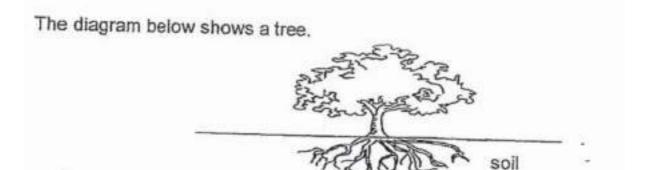
Test:	Primary 4 Science (Term 4) - St	Nicholas 2020
Points	5: 76 points	
Name:	:	Score:
Date:		
Signat	ture:	
Select	multiple choice answers with a cross or	tick:
O On	nly select one answer	
☐ Ca	in select multiple answers	
Ques	ation 1 of 64	Primary 4 Science (Term 4) 2 pts
	ach question, four options are given. (s = 56 marks)	One of them is the correct answer. (28 x 2
	ng observed the stages of growth of a seled her observations below.	eed to an adult plant over a period of time and
B shoo C leave D root	e flowers bloom ot fgrows upwards res start to develop grows downwards s starts to appear	
Which plant?	·	er in which the seed develops into an adult
() A)	B, C, D, E, A	
(B)	B, D, E, A, C	
() C)	D, B, A, E, C	
(D)	D, B, C, A, E	
Ques	ation 2 of 64	Primary 4 Science (Term 4) 2 pts
Which	one of the following is in the function of	a leaf on a plant?
(A)	makes food	
○ B)	absorbs water	
() C)	holds plant upright	
(D)	absorbs mineral salts	

Question 3 of 64

Primary 4 Science (Term 4)

2 pts



During a thunderstorm, Cindy observed that the tree did not fall.

Which one of the following statements best explains her observation?

- A) The roots store food for the tree.
- B) The roots absorb water for the tree.
- C) The roots absorb minerals for the tree.
- **D)** The roots hold the tree firmly to the soil.

Question 4 of 64

Primary 4 Science (Term 4)

2 pts

Which of the following statement(s) is/are correct about a rose plant and a staghorn fern?

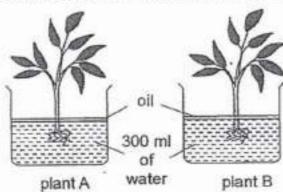
- A Both are flowering plants.
- B Both make their own food.
- C Both reproduce by spores.
- D Both have leaves, stem and roots.
- A) A only
- **B)** A and C only
- C) B and D only
- **D)** B, C and D only

Question 5 of 64

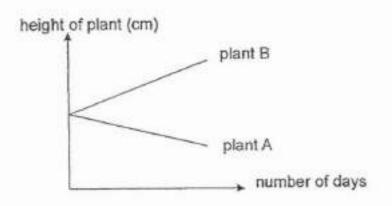
Primary 4 Science (Term 4)

2 pts

The diagram below shows two similar plants A and B.



Plant A was placed in a dark room and plant B was left in the sun. The height of the plant was measured over a number of days and recorded in the graph below.



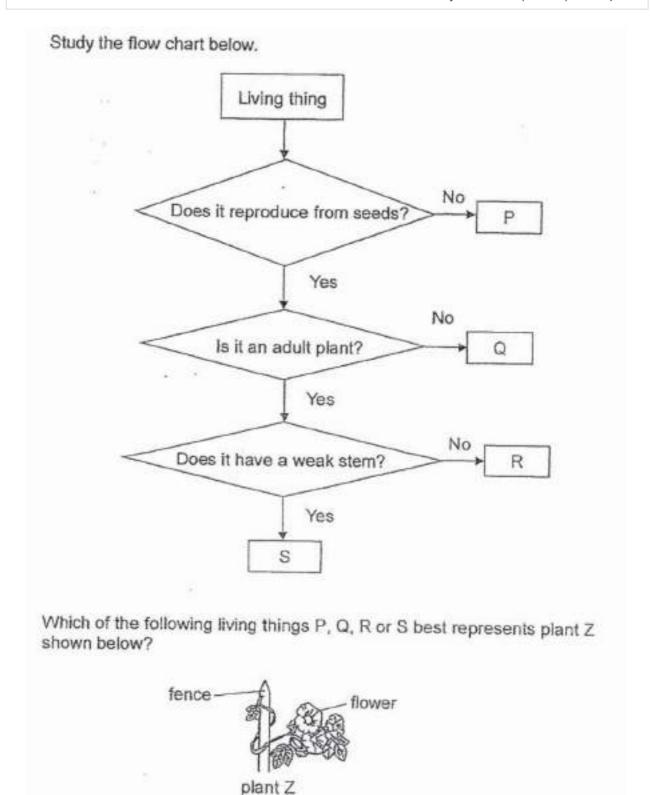
What is the aim of the experiment?

- A) To find out if plants need minerals to grow.
- B) TO find out if plants can grow without water.
- C) To find out if the amount of water affected plant growth.
- To find out if the amount of sunlight affected plant growth.

Question 6 of 64

Primary 4 Science (Term 4)

2 pts



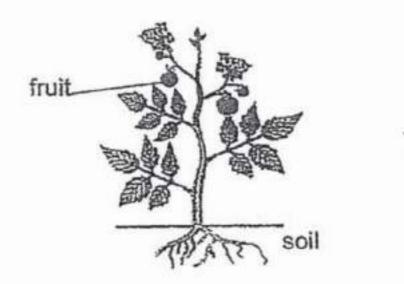
- (A) P
- B) Q
- C) R
- (D) S

Question 7 of 64

Primary 4 Science (Term 4)

2 pts

The diagram below shows a plant growing in a garden.



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

- A It can make food.
- B It has a weak stem.
- C It is a flowering plant.
- A) Bonly
- **B)** A and C only
- C) B and C only
- OD) A, B and C

Question 8 of 64

Primary 4 Science (Term 4)

2 pts

Which statement is true about most amphibians?

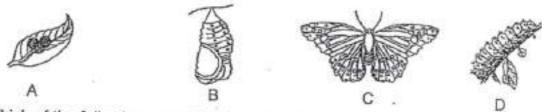
- A) They have tails.
- **B)** They are covered with scales.
- **C)** They give birth to their young.
- **D)** They can live on land and in water.

