

Name: _____ ()

Class: Primary 5 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 5
Termly Assessment 2
SCIENCE
BOOKLET A
16 July 2020

Total Time for Booklets A and B: 1 hour

18 questions
36 marks

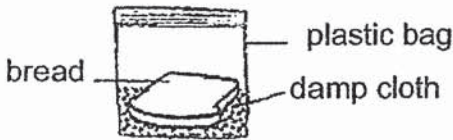
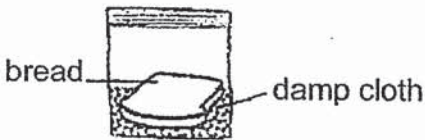
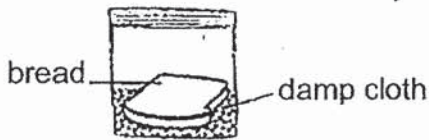
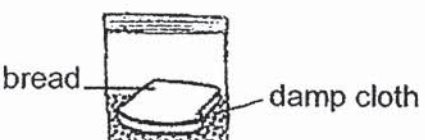
Do not open this booklet until you are told to do so.
Follow all instructions carefully.
Answer all questions.

This booklet consists of 11 printed pages.

Section A (18 x 2 marks = 36 marks)

For each question from 1 to 18, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet provided.

1. 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.

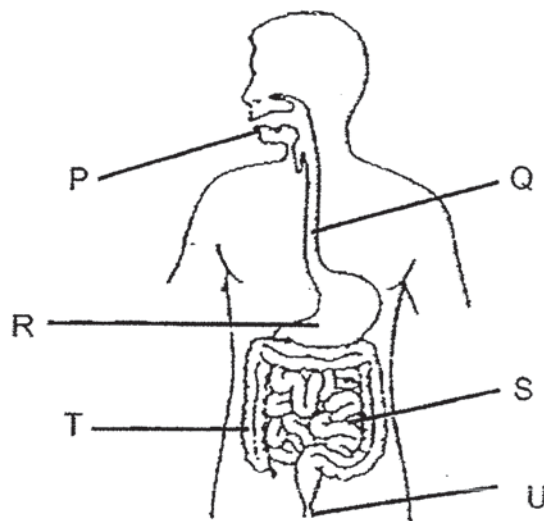
 set-up A put in a dark room at 10 °C	 set-up B put in a bright room at 10 °C
 set-up C put in a dark room at 35 °C	 set-up D put in a bright room at 35 °C

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 _____.

- (1) need light to grow
- (2) need water to grow
- (3) grow in a dark place
- (4) grow in a warm place

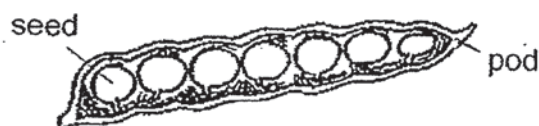
2. The diagram below shows parts of the human digestive system.



Which of the following is correct?

	Part(s) involved in the digestion of food	Part(s) involved in the absorption of digested food
(1)	P only	U only
(2)	Q and R only	S and T only
(3)	P, R and S only	S only
(4)	P, S and T only	U only

3. 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?

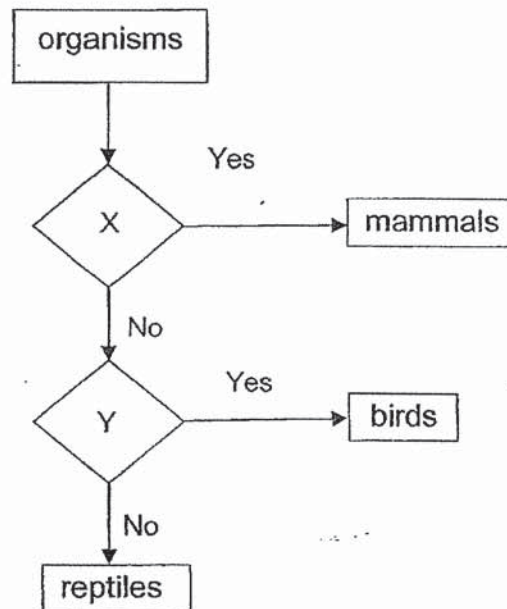
- (1) It has large flowers.
- (2) It is a flowering plant.
- (3) It is a non-flowering plant.
- (4) It has spore bags on the underside of the leaves.

