

RED SWASTIKA SCHOOL

SCIENCE

PRIMARY 4

Name:	()
Class : Primary 4/		
Date .		

BOOKLET A

Total time for Booklets A & B: 1h 30 min

Booklet A: 28 questions (56 marks)

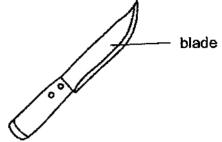
Note:

- 1. Do not open the booklet until you are told to do so.
- 2. Read carefully the instructions given at the beginning of each part of the booklet.
- 3. Do not waste time. If the question is too difficult for you, go on to the next question.
- 4. Check your answers thoroughly and make sure you attempt every question.
- 5. In this booklet, you should have the following:
 - a. Page 1 to Page 15
 - b. Questions 1 to 28

RED SWASTIKA SCHOOL Primary 4 Science Revision Paper

Nam	ne:		()	Date:	
Clas	ss: P4/	-				
	Questions OAS provid		ost suita	able a	nswer and shade its n	umber in
1.	Which one	of the animals shown b	elow is 1	NOT at	n insect?	
	(1)		((2)		9
	(3)			(4)		

2. The diagram shows a knife.



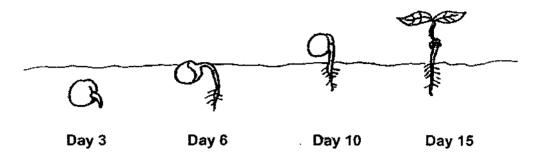
Metal is used to make the blade of the knife because metal _____

- (1) can reflect light
- (2) does not break easily
- (3) can bend without breaking
- (4) does not allow light to pass through
- 3. Which one of the following is the function of a leaf on a plant?
 - (1) makes food
 - (2) takes in water
 - (3) holds plant upright
 - (4) takes in mineral salts
- 4. In which part of the digestive system is food absorbed into the blood?
 - (1) mouth
 - (2) stomach
 - (3) small intestine
 - (4) large intestine
- Jonathan made the following observations on the life cycle of an animal.
 - There are four stages in the life cycle.
 - The young does not look like the adult.

Which animal was Jonathan observing?

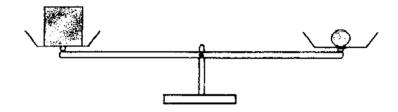
- (1) dog
- (2) chicken
- (3) butterfly
- (4) cockroach

6. The diagrams show the development of a seed growing into a young plant.



Based on the diagrams, when will the young plant be able to start making food?

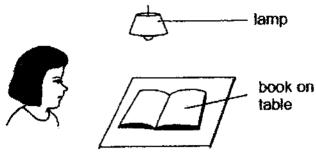
- (1) Day 3
- (2) Day 6
- (3) Day 10
- (4) Day 15
- 7. Study the diagram below.



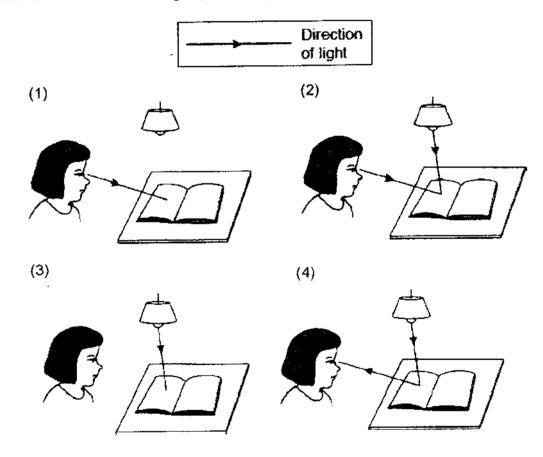
Which of the following statements is true?

- (1) Both objects have the same size.
- (2) Both objects have the same mass.
- (3) Both objects have the same shape.
- (4) Both objects have the same volume.
- 8. Which one of the following is the best conductor of heat?
 - (1) A paper cup
 - (2) A metal cup
 - (3) A plastic cup
 - (4) A wooden cup

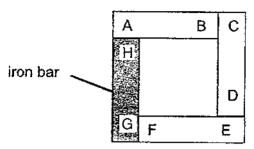
9. Look at the picture below.



