

**WA 2**

**Catholic High School (Primary)**  
**Primary 5 Science 2021**  
**Weighted Assessment 2**

Name: \_\_\_\_\_ (     )

Class: Pri. 5 - \_\_\_\_\_

MARKS	30
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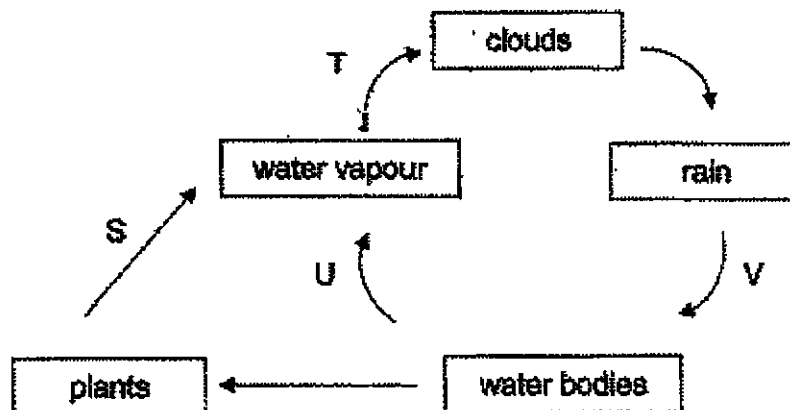
Date: 29 April 2021

Parent's Signature: \_\_\_\_\_

**Booklet A (10 × 2 marks)**

For each question from 1 to 10, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Write its correct number in the brackets provided. (20 marks)

1 Study the diagram below.

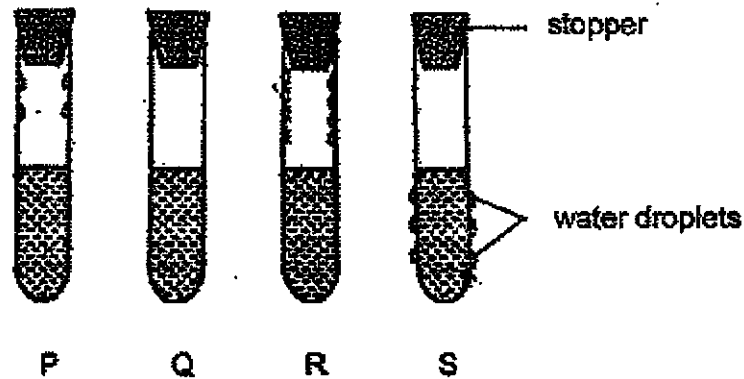


Which statement about the diagram shown above is correct?

- (1) At stage T, the water vapour loses heat and forms clouds.
- (2) At stage U, the water bodies lose heat and become water vapour.
- (3) At stage V, surrounding air cools the rain to form the water bodies.
- (4) At stage S, the plants give out air that evaporates to become water. (     ) vapour.



- 2 Caleb filled four identical test tubes, P, Q, R and S, with the same amount of water at different temperatures. He covered the tubes with identical stoppers. The diagram below shows his observations after a few minutes.

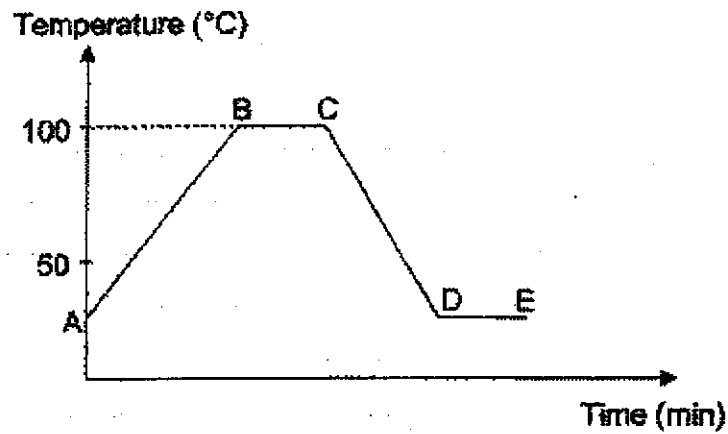


Which of the following shows the correct order of the test tubes based on the temperature of the water?

