Test: Primary 5 Science (Term 3) - St Nicholas (2020)

Points: 39 points

Name: _____ **Score:** _____

Date: _____

Signature: _____

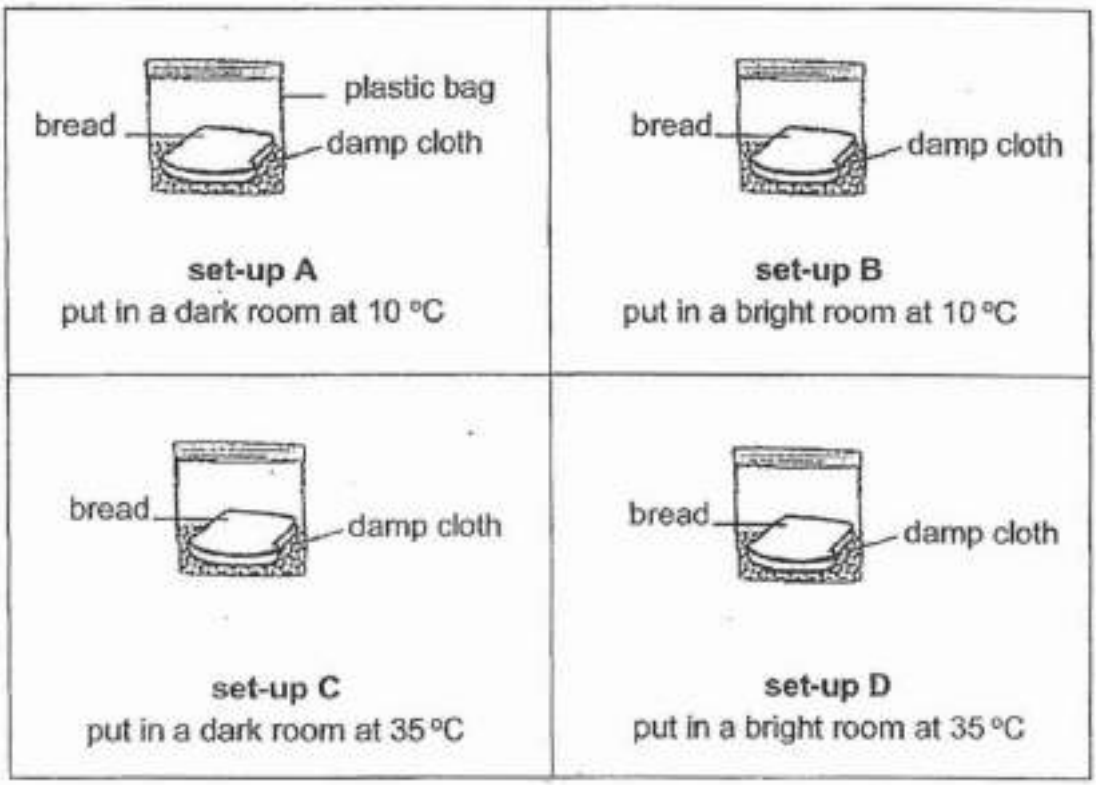
Select multiple choice answers with a cross or tick:

- ○ Only select one answer
- ☐ Can select multiple answers

Question 1 of 32

Primary 5 Science (Term 3) 2 pts

Jamie wanted to investigate the suitable conditions for fungi to grow. She sets up the experiment as shown below. All the plastic bags used for the experiment are sealed.



After three days, fungi were seen growing in set-ups C and D only but not in set-ups A and B.

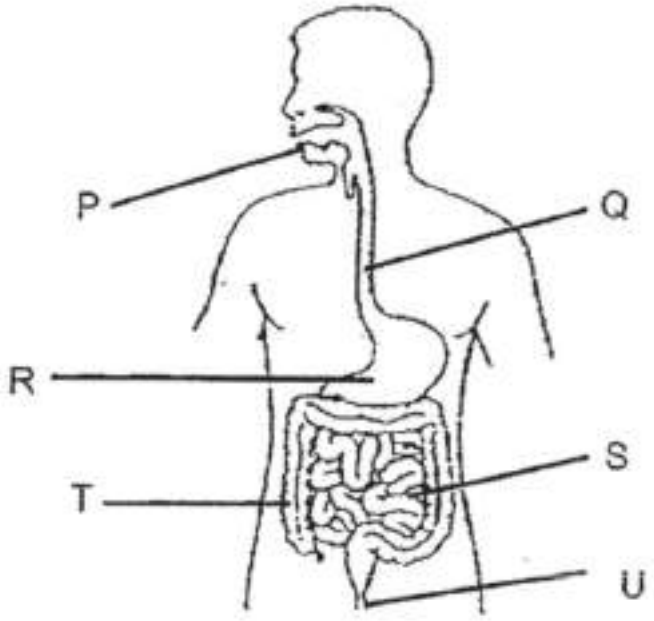
From this experiment, Jamie concluded that fungi _____.

- **A)** need light to grow
- **B)** need water to grow
- **C)** grow in a dark place
- **D)** grow in a warm place

Question 2 of 32

Primary 5 Science (Term 3) 2 pts

The diagram below shows parts of the human digestive system.



Which of the following is correct?

A)

Part(s) involved in the digestion of food	Part(s) involved in the absorption of digested food
P only	U only

B)

Part(s) involved in the digestion of food	Part(s) involved in the absorption of digested food
Q and R only	S and T only

C)

Part(s) involved in the digestion of food	Part(s) involved in the absorption of digested food
P, R and S only	S only

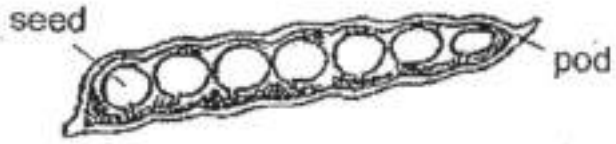
D)

Part(s) involved in the digestion of food	Part(s) involved in the absorption of digested food
P, S and T only	U only

Question 3 of 32

Primary 5 Science (Term 3) 2 pts

The diagram below shows the seeds in the pod of plant X.



Based on your observation of the pod above, what can be inferred about plant X?

- **A)** It has large flowers.
- **B)** It is a flowering plant.
- **C)** It is a non-flowering plant.
- **D)** It has spore bags on the underside of the leaves.

Question 4 of 32

Primary 5 Science (Term 3) 2 pts

The roots of plants perform several functions. Which of the following are possible functions of roots?

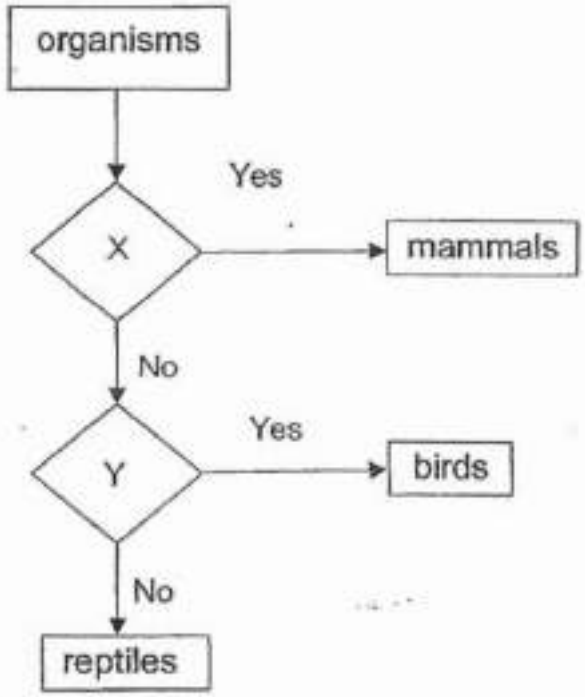
A Take in water
B Take in mineral salts
C Make and store food for the plant
D Hold the plant firmly to the ground

- **A)** A and B only
- **B)** C and D only
- **C)** A, B and D only
- **D)** A, B, C and D

Question 5 of 32

Primary 5 Science (Term 3) 2 pts

Study the chart below.