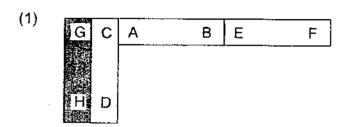
Which one of the following explains why Sue can see the book on the table?

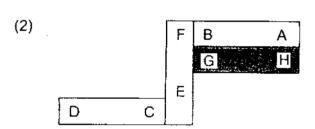


10. Study the three bar magnets, AB, CD, EF and an iron bar GH as shown in the arrangement carefully.

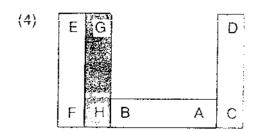


Which one of the following arrangements is possible?

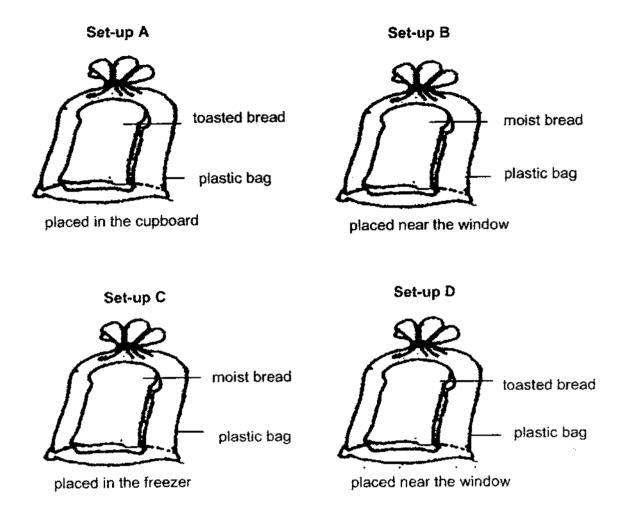




3) A	В
D	С
E	F
G	H



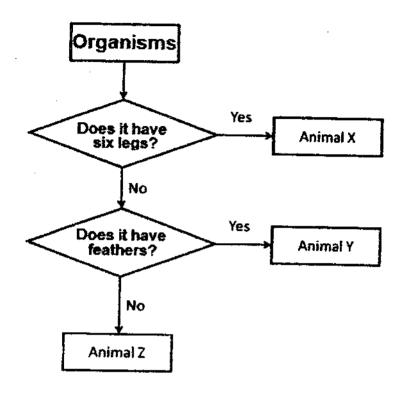
11. Mary set up an experiment as shown below. The toasted bread was allowed to cool down before it was placed into the plastic bag.



In which set-up would mould most likely grow first on the bread?

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

12. Study the flow chart below about Animals X, Y and Z carefully.



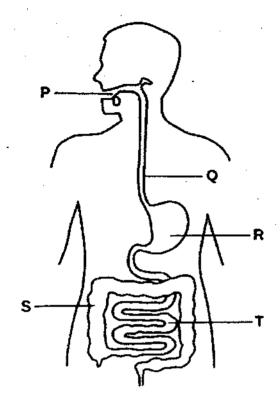
What could Animal X, Y and Z be?

	Animal X	Animal Y	Animal Z
(1)	mammal	insect	bird
(2)	insect	bird	mammal
(3)	insect	mammal	bird
(4)	bird	mammal	insect

13. Which of the following incorrectly matches the organ to the system?

	System	Organ
(1)	skeletal	large intestine
(2)	respiratory	windpipe
(3)	circulatory	heart
(4)	digestive	stomach

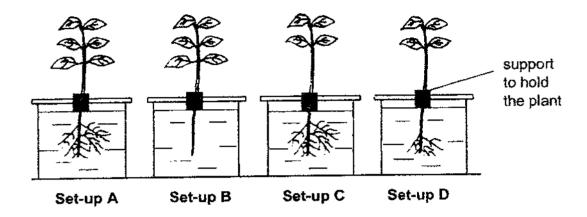
14. Study the human body system below.



Which two parts of the human body system do not produce digestive juices?