Temperature of water				
<div style="display: flex; justify-content: space-between; align-items: center;"> <span>highest</span> <span>→</span> <span>lowest</span> </div>				
(1)	S	R	P	Q
(2)	R	P	Q	S
(3)	P	Q	S	R
(4)	Q	S	R	P

( )

- 3 The graph below shows the changes in the temperature of water over a period of time.

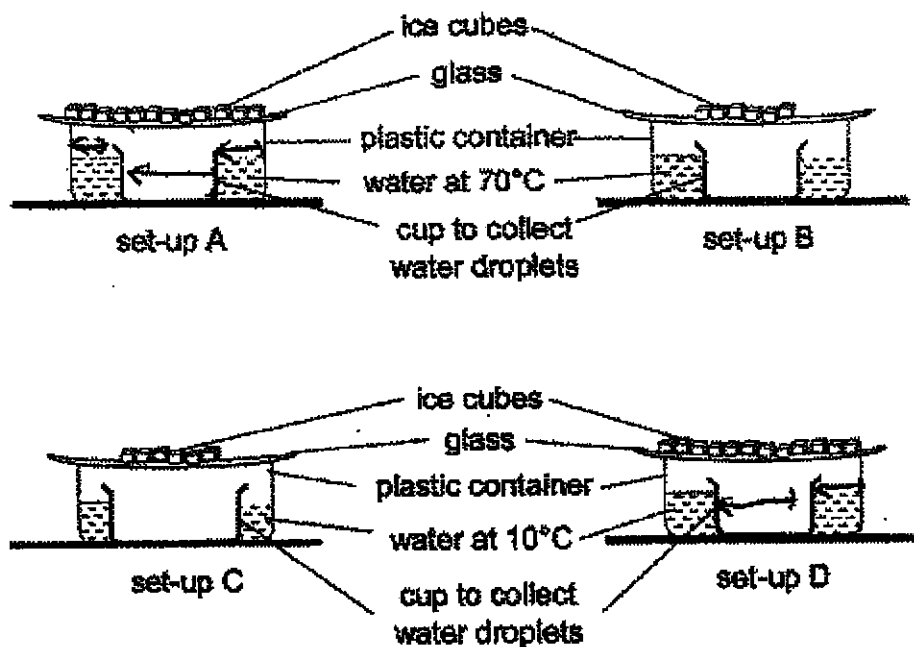


Which of the following correctly identifies the stage when evaporation is happening the fastest?

- (1) AB
- (2) BC
- (3) CD
- (4) DE

( )

- 4 Michelle wanted to find out if the temperature of water in the plastic container affects the amount of water droplets collected in the cup. The surrounding temperature was  $30^{\circ}\text{C}$ .



Which two set-ups should she choose to conduct a fair test?