Question 9 of 64

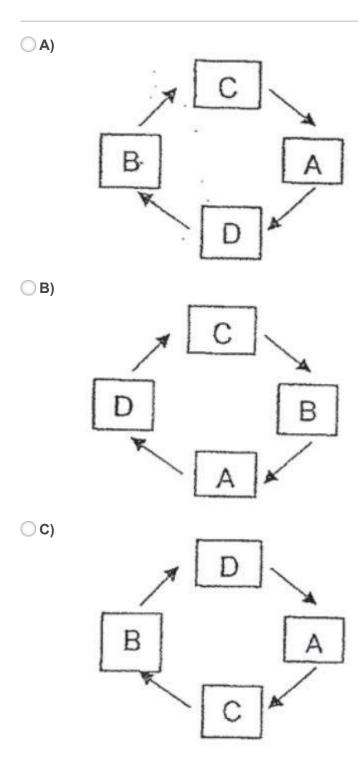
Primary 4 Science (Term 4)

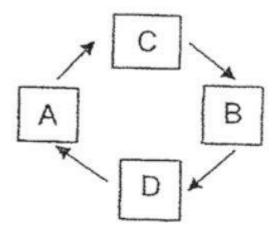
2 pts

A, B, C and D are the various stages in the life cycle of a butterfly.



Which of the following correctly shows the life cycle of a butterfly?



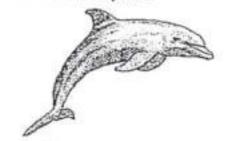


Question 10 of 64

Primary 4 Science (Term 4)

2 pts

The diagram below shows a dolphin.



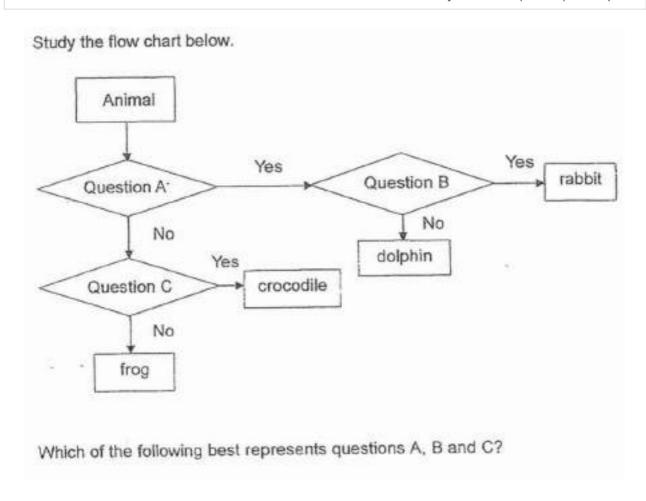
The dolphin is a mammal because

- (A) it has fins
- B) it can swim
- OC) it has a tail
- Op) it has hair on its body

Question 11 of 64

Primary 4 Science (Term 4)

2 pts



(A)	Question A		Question B Qu		estion C	
	Does it breathe throu	gh lungs?	Does it have hair?	Do	es it lay eggs?	
○ B)	Question A	Question	В		Question C	
	Does it live on land?	Does it give	ve birth to young aliv	/e?	Does it have h	a

() C)	Question A	Question B	Question C
	Does it give birth to young alive?	Does it live on land?	Does it have scales?

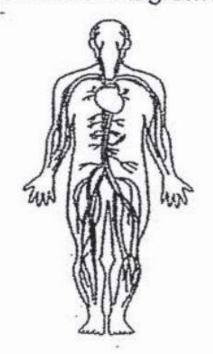
O D)	Question A	Question B	Question C
	Does it lay eggs?	Does it live in water?	Does it breathe through lungs?

Question 12 of 64

Primary 4 Science (Term 4)

2 pts

Which organ system is shown in the diagram?



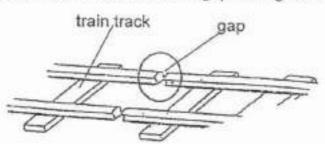
- A) skeletal system
- B) muscular system
- C) circulatory system
- O) respiratory system

Question 13 of 64

Primary 4 Science (Term 4)

2 pts

Ahmad observed that there were gaps along the train tracks at the MRT station.



Which of the following statements best explains Ahmad's observations?

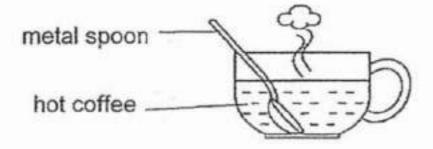
- A) The gaps allow the tracks to gain heat and expand on a hot day.
- B) The gaps allow the tracks to lose heat and contract on a hot day.
- C) The gaps allow the tracks to lose heat and expand on a cold day.
- D) The gaps allow the tracks to gain heat and contract on a cold day.

Question 14 of 64

Primary 4 Science (Term 4)

2 pts

Carine places a metal spoon in a cup of hot coffee.



The spoon becomes hotter after a while.

Which one of the following statements explains this?

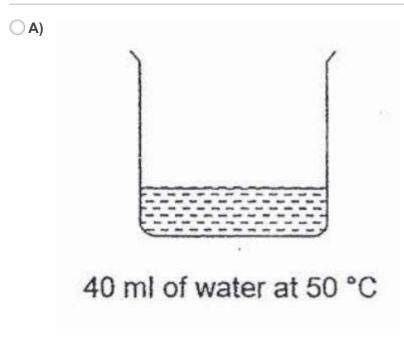
- A) The cup loses heat to the hot coffee.
- B) The spoon loses heat to the hot coffee.
- C) The spoon gains heat from the hot coffee.
- D) The hot coffee gains heat from the spoon.

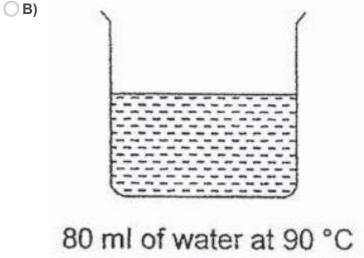
Question 15 of 64

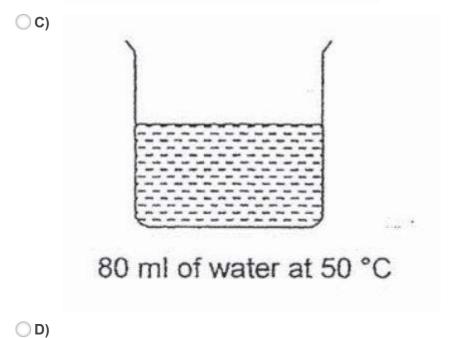
Primary 4 Science (Term 4)

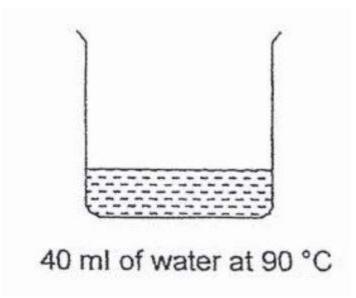
2 pts

Which of the following beakers contains the most heat?







