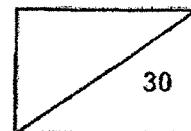


RED SWASTIKA SCHOOL  
SCIENCE  
PRIMARY 5  
CLASS TEST (2)



Name: \_\_\_\_\_ ( ) Parent's Signature: \_\_\_\_\_

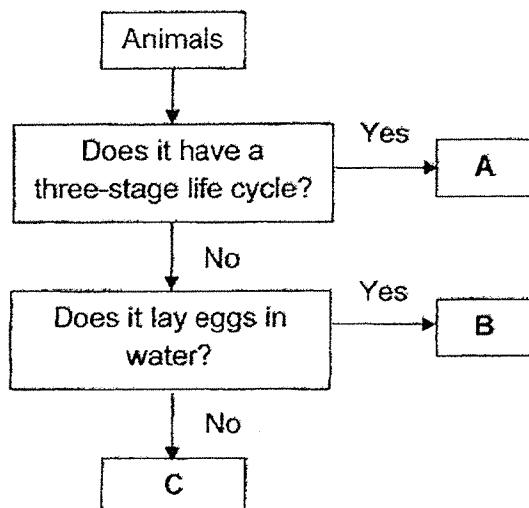
Class: Pr. 5 \_\_\_\_\_ Date: \_\_\_\_\_

**Total time for Section A and B: 45 minutes**

**Section A: Multiple-Choice Questions (9 x 2 = 18 marks)**

Choose the most suitable answer and shade its number in the OAS provided.

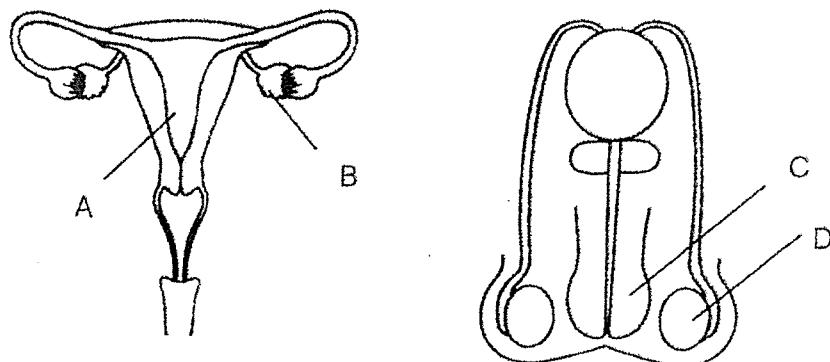
1. Study the flow chart below.



Which of the following best represents animals A, B and C?

	A	B	C
(1)	cockroach	butterfly	frog
(2)	butterfly	cockroach	mosquito
(3)	mosquito	frog	cockroach
(4)	cockroach	mosquito	butterfly

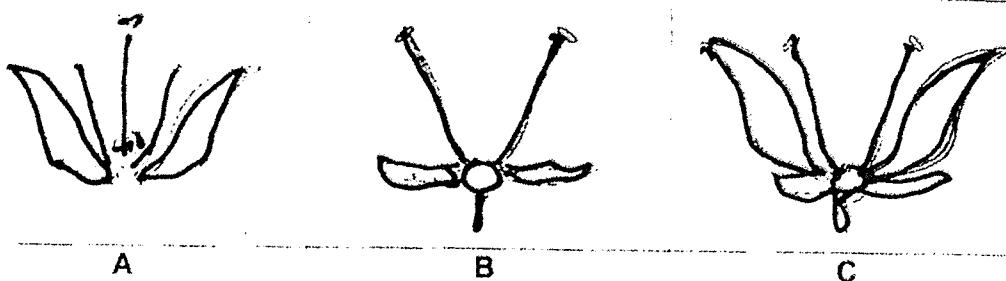
2. The diagrams below show parts of the human reproductive system.



Where does the fertilised egg continue to develop?