Which of the following are questions represented by X and Y?

A)

Question X	Question Y
Do they have hair?	Do they have feathers?

B)

Question X	Question Y
Do they produce milk?	Do they have fins?

C)

Question X	Question Y
Do they lay eggs?	Do they have feathers?

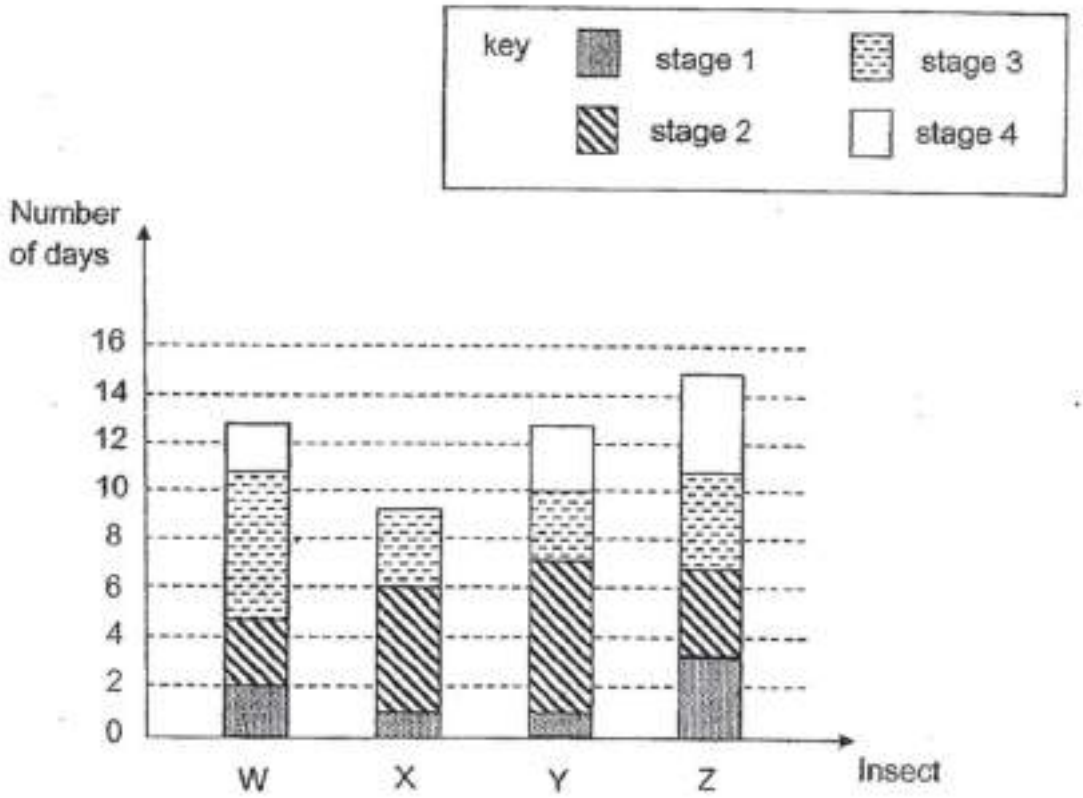
D)

Question X	Question Y
Do they give birth to young alive?	Do they have hard body coverings?

Question 6 of 32

Primary 5 Science (Term 3) 2 pts

The graph below shows the number of days for each stage of the life cycle of four insects W, X, Y and Z.



Based on the graph above, which of the following statement(s) is/are correct?

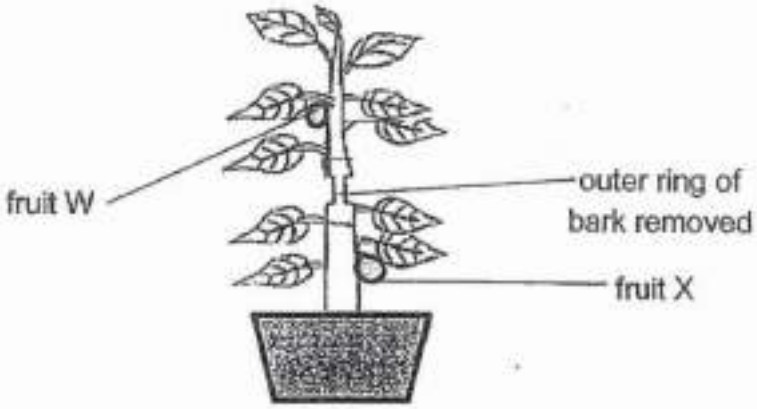
A Insect W has the longest pupal stage.
B The four insects have 4 stages in their life cycle.
C The eggs of Insect Z take the longest time to hatch.
D Insect X spends more time as a young than as an adult.

- **A)** B only
- **B)** B and D only
- **C)** A and C only
- **D)** A, C and D only

Question 7 of 32

Primary 5 Science (Term 3) 2 pts

Sanjay removed an outer ring of bark from the stem of a plant as shown below. As a result, the water and food carrying tubes were removed. The plant was watered regularly for two weeks.



Which of the following will he most likely observe for fruit W and X after two weeks?

A)

Size of fruit W	Size of fruit X
bigger	bigger

B)

Size of fruit W	Size of fruit X
bigger	smaller

C)

Size of fruit W	Size of fruit X
smaller	smaller

D)

Size of fruit W	Size of fruit X
smaller	bigger

Question 8 of 32

Primary 5 Science (Term 3) 2 pts

Which one of the following statements about cells is correct?

A) Every cell contains a cell wall.

B) All plant cells can carry out photosynthesis.

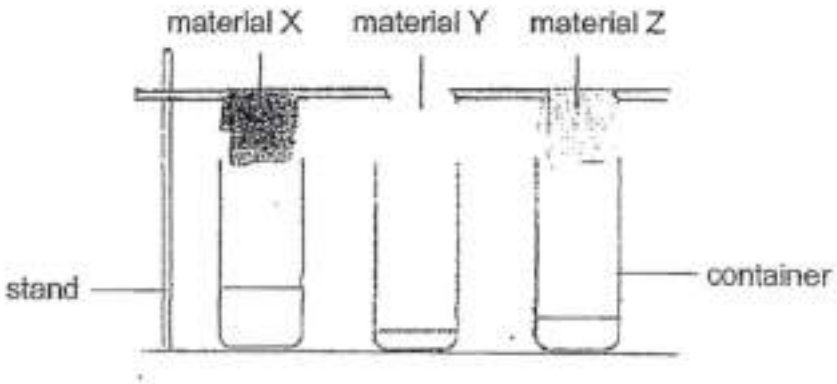
C) The size of the cells depends only on the size of the living thing.

D) When living things grow, the number of cells in their body increases.