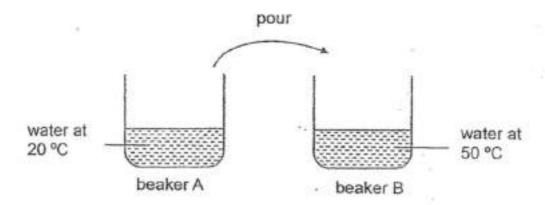


Question 16 of 64

Primary 4 Science (Term 4)

2 pts

Jimmy filled beakers A and B with the same amount of water. He then poured all the water from beaker A into beaker B as shown.



What is the most likely temperature of the mixture of water in beaker B?

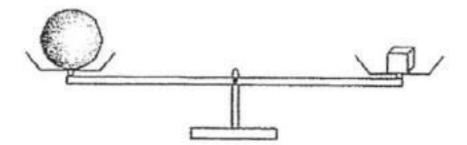
- ○**A)** 19°C
- ○B) 36°C
- **c**) 53°C
- **D**) 70°C

Question 17 of 64

Primary 4 Science (Term 4)

2 pts

Study the diagram below.

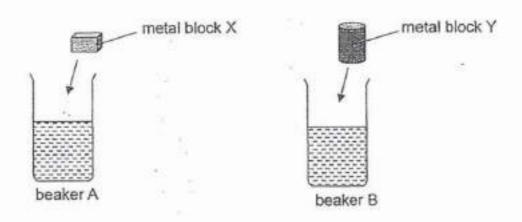


Which of the following statements is true?

- **A)** Both objects have the same size.
- B) Both objects have the same mass.
- OC) Both objects have the same shape.
- OD) Both objects have the same volume.

2 pts

Siva conducted an experiment to find out which metal block X or Y has a greater volume. She placed block X into beaker A and block Y into beaker B before comparing their water levels.



Which of the following variable(s) should she keep the same if she wants to conduct a fair test?

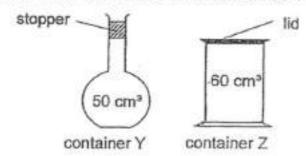
- A size of the beakers
- B volume of the metal blocks
- C amount of water in each beaker
- D shape of the metal blocks
- A) A only
- **B**) B only
- C) A and C only
- **D)** B and D only

Question 19 of 64

Primary 4 Science (Term 4)

2 pts

The diagram below shows the volume of two containers Y and Z.



Using a syringe, Eva pumped in another 20 cm³ of air into container Y. Then she placed a 15 cm³ wooden block into container Z.

What is the volume of air in each container in the end?

(A)	Container Y	Container Z
	50	45

- Container Y Container Z
 70 75
- C) Container Y Container Z
 60 50
- Container Y Container Z
 30 60

Question 20 of 64

Primary 4 Science (Term 4)

2 pts

Which one of the following is a source of light?





a flower





the moon

(C)



a watermelon

(D)



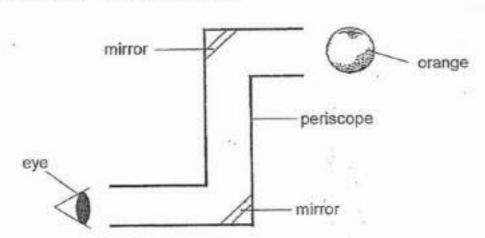
a candle flame

Question 21 of 64

Primary 4 Science (Term 4)

2 pts

The diagram below shows a periscope.



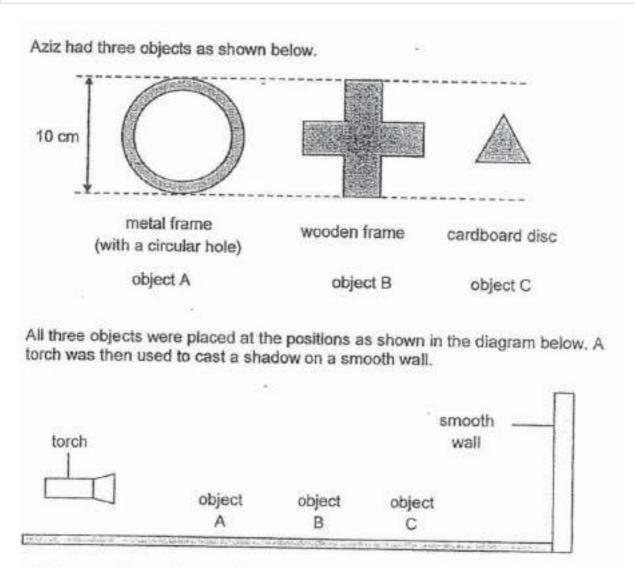
Which of the following statements correctly describe why Fatimah can see the image of an orange through a periscope?

- A Light can bend.
- B Light can be reflected.
- C Light travels in a straight line.
- D Light is given off by the orange.
- A) A and C only
- **B)** A and D only
- OC) B and C only
- **D)** B and D only

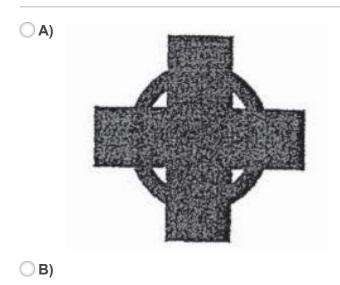
Question 22 of 64

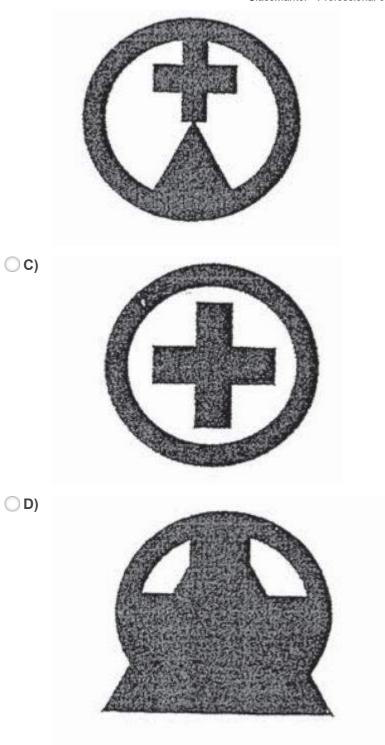
Primary 4 Science (Term 4)

2 pts



Which one of the following is the most likely shadow cast on the smooth wall?