4. 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

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

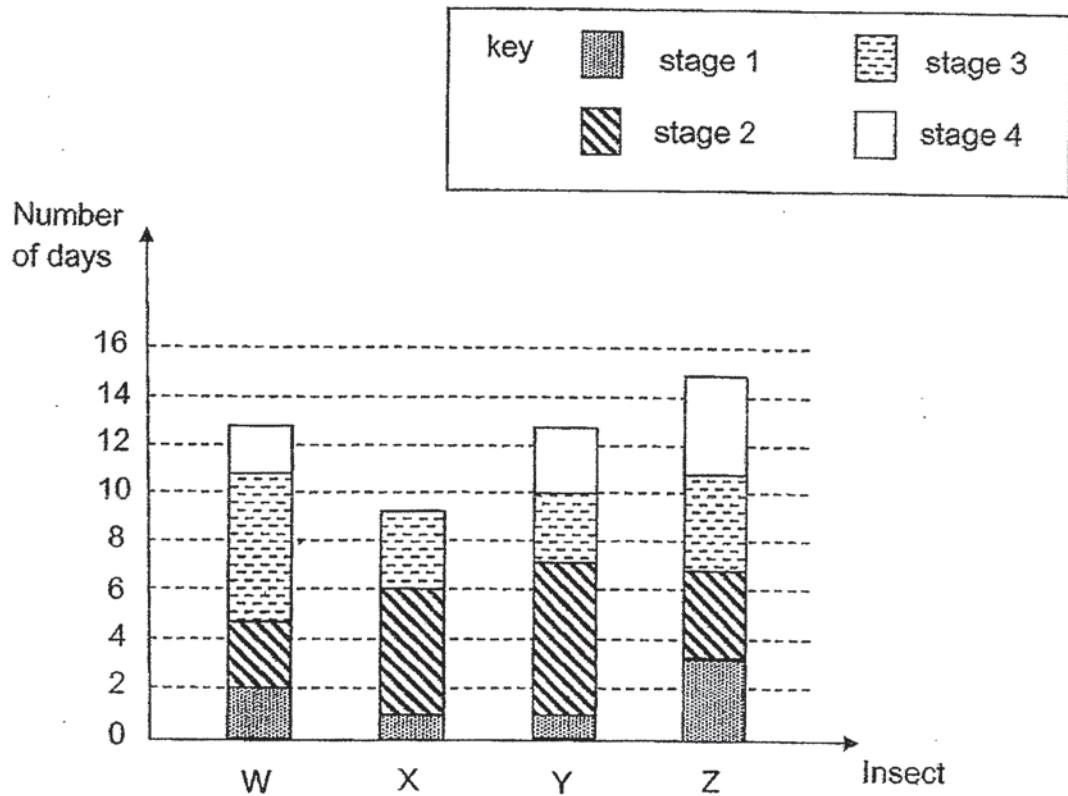
5. Study the chart below.



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

	Question X	Question Y
(1)	Do they have hair?	Do they have feathers?
(2)	Do they produce milk?	Do they have fins?
(3)	Do they lay eggs?	Do they have feathers?
(4)	Do they give birth to young alive?	Do they have hard body coverings?

