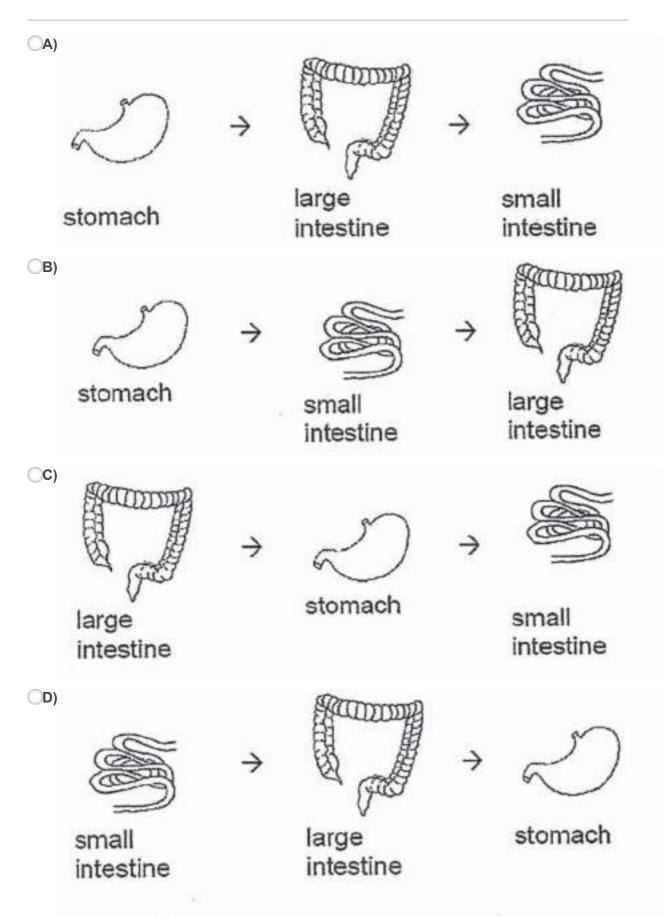
Test:	Primary 4 Science (Term 4) -	- Rosyth (2020)
Points:	80 points	
Name:		Score:
Date:		
Signature:		
Select multi	ole choice answers with a cross	s or tick:
Only selection	ect one answer	
Can sele	ect multiple answers	
Question	1 of 58	Primary 4 Science (Term 4) 2 pts
Sarah fou	ind a plant in the garden and r d its height again.	neasured its height. After two weeks, she
Sarah fou measured	i its height again.	
Sarah fou measured From he	its height again.	neasured its height. After two weeks, she
Sarah fou measured	the	neasured its height. After two weeks, she

Question 2 of 58

Which one of the following shows the correct order when food moves through some parts of the digestive system?



Question	2	of	59
Question	5	ΟΤ	JÖ

Which animal has a pupa as a stage in its life cycle?

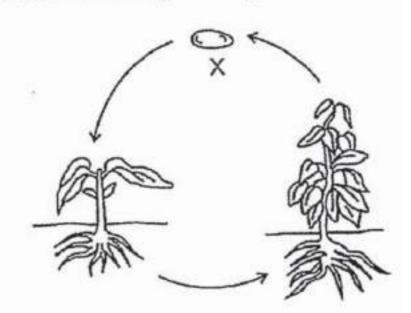
A) beetle

- **B**) chicken
- **C**) cockroach
- **D**) grasshopper

Question 4 of 58

Primary 4 Science (Term 4) 2 pts

The diagram below shows the life cycle of a plant.



What is the stage marked X?

- ○A) egg
- B) seed
- **C**) adult plant
- **D**) young plant

The arrows (→) in the diagram below show the direction of movement of a substance in plants.

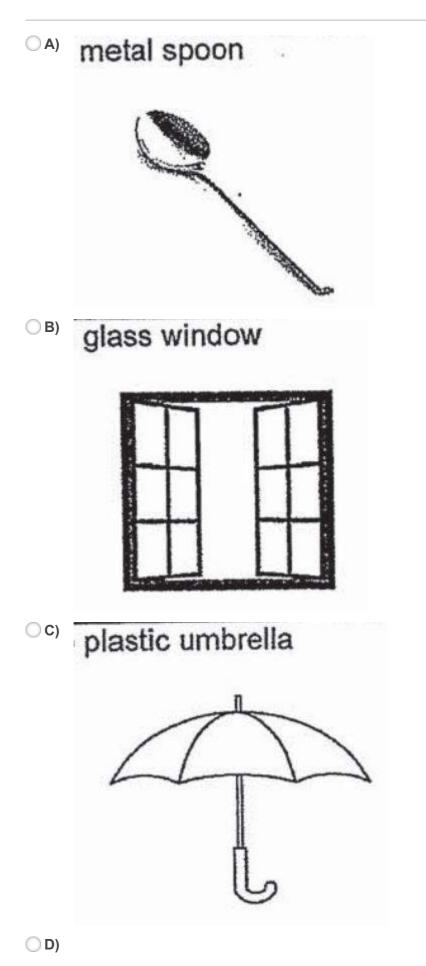
🔾 A) soil

Question 5 of 58

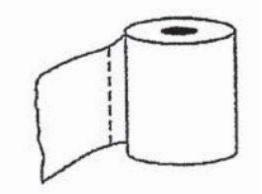
- **B**) food
- ○C) water
- OD) sunlight

Question 6 of 58

Which one of the following objects is not made of waterproof material?