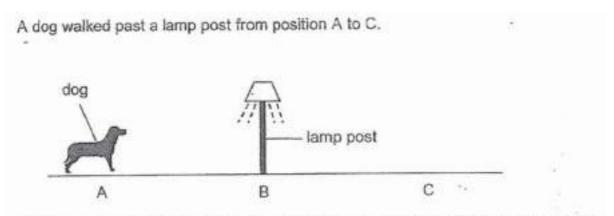




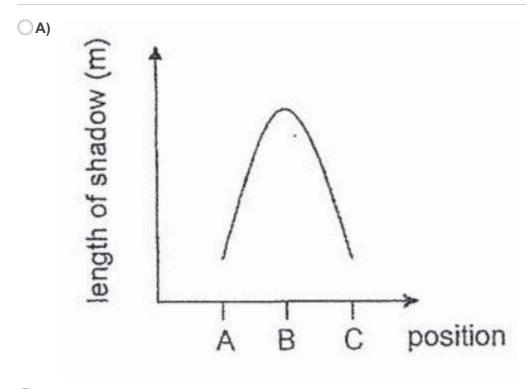
Question 23 of 64

Primary 4 Science (Term 4)

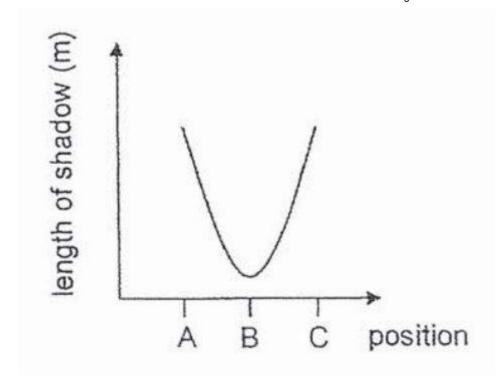
2 pts

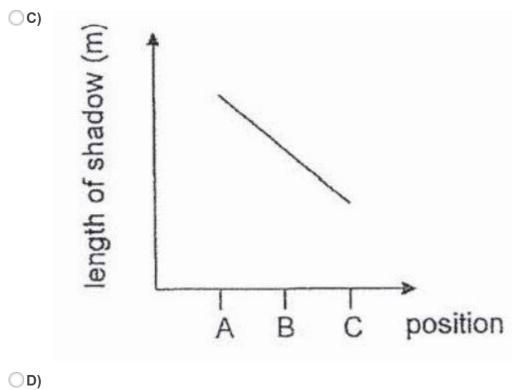


Which one of the following graphs shows how the length of the dog's shadow would change as it walked from position A to C?

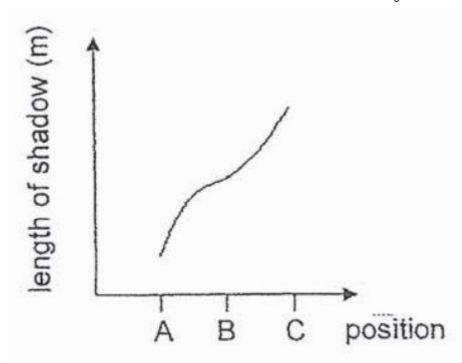


○ B)





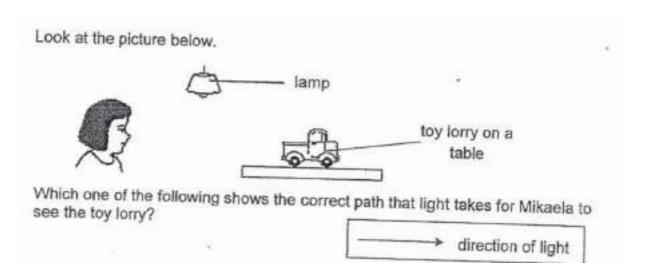
https://www.classmarker.com/a/tests/test/print/?test_id=1773304

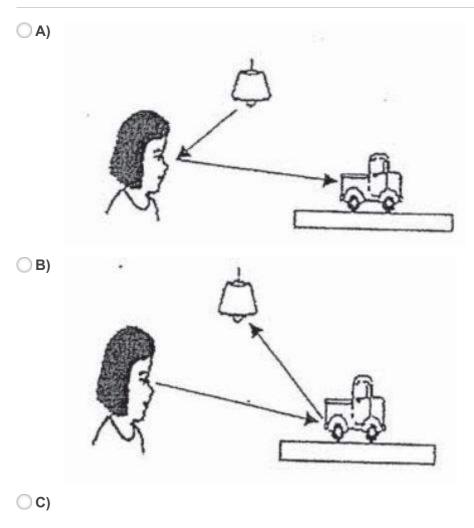


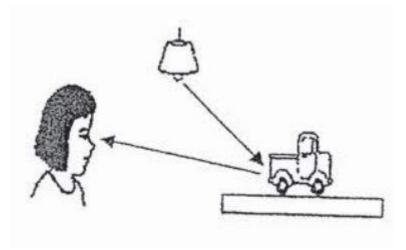
Question 24 of 64

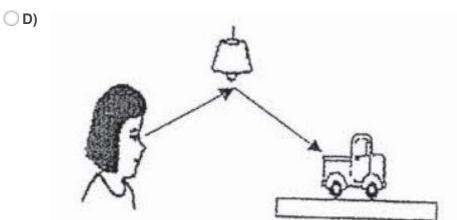
Primary 4 Science (Term 4)

2 pts









Question 25 of 64

Primary 4 Science (Term 4)

2 pts

The diagram below shows a hammer.



Metal is used to make part X of the hammer because metal_

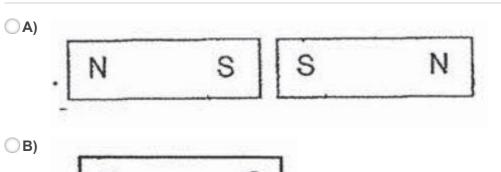
- A) can reflect light
- does not break easily
- C) can bend without breaking
- OD) does not allow light to pass through

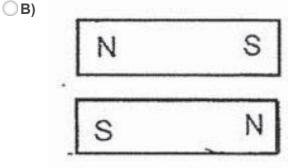
Question 26 of 64

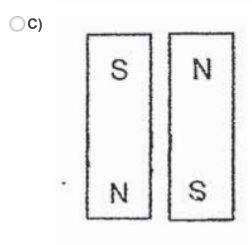
Primary 4 Science (Term 4)

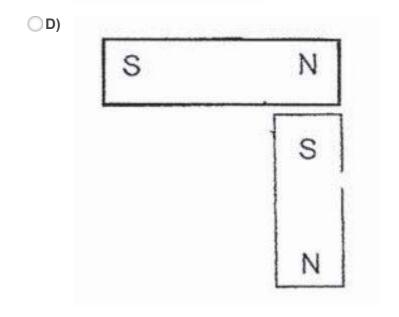
2 pts

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









Question 27 of 64

Primary 4 Science (Term 4)

2 pts

Jessie placed magnet M on a table. She then placed two similar balls X and Y next to magnet M as shown below.