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

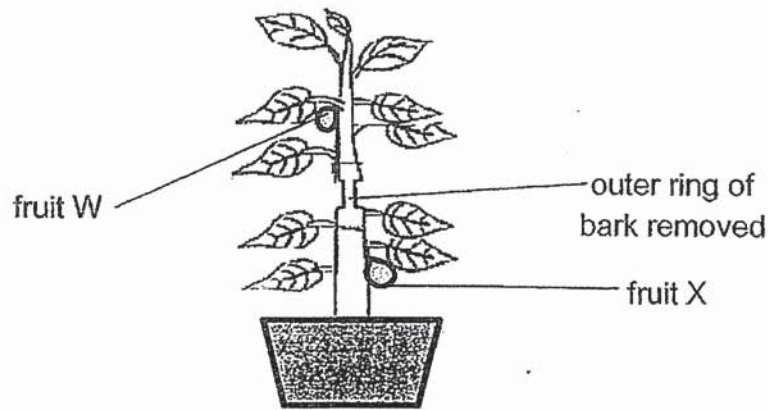


Based on the graph above, which of the following statement(s) is/are correct?

- 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.

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

7. 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.



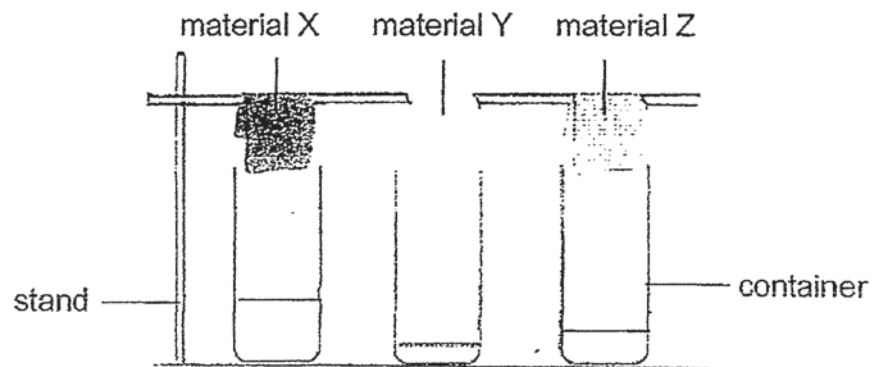
Which of the following will he most likely observe for fruit W and X after two weeks?

	size of fruit W	size of fruit X
(1)	bigger	bigger
(2)	bigger	smaller
(3)	smaller	smaller
(4)	smaller	bigger

8. Which one of the following statements about cells is correct?

- (1) Every cell contains a cell wall.
- (2) All plant cells can carry-out photosynthesis.
- (3) The size of the cells depends only on the size of the living thing.
- (4) When living things grow, the number of cells in their body increases.

9. 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?

- (1) Y, Z, X
- (2) X, Z, Y
- (3) X, Y, Z
- (4) Z, Y, X

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

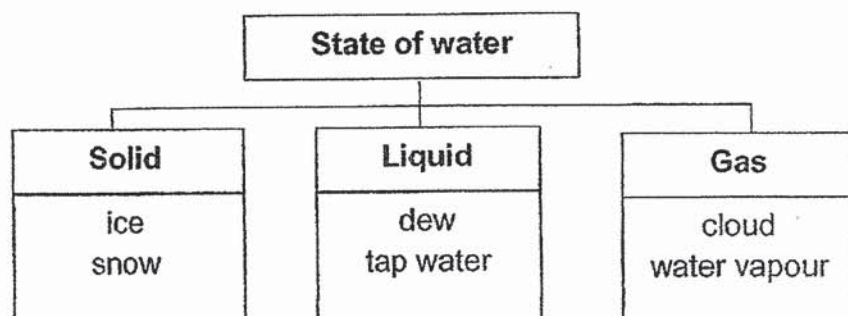


protective clothing

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

	Materials	Property			
		Strong	Flexible	Waterproof	Poor conductor of heat
(1)	A	no	no	yes	yes
(2)	B	yes	yes	yes	no
(3)	C	yes	yes	yes	yes
(4)	D	no	yes	no	no