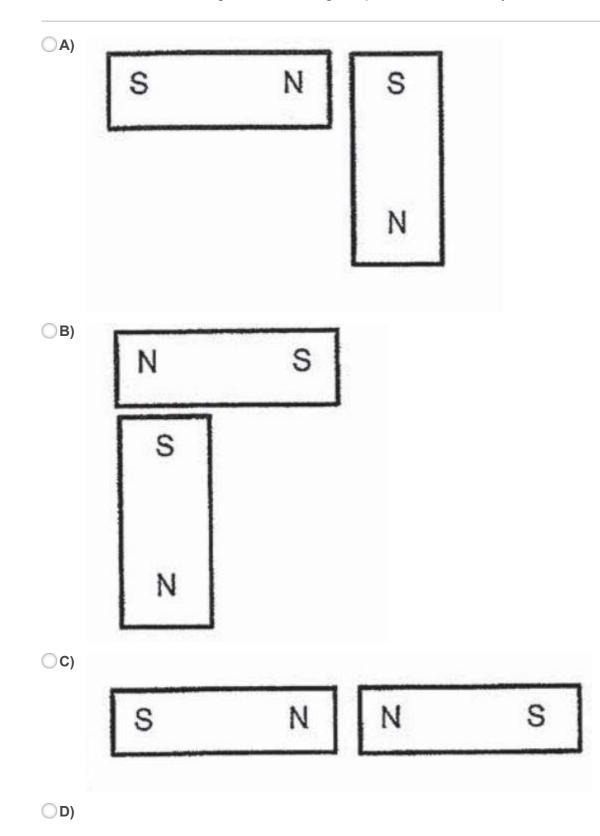


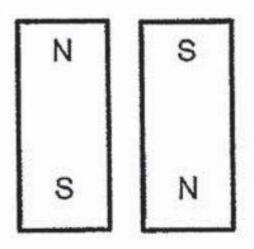
toilet paper

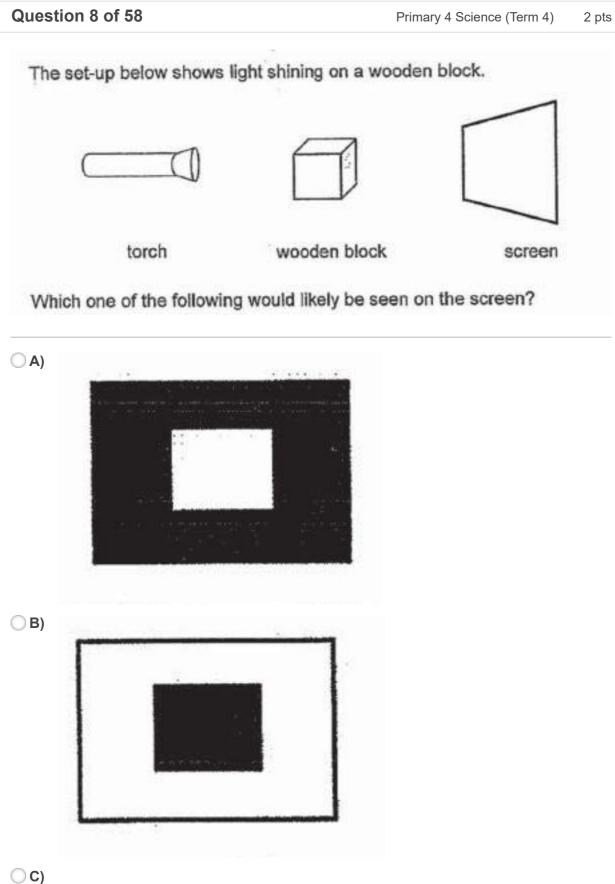


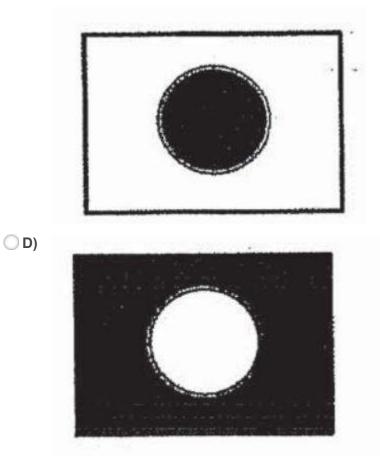
Question 7 of 58

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









Question 9 of 58

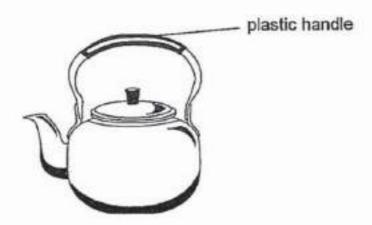
Primary 4 Science (Term 4) 2 pts

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

- A) The Sun
- OB) A blanket
- C) A lighted bulb
- OD) A candle flame

Question 10 of 58

Hashim boiled some water in the kettle as shown below.



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

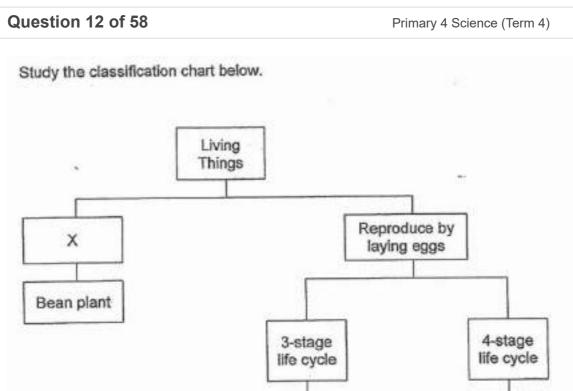
- **A**) light material
- **B**) flexible material
- **C)** poor conductor of heat
- **D**) good conductor of heat

Study the table below.

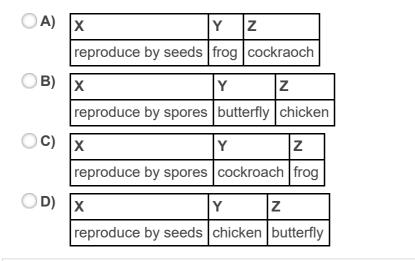
Characteristic of animal	w	х	Y	z
Has hair		1		
Lays eggs	1		1	~
Has wings	1			
Has moist skin			1	

Which one of the following is an amphibian?

- **A)** W
- ОВ) Х
- **○C)** Y
- **D**) Z



Which of the following best describes X, Y and Z?



Question 13 of 58

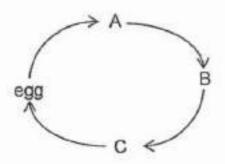
Primary 4 Science (Term 4) 2 pts

Z

How is an adult cockroach and its young similar?

- A) They can lay eggs.
- **B)** They have eight legs.
- C) They have a pair of wings.
- **D**) They have three body parts.

The diagram below shows the stages in the life cycle of the mosquito.



Which one of the following statement is true?