- (1) R and T
- (2) P and Q
- (3) R and S
- (4) Q and S

15. Robert wanted to conduct an experiment to find out if the number of leaves affects the amount of water taken in by the plant.

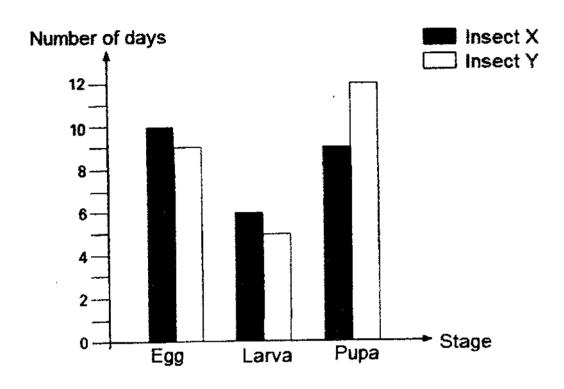


Each set-up had the same amount of water at the start of the experiment.

Which of the two set-ups above should he choose to conduct a fair test?

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

16. The graph below shows how long each stage in the life cycle of Insect X and Insect Y lasts.



Based on the graph above, at which stage will Insect X and Insect Y be on the 15th day after the eggs are laid?

	Insect X	Insect Y
(1)	Larva	Pupa
(2)	Pupa	Larva
(3)	Larva	Larva
(4)	Pupa	Pupa

17. Devi placed four similar seeds under the following conditions as shown below. A tick $(\sqrt{})$ represents the presence of the condition.

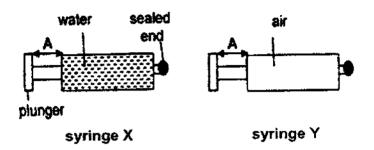
		Cond	lition	···-
Set-up	Air	Light	Water	Temperature (°C)
P		√		30
Q	1		1	30
R	· V	1		3
S			7	3

In which set-up will the seed germinate first?

- (1) P
- (2) Q
- (3) R
- (4) S

18. Kok Wei has two identical syringes, X and Y, each filled with a different matter as shown in the diagram below.

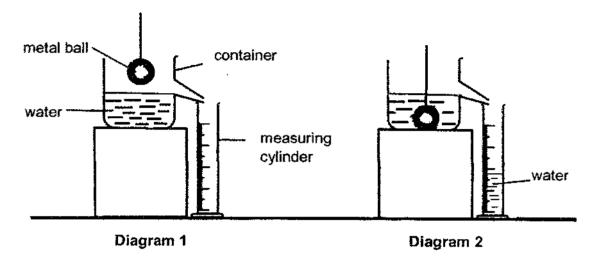
The distance, **A**, for each syringe before he pushed the plunger was 6 cm. He then pushed in each plunger as hard as he could and measured distance **A** again.



Which of the following could likely be the measurements of **A** after the plungers were pushed in?

Syringe X		Syringe Y
(1)	4 cm	4 cm
(2)	4 cm	6 cm
(3)	6 cm	4 cm
(4)	6 cm	6 cm
		<u> </u>

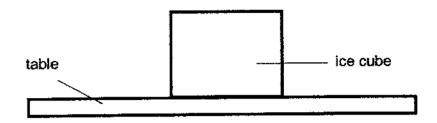
19. Alex carried out an experiment as shown below. After he lowered the metal ball carefully into the container shown in Diagram 1, some water flowed out. The water was collected in the measuring cylinder as shown in Diagram 2.



The result of the experiment shows that the _______.

- (1) water has mass
- (2) metal ball has mass
- (3) metal ball has a definite volume
- (4) metal ball has a definite shape

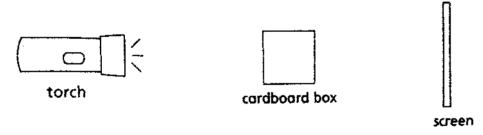
20. An ice cube has been left on a table as shown below.



Which of the following correctly shows the change in the ice cube in the next 10 minutes?