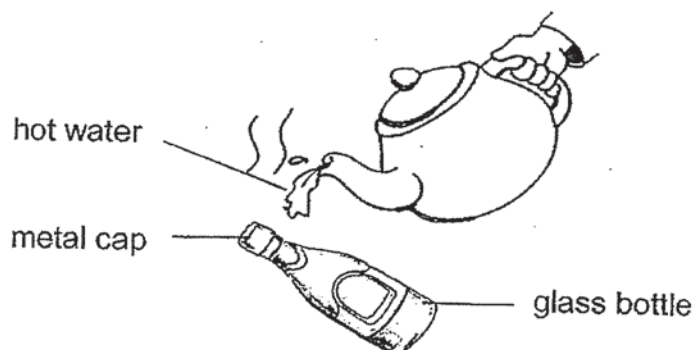
11. Study the classification chart below.



Which one of the states of water is wrongly classified?

- (1) ice
- (2) dew
- (3) snow
- (4) cloud

12. 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?

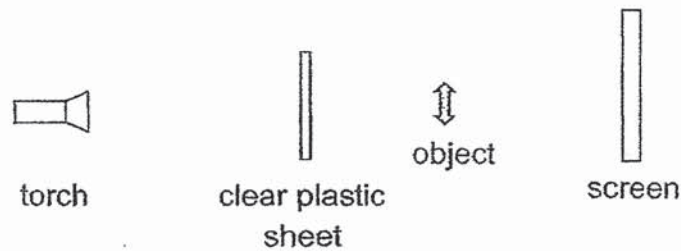
- (1) The metal cap and the glass bottle contracted.
 - (2) The metal cap contracted and the glass bottle expanded.
 - (3) The glass bottle contracted while the metal cap expanded.
 - (4) The metal cap gained heat and expanded faster than the glass bottle.
13. Roston wanted to find out how the temperature 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?

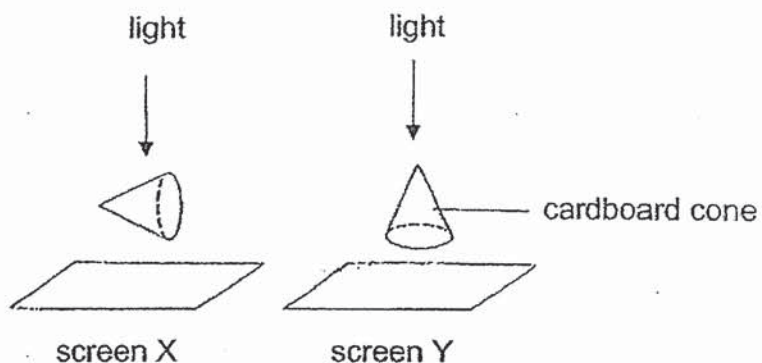
- (1) W and X
- (2) W and Y
- (3) X and Y
- (4) Y and Z

14. 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?

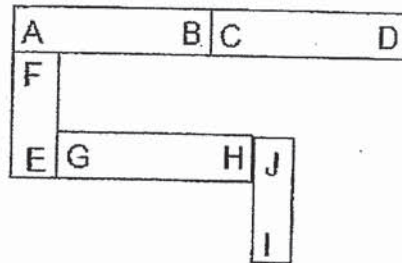
- (1) Remove the clear plastic sheet.
 - (2) Move the screen nearer to the object.
 - (3) Move the object nearer to the clear plastic sheet.
 - (4) Replace the torch with one that gives out brighter light.
15. Krishna carried out an experiment to study the shadows formed by two identical cardboard cones. 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?

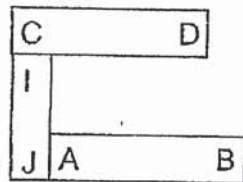
	Screen X	Screen Y
(1)		
(2)		
(3)		
(4)		

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

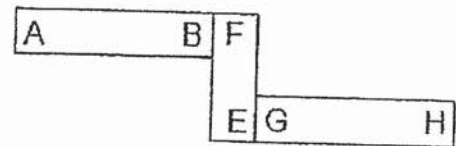


Which one of the following diagrams is a possible arrangement of three of the magnets?