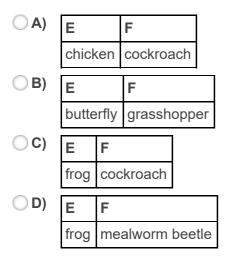
- A) Stage A represents the adult stage.
- **B**) The mosquito can only fly in stage B.
- **C**) The mosquito does not feed in stage B.
- **D**) Only stages B and C are spent in water.

Question 15 of 58

Amin observed organisms, E and F, over a period of time and recorded his findings in the table below.

Observation	E	F
It has a 3-stage life cycle.	Yes	Yes
Its young resembles the adult.	No	Yes
It spends part of its life cycle in water.	Yes	No

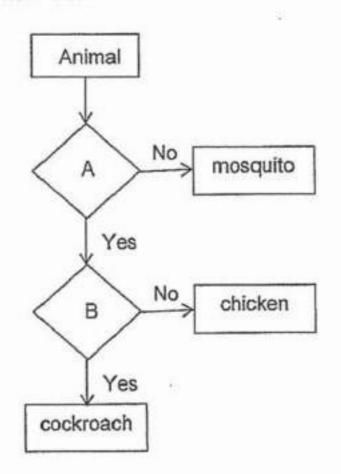
Which one of the following correctly represents organisms E and F?



2 pts

Study the flow chart below.

Question 16 of 58

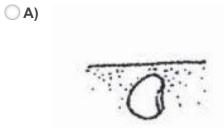


Which of the following statements correctly represents A and B?

_						
○ A)	Α			В		
	Does it give birth to its young? D		Does its	Does its young resemble the a		the adult?
○В)	Α	В				
	Does it live in water?	Does it giv	ve birth t	to its young?		
() C)	Α			В		
	Does it have a 3-stage	e life cycle	? Does	it have six leg	js?	
O D)	A			В		
	Does it have a 4-stage	e life cycle	? Does	it live on land	?	

Question 17 of 58

In which of the following stages can the plant reproduce?



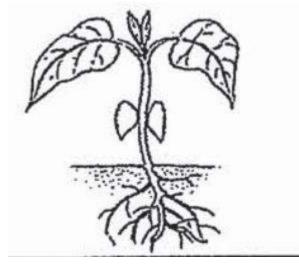
ОВ)



() C)



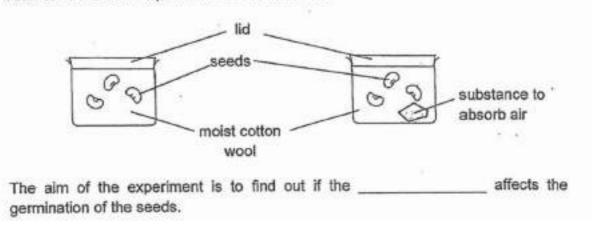
() D)



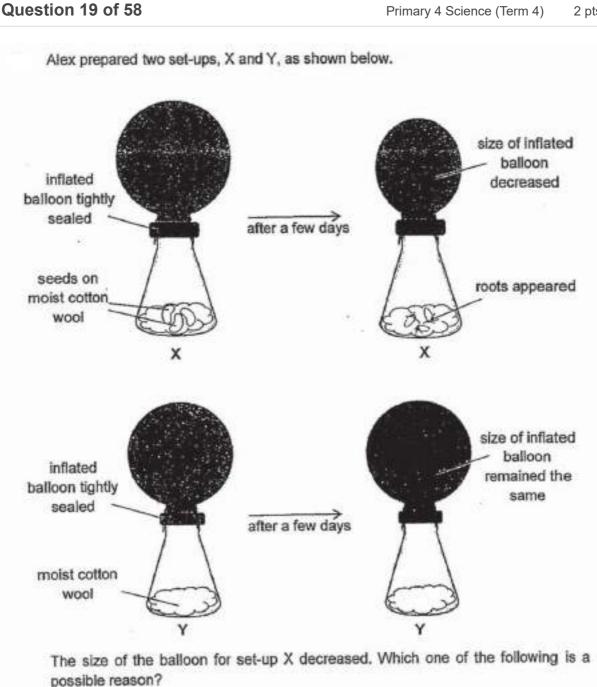
Question 18 of 58

Primary 4 Science (Term 4) 2 pts

Alan carried out an experiment as shown below.



- A) presence of air
- **B**) amount of water
- C) presence of light
- **D**) number of seeds



- Air was taken in by the seeds.
- **B**) Air was produced by the seeds.
- **C**) Air was taken in by the moist cotton wool.
- **D**) Air was produced by the moist cotton wool.

Question 20 of 58

The table below shows the properties of materials A, B, C and D. A tick (\checkmark) indicates that the material has the property.

	Property			
Material		Strong	Flexible	Waterproof
A		. イ		~
В	÷	~	1	
С			~	
D		1	~	~

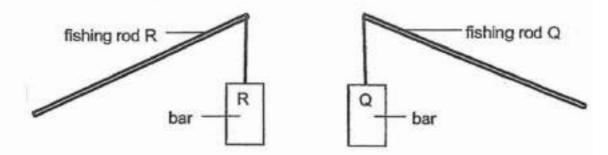
Which material, A, B, C or D, would you use to make a raincoat?



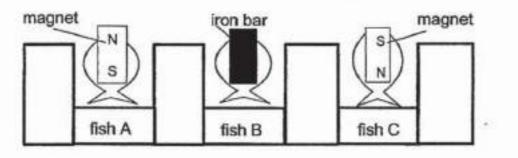
- **A**) A
- **В)** В
- **○C)** C
- OD) D



Henry made a fishing game using the objects shown below.

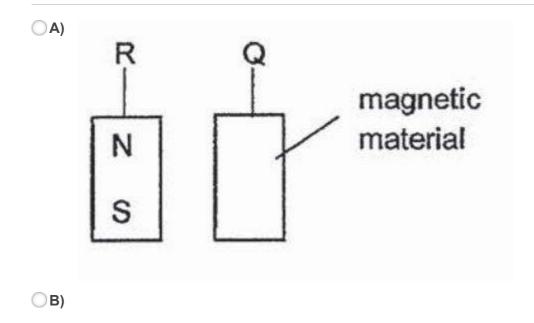


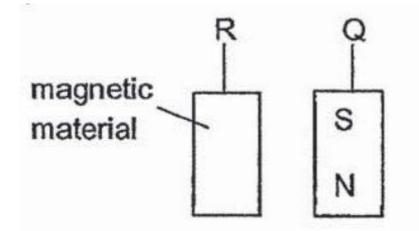
The lower end of bar R and Q are used to catch toy fish A, B and C.