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

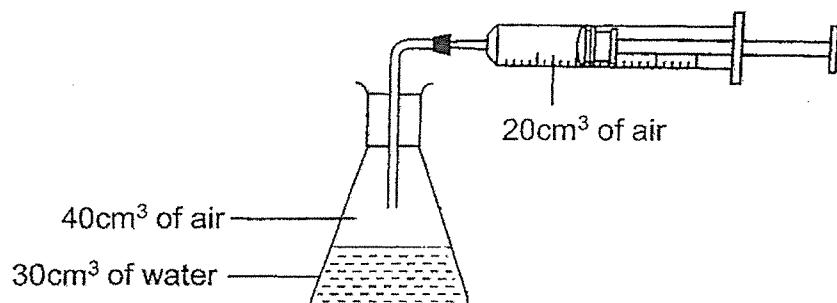
3. The following diagrams show parts of the plant reproductive system.



Which plant(s) cannot be pollinated?

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

4. A flask contains  $40\text{cm}^3$  of air and  $30\text{cm}^3$  of water as shown in the set-up below.

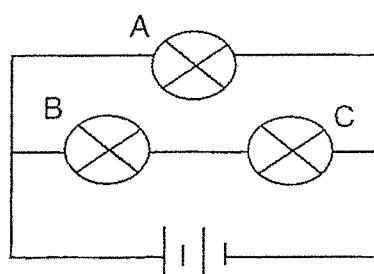


Harry pumped in another  $20\text{cm}^3$  of air into the flask.

What would happen to the volume of water and air after that?

	Volume of water ( $\text{cm}^3$ )	Volume of air ( $\text{cm}^3$ )
(1)	increase	decrease
(2)	decrease	no change
(3)	no change	no change
(4)	no change	increase

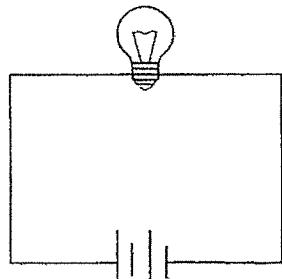
5. Study the circuit below. Identical bulbs, A, B and C, are used in the circuit.



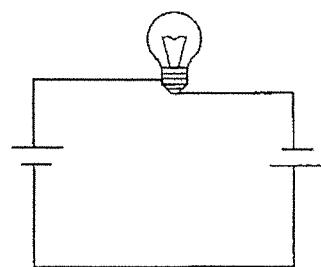
Which change will allow all bulbs to light up with equal brightness?

- (1) Increase the number of batteries.
- (2) Add an identical bulb in series with A.
- (3) Add an identical bulb in parallel with A.
- (4) Add an identical bulb in series with B and C.

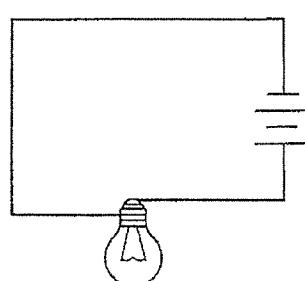
6. The diagrams below show four electrical circuits, A, B, C and D.



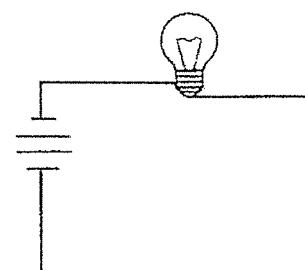
A



B



C

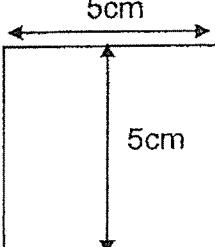
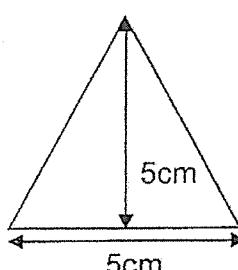
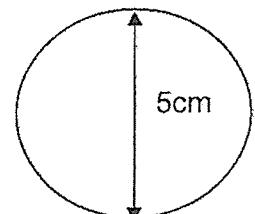


D

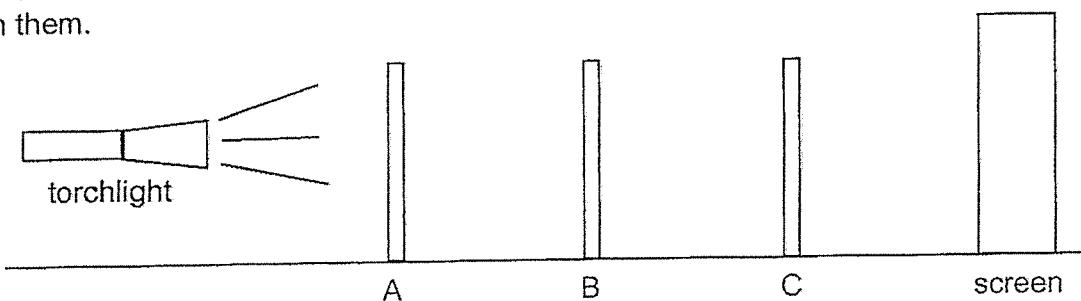
In which two set-up(s) will the bulb light up?