Question 9 of 32

Primary 5 Science (Term 3) 2 pts

Alexis conducted an experiment with three towels of the same shape and size but of different materials X, Y and Z. She poured equal amounts of water slowly onto each of the three towels. After twenty minutes, she observed the amount of water collected in the containers as shown below.



Which of the following shows the correct order of the materials starting with the material that absorbs the most water?

- **A)** Y, Z, X
- **B)** X, Z, Y
- **C)** X, Y, Z
- **D)** Z, Y, X

Question 10 of 32

Primary 5 Science (Term 3) 2 pts

The medical officers need to put on protective clothings as shown below when they are treating Covid-19 patients in a hospital.

Based on the properties shown below, which material is most suitable for making the protective clothing?

A)

Materials	Strong	Flexible	Waterproof	Poor conductor of heat
A	no	no	yes	yes

B)

Materials	Strong	Flexible	Waterproof	Poor conductor of heat
B	yes	yes	yes	no

C)

Materials	Strong	Flexible	Waterproof	Poor conductor of heat
C	yes	yes	yes	yes

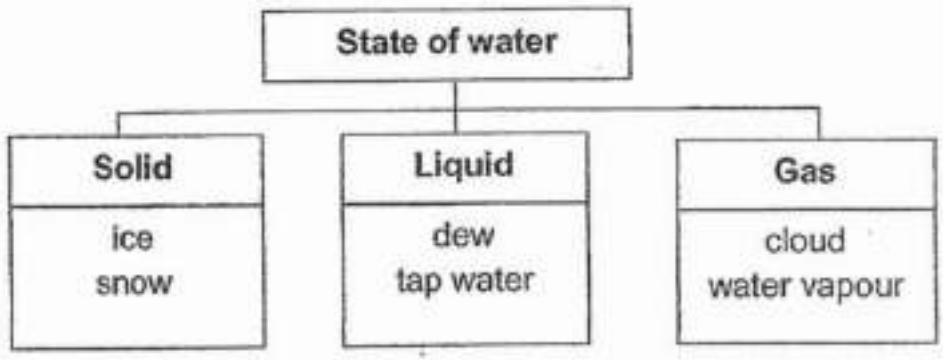
D)

Materials	Strong	Flexible	Waterproof	Poor conductor of heat
D	no	yes	no	no

Question 11 of 32

Primary 5 Science (Term 3) 2 pts

Study the classification chart below.



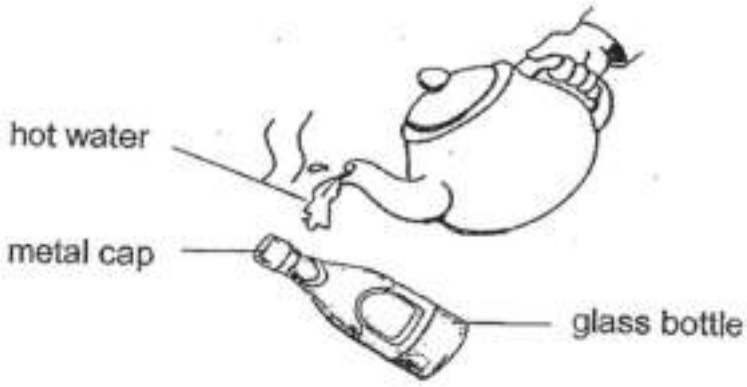
Which one of the states of water is wrongly classified?

- A) ice
- B) dew
- C) snow
- D) cloud

Question 12 of 32

Primary 5 Science (Term 3) 2 pts

Perry could not open a bottle of chilli sauce. He decided to pour boiling water over the metal cap of the chilli sauce bottle as shown below.



After pouring hot water onto the metal cap of the chilli sauce bottle, Perry was able to open the bottle. Which of the following statement best explains this observation?

- **A)** The metal cap and the glass bottle contracted.
- **B)** The metal cap contracted and the glass bottle expanded.
- **C)** The glass bottle contracted while the metal cap expanded.
- **D)** The metal cap gained heat and expanded faster than the glass bottle.

Question 13 of 32

Primary 5 Science (Term 3) 2 pts

Roston wanted to find out how the temperature of water affects the rate at which salt dissolves. He used 4 identical beakers W, X, Y and Z to set up his experiment. Details of his experiment are shown in the table below.

Beaker	Amount of salt (g)	Temperature of water	Amount of water
W	2	80 °C	600 ml
X	1	30 °C	600 ml
Y	1	80 °C	500 ml
Z	1	40 °C	500 ml

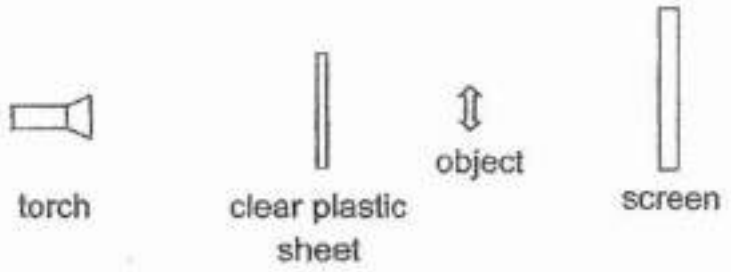
In order to carry out a fair test, which two beakers should Roston compare?

- **A)** W and X
- **B)** W and Y
- **C)** X and Y
- **D)** Y and Z

Question 14 of 32

Primary 5 Science (Term 3) 2 pts

A piece of clear plastic sheet and an object were placed between a lighted torch and a screen as shown in the diagram below.



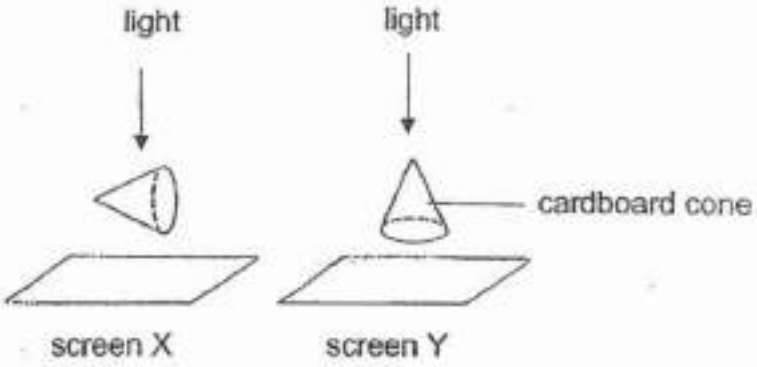
A shadow was formed on the screen. Which one of the following actions would result in a bigger shadow?

- **A)** Remove the clear plastic sheet.
- **B)** Move the screen nearer to the object.
- **C)** Move the object nearer to the clear plastic sheet.
- **D)** Replace the torch with one that gives out brighter light.

Question 15 of 32

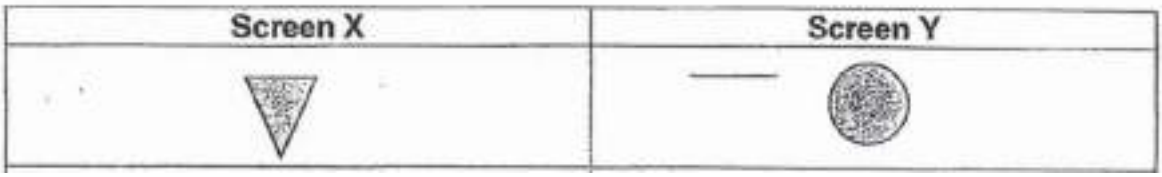
Primary 5 Science (Term 3) 2 pts

Krishna carried out an experiment to study the shadows formed by two identical cardboard cones. The cones were placed in different positions under identical light sources in a dark room. Shadows were formed on screens X and Y.