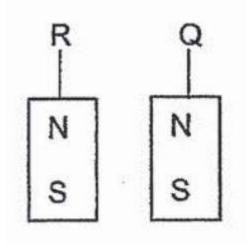
Rod R could catch fish A and B only. Rod Q could catch fish A and C only.

Which of the following shows the bars for rods R and Q?

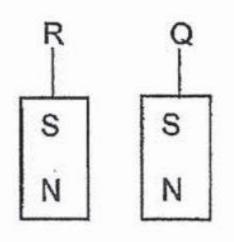




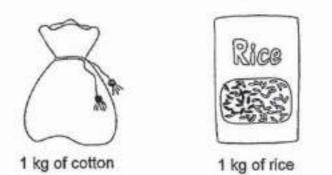
OC)



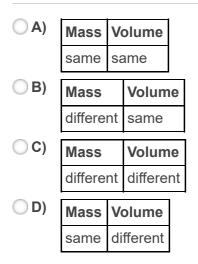
OD)



The pictures below shows 1 kg of cotton and 1 kg of rice.

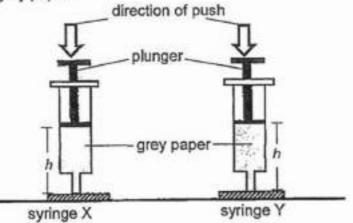


Which one of the following is true about the comparison of the mass and volume of the cotton and rice?



Question 23 of 58

Ally carried out an experiment, as shown below, using two syringes, X and Y. Each syringe contained matter of different states. The external part of the syringes were wrapped in grey paper.



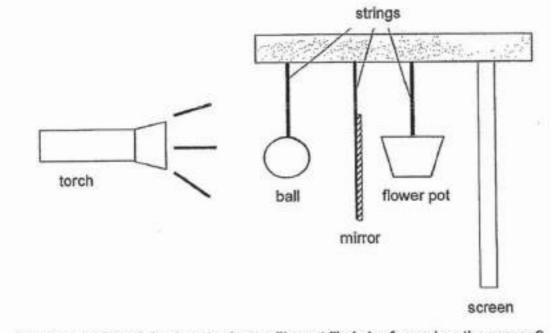
She pushed both plungers downwards and recorded the heights of h in the table below.

	Height of I) (cm)
Syringe	At the beginning	At the end
x	8	5
Y	8	8

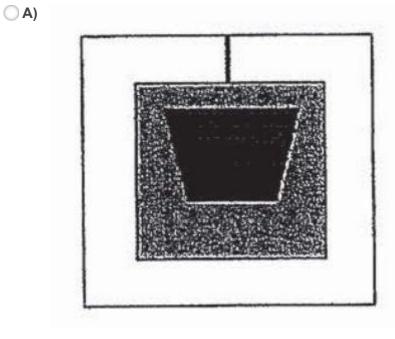
Which one of the following correctly describes the state of the substance contained in syringe X and Y?

○ A)	state of substance in syringe X	state of substance in syringe Y
	gas	liquid
○В)	state of substance in syringe X	state of substance in syringe Y
	liquid	solid
() C)	state of substance in syringe X	state of substance in syringe Y
	gas	gas
O D)	state of substance in syringe X	state of substance in syringe Y
	liquid	gas

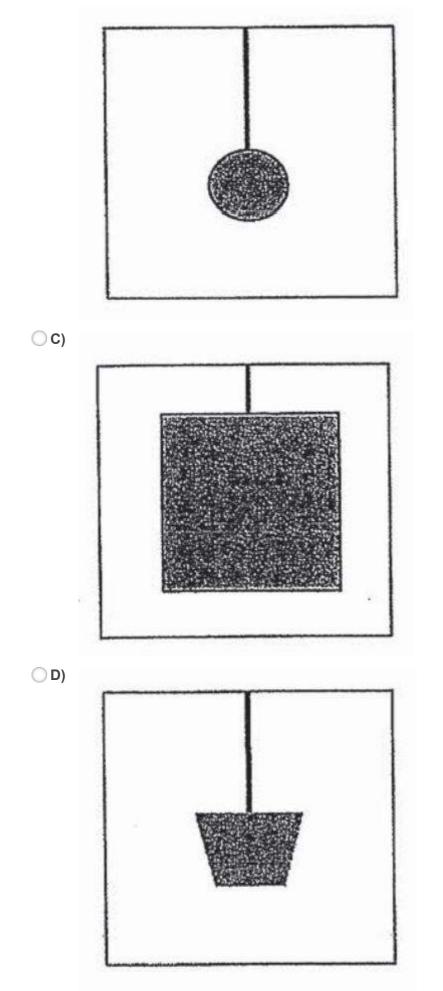
A torch was shone on three objects hanging by strings as shown in the diagram below.



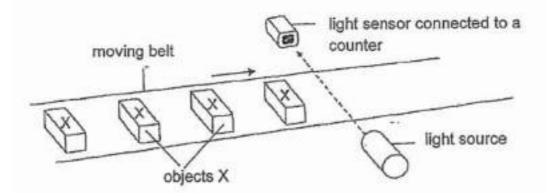
Which one of the following shadows will most likely be formed on the screen?



ОВ)

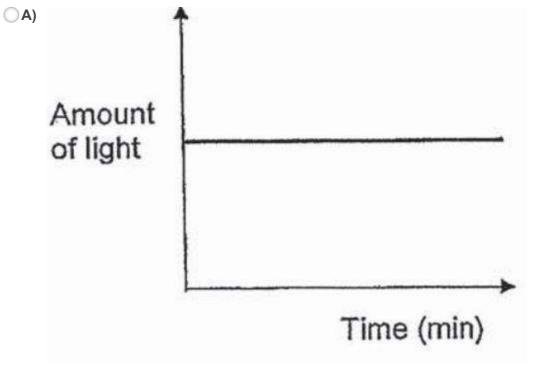


The diagram below shows a set-up that uses a light sensor to count the number of identical object X moving on a belt in a room with lights.