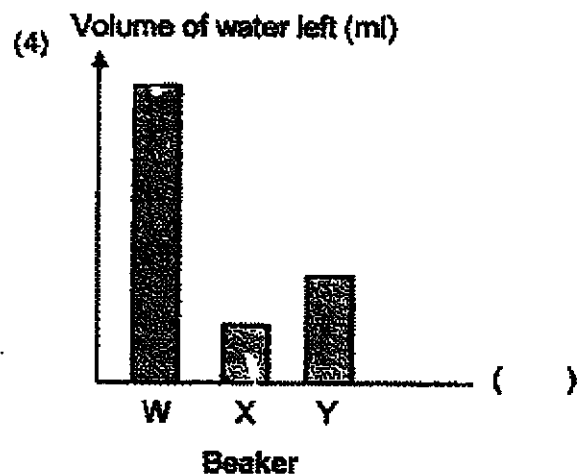
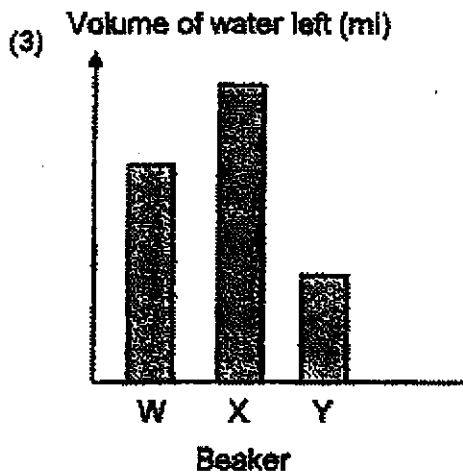
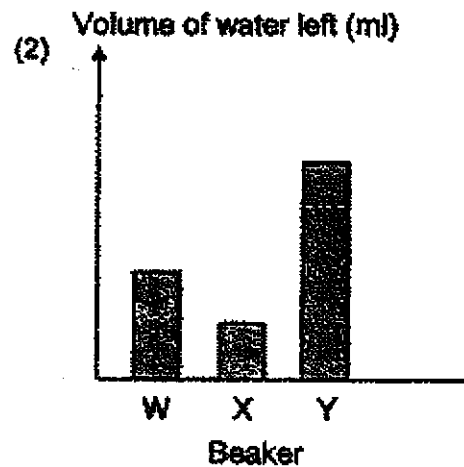
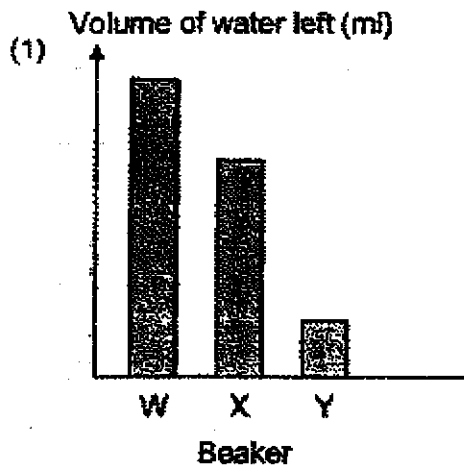
- (1) A and B
- (2) A and D
- (3) B and C
- (4) C and D

( )

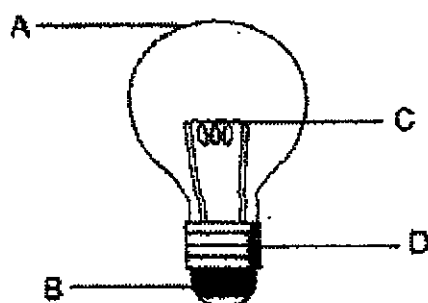
- 5 Three identical beakers W, X and Y were filled with the same amount of water and placed at three different locations for a day. The conditions of the three locations are shown in the table below.

Beaker	W	X	Y
Conditions	cloudy not windy	sunny windy	sunny not windy

Which graph correctly shows the volume of water left in each beaker at the end of the experiment?



- 6 Study the diagram below.

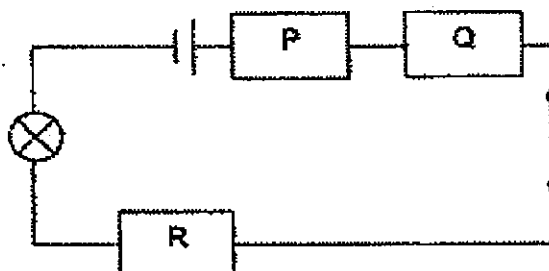


Which of the following parts should be connected in an electric circuit to light up the bulb?

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

( )

- 7 Study the circuit diagram below. P, Q and R are made of different materials.



It is observed that the bulb lights up when the switch is closed.

Which of the following correctly represents P, Q and R?