When she lifted up magnet M, ball X remained attached to the magnet but ball Y did not.

Which of the following statements explains why ball Y did not remain attached to magnet M?

A) Ball X has	a greater	magnetic	strength	than	Ball	Y.
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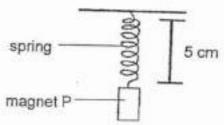
- B) Magnet M has lost its magnetism so it could not attract Ball Y.
- C) Ball Y is made of a non magnetic material so it could not be attracted by magnet M.
- **D)** The magnetic attraction in the middle of magnet M is not strong enough to attract ball Y.

Question 28 of 64

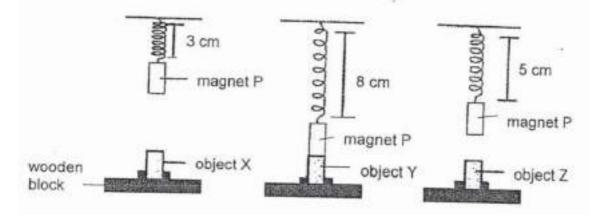
Primary 4 Science (Term 4)

2 pts

Magnet P was hung on a spring above the ground as shown in the diagram below.



Three objects X, Y and Z were secured with a wooden block and placed one at a time directly below magnet P. The diagram below show the results when the objects were placed below magnet P.



Based on the observations above, which one of the following statements is true?

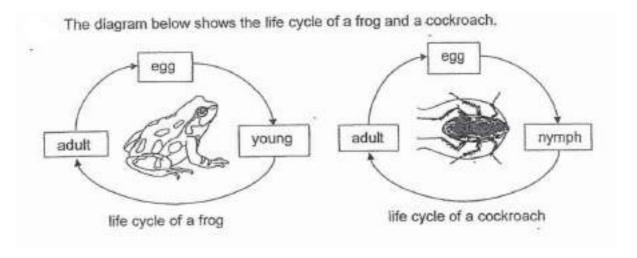
- A) Object X is a magnet.
- B) Object Z is made of iron.
- Objects Y and Z are magnets.
- Opject Y is made of a non-magnetic material.

Question 29 of 64

Primary 4 Science (Term 4)

0 pts

(44 marks)



State two differences between the life cycle of the frog and the cockroach. (Do not describe the physical characteristics of the animals) (2 marks)

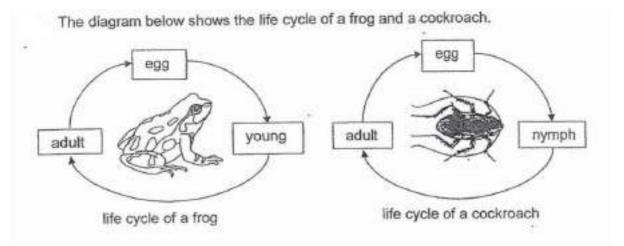
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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 30 of 64

Primary 4 Science (Term 4)

1 pt

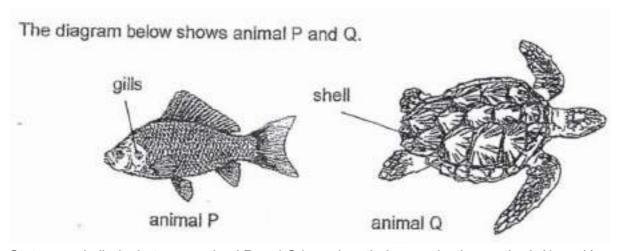


Name another organism that has the same number of stages in life cycle as the frog and the cockroach.

Question 31 of 64

Primary 4 Science (Term 4)

0 pts



State one similarity between animal P and Q based on their reproduction method. (1 mark)

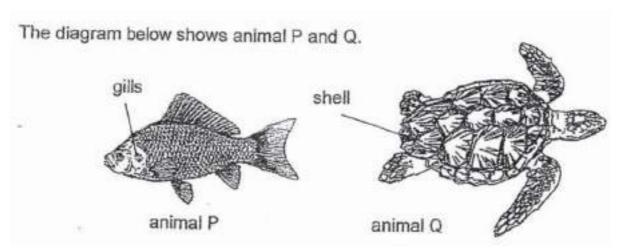
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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 32 of 64

Primary 4 Science (Term 4)

1 pt

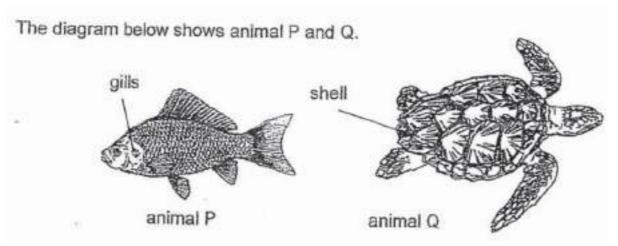


Based on the diagram above, which animal group does animal Q belong to? Explain your answer.

Question 33 of 64

Primary 4 Science (Term 4)

0 pts



State a function of the gills and the shell of animal P and Q respectively. (2 marks)

i) Function of gills: _	
ii) Function of shell:	

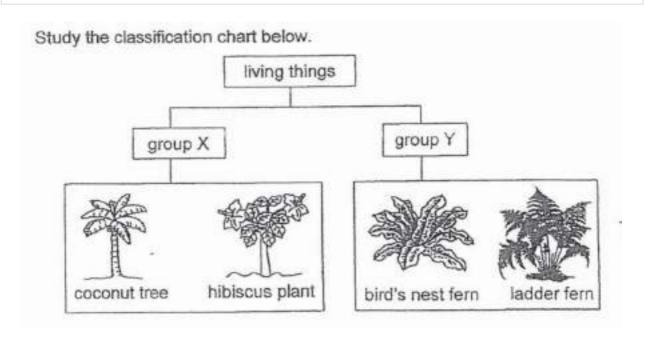
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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 34 of 64

Primary 4 Science (Term 4)

2 pts

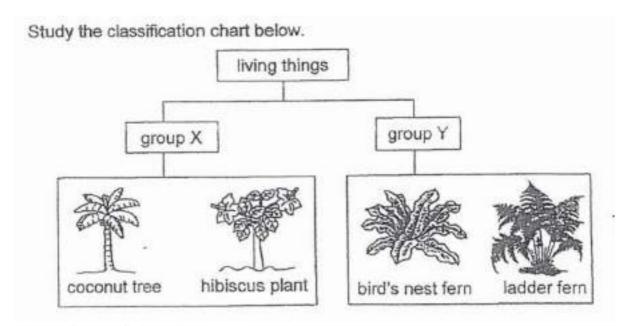


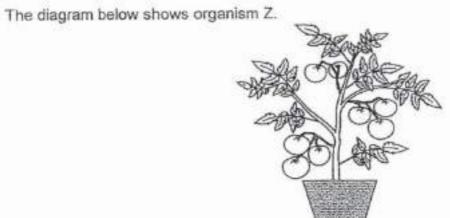
Choose the correct words from the list below to give suitable headings for group X and Y.