	Change in state of matter of the ice cube	Heat gain by the ice cube
(1)	No	Yes
(2)	No	No
(3)	Yes	No
(4)	Yes	Yes

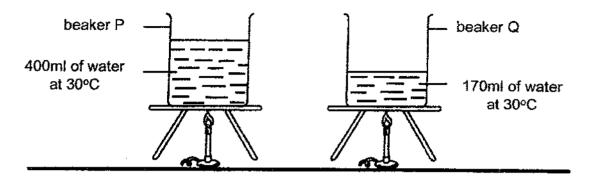
21. When the light from the torch shines on the cardboard box, a shadow is cast on the screen.



To make the shadow bigger, you should move the

- (1) cardboard box nearer to the torch
- (2) screen nearer to the cardboard box
- (3) cardboard box further away from the torch
- (4) torch further away from the cardboard box

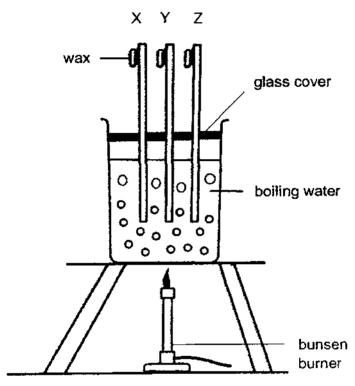
22. Study the following set-ups.



Which of the statements about the two beakers of water is true?

- (1) The water in beaker Q would boil first.
- (2) The water in both beakers would boil at the same time.
- (3) The water in beaker P had a higher temperature when it boils.
- (4) The water in both beakers have different temperature when they boil.

23. Kumar coated the same amount of wax on the ends of three rods made of three different materials, X, Y and Z. He conducted the experiment as shown in the diagram.



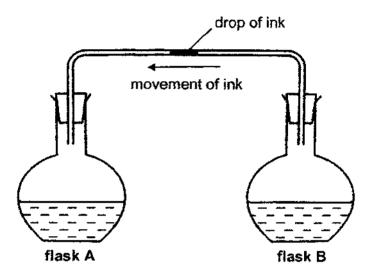
He recorded the time taken for the wax to melt completely in the table below.

Material	Time taken for wax to melt completely (min)
X	7
Y	16
Z	2

Based on the results above, which of the statements is true?

- (1) Material Y is the best conductor of heat
- (2) Material Z conducts heat better than Material X.
- (3) Material Z is the poorest conductor of heat.
- (4) Material X is a poorer conductor of heat than material Y.

24. A drop of ink was placed in the middle of a glass tube connecting flask A and flask B as shown in the diagram below. Both flasks contained the same amount of water.

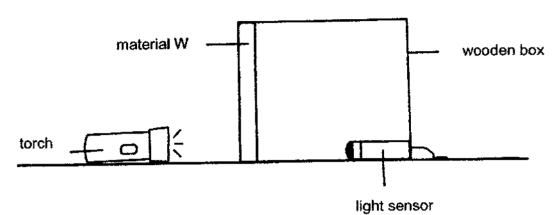


Marcus noticed that the drop of ink moved towards flask A after some time.

Based on his observation, which of the following shows the possible temperature of the water in flask A and B?

	Α	В
(1)	10°C	10°C
(2)	90°C	90°C
(3)	90°C	10°C
(4)	10°C	90°C

25. Sammi set up an experiment in a dark room as shown below. She placed material W at the opening of the wooden box.



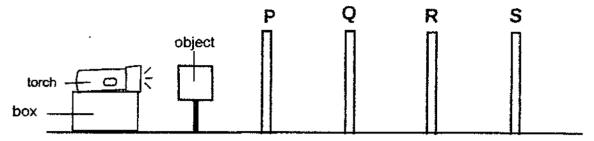
She recorded the amount of light that passed through material W using a light sensor placed in the box. She repeated the experiment using materials X, Y and Z. The table below shows the results.

	Material W	Material X	Material Y	Material Z
Amount of light detected	400	1100	150	800
by the light sensor (units)				

Which material should Sammi choose to make curtains that will reduce the most amount of light entering her room during the day?

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

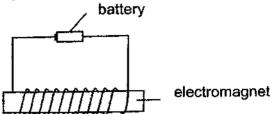
26. The experiment shown below was carried out in a dark room. Sheet P, Q, R and S were arranged in a straight line. An object was placed in front of sheet P.