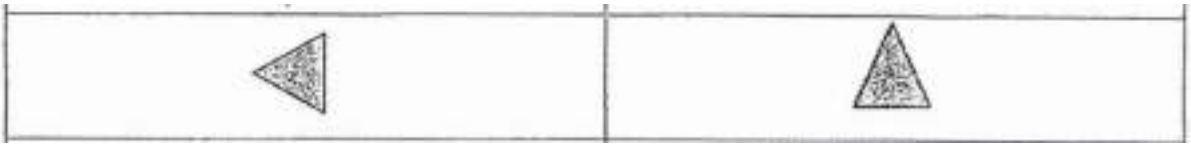


Which of the following shadows would be observed for each screen?

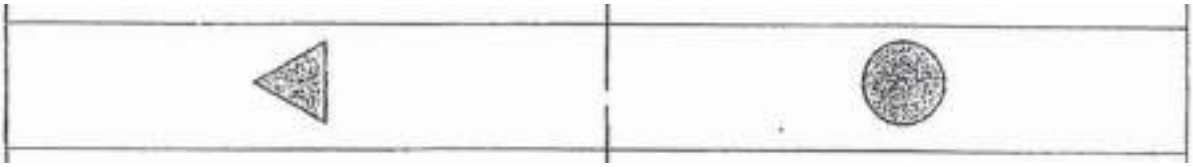
A)



B)



C)

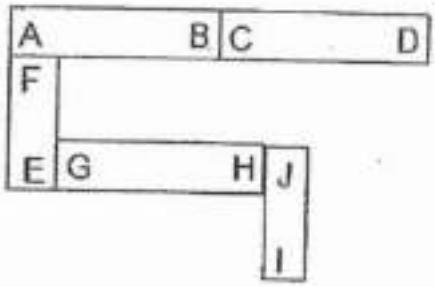


D)

Question 16 of 32

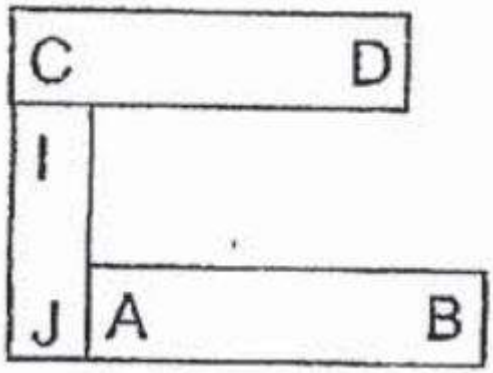
Primary 5 Science (Term 3) 2 pts

Five magnets with their ends marked A to J are arranged together as shown.

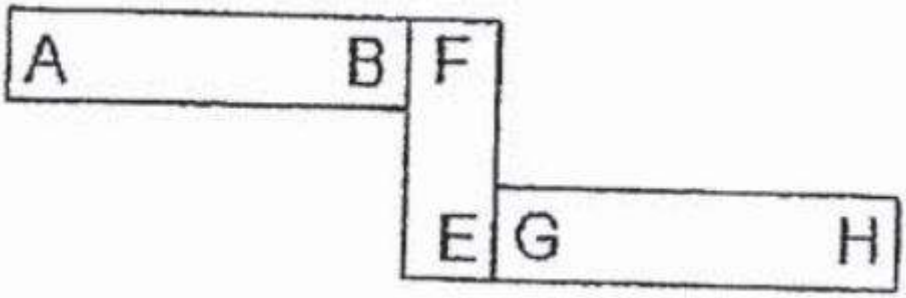


Which one of the following diagrams is a possible arrangement of three of the magnets?

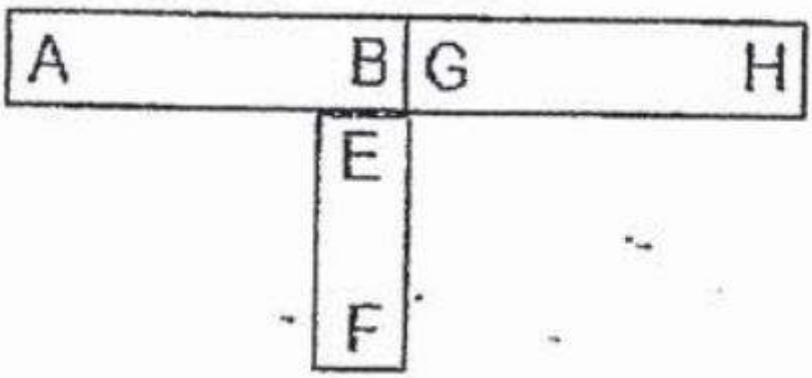
A)



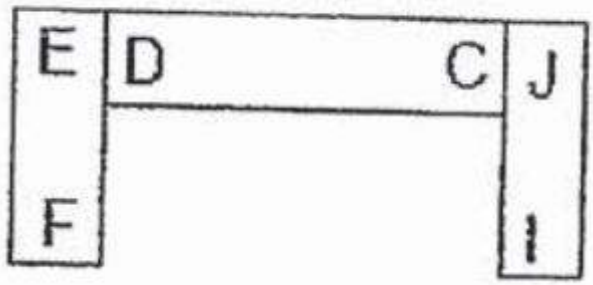
B)



C)



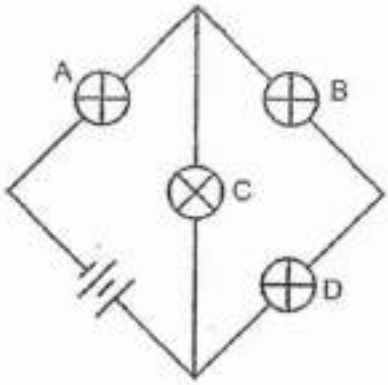
D)



Question 17 of 32

Primary 5 Science (Term 3) 2 pts

Study the circuit below.



One of the bulbs in the circuit is fused and all the other bulbs did not light up. Which bulb is fused?

A) A

B) B

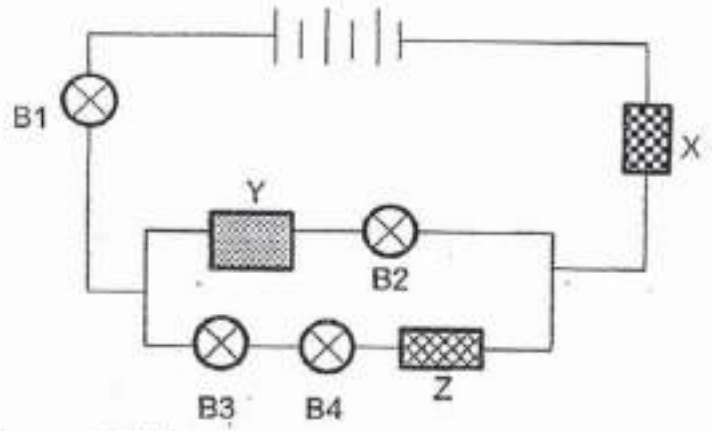
C) C

D) D

Question 18 of 32

Primary 5 Science (Term 3) 2 pts

Study the circuit diagram below. Materials X, Y and Z were connected to the circuit below.