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

7. Mike cut out different shapes, A, B and C as seen below. The shapes are made of different materials.

Position	A	B	C
Shape			
Material	Clear plastic	Tracing paper	Cardboard

He positioned them at different distances away from the torchlight and shone a torchlight on them.

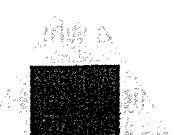


Which of the following would he see on the screen?

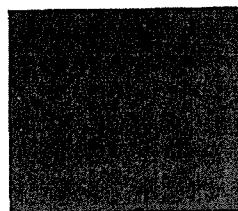
(1)



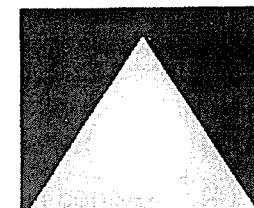
(2)



(3)



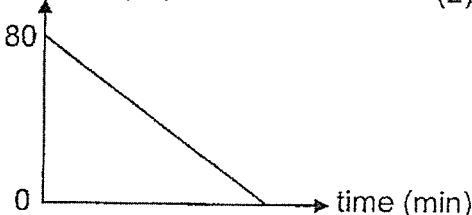
(4)



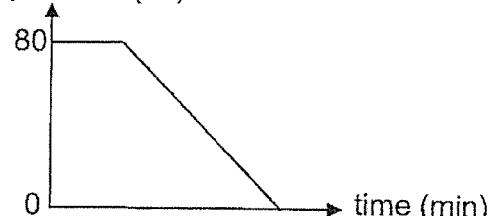
8. Luanne heated some water to 80°C in a beaker. Then, she left the beaker of hot water on the table for 30 minutes.

Which of the following graphs correctly shows how the temperature of water changed during the 30 minutes?

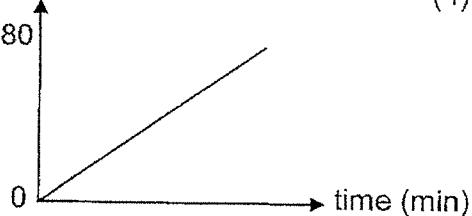
(1) temperature (°C)



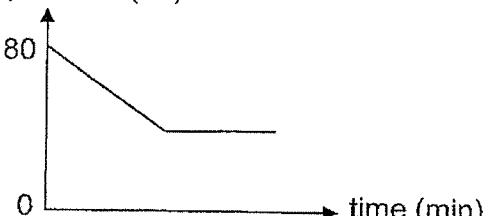
(2) temperature (°C)



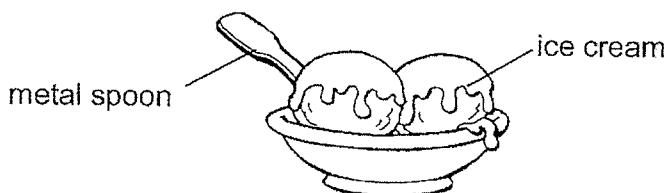
(3) temperature (°C)



(4) temperature (°C)



9. The diagram below shows a metal spoon in a bowl of ice cream.



After a while, the spoon became cold, and the ice cream started to melt.

Which of the following correctly shows the transfer of heat for the ice cream and the metal spoon?