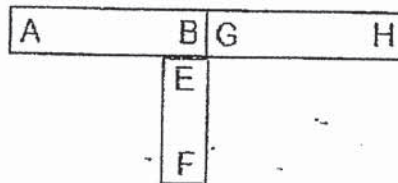
(1)



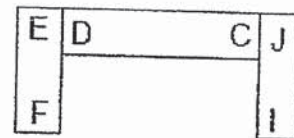
(2)



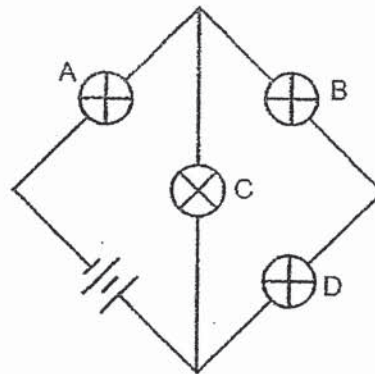
(3)



(4)



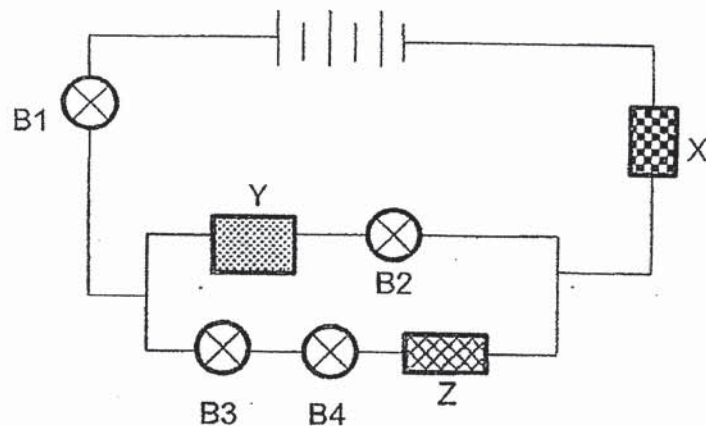
17. Study the circuit below.



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

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

18. 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?

	X	Y	Z	Number of bulbs that lit up
(1)	iron	wood	aluminium	4
(2)	aluminium	steel	plastic	3
(3)	wood	copper	iron	2
(4)	copper	plastic	steel	3

Name : _____ ()

Class : Primary 5 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 5

Termly Assessment 2

SCIENCE

BOOKLET B

16 July 2020

Total Time for Booklets A and B: 1 hour

5 questions
14 marks

Do not open this booklet until you are told to do so.
Follow all instructions carefully.
Answer all questions.

This booklet consists of 6 printed pages.

Booklet A	36
Booklet B	14
Total	50

Parent's Signature/Date

Section B (14 marks)

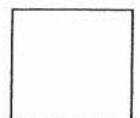
For questions 19 to 23, write your answers in this booklet. The number of marks available is shown in the brackets at the end of each question or part question.

19. 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.