Which of the following most likely represents materials X, Y and Z and the number of bulbs that lit up?

A)

X	Y	Z	Number of bulbs that lit up
iron	wood	aluminium	4

B)

X	Y	Z	Number of bulbs that lit up
aluminium	steel	plastic	3

C)

X	Y	Z	Number of bulbs that lit up
wood	copper	iron	2

D)

X	Y	Z	Number of bulbs that lit up
copper	plastic	steel	3

Question 19 of 32

Primary 5 Science (Term 3) 0 pts

Bacteria W can cause a person to fall sick when it is present in large numbers. Ranjit wanted to find out how fast bacteria W can reproduce when it is kept at different temperatures. His results are shown below.

Temperature at which bacteria W is kept (°C)	Amount of bacteria W (unit)	
	At the start of experiment	End of experiment (24 hours later)
25	1	100
30	1	120
35	1	200
40	1	190
45	1	90

Describe how the changes in temperature affect the amount of bacteria W. (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 20 of 32

Primary 5 Science (Term 3) 0 pts

Bacteria W can cause a person to fall sick when it is present in large numbers. Ranjit wanted to find out how fast bacteria W can reproduce when it is kept at different temperatures. His results are shown below.

Temperature at which bacteria W is kept (°C)	Amount of bacteria W (unit)	
	At the start of experiment	End of experiment (24 hours later)
25	1	100
30	1	120
35	1	200
40	1	190
45	1	90

Ranjit ate a plate of raw oysters and became very sick. A large quantity of bacteria W was detected in his intestines. The human body temperature is about 37^{o}C. Based on the results above, suggest why bacteria W reproduced so quickly in his intestines and caused him to fall sick. (1 mark)

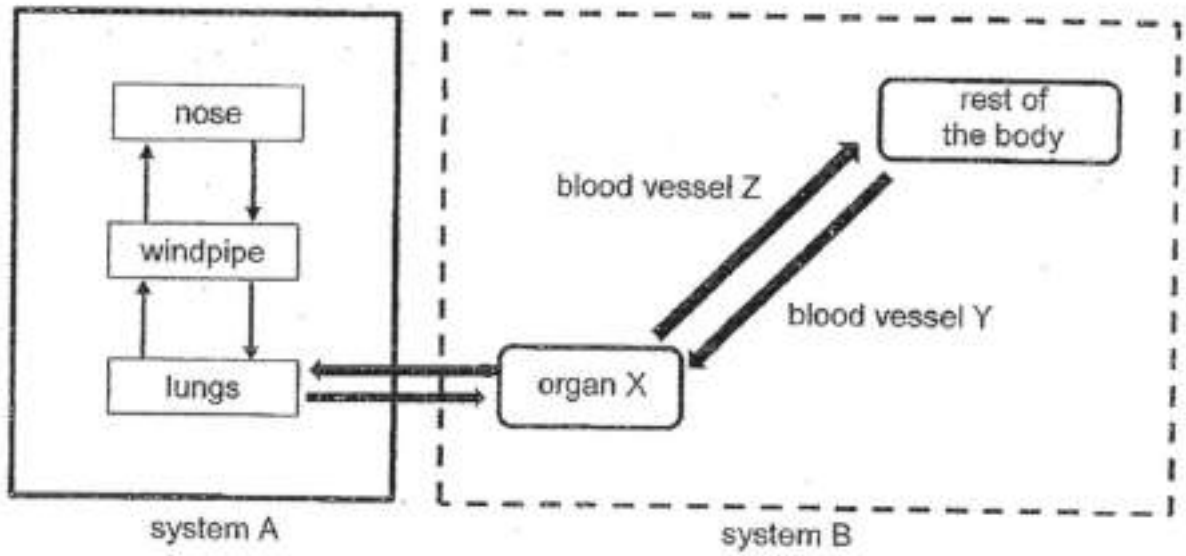
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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 21 of 32

Primary 5 Science (Term 3) 1 pt

Study the diagram below that shows two body systems A and B.

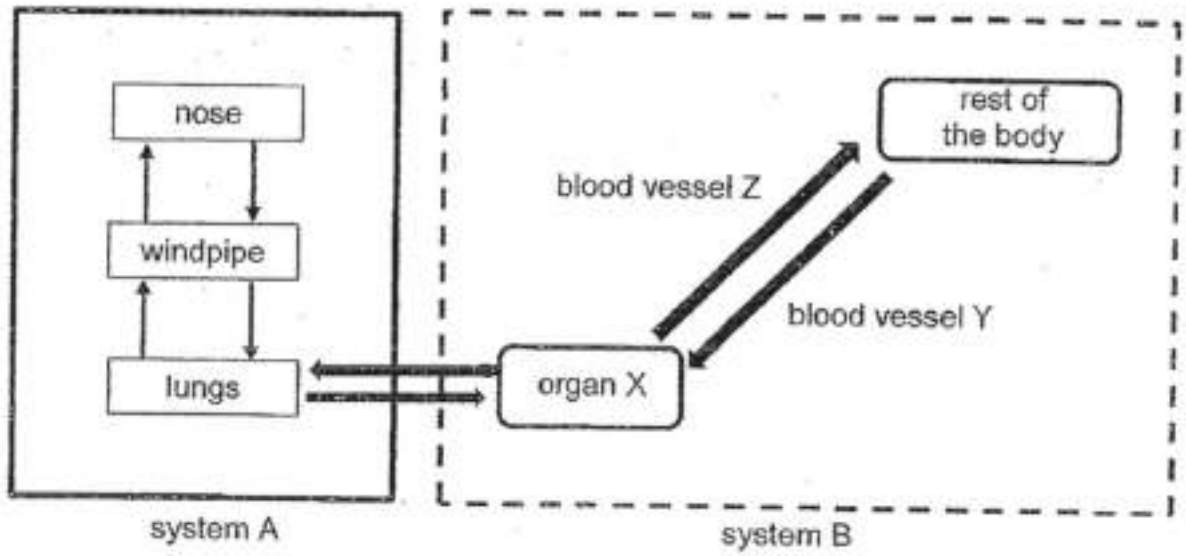


What is organ X? (1 mark)

Question 22 of 32

Primary 5 Science (Term 3) 0 pts

Study the diagram below that shows two body systems A and B.



What will happen if blood vessel Y is damaged and unable to transport blood between the rest of the body and organ X? (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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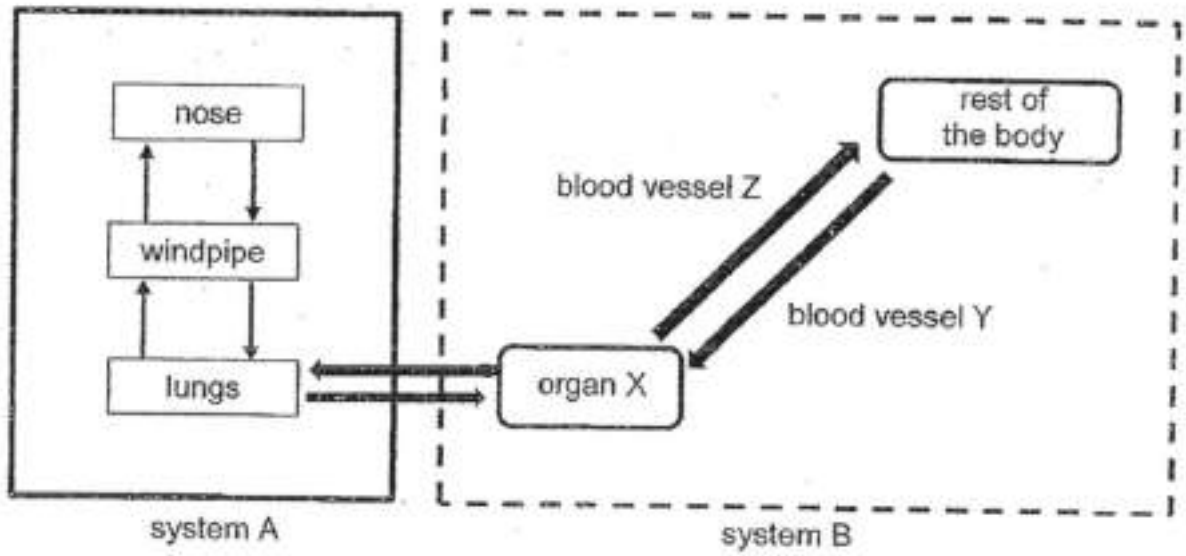
Question 23 of 32