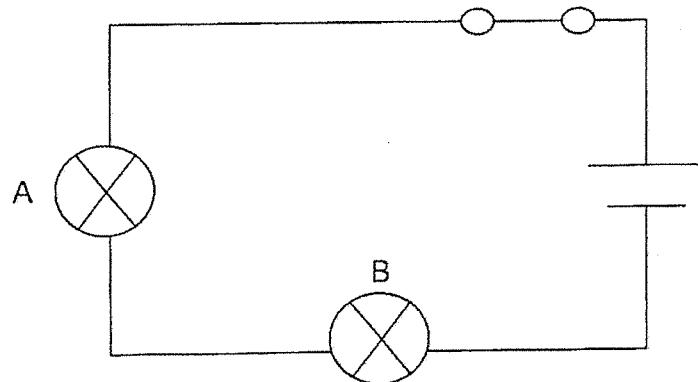
Metal spoon	Ice cream
Gained heat from the ice cream	Lost heat to the surroundings
Lost heat to the ice cream	Gained heat from the metal spoon
Lost heat to the surroundings	Lost heat to the metal spoon
Gained heat from the surroundings	Gained heat from the surroundings

**Section B: Open-ended Questions (3 Questions: 12 marks)**

10. (a) Fill in the blanks with 'T' for true and 'F' for false. (2m)

Statement	T or F
A bulb can light up in an open circuit.	
Metal is a conductor of electricity but rubber is not a conductor of electricity.	

Shauna constructed a circuit with a battery, two bulbs and a switch as shown below.



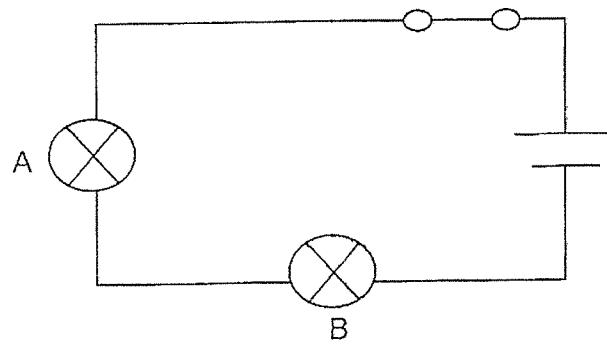
(bi) After bulb A fused, bulb B did not light up. Explain why. (1m)

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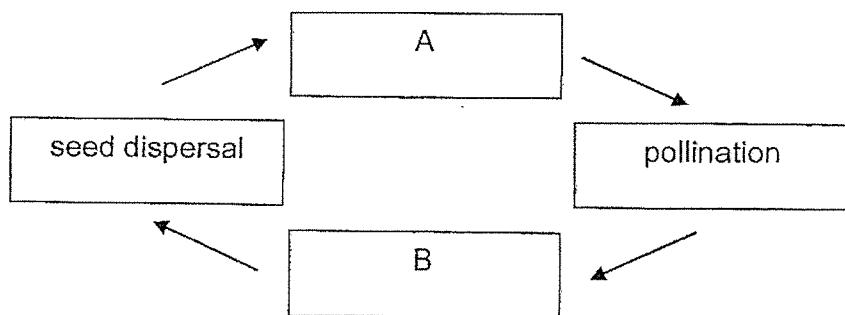


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(bii) Draw 1 wire in the set-up below such that if bulb A fuses, bulb B can still light if the switch is closed. (1m)