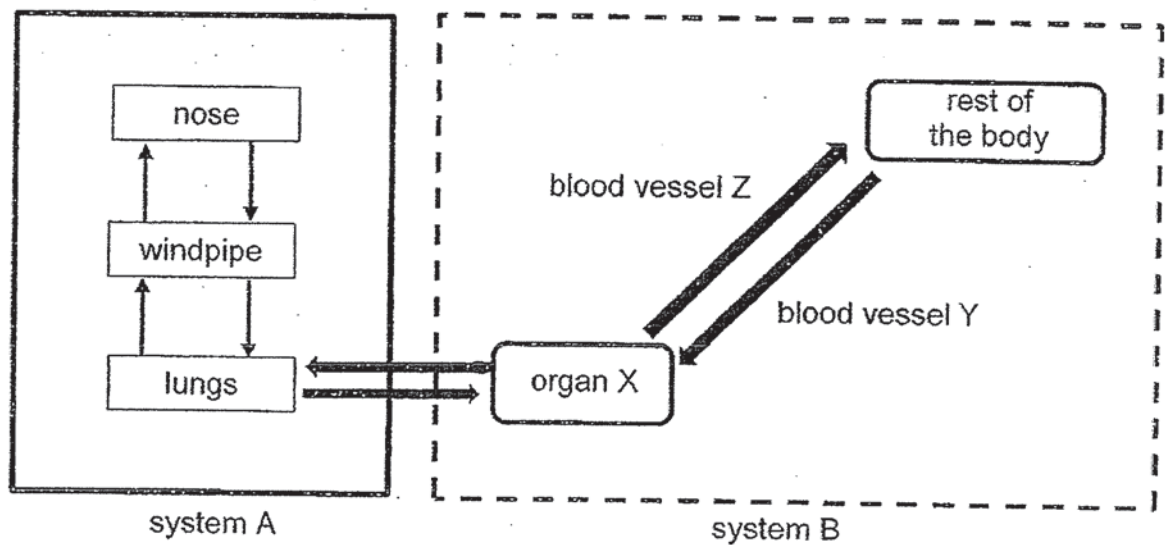
Temperature at which bacteria W is kept (°C)	Amount of bacteria W (unit)	
	At the start of experiment	End of experiment (24 hours later)
25	1	100
30	1	120
35	1	200
40	1	190
45	1	90

- (a) Describe how the changes in temperature affect the amount of bacteria W. [1]

- (b) 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 °C. Based on the results above, suggest why bacteria W reproduced so quickly in his intestines and caused him to fall sick. [1]



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



(a) What is organ X?

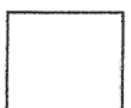
[1]

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

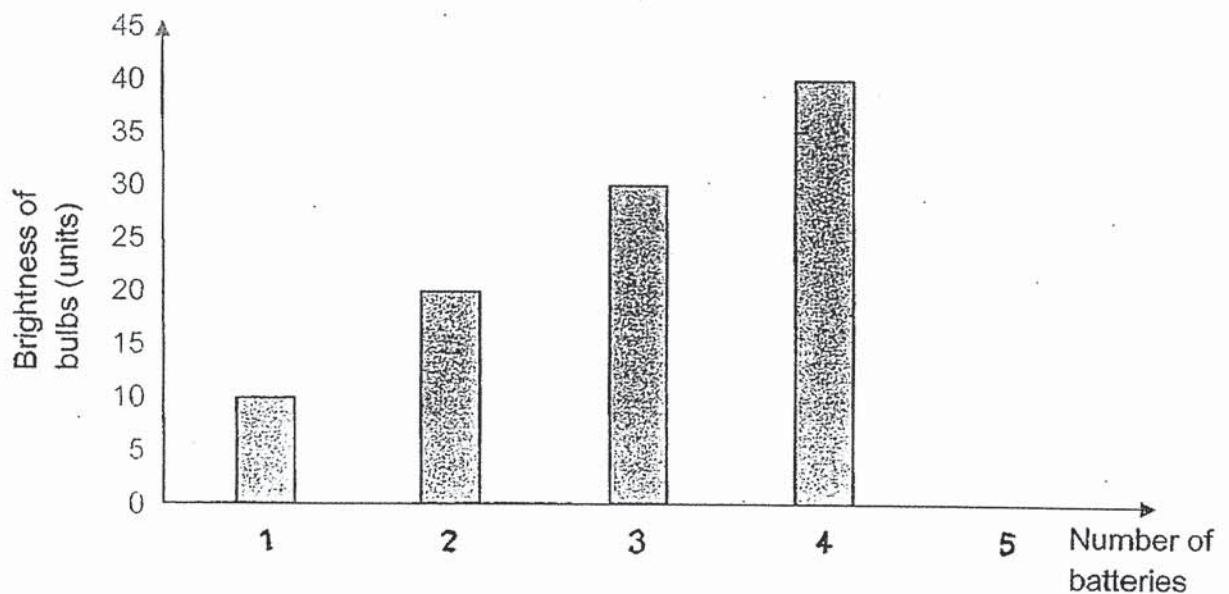
[1]

(c) 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]



21. 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.



