	The jacket provided less surface area of contact between the finger/hand and the cup, hence, there is less heat gain by the fingers. The customer would be able to hold the cup more comfortably for longer period of time without being burnt or feeling hot.
	(c)	It is a poor conductor of heat and it is light.
Q44	(a)	He was trying to find out if the material of the rod will affect the conductivity of heat.
	(b)	Rod B is a better conductor of heat thus the wax took a shorter time to melt.
	(c)	It would be longer. The rod would have to conduct more heat.