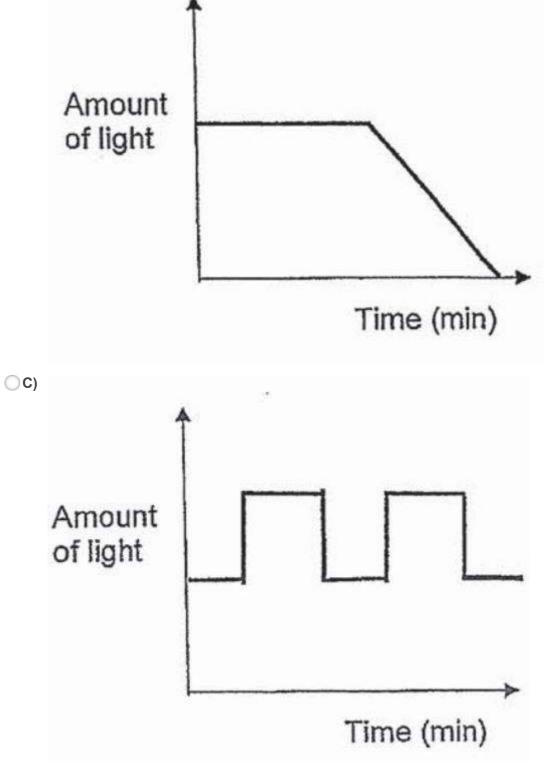


The belt moves at a constant speed. When an object X is between the light source and the sensor, it blocks some light from reaching the sensor.

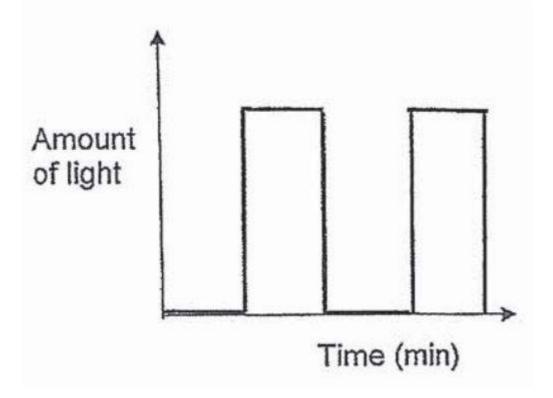
Which graph correctly shows the data recorded by the light sensor?



○В)



OD)



Question 26 of 58

Some pupils are preparing for a shadow puppet performance. They set up the stage as shown in the diagram below.



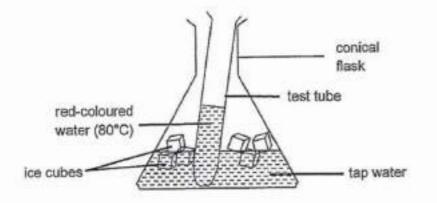
The pupils then made a few more shadow puppets by using different materials.

Which one of the puppet is the least suitable for the show?

- **A**) A puppet made of cardboard.
- **B**) A puppet made of tracing paper.
- **C)** A puppet made of drawing block.
- **D**) A puppet made of clear plastic sheet.

Question 27 of 58

A test tube containing some red-coloured water at 80°C was placed into a conical flask containing some tap water and ice as shown below. The set-up was left overnight in a room where the temperature was 26°C.



Which of the following correctly shows the temperature of the tap water and redcoloured water the next day?

○ A)	Temperature of the tap water (°C)	Temperature of the red-coloured water (^o C)
	54	54
⊖В)	Temperature of the tap water (^o C)	Temperature of the red-coloured water (^o C)
	15	26
() C)	Temperature of the tap water (^o C)	Temperature of the red-coloured water (^o C)
	26	80
O D)	Temperature of the tap water (°C)	Temperature of the red-coloured water (^o C)
	26	26

Question 28 of 58

 Mr Muthu prepared his 'teh tarik' (pulled tea) by pouring the tea from a metal container to another metal container repeatedly as shown in the diagram below.



He poured the tea back and forth repeatedly between the two metal containers from a height to ensure that the tea is not too hot for the customers to drink.

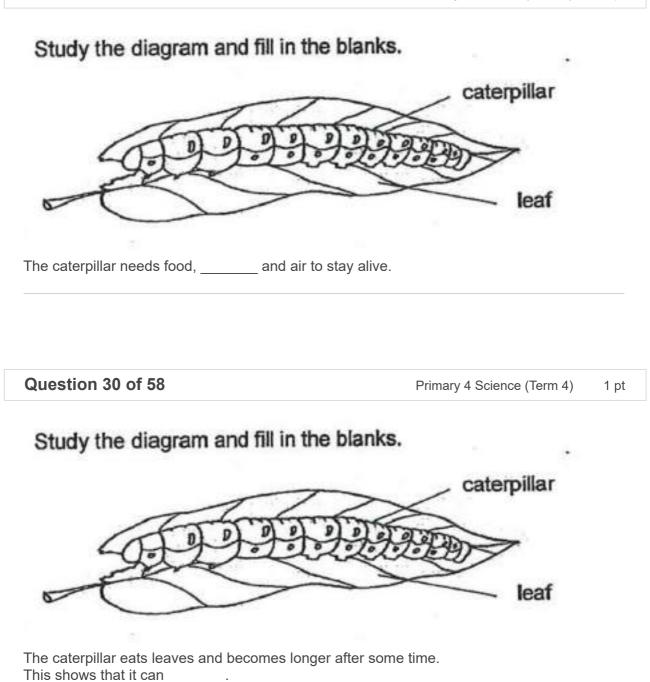
Sally, Vicky and Joy, each made a statement on why the tea is not too hot.

Sally	Coldness from the surrounding air travels to the hot tea.
Vicky	The hot tea will lose heat faster to the surrounding air.
Joy	Metal containers conducted the heat away from the hot tea.

Which of the above children's statement(s) is/are correct?