	P	Q	R
(1)	rubber	cardboard	iron
(2)	cardboard	rubber	gold
(3)	iron	silver	gold
(4)	iron	rubber	silver

( )

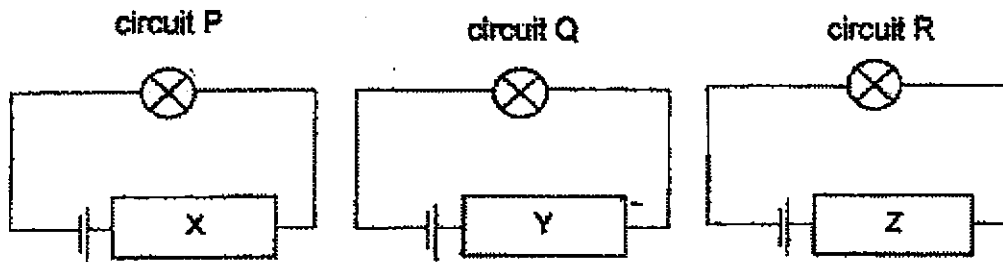
- 8 Joshua made four statements about an electric circuit.
- A The battery connects the parts of the circuit together.
  - B The switch allows the circuit to be either open or closed.
  - C The bulb lights up when the electric current flows through its metal filament.
  - D Electric current can flow through an open circuit as there is a gap in the circuit.

Which statements are correct about an electric circuit?

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

( )

- 9 Roy set up three circuits, P, Q and R, with different objects made of materials X, Y and Z as shown below.



Roy made the following observations:

- A The bulb in circuit P lit up.
- B The bulb in circuit Q did not light up.
- C The bulb in circuit R did not light up.

What can Roy conclude about materials X, Y and Z?

- (1) Z is a metal.
- (2) X and Z are non-metals.
- (3) Y and Z are electrical insulators.
- (4) X and Y are electrical conductors.

( )



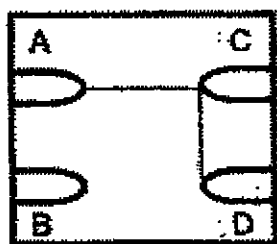
- 10 Kenny wanted to find out how four paper clips, A, B, C and D, on a circuit card were connected.

The table below shows the results when a circuit tester was connected to the following pairs of paper clips.

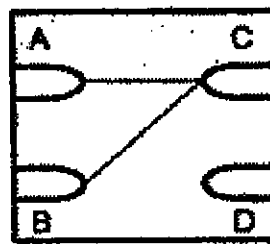
Paper clips tested	Does the bulb light up?
A and B	No
A and C	Yes
A and D	Yes
B and C	No
B and D	No

Which of the following shows a possible arrangement of the wires behind the circuit card?

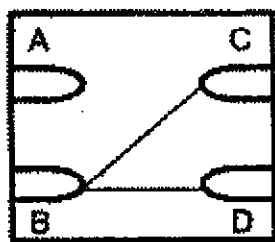
(1)



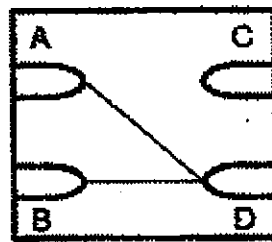
(2)



(3)



(4)



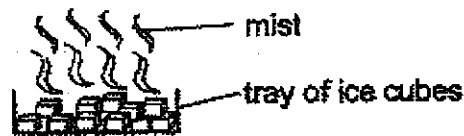
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**Booklet B (10 marks)**

For questions 11 to 14, write your answers in this booklet.

The number of marks available is shown in brackets [ ] at the end of each question or part question. (10 marks)

- 11 Damien took out a tray of ice from the freezer. He saw mist forming above the tray.



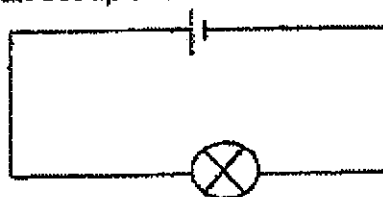
- (a) What is the state of matter of mist? [1]

\_\_\_\_\_

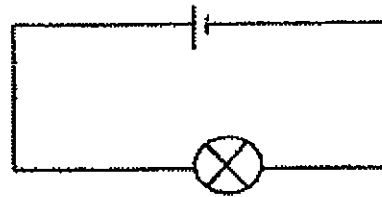
- (b) Explain how the mist was formed. [2]

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

- 12 Farah set up two similar circuits as shown below.



circuit A



circuit B

She realised that the bulb in circuit A did not light up while the bulb in circuit B lit up.