1. [] Group X:	A. bacteria
2. [] Group Y:	B. non-flowering plant
	C. flowering plant
	D. fungi

Primary 4 Science (Term 4)

1 pt





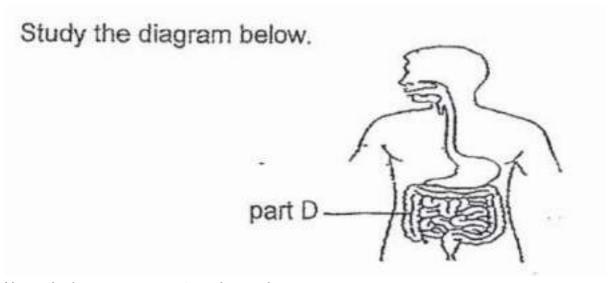
Based on the classification chart, in which group X or Y should Jane place organism Z? Explain your answer.

[1]

Question 36 of 64

Primary 4 Science (Term 4)

1 pt

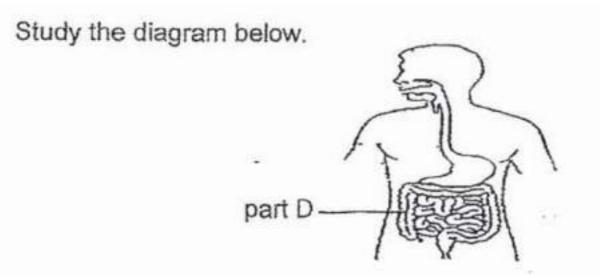


Name the human organ system shown above.

Question 37 of 64

Primary 4 Science (Term 4)

1 pt



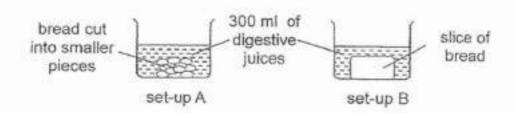
Name part D and state its function.

Question 38 of 64

Primary 4 Science (Term 4)

0 pts

Claudia carried out an experiment to find out how the size of the bread affects the rate of digestion. She put some bread into each set-up as shown below.



Set-up	Amount of bread at the start of the experiment (g)	Amount of bread at the end of the experiment (g)
A	100	30
В	100	70

Based on her experiment, what is the relationship between the size of the bread and the rate of digestion?

[1]

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.

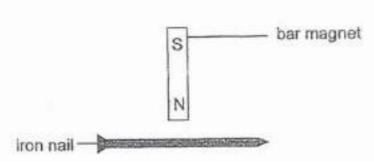
Grading: This question type is not graded on this system and will not affect the final score as it was designed in such a way that it requires manual assistance.

Question 39 of 64

Primary 4 Science (Term 4)

0 pts

Raj wanted to use a bar magnet to magnetise an iron nail as shown below.



Explain how Raj should stroke the iron nail to magnetise it. (2 marks)

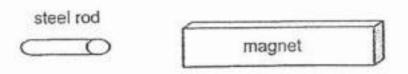
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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 40 of 64

Primary 4 Science (Term 4)

1 pt



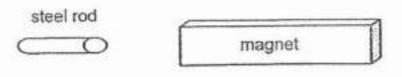
Raj placed a magnet near a steel rod. The steel rod moved towards the magnet.

The magnet exerts a _____ on the steel rod.

Question 41 of 64

Primary 4 Science (Term 4)

1 pt



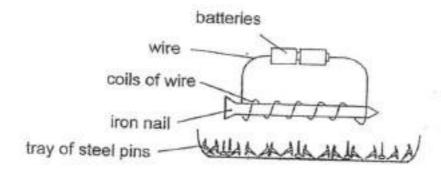
Raj placed a magnet near a steel rod. The steel rod moved towards the magnet.

Choose the correct word from the list below to answer the question below.

Raj's observation shows that steel is a _____ material.

- (A) flexible
- B) magnetic
- C) strong

Study the diagram below. The iron nail became an electromagnet with the following set-up.

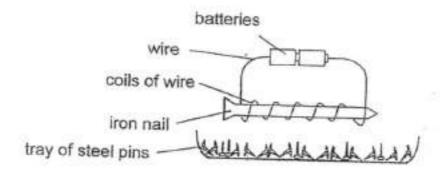


Eric conducted an experiment with four electromagnets A, B, C and D and recorded the number of steel pins attracted by the electromagnets in the table below.

Electromagnet	Number of coils of wire around the nail	Number of batteries	Number of steel pins attracted
Α	10	-2	9
В	15	3	1/
C	20	1	14
D	10	- 4	18
	10	3	10

Based on the table above, which two electromagnets should he use to find out how the number of batteries affects the strength of the electromagnet?

Study the diagram below. The iron nail became an electromagnet with the following set-up.



Eric conducted an experiment with four electromagnets A, B, C and D and recorded the number of steel pins attracted by the electromagnets in the table below.

Electromagnet	Number of coils of wire around the nail	Number of batteries	Number of steel pins attracted
Α	10	-2	9
В	15	3	1/
C	20	1	14
D	10	- 4	18
	10	3	10

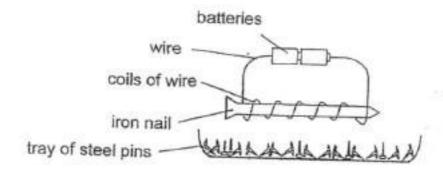
What is the relationship between the number of coils of wire around the nail and the number of steel pins attracted by the electromagnet? (1 mark)

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.

Primary 4 Science (Term 4)

0 pts

Study the diagram below. The iron nail became an electromagnet with the following set-up.



Eric conducted an experiment with four electromagnets A, B, C and D and recorded the number of steel pins attracted by the electromagnets in the table below.