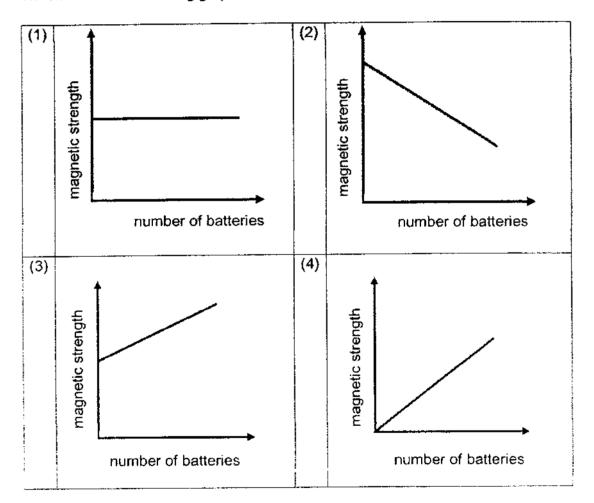
When the torch was switched on, a shadow of the object was formed on sheet R only. Which of the following correctly describes the properties of the materials of sheet P, Q, R and S?

•	Allows most light to pass through	Does not allow light to pass through	Not possible to tell		
(1)	P and Q	R	S		
(2)	Р	Q and R	S		
(3)	Р	Q	R and S		
(4)	P and Q	S	R		

27. Randy used the set-up below to find out if the number of batteries affects the strength of an electromagnet.

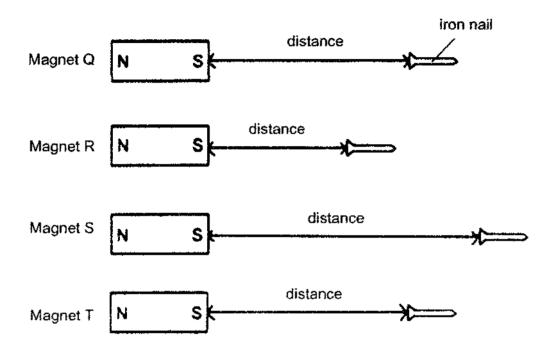


Which one of the following graphs would show the correct result of the experiment?



28. Joel wanted to find out the strength of four different magnets, Q, R, S and T, using an iron nail.

He moved the iron nail slowly towards Magnet Q until the nail was just attracted by the magnet. He then observed the distance between the nail and the magnet. He repeated this with the other three magnets. The results are shown in the diagram below.



Based on the results shown above, which of the following is correct?

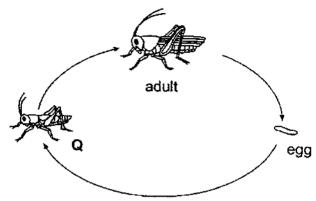
	Strongest magnet	Weakest magnet
(1)	R	S
(2)	R	Ŧ
(3)	S	Q
(4)	S	R

End of Booklet A

RED SWASTIKA SCHOOL Primary 4 Science Revision Paper 4

Fill in the blanks in the table with	names of broad groups of living things. (2m)
Group	Characteristics Body covered with hair
	Body covered with tiali
	Dry skin with scales
The diagram shows a plant.	·
-	E A
e	colles
7	X X
· 1	root
٠.	F X
(a) Name plant part X. (1m)	1

31. The diagram below shows the stages in the life cycle of a grasshopper.



- (a) Name stage Q. (1m)
- (b) State one other animal that has a similar life cycle as a grasshopper. (1m)
- 32. The diagram shows a beaker of water.