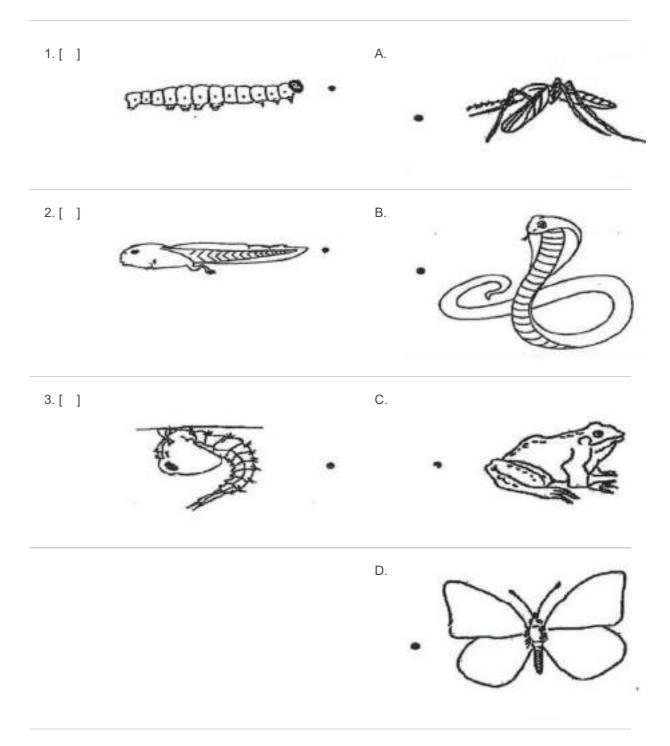
- **A**) Vicky only
- **B**) Vicky and Joy only
- **C**) Joy and Sally only
- **D)** Sally, Vicky and Joy

Question 29 of 58



Question 31 of 58

The diagram below shows the young and adult of some organisms. Match the young with the correct adult.



Question 32 of 58			Primary 4 Science (Term 4)	3 pts
Classify the following into	matter and non-matter.			
1. [] Shadow		A.	Matter	
2. [] Sugar		В.	Non-Matter	
3. [] Heat				
Question 33 of 58			Primary 4 Science (Term 4)	2 pts
The diagram below s	shows how Mary sees th		lamp — cup	
The	_ from the lamp is		by the cup and	E .

enters Mary's eye.

[2]

Part C: backbone

Question 34 of 58	Primary 4 Science (Term 4)	0.5 p
The diagram below shows the human	skeletal system.	3
Identify the parts, A and B, in the boxe	es below.	[1]
	Part A:	
	Part B.	

Identify Part A.

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Question 35 of 58	Primary 4 Science (Term 4)	0.5 pt
The diagram below shows the human	skeletal system.	10
Identify the parts, A and B, in the boxe	es below.	[1]
	Part A:	
	Part B:	
1 port	Part C: backbone	

Identify Part B.

,

Question 36 of 58

Primary 4 Science (Term 4)	0 pts

[1]

The diagram below shows the human skeletal system.

Identify the parts, A and B, in the boxes below.

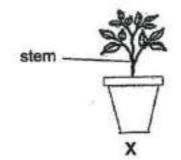
Part A: Part B: Part C: backbone

State a function of part A. (1 mark)

This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

Question 37 of 58

The diagram below shows plant X.



Jenny learnt the functions of the plant system and states that the stem of plant X has a similar function as part C of the human skeletal system. Do you agree? [2]

This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

Grading: This question type is not graded on this system and will not affect the final score as it was designed in such a way that it requires manual assistance.

Question 38 of 58

Primary 4 Science (Term 4) 1 pt

The table below shows the stages in the life cycle of insects, A and B, and the number of days they remain in each stage.

Stage in life cycle of Insect A	egg	larva	pupa	adult
Number of days	1	5	12	10

Stage in life cycle of Insect B	egg	larva	pupa	adult
Number of days	1	3	5	12

Predict the stage of insect A on the 10th day of their life cycles after the eggs are laid.

Insect A:

Question 39 of 58

The table below shows the stages in the life cycle of insects, A and B, and the number of days they remain in each stage.

Stage in life cycle of Insect A	egg	larva	pupa	adult
Number of days	1	5	12	10

Stage in life cycle of Insect B	egg	larva	pupa	aduit
Number of days	1	3	5	12

Predict the stage of insect B on the 10th day of their life cycles after the eggs are laid.

Insect B: _____

The table below shows the stages in the life cycle of insects, A and B, and the number of days they remain in each stage.

Stage in life cycle of Insect A	egg	larva	pupa	adult
Number of days	1	5	12	10

Stage in life cycle of Insect B	egg	larva	pupa	aduit
Number of days	1	3	5	12

Both insects reproduce by laying many eggs.

Explain why the insects lay many eggs. (1 mark)

This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

Grading: This question type is not graded on this system and will not affect the final score as it was designed in such a way that it requires manual assistance.

Question 41 of 58	Primary 4 Science (Term 4)	0 pts
		0 pt3

Draw and label the life cycle of the grasshopper below. (1 mark)

This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

Question 42 of 58

State a similarity and difference between the adult grasshopper and its young. (2 marks)

This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

Grading: This question type is not graded on this system and will not affect the final score as it was designed in such a way that it requires manual assistance.

Question 43 of 58

Primary 4 Science (Term 4) 0 pts

Explain why the life cycle is important to the grasshopper. (1 mark)

This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

Grading: This question type is not graded on this system and will not affect the final score as it was designed in such a way that it requires manual assistance.

Question 44 of 58

Primary 4 Science (Term 4) 2 pts

Ken planted the seed of a flowering plant and observed its growth. He measured the height of the young plant over a period of time as shown in the table below.