Primary 5 Science (Term 3) 0 pts

Study the diagram below that shows two body systems A and B.



When a person exercises, the heart rate will change. How would this affect the speed of blood flow within blood vessel Z? Explain why. (1 mark)

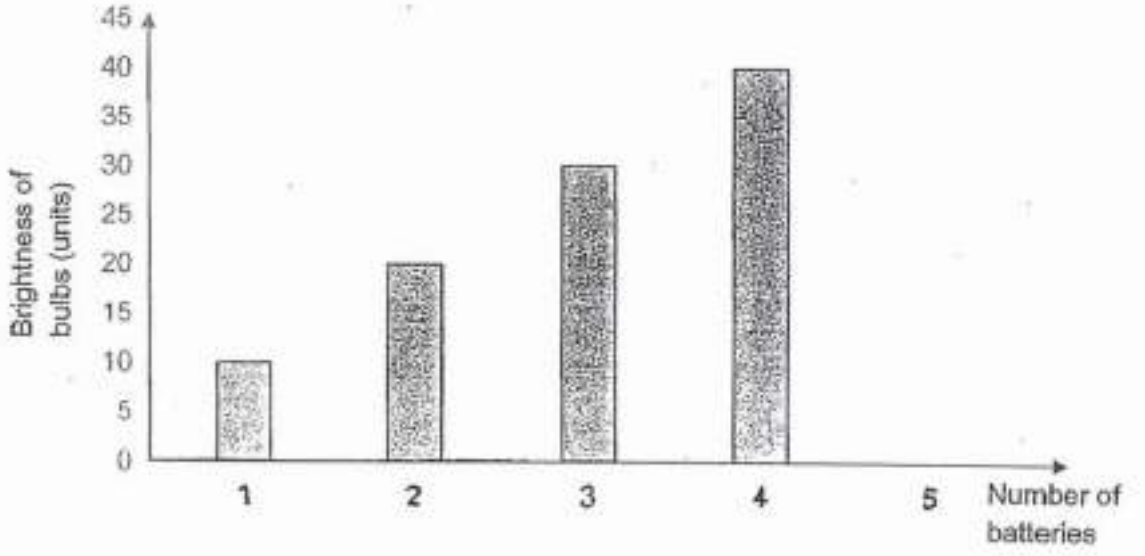
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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 24 of 32

Primary 5 Science (Term 3) 0 pts

Celeste set up an electric circuit with bulbs arranged in series using two bulbs, one battery and some wires. She increased the number of batteries used and measured the light intensity of the bulbs. She recorded her results in the graph shown below.



What is the aim of the experiment? (1 mark)

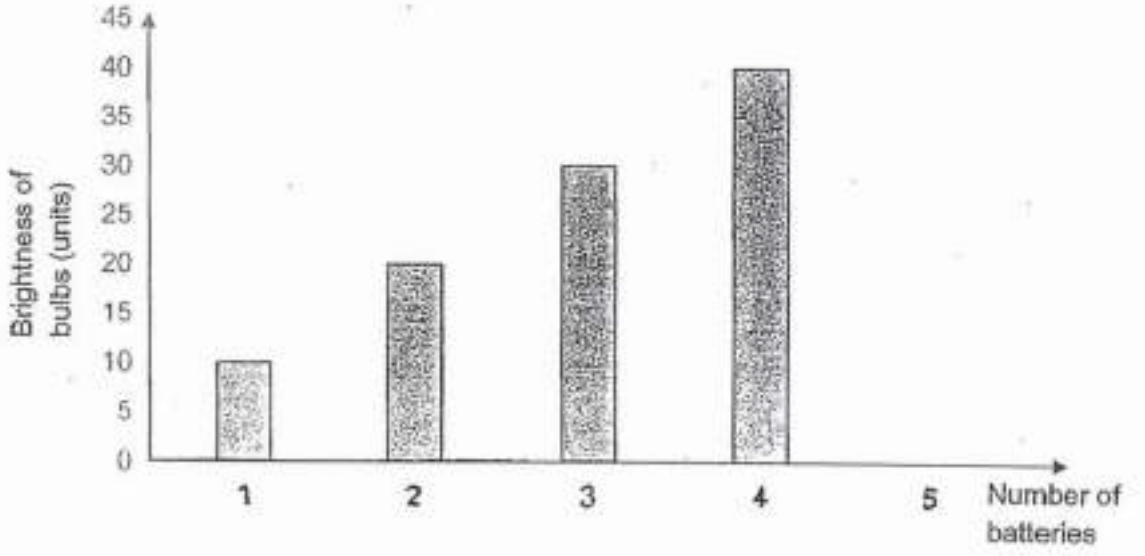
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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 25 of 32

Primary 5 Science (Term 3) 0 pts

Celeste set up an electric circuit with bulbs arranged in series using two bulbs, one battery and some wires. She increased the number of batteries used and measured the light intensity of the bulbs. She recorded her results in the graph shown below.



Explain why the brightness of the bulbs decreases to zero when the fifth battery was added. (1 mark)

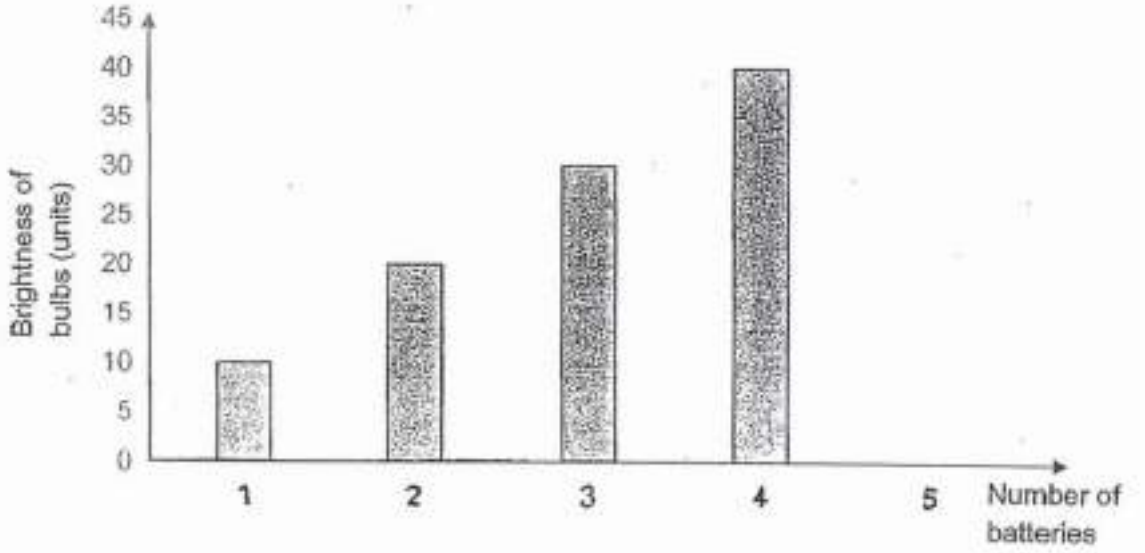
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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 26 of 32

Primary 5 Science (Term 3) 0 pts

Celeste set up an electric circuit with bulbs arranged in series using two bulbs, one battery and some wires. She increased the number of batteries used and measured the light intensity of the bulbs. She recorded her results in the graph shown below.



