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SCIENCE

Term 4 Revision

P5 SCIENCE

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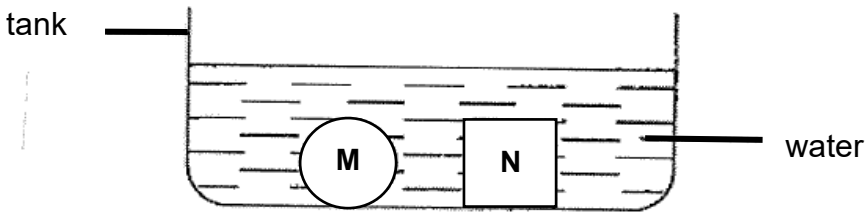
Booklet A: Multiple Questions

1. Alex dropped two objects M and N into a tank of water as shown below.



Which of the following conclusion(s) about objects M and N is/are definitely true?

A Objects M and N can sink in water.

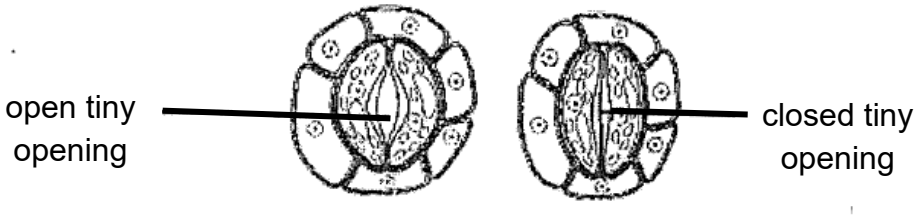
B Objects M and N have the same mass.

C Objects M and N are made of the same material

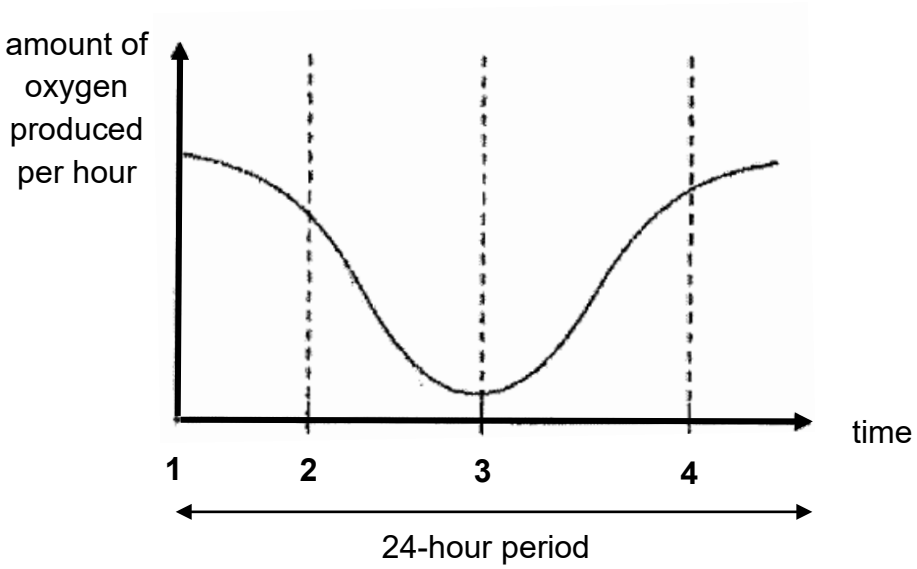
(1) A only
(2) A and B only
(3) A and C only
(4) B and C only

( )

2. The diagrams below show tiny openings that are found on the underside of the leaves. The tiny openings will open and close in the presence and absence of light respectively.



The graph below shows the amount of oxygen produced by a green plant placed outdoor during a 24-hour period, on a warm and sunny day.

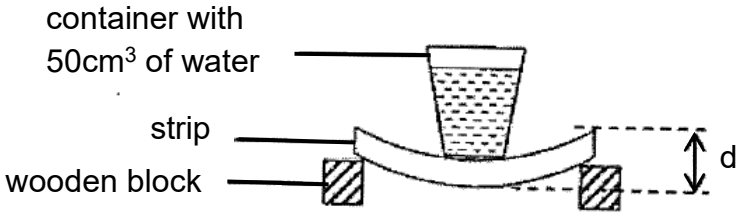


Which one of the following Is correct about the tiny openings at the different points of time?

	Point	Tiny openings
(1)	1	Open
(2)	2	Closed
(3)	3	Open
(4)	4	Closed

( )

3. Shanis set up an experiment as shown below to compare the flexibility of four similar strips, A, B, C and D, each made of different materials.