Time (week)	Height of the plant (cm)
0	0
1	5
2	9
3	20 -
4	22
5	22

State the two processes that the seed undergoes to become a young plant. The first letter of the two processes has been given. (2 marks)

Process 1: G_____ Process 2: G_____ Question 45 of 58

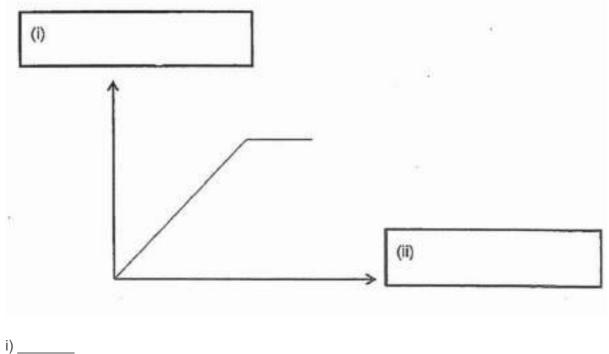
[2]

Ken planted the seed of a flowering plant and observed its growth. He measured the height of the young plant over a period of time as shown in the table below.

Time (week)	Height of the plant (cm)
0	0
1	5
2	9
3	20 -
4	22
5	22

The graph below shows height of the plant over a period of time.

Label (i) and (ii) clearly in the graph below.

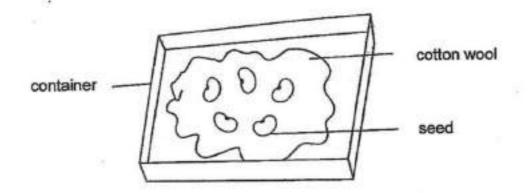


ii)_____

This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

Question 46 of 58

Andy wanted to find out if the amount of light affected the germination of the seeds. He set up a container as shown below.



He placed three similar containers, E, F and G, in the Science laboratory and recorded the information in the table shown below.

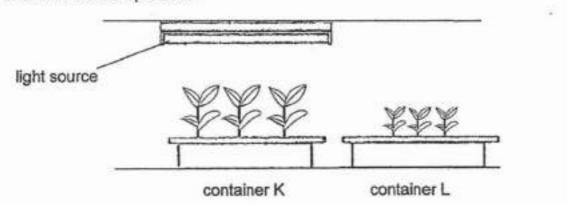
Container	Amount of light (lux)	Amount of water added to container (ml)
F	3500	50
F	100	20
G	100	50

Which two containers, E, F and G should Andy use to carry out his experiment? Explain your answer. (2 marks)

This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

Question 47 of 58

Andy observed another two containers, K and L, for a few weeks. He noticed that the plants in container L were smaller in size than the plants in container K as shown in the set-up below.

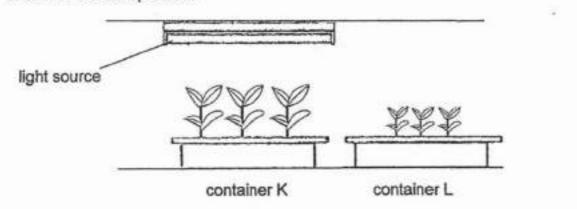


Based on the set-up above, state why the plants in L were smaller in size. (1 mark)

This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

Question 48 of 58

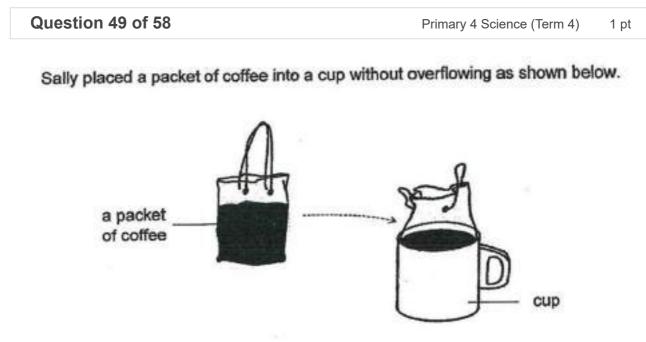
Andy observed another two containers, K and L, for a few weeks. He noticed that the plants in container L were smaller in size than the plants in container K as shown in the set-up below.



What could Andy do to the set-up to ensure that all the plants in containers K and L were similar in size? (1 mark)

This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

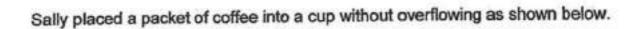
Grading: This question type is not graded on this system and will not affect the final score as it was designed in such a way that it requires manual assistance.

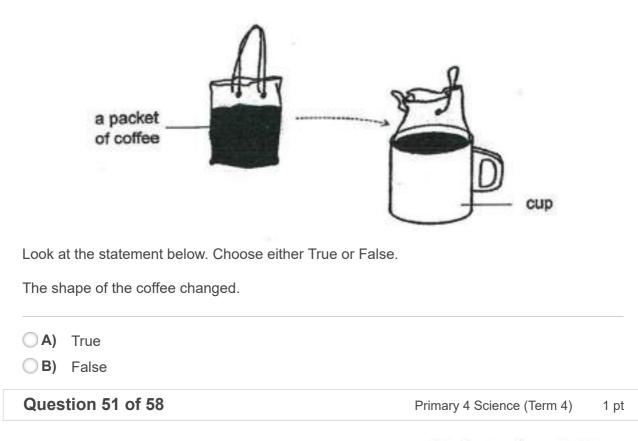


Identify the state of matter for the coffee.

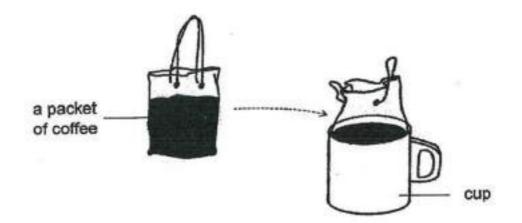
Question 50 of 58

Primary 4	Science	(Term 4)	1 pt
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Sally placed a packet of coffee into a cup without overflowing as shown below.



Look at the statement below. Choose either True or False.

The volume of the coffee changed.

A) True

B) False

Andrea made a cup of hot milo. However, it was too hot to drink. She added some tap water into the cup.



Choose the correct answer to show whether there was heat gain or heat loss in each item.

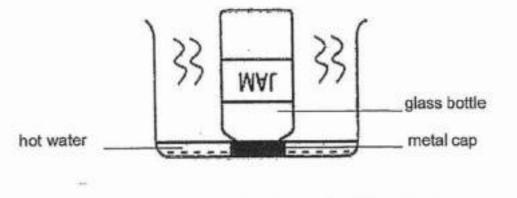
1.[]	Hot Milo	Α.	Heat Loss
2. []	Tap Water	Β.	Heat Gain

Question 53 of 58

Andrea made a cup of hot milo. However, it was too hot to drink. She added some tap water into the cup.