Suggest two possible reasons for the bulb in circuit A not to light up. [2]

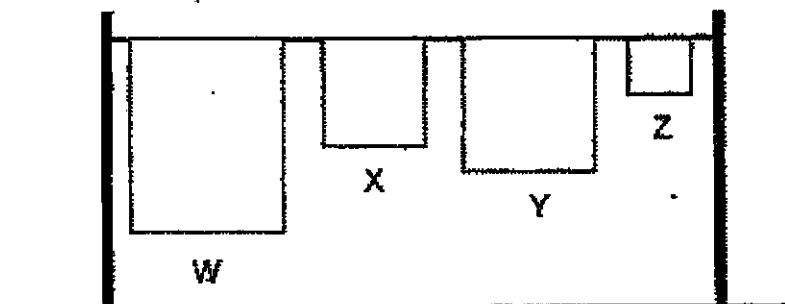
(i) \_\_\_\_\_

(ii) \_\_\_\_\_

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SCORE	5
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- 13 Edwin had four similar towels, W, X, Y and Z. He dipped each towel into a basin of water and weighed it. He folded X, Y and Z and hung them on a clothes line under the sun as shown below.



Edwin weighed the towels at 20-minute intervals and recorded the mass of each towel in the table below.

Towel	Mass of towel (g) after		
	0 min	20 min	40 min
W	200	161	130
X	200	184	170
Y	200	170	142
Z	200	196	187

- (a) Based on the results above, what can you conclude about the effect of the amount of exposed surface area of the towel on the rate of evaporation? [1]

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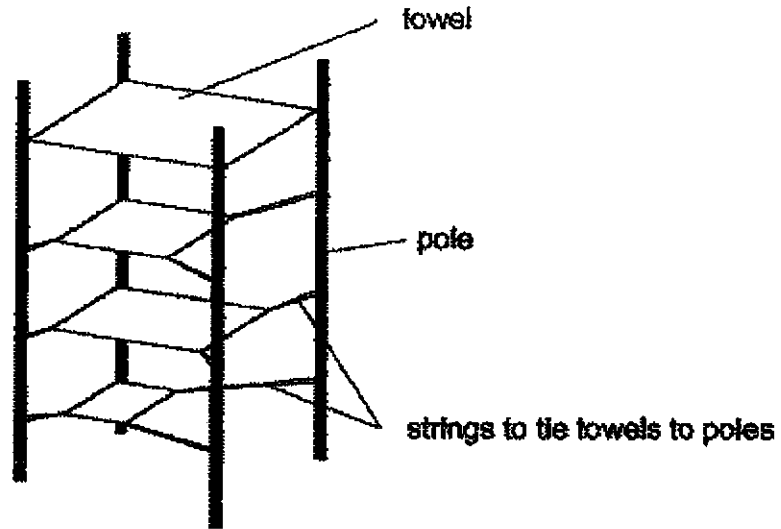
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SCORE	1
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Continue from Question 13

Edwin conducted another experiment with the same aim. He used the same towels. However, they were hung differently as shown below.