11. The diagram below shows the stages in the life cycle of a plant.



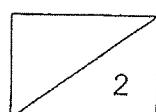
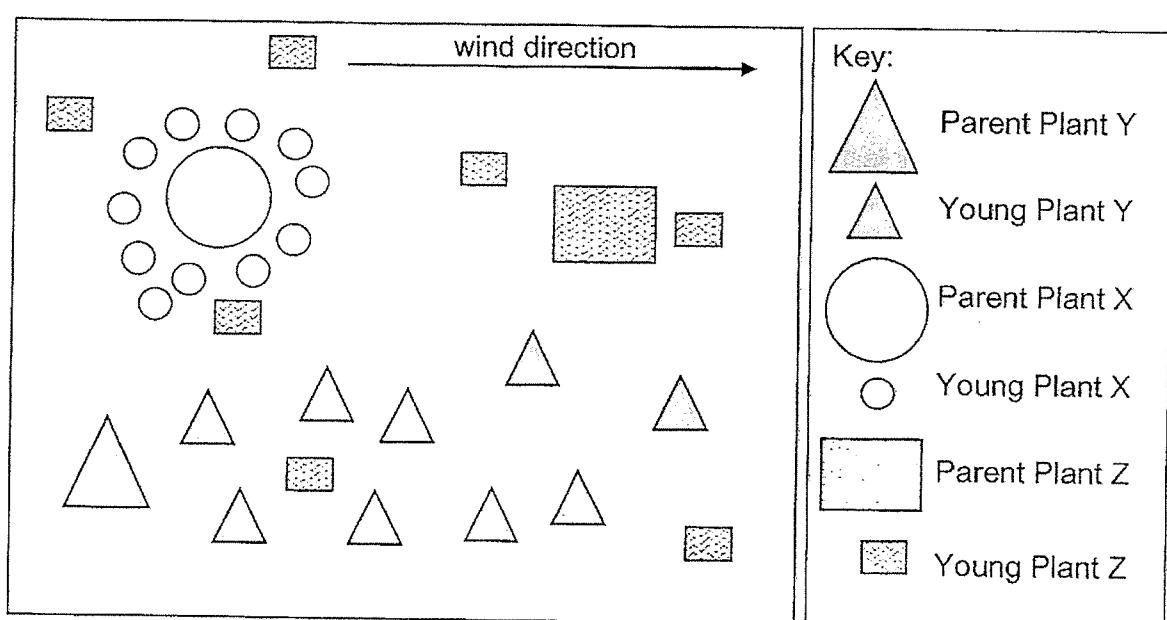
(a) What do processes A and B represent? (2m)

A: \_\_\_\_\_

B: \_\_\_\_\_

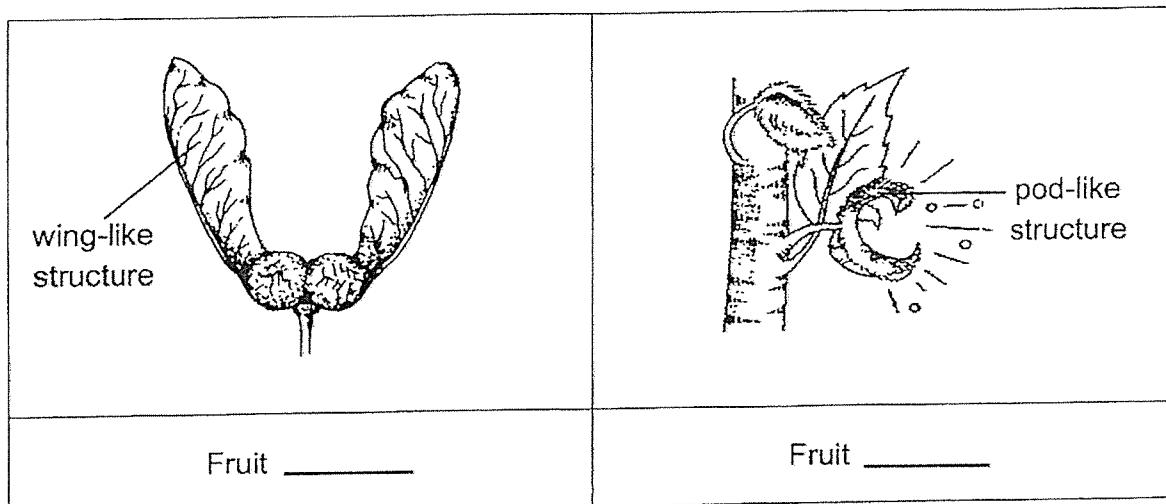
The map below shows plants X, Y and Z that were dispersed over a piece of land.

Use the map below to answer Questions 11(b) and 11(c).



11. (b) Based on the map, which of the following best represents the fruits of X and Y?