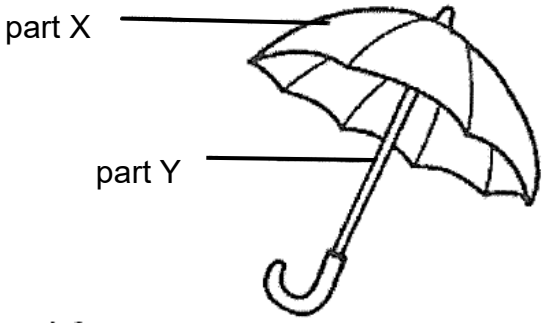


On each strip, she placed a container with 50cm^3 of water. The distance, d, between the highest and lowest points of the strip was measured.

Her results are shown below.

Strip	d (mm)
A	36
B	14
C	25
D	4

The diagram below shows an umbrella made of parts X and Y.

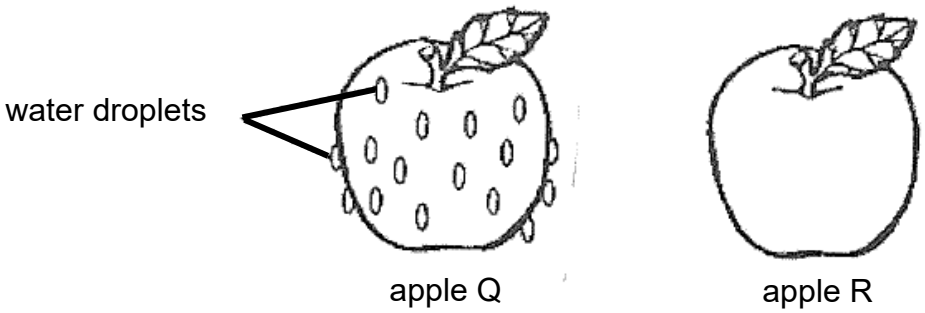


Based on the information above, which of the materials, A, B, C, or D, are most suitable for making parts X and Y of the umbrella?

	X	Y
(1)	A	D
(2)	D	C
(3)	A	B
(4)	B	A

( )

4. Mrs Teo picked up two similar apples from the fruit cart at the supermarket. She observed that there were many tiny water droplets on the surface of apple Q while apple R was dry.



Which of the following statements about apples Q and R are definitely correct?

A Temperature of apple Q is lower than that of apple R

B Temperature of apple Q is higher than that of apple R

C Temperature of apple Q is lower than that of the surroundings.

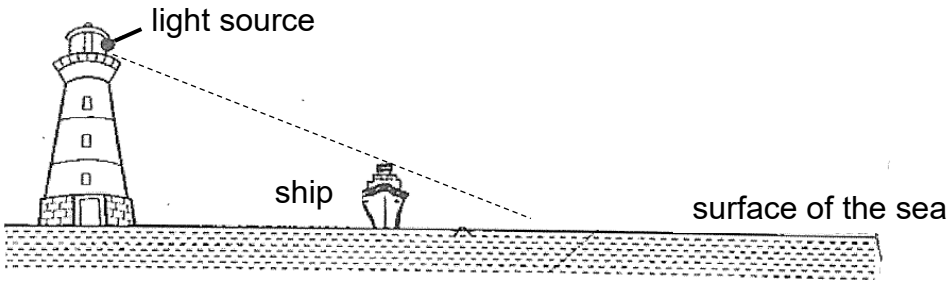
D Temperature of apple R is lower than that of the surroundings.

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

( )

Booklet B: Open Ended Questions

5. The diagram shows the position of a light source and a ship in the sea.



(a) In the diagram above, draw a cross (X) on the surface of the seawater to show where the shadow of the ship would be cast. (1m)

(b) Explain why the ship casts a shadow. (1m)

_____

_____

(c) If a larger ship is at the same position as the ship above, would the shadow cast on the seawater now be *smaller, larger, or of the same size*? Explain your answer. (1m)

_____

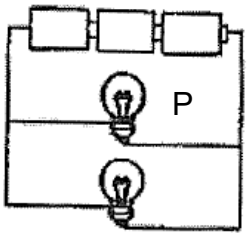
_____

(d) Explain why using the same light source in part (c) will make the experiment a fair test. (1m)

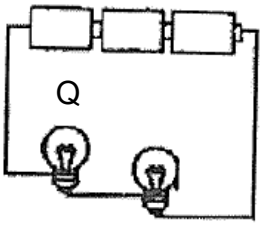
_____

_____

6. David used identical bulbs and batteries in working condition to form the circuits 1 and 2 below.



Circuit 1



Circuit 2

(a) Which bulb, P or Q, will glow more brightly? Give a reason for your answer. (1m)