Andrea could not open the bottle of jam so she dipped the metal cap of the bottle into hot water for a minute as shown in the diagram.



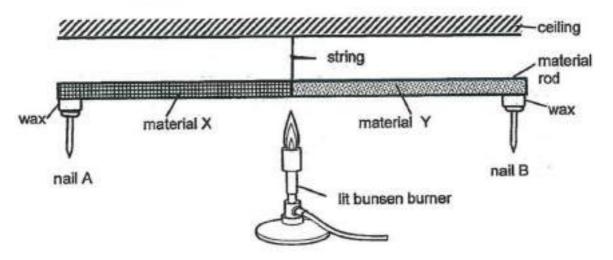
She was then able to open the bottle of jam using this method.

Explain why Andrea was able to open the bottle of jam. [2]

This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

Question 54 of 58

Lee Han carried out an experiment as shown below to find out which material is a better conductor of heat.



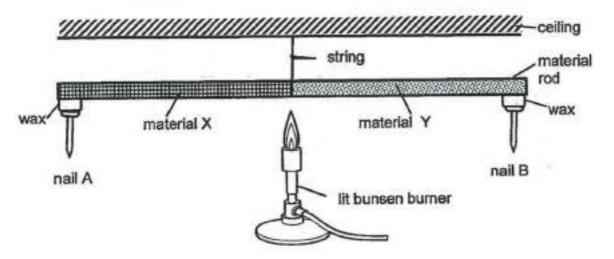
Complete the table to show how Lee Han should carry out his experiment. Match the numbers 2 to 5 provided in the list to the steps on the left. The first step has been done for you.

Step	Procedure
1	Stick the flat end of the nail to the end of the rod using the same amount of wax.
	Using a stopwatch, measure how long it takes for each of the nails to fall off.
	Hang the rod using the string over the bunsen burner.
	Record the results.
	Light the bunsen burner.

1. []	Using a stopwatch, measure how long it takes for each of the nails to fall off.	A. 2	
2. []	Hang the rod using the string over the bunsen burner.	B. 5	
3. []	Record the results.	C. 4	
4.[]	Light the bunsen burner.	D. 3	

Question 55 of 58

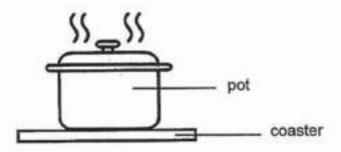
Lee Han carried out an experiment as shown below to find out which material is a better conductor of heat.



Lee Han recorded the time taken for the nails to drop off from the rod in the table below.

Material	Nail	Time taken for each nail to drop off (min)
X	Α	2
Y	В	5

He wanted to find out which material is the best to make into a coaster. The purpose of the coaster is to prevent the table from being damaged by heat.

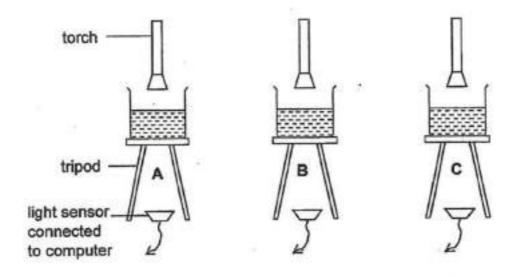


Based on the results from the table, which material, X or Y, is the better choice for making the coaster? Explain your answer. [2]

This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

Question 56 of 58

Paul collected some water samples from two ponds, A and B. He wanted to find out which pond has more polluted water. Polluted water contains more unwanted particles. Water sample C contained clear water.



He carried out the experiment in a dark room. He then used three identical torches to shine through the water samples. The reading of the amount of light passing through was recorded using a light sensor.

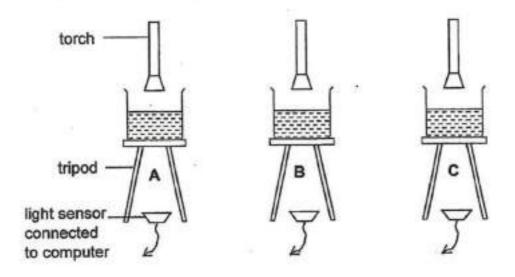
The results were shown in the table below.

Water samples	Α	В	C
Amount of light that passed through (lux)	710	327	1009

Which one of the water samples, A or B, was more polluted? Give a reason. (1 mark)

This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

Paul collected some water samples from two ponds, A and B. He wanted to find out which pond has more polluted water. Polluted water contains more unwanted particles. Water sample C contained clear water.



He carried out the experiment in a dark room. He then used three identical torches to shine through the water samples. The reading of the amount of light passing through was recorded using a light sensor.

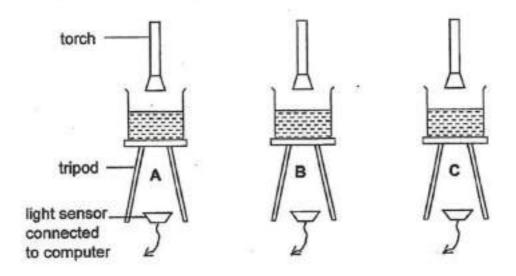
The results were shown in the table below.

Water samples	Α	В	C
Amount of light that passed through (lux)	710	327	1009

Why did Paul set up his experiment in a dark room? (1 mark)

This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

Paul collected some water samples from two ponds, A and B. He wanted to find out which pond has more polluted water. Polluted water contains more unwanted particles. Water sample C contained clear water.



He carried out the experiment in a dark room. He then used three identical torches to shine through the water samples. The reading of the amount of light passing through was recorded using a light sensor.

The results were shown in the table below.

Water samples	A	В	C
Amount of light that passed through (lux)	710	327	1009

Based on Paul's experiment, choose the correct variables accordingly. Match the options below:

1.[]	The type of water samples used.	A.	Kept the same
2. []	The amount of light that passed through the water.	В.	Measured
3. []	The amount of the water samples.	C.	Changed
4.[]	Location of the set-ups.		