- (a) What is the aim of the experiment?

[1]

- (b) Explain why the brightness of the bulbs decreased to zero when the fifth battery was added.

[1]

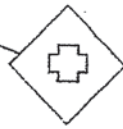
- (c) Without changing the number of batteries and removing any bulbs, what can Celeste do to the set-up if she wants to increase the brightness of the bulbs?

[1]

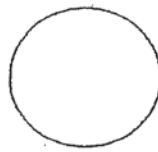


22. Benson had 4 cut-outs made of different materials as shown below. The diagrams are drawn to scale.

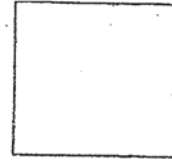
cut-out with a cross-shaped hole



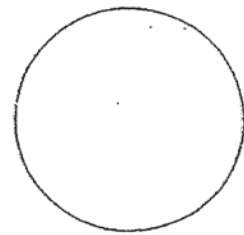
cut-out A



cut-out B

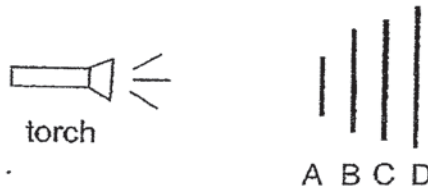


cut-out C

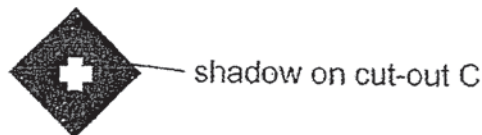


cut-out D

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



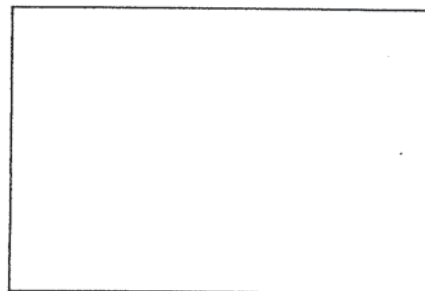
Benson turned on the torch and recorded the shadow on cut-out C as shown below.



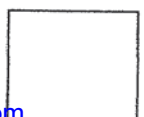
- (a) Based on Benson's observation, state whether materials A and B is **opaque** or **transparent**. [1]

Cut-out	Transparency
A	
B	

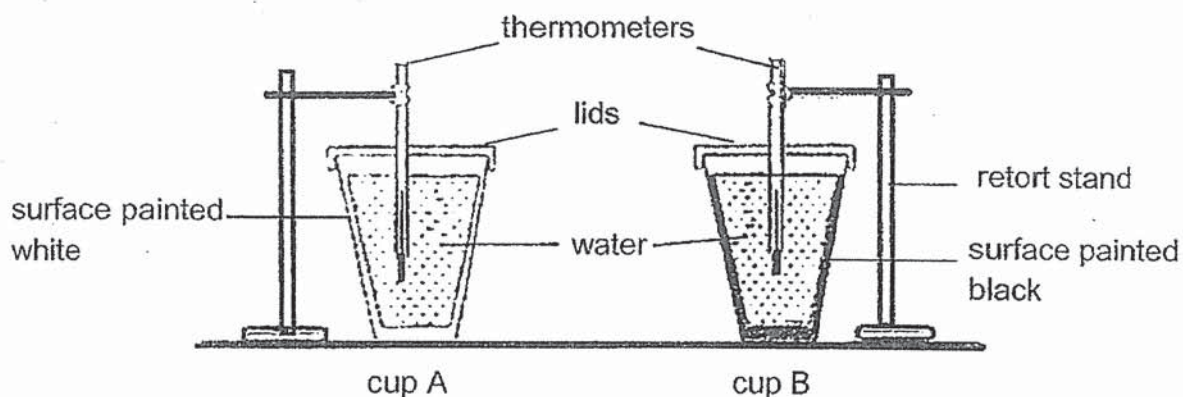
- (b) If cut-out D is made of an opaque material, draw the shadow cast on cut-out D in the space provided below. [1]