Without changing the number of batteries and removing any bulbs, what can Celeste do to the set-up if she wants to increase the brightness of the bulbs? (1 mark)

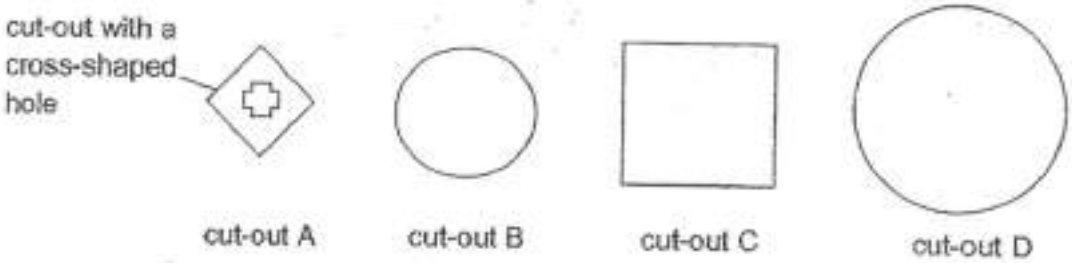
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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.

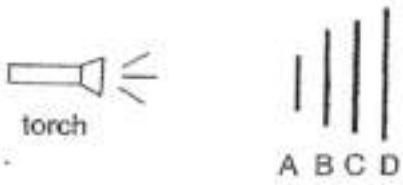
Question 27 of 32

Primary 5 Science (Term 3) 1 pt

Benson had 4 cut-outs made of different materials as shown below. The diagrams are drawn to scale.



He placed the four cut-outs in front of a torch as shown in the diagram below.



Benson turned on the torch and recorded the shadow on cut-out C as shown below.

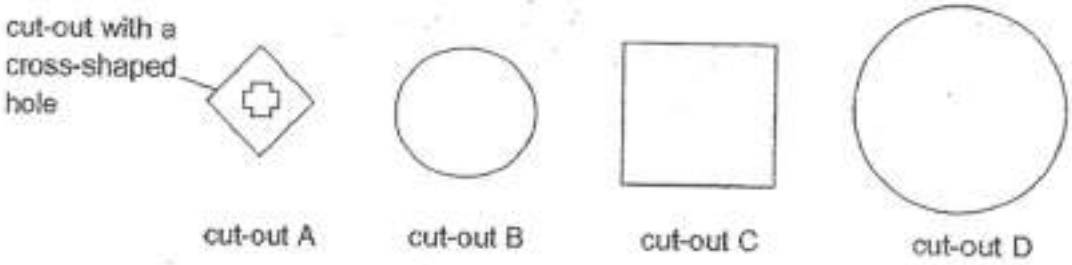
Based on Benson's observation, state whether materials A and B is opaque or transparent.

1. [ ]	Cut-out A: _____	A.	Transparent
2. [ ]	Cut-out B: _____	B.	Opaque

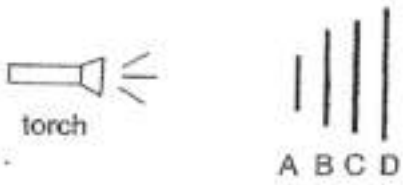
Question 28 of 32

Primary 5 Science (Term 3) 0 pts

Benson had 4 cut-outs made of different materials as shown below. The diagrams are drawn to scale.



He placed the four cut-outs in front of a torch as shown in the diagram below.



Benson turned on the torch and recorded the shadow on cut-out C as shown below.

If cut-out D is made of an opaque material, draw the shadow cast on cut-out D in the space provided below. [1]

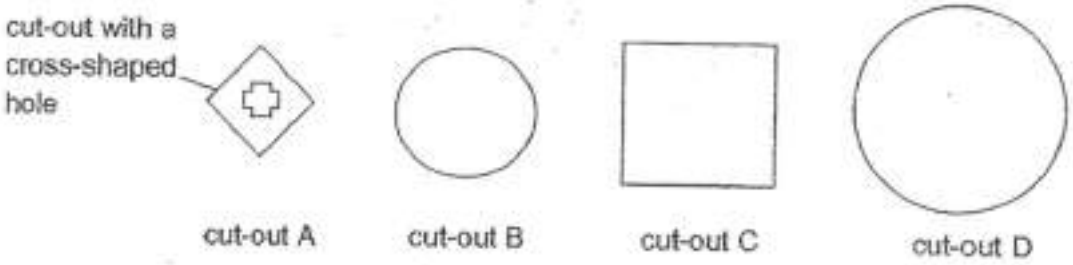
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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.

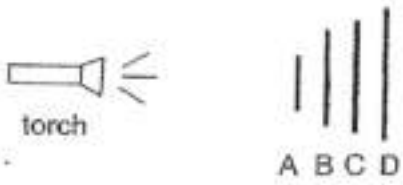
Question 29 of 32

Primary 5 Science (Term 3) 1 pt

Benson had 4 cut-outs made of different materials as shown below. The diagrams are drawn to scale.



He placed the four cut-outs in front of a torch as shown in the diagram below.



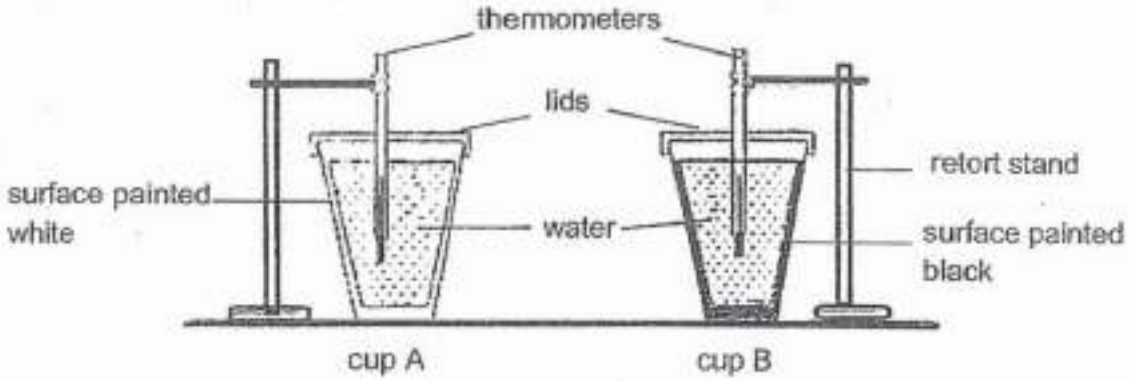
Benson turned on the torch and recorded the shadow on cut-out C as shown below.