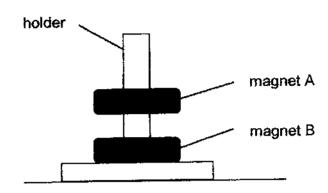


Fill in the blanks using the correct words in the box. (2m)

gas decreases solid remains unchanged increases

- (a) When heat is removed from the water, its temperature
- (b) The beaker of water is put in the freezer. After some time, the water will change its state to become

33. Alice placed two ring magnets, A and B, through a holder as shown below.

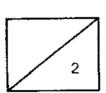


(a) The holder was made of wood and did not attract the magnets. (1m)

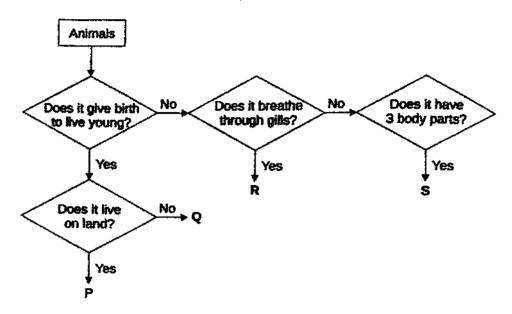
Wood is a _____ material.

(b) Why was magnet A floating above magnet B? (1m)

Magnet B was _____ magnet A.



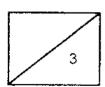
34. Study the flow chart below.



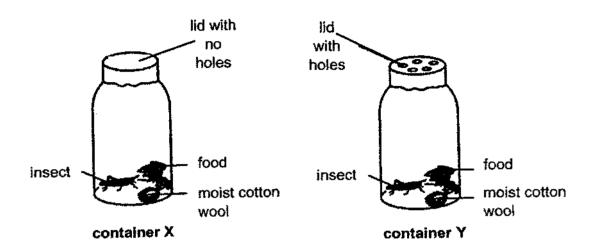
(a) Based on the flow	/ chart, state a dif	fførence betwee	n animals R ar	nd S. (1m)

(b) Classify these organisms according to the flow chart. Fill in the blanks with the letters P, Q, R or S. (2m)

Animal	Letter (P, Q, R or S)
Goldfish	
Dog	, , , , , ,

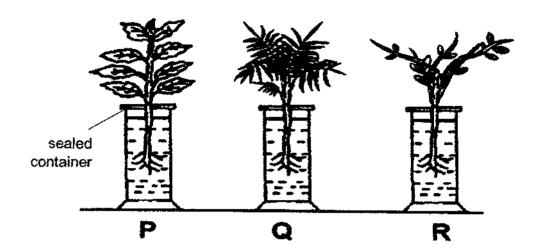


34. Gopal carried out an experiment as shown below.



e) Which insect in container X or Y will likely to die first? (1	lm)
l) Give a reason for the answer in part (c). (1m)	

35. Luke placed different types of plants in three identical sealed containers of water, P, Q and R. One of the plants was made of plastic.

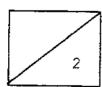


The three set-ups were left near the window for three days. The table below shows the amount of water left in each set-up at the start and end of the experiment.

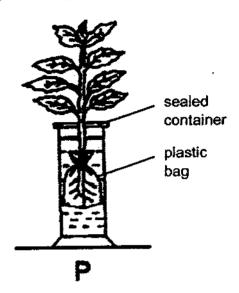
	Amount of water left in the container (ml)				
Set-up	Day 1	Day 3			
Р	30	15			
Q	30	30			
R	30	20			

(a) Which one of the set-ups, P, Q or R, contained the plant made of plastic? (1)) Which one of the set-ups	P, Q or R, contained the plant made of I	olastic? (1m)
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(b) Give a reason for your answer in part (a). (1m)



35. (c) Luke repeated the experiment using the plant in set-up P but he wrapped the roots of the plant with a plastic bag as shown below.

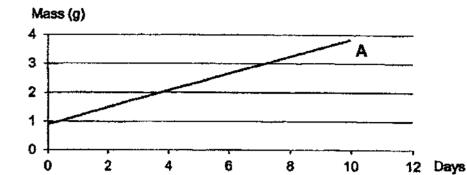


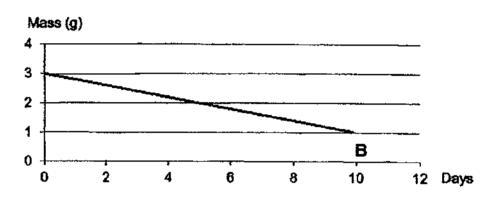
At the end of the experiment, would the amount of water left in set-up P be less than 15ml, remain the same at 15ml or greater than 15ml?