Electromagnet	Number of coils of wire around the nail	Number of batteries	Number of stee	
A	10	.2	o o	
В	15	3	0	
C	20	4	14 -	
D	10	4	18	
	10	3	10	

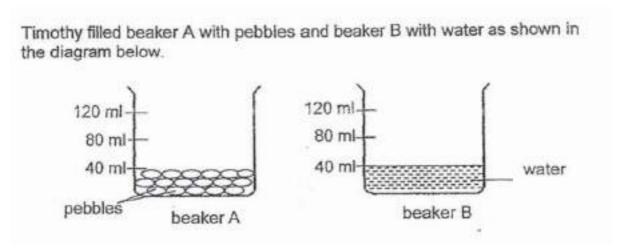
Without changing the number of batteries, state another way to increase the number of steel pins attracted by electromagnet B. (1 mark)

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.

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0 pts



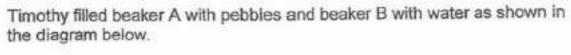
Timothy said that the pebbles are not solid as they take the shape of the beaker. Do you agree with him? Explain your answer. (1 mark)

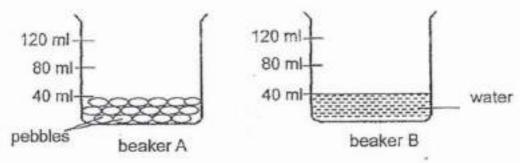
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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Primary 4 Science (Term 4)

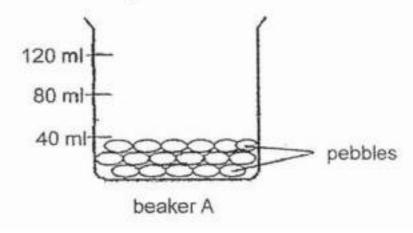
0 pts





Timothy poured all the water from beaker B into beaker A.

Draw the water level in the diagram 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.

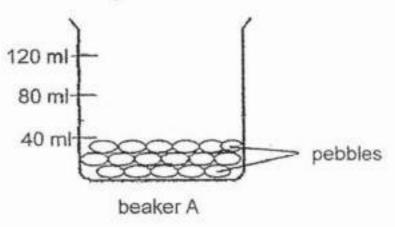
Question 47 of 64

Primary 4 Science (Term 4)

0 pts

Timothy poured all the water from beaker B into beaker A.

Draw the water level in the diagram below.



Explain your answer in the previous question. (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 48 of 64

Primary 4 Science (Term 4)

0 pts

State what matter is. (1 mark)

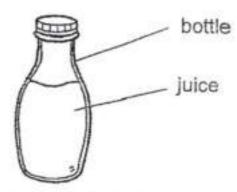
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

Question 49 of 64

Primary 4 Science (Term 4)

1 pt

The diagram below shows a bottle of juice.



Complete the sentences to state if the parts are solid, liquid or gas.

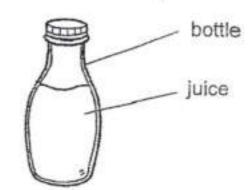
The juice is a _____.

Question 50 of 64

Primary 4 Science (Term 4)

1 pt

The diagram below shows a bottle of juice.



Complete the sentences to state if the parts are solid, liquid or gas.

The bottle is a _____.

Question 51 of 64

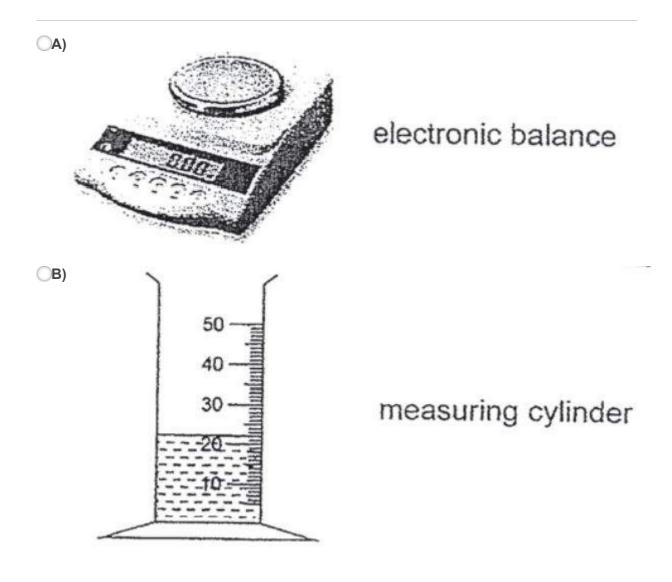
Primary 4 Science (Term 4)

1 pt

The diagram below shows a small stone.



How can Andy measure the mass of the stone? Choose the correct apparatus he should use to measure the mass of the stone.

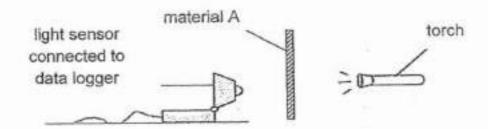


Question 52 of 64

Primary 4 Science (Term 4)

0 pts

Nevin conducted an experiment in a dark room as shown below. When no material was placed between the torch and the light sensor, the amount of light detected was 800 units.



Nevin placed material A between the torch and the light sensor. He recorded the amount of light detected by the light sensor connected to a data logger in the table below. He repeated his experiment with materials B, C and D.

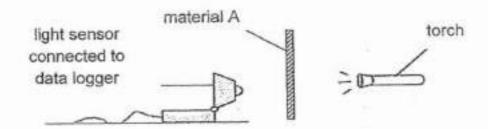
Material	Amount of light detected (units)
Α	0
В	730
C	415
D	120

What was he trying to find out from his experiment? (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.

1 pt

Nevin conducted an experiment in a dark room as shown below. When no material was placed between the torch and the light sensor, the amount of light detected was 800 units.



Nevin placed material A between the torch and the light sensor. He recorded the amount of light detected by the light sensor connected to a data logger in the table below. He repeated his experiment with materials B, C and D.

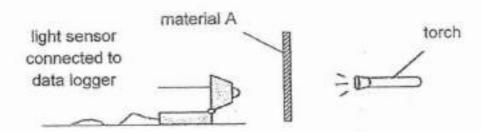
Material	Amount of light detected (units)
Α	0
В	730
C	415
D	120

Based on the table, which material A, B, C or D is most likely made of cardboard?

Primary 4 Science (Term 4)

0 pts

Nevin conducted an experiment in a dark room as shown below. When no material was placed between the torch and the light sensor, the amount of light detected was 800 units.



Nevin placed material A between the torch and the light sensor. He recorded the amount of light detected by the light sensor connected to a data logger in the table below. He repeated his experiment with materials B, C and D.