_____

_____

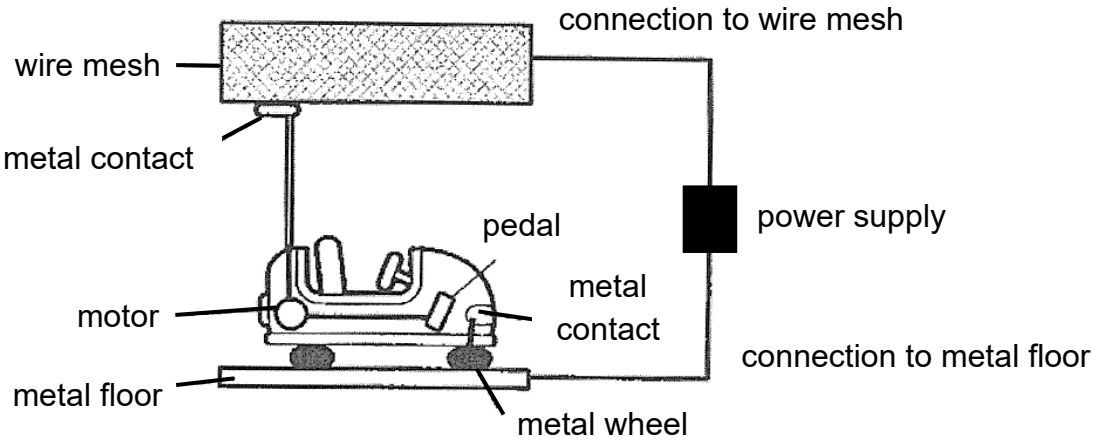
(b) David wanted to add another identical bulb to circuit 1 so that bulb P will be as bright as bulb Q in circuit 2.

Describe how he should connect the new bulb in circuit 1. (1m)

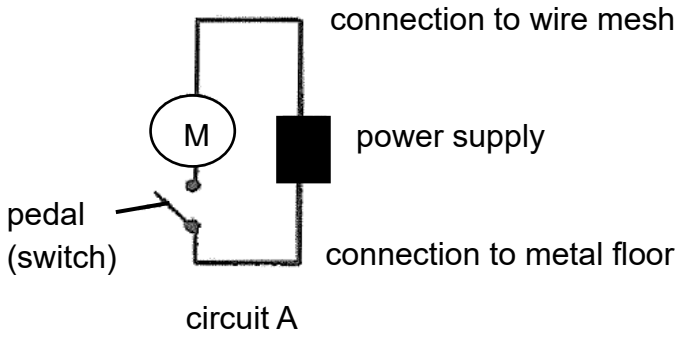
_____

_____

The diagram shows a bumper car. The circuit symbols for the motor and pedal for each car are shown on the diagram.



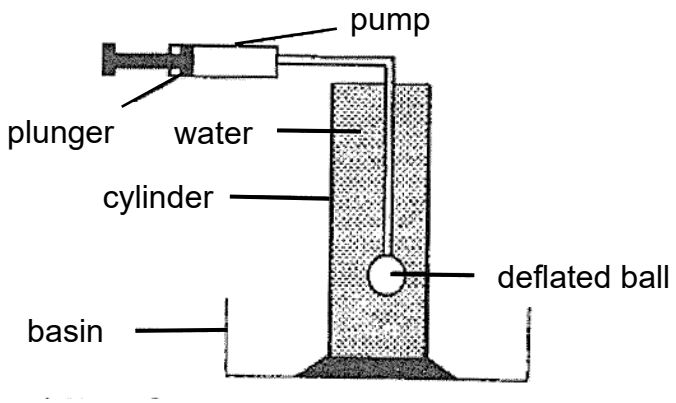
Bumper cars are connected such that when one car breaks down, the other cars can still work. Circuit A below shows the connection for one bumper car.



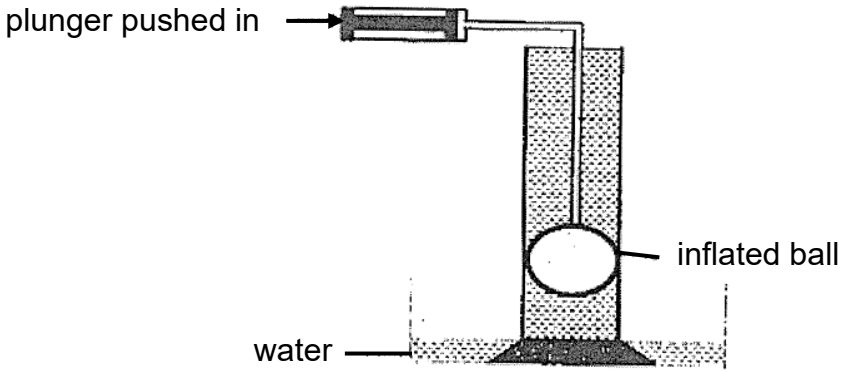
circuit A

(c) Based on the information provided, using only wires and two switches, draw the circuit in the box below to show how two bumper cars should be connected. (2m)

7. The diagram below shows an inflatable ball fixed to an air pump. The ball was placed in a cylinder. The cylinder was then filled with water to the brim.



When Bob pumped 200cm^3 of air into the deflated ball, the ball started to inflate. The water in the cylinder overflowed and was collected in the basin.



(a) Explain why the water overflowed when air was pumped into the ball. (1m)

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(b) Based on the experiment, state a property of water. (1m)

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