Put a tick ($\sqrt{}$) in the correct box. (1m)

less than 15ml	remain the same at 15ml	greater than 15ml
		1

36. Deliang conducted an experiment to find out how the mass of the seed leaf changes as the seed germinates into a seedling. He plotted the graphs as shown below.

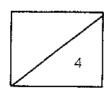




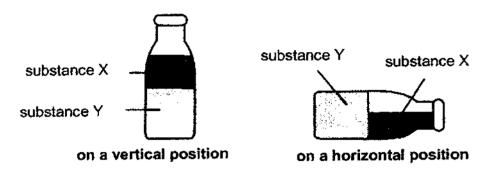
(a) After a seed germinates, which part of the seedling will grow out of the seed first? (1m)

(b) Which graph, A or B, correctly shows the mass of the seed leaf as the seed germinates into a seedling? (1m)

(c) Explain your answer in part (b). (2m)



37. Vinesh had a bottle containing substances X and Y. She observed the following when the bottle was placed in two different positions.

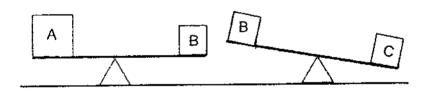


(a) What is the state of matter for substance X and substance Y? Write "X" or "Y" in the boxes below. (2m)

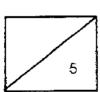


(b) Based on the experiment, what is the property of substance X? (1m)

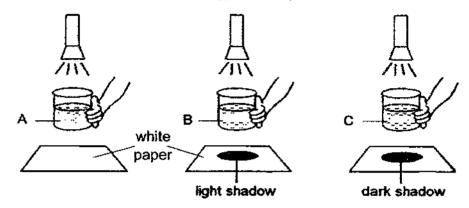
Vinesh wanted to compare the mass of 3 objects, A, B and C. She placed them on a balance beam as shown in the diagram below.



- (c) Which object, A, B or C, has the largest mass? (1m)
- (d) Which object, A, B or C, has the largest volume? (1m)



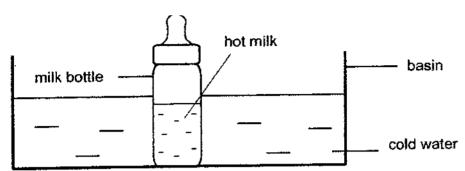
38. Jamal wanted to find out how different types of liquid affect the amount of light that passes through the liquid. He shone light through three similar clear glass beakers. The beakers contain different types of liquid, A, B and C, as shown below.



- (a) Base on the diagram, why did Jamal put a piece of white paper under each beaker? (1m)
- (b) For the experiment to work, give a reason why the glass beakers cannot be replaced with wooden containers. (1m)
- (c) From the diagram, what can be concluded about figuid C? (1m)
- (d) Tick (✓) the variables that Jamal kept the same to conduct a fair test. (2m)

	Variable	Kept the same
(i)	Brightness of the torch	
(ii)	Distance of the torch from the beakers	
(iii)	Types of liquid	
(iv)	Amount of liquid used	

39. Sharifah made some milk for her baby. However, the milk was too hot and she decided to put the milk bottle into a basin of cold water.



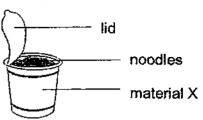
(a)	What will happen to the temperate	re of	the	milk	after	two	minutes?	Explain
	why? (2m)							

(b) What does this experiment tell us	about the direction of heat flow? (1m)
---------------------------------------	--

(c) What will happen to the temperature	e of the milk and the cold water after a	រវា
hour? (1m)		

(d) What can Sharifah add to the cold water if she wants to cool down the milk faster? (1m)

40. Mr Eng poured hot water into a cup of instant noodles and kept it covered for five minutes. The cup is made of material X. When he removed the lid, he observed that the noodles had softened and the soup was still hot.