Material	Amount of light detected (units)
A	0
В	730
C	415
D	120

Other than the position of the light sensor and the torch, state two other variables that should remain the same for Nevin's experiment to be fair. (2 marks)

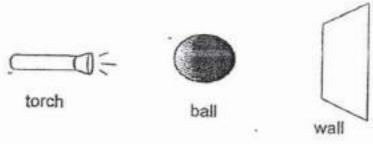
i)			
	,			

Question 55 of 64

Primary 4 Science (Term 4)

1 pt

Aminah shines a torch on a ball and a shadow is formed on a smooth wall.

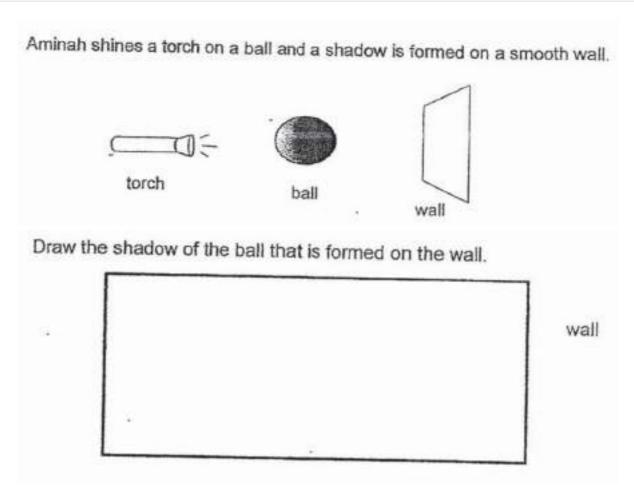


A shadow is formed when light is _____ by an object.

Question 56 of 64

Primary 4 Science (Term 4)

0 pts

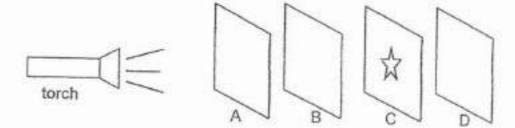


This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

Primary 4 Science (Term 4)

1 pt

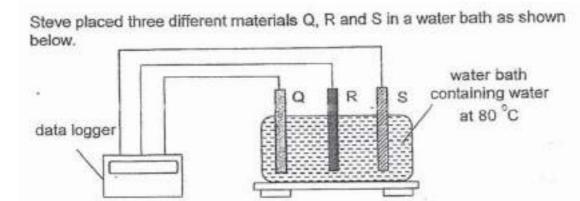
Aminah carried out an experiment in a dark room as shown below.



She arranged the torch and four similar-sized sheets made of different materials A, B, C and D in a straight line. Sheet C has a star-shaped cut-out in the middle. When the torch was switched on, a star-shaped patch of light was seen on sheet D only.

Based on her experiment, which of the materials A, B, C and/or D do not allow light to pass through?

[1]

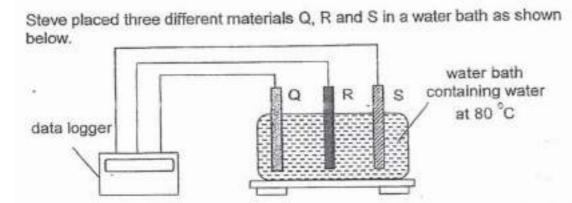


Each material was connected to a data logger and the changes in their temperature were recorded in the table below.

Time (min)	Temperature (°C)			
	Material Q	Material R	Material S	
0	25	25	25	
5	33	39	28	
10	40	55	32	
15	51	80	37	

State what heat is. (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.



Each material was connected to a data logger and the changes in their temperature were recorded in the table below.

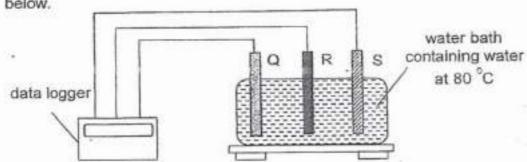
Time (min)	Temperature (°C)			
	Material Q	Material R	Material S	
0	25	25	25	
5	33	39	28	
10	40	55	32	
15	51	80	37	

Based on the table, what can he conclude from his experiment? (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.

2 pts

Steve placed three different materials Q, R and S in a water bath as shown below.



Each material was connected to a data logger and the changes in their temperature were recorded in the table below.

Time (min)	Temperature (°C)			
	Material Q	Material R	Material S	
0	25	25	25	
5	33	39	28	
10	40	55	32	
15	51	80	37	

The diagram below shows a ladle.



Based on the results of the experiment, which material Q, R or S is most suitable for making part X of a ladle? Explain your answer.

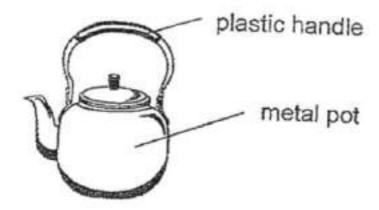
[2]

Question 61 of 64

Primary 4 Science (Term 4)

1 nt

The diagram below shows a kettle.



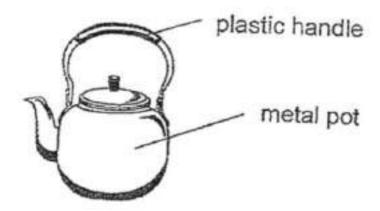
The handle is made of plastic because it is a _____ conductor of heat. (1 mark)

Question 62 of 64

Primary 4 Science (Term 4)

1 pt

The diagram below shows a kettle.



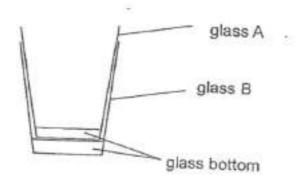
The pot is made of metal because it is a _____ conductor of heat.

Question 63 of 64

Primary 4 Science (Term 4)

0 pts

Khairul found two glasses A and B stuck together as shown below.



State how he can separate both glasses safely without using force to pull the two glasses apart.

[1]

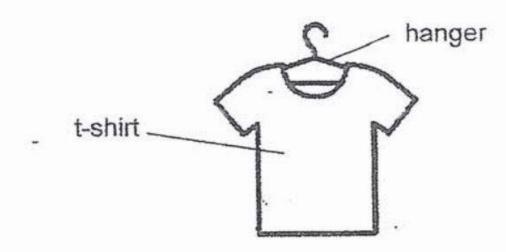
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

Question 64 of 64

Primary 4 Science (Term 4)

0 pts

The diagram below shows a t-shirt on a hanger.



Suggest a material for making the T-shirt and hanger and give a reason for your choice. (3 marks)

	Material	Reason for your choice
T-shirt		
Hanger		

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.