- (b) Edwin's teacher told him that his experiment was not a fair one. Explain why. [1]

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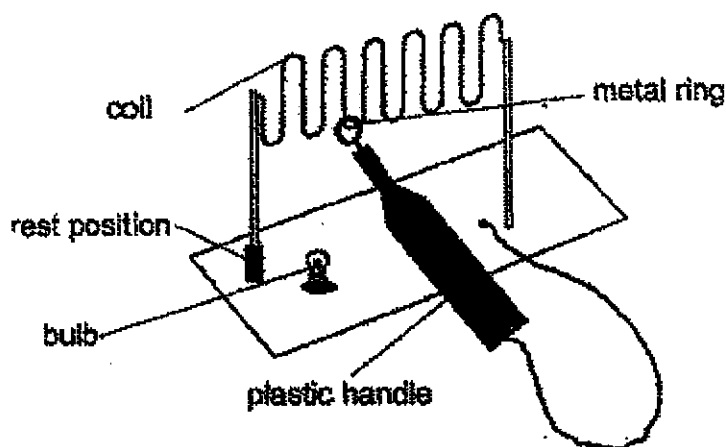
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SCORE	1
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- 14 Samson moves a metal ring along a coil until it reaches the rest position. The metal ring is connected to the circuit with a wire which is covered with a plastic handle.

If the metal ring touches the coil, the bulb lights up.



- (a) State the property of the metal ring and the coil for the bulb to light up. [1]

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- (b) When the metal ring reaches the rest position, the bulb does not light up. Which of the following could Samson possibly use to cover the rest position?

Tick (✓) the correct box(es).

[1]

plasticine	
steel plate	
copper sheet	
towel	
aluminium foil	

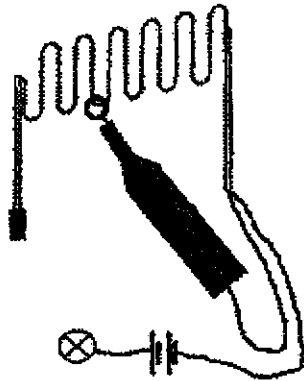
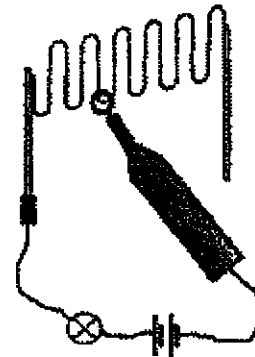
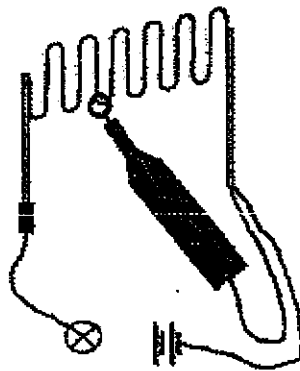
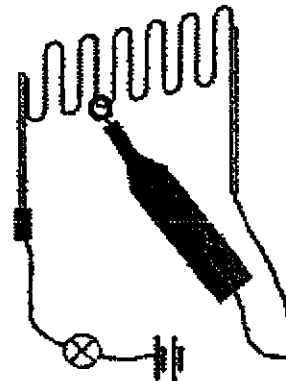
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SCORE	2
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Continue from Question 14

- (c) Samson has four other similar set-ups. Only one set-up is a closed circuit which allows the bulb to light up only when the metal ring touches the coil.

Put a tick (✓) in the box to show which set-up is a closed circuit. [1]


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End of Paper

SCORE	1
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**ANSWER KEY**

**YEAR** : 2021  
**LEVEL** : PRIMARY 5  
**SCHOOL** : CATHOLIC HIGH SCHOOL  
**SUBJECT** : SCIENCE  
**TERM** : WEIGHTED ASSESSMENT 2

**BOOKLET A**

Q1	1	Q2	2	Q3	2	Q4	2	Q5	4
Q6	4	Q7	3	Q8	3	Q9	3	Q10	1

**BOOKLET B**

Q11	a)	Liquid
	b)	The warm vapour touched the cool air, lost heat and condensed to form tiny water droplets called mist.
Q12	i)	The bulb had fused
	ii)	The bulb is faulty
Q13	a)	As the amount of expose surfaces area decreases, the outerof evaporation decreases.
	b)	The water from the towel at the top layer may drip to those at the layer below causing the amount of water to be different.
Q14	a)	electrical conductor
	b)	Plasticine <input checked="" type="checkbox"/> Towel <input checked="" type="checkbox"/>
	c)	

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 END