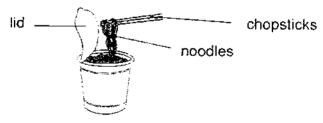


(a)	To cook the noodles faster,	should material	X be a	good or	poor conductor of	of
	heat? Why? (2m)				•	

(b) What property of m	naterial should materia	al X have so that	the soup will not
leak out from the co	up? (1m)		

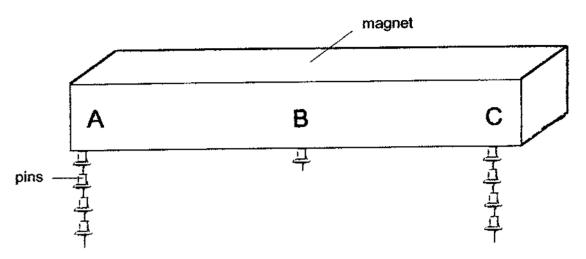
(c) Explain how the lid covering the cup helped the noodles to be cooked faster.(1m)

Mr Englused a pair of chopsticks to scoop the noodles.



(d) Why did the chopsticks become hot after a while? (1m)

41. Jia Wen placed a magnet into a box of pins. When she lifted up the magnet, she observed that the pins were attracted to the magnet as shown below.



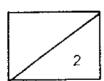
(a) Based on her observation, what can she conclude about the magnetic strength of the magnet? (1m)

Jia Wen repeated the experiment by placing the magnet into a box of plastic clips.

(b) She observed that the magnet did not attract the plastic clips. Give a reason for her observation. (1m)

End of Booklet B

Please check your answer.



ANSWER KEY

YEAR : 2021 LEVEL : PRIMARY 4

SCHOOL : RED SWASTIKA SCHOOL SUBJECT : SCIENCE

TERM: REVISION

PAPER 3

Q1	1	Q2	2	Q3	1	Q4	3	Q5	3
Q6	4	Q7	2	Q8	2	Q9	4	Q10	3
Q11	2	Q12	2	Q13	1	Q14	4	Q15	3
Q16	1	Q17	2	Q18	3	Q19	3	Q20	4
Q21	1	Q22	1	Q23	2	Q24	4	Q25	3
Q26	1	Q27	4	Q28	4				•

PAPER 4

	1=1=				
Q29	Mam				
	Repti	les			
Q30	(a)	X: Leaf			
	(b)	Water			
Q31	(a)	Nymph			
	(b)	Cockroach			
Q32	(a)	decreases			
	(b)	solid			
Q33	(a)	non-magnetic			
	(b)	repelling			
Q34	(a)	Animal R breathe through gills but animal S does not			
		breathe through gills			
	(b)	R			
		P			
	(c)	Container X			
	(d)	There was insufficient in Container X			
Q3 5	(a)	Set-up Q			
	(b)	Because after 3 days, the amount of water remained the			
		same in Set-up Q. Water is needed for survival. Hence, Set-			
		up Q is made of plastic.			
	(c)	less than 15ml remain the same greater than 15ml			
. :	. : . :	at 15ml			
	:	✓			

Q36	(a)	Roots
	(b)	Graph B
	(c)	As the seedling grows, the mass of the seed leaf decreases
		because the nutrients in the seed leaf are used up.
Q37	(a)	Liquid X Solid Y
	(b)	Substance X does not have a definite shape.
	(c)	Object C
	(d)	Object A
Q38	(a)	To be able to see the shadow clearly
_	(b)	Because wood does not allow light to pass through
	(c)	Liquid C allows the least light to pass through
	(d)	i. V
		ii. 🗸
	!	iii.
		iv. 🗸
Q39	(a)	The temperature of the milk will decrease. Because the hot
		milk lost heat to the cold water and become colder. Hence,
		the temperature of the milk will decrease after two
l		minutes.
	(b)	Heat travels from a hotter place to a colder place.
	(c)	They will reach the same temperature as the surroundings.
	(d)	Sharifah can add ice cubes to the cold water if she wants to
		cool down the milk faster.
Q40	(a)	X should be a poor conductor of heat as it helps to slow
		down heat loss.
 	(b)	Waterproof
	(c)	The lid will prevent heat from flowing out
	(d)	Because the chopsticks gained heat from the hot noodles.
Q41	(a)	The magnetic strength is the greatest at its poles.
	(b)	Because plastic is a non-magnetic material