State one property of light and explain how a shadow is formed.

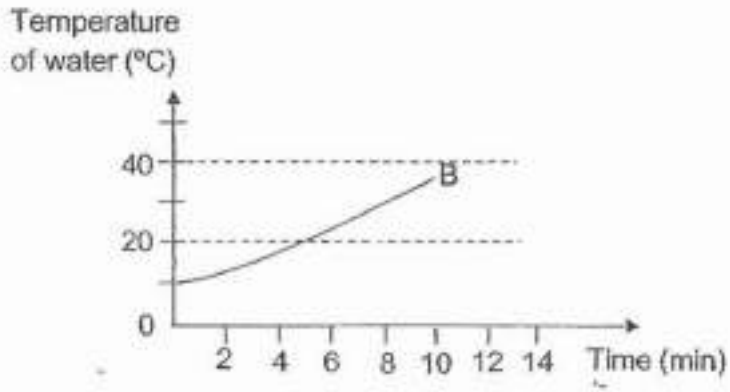
Question 30 of 32

Primary 5 Science (Term 3) 0 pts

James carried out an experiment with two identical cups A and B as shown in the diagram below. The outer surface of cup A was painted white and the outer surface of cup B was painted black. An equal amount of water at 10 °C was poured into each cup.



The two set-ups were placed in a room which had a constant temperature of 35 °C. He recorded the change in the temperatures of the water in cup B in the graph below.



Using the same graph above, draw the change in the temperature of water in cup A. Label the graph. (1 mark)

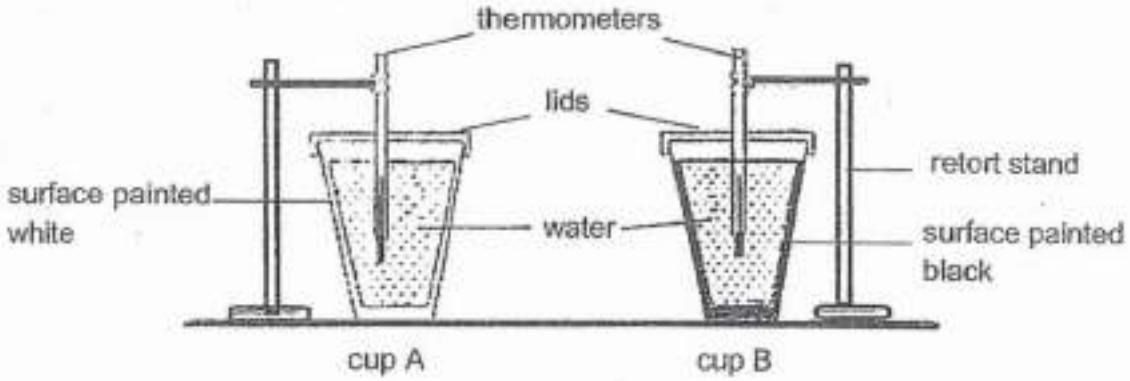
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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.

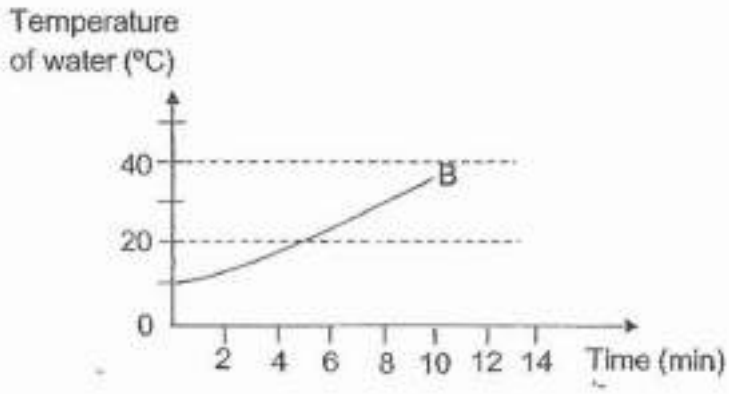
Question 31 of 32

Primary 5 Science (Term 3) 0 pts

James carried out an experiment with two identical cups A and B as shown in the diagram below. The outer surface of cup A was painted white and the outer surface of cup B was painted black. An equal amount of water at 10 °C was poured into each cup.



The two set-ups were placed in a room which had a constant temperature of 35 °C. He recorded the change in the temperatures of the water in cup B in the graph below.



What would be the difference in the change of temperature for the water in the two cups? (1 mark)

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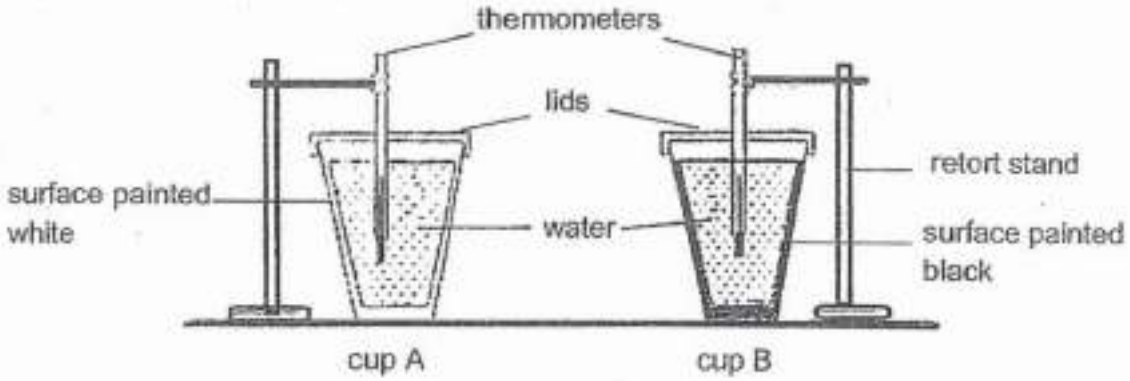
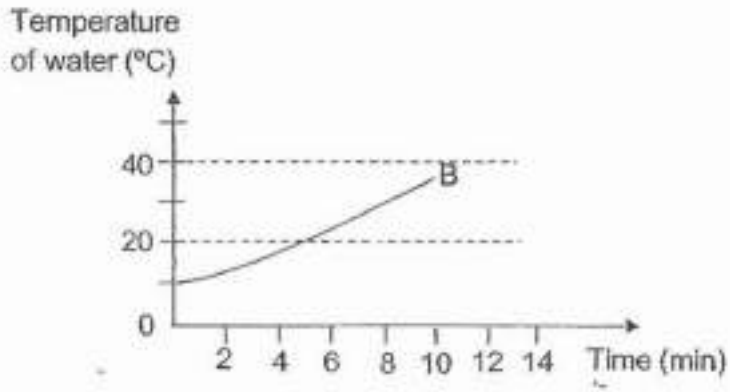
Question 32 of 32

Primary 5 Science (Term 3) 0 pts

James carried out an experiment with two identical cups A and B as shown in the diagram below. The outer surface of cup A was painted white and the outer surface of cup B was painted black. An equal amount of water at 10 °C was poured into each cup.



The two set-ups were placed in a room which had a constant temperature of 35 °C. He recorded the change in the temperatures of the water in cup B in the graph below.



Explain your answer in the previous question. (1 mark)

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