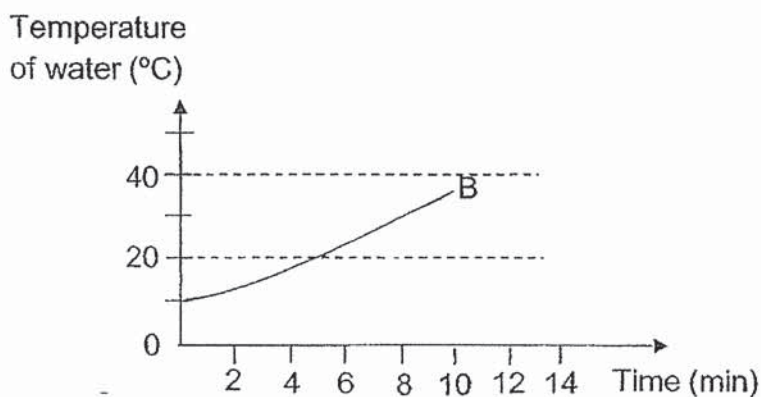
- (c) State one property of light and explain how a shadow is formed. [1]



23. 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.

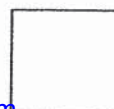


The two set-ups were placed in a room which had a constant temperature of 35°C . He recorded the change in the temperatures of the water in cup B in the graph below.



- (a) Using the same graph above, **draw** the change in the temperature of water in cup A. Label the graph. [1]
- (b) What would be the difference in the change of temperature for the water in the two cups? [1]

- (c) Explain your answer in (b) above. [1]



ANSWER KEY

YEAR: 2020

LEVEL: PRIMARY 5

SCHOOL: CHIJ ST NICHOLAS GIRLS' SCHOOL

SUBJECT: SCIENCE

TERM: TERM 1 ASSESSMENT 2

Q1	4	Q2	3	Q3	2	Q4	3	Q5	1
Q6	4	Q7	4	Q8	4	Q9	1	Q10	2
Q11	4	Q12	4	Q13	4	Q14	3	Q15	3
Q16	4	Q17	1	Q18	4				

Q19. a) Amount of bacteria W increases when the temperature until 35°C when temperature is 35°C the amount of bacteria W decreases.

b) Ranjit body temperature is 37°C which is close to bacteria W best temperature (35°C-48°C) for fastest growth

Q20. a) Heart

b) The carbon dioxide produced from respiratory will not be passed to the rest of the body.

c) Heart pumps faster to transport more oxygen and more digested food of respiration to all parts of the body. Therefore the speed of the blood flow will be very fast.

Q21. a) To find out if the number of batteries affected the brightness of bulbs.

b) When the fifth battery was added there was too much electric and the bulb fused.

c) Arrange the set up to parallel

Q22. a) Opaque (A)

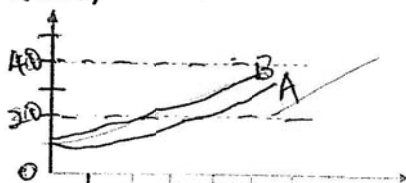
Transparent (B)

b)



c) Opaque

Q23. a)



b) The temperature of water in Jar B will increase at a faster rate than the temperature of water in jar A

c) A black surface absorbs heat faster than a white surface thus the water in jar B gains heat.

2/10/21