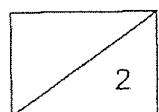
Label the boxes with X and Y accordingly. (1m)



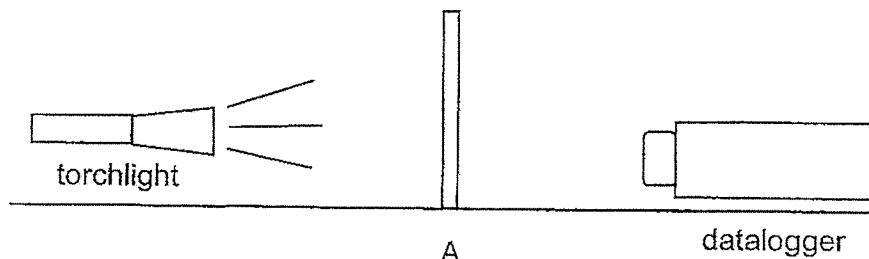
(c) State one characteristic of the fruit of plant Z that allows for it to be dispersed. (1m)

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12. Leia wanted to find out the amount of light passing through 3 different materials, A, B and C. She prepared the set-up below.



(ai) Which variable(s) should be kept constant to ensure a fair test? (1m)  
Put a tick (✓) accordingly.

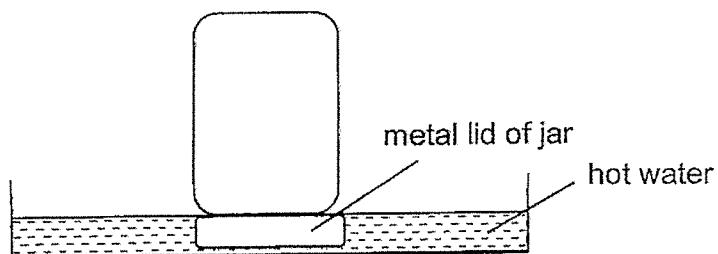
Variables	To be kept constant (✓)
amount of light	
type of material	
thickness of material	
distance between torchlight and material	
distance between material and datalogger	

Leia recorded her results in the table below.

Material	Amount of light detected by datalogger (unit)
No material	500
A	240
B	500
C	0

(aii) Based on her results, which material would be most suitable to make spectacles? (1m)

12. Geetha wanted to open a jar that was closed tightly. Her mother suggested that she turn the metal lid over and place it in a jar of hot water as shown in the diagram below.



(bi) How does putting the metal lid of jar in the hot water help Geetha to open the jar more easily? (1m)

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After leaving the metal lid of jar in the hot water for 30 minutes, Geetha took it out of the hot water. She noticed that it was very hot. Her mother suggested that using a towel would help her feel less hot when she touched the metal lid.

(bii) Explain why this is so. (1m)

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**End of Paper**

**Please check your answers.**

2



# ANSWER KEY

**YEAR** : 2024  
**LEVEL** : PRIMARY 5  
**SCHOOL** : RED SWASTIKA  
**SUBJECT** : SCIENCE  
**TERM** : CLASS TEST 2

## SECTION A

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

## SECTION B

Q10	a)											
	A bulb can light up in an open circuit : F Metal is a conductor of electricity but rubber is not a conductor of electricity : T Bi) The bulbs are in series, so when bulb A fuses, it creates an open circuit. Thus, bulb B will not light up. Bii)											
Q11	<p>a) A : germination B : fertilisation</p> <p>b) Wing-like structure : Fruit Y Pod-like structure : Fruit X</p> <p>c) Plant Z could have fruit with juicy flesh in order to be dispersed by animals.</p>											
	<p>Q12 ai)</p> <table border="1"> <thead> <tr> <th>Variables</th> <th>To kept constant</th> </tr> </thead> <tbody> <tr> <td>Amount of light</td> <td>✓</td> </tr> <tr> <td>Type of material</td> <td></td> </tr> <tr> <td>Thickness of material</td> <td>✓</td> </tr> <tr> <td>Distance between torchlight and material</td> <td>✓</td> </tr> <tr> <td>Distance between material and datalogger</td> <td>✓</td> </tr> </tbody> </table> <p>       aii) Material B would be most suitable to make spectacles.        bi) when the material lid gains heat from the hot water, it will expand. Thus, it can be removed more easily.        bii) towels are poorer conductors of heat, so the heat from the metal lid will be transferred to her hands at a slower rate.     </p>	Variables	To kept constant	Amount of light	✓	Type of material		Thickness of material	✓	Distance between torchlight and material	✓	Distance between material and datalogger
Variables	To kept constant											
Amount of light	✓											
Type of material												
Thickness of material	✓											
Distance between torchlight and material	✓											
Distance between material and datalogger	✓											