METHODIST GIRLS' SCHOOL

Founded in 1887



CONTINUAL ASSESSMENT 2011 PRIMARY 5 SCIENCE

BOOKLET A

Total Time for Booklets A and B: 1 hour 45 minutes

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.
Follow all instructions carefully.
Answer all questions.
Shade your answers in the Optical Answer Sheet (OAS)
Provided.

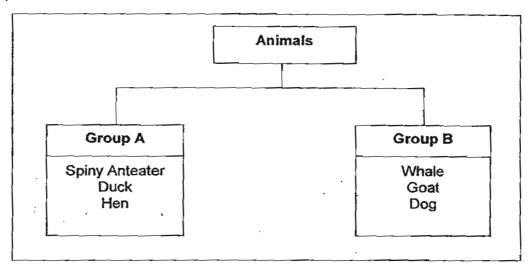
Name:	(
Class:	Primary 5	
Date:	28 February 2011	

This booklet consists of 21 printed pages including this page.

For each question from 1 to 30, four options are given. One of them is the correct answer. Make your choice and shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet.

(60 marks)

1. Study the classification table below. The animals are grouped according to how they reproduce.



Which one of the following pairs correctly matches the grouping in the table above?

	Group A	Group B
(H)	Cat	Parrot
20	Rabbit	Ostrich
(3)	Housefly	Hamster
(X)	Cockroach	Turtle
		Turke

2. Study the table below carefully.

Group X	Group Y
Apple	Longan-
Mango	Kiwi fruit
Pong Pong	Jackfruit
Watermelon	Strawberry

What could be the possible headings for Group X and Group Y?

	Group X	Group Y	
(PS)	Edible	Inedible	
(%)	Fleshy	Non-fleshy	
(38)-	One seed	Many seeds	
(%)	Smooth covering	Rough Covering	

- 3. Farmer Peter put 12 eggs into an incubator to hatch. After 21 days, only 9 hatched into chicks. Which one of the following is a **possible reason** to explain why the other 3 eggs did not hatch?
 - (1) The incubator was too hot.
 - (2) The incubator was too cold.
 - (3) The eggs were not fertilised.
 - (4) The eggs needed more time to hatch.

4. Mary wanted to conduct an experiment to find out if plants need water to stay alive. Which two of the following set-ups should she use?

Set-up			Conditions	
A	Rose	Air	Sunlight	Water
·B	Pandan	Air	Sunlight	Water
С	Rose	Air	Sunlight	No Water
D	Rose	No Air	No Sunlight	Water
E	Pandan	No Air	No Sunlight	No Water

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

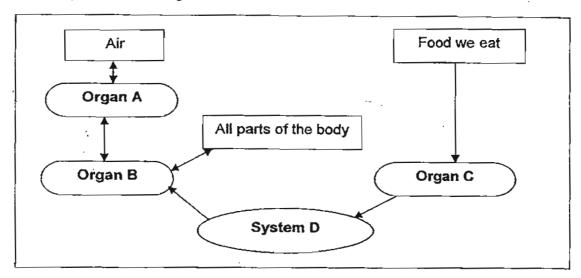
5. The box below provides information about some of the organs in the human digestive system.

Α	Х	√
В	1	
С	1	X

Which one of the following correctly represents parts A, B, and C?

剱	Gullet	Large Intestine	Stomach
(2)	Large Intestine	Small Intestine	Gullet
(8).	Mouth	Large Intestine	Gullet
(3k)	Stomach	Small Intestine	Large Intestine

6. Study the flow chart given below:

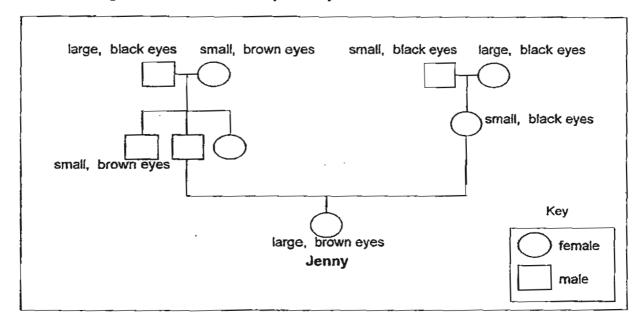


Which of the following labels correctly identify Organs A, B, C and System D

	Organica (Control			
X	Heart	Lungs	Gullet	Digestive
(2)	Lungs	Heart	Small Intestine	Circulatory
(38)	Lungs	Heart	Large Intestine	Circulatory
X4)	Heart	Lungs	Stomach	Respiratory

- 7. Alice walked into a pet shop and saw some puppies. Two of the puppies had blue eyes. Out of these two puppies, one had straight black fur while the other had straight brown fur. She concluded that the two puppies were born of the same parents. How could she tell?
 - (*) Both the puppies are small and male.
 - Both the puppies have blue eyes and a tail.
 - 图 Both the puppies are male and have straight fur.
 - Both the puppies have blue eyes and straight fur.

- 8. Which of the following sets are traits that a baby can inherit from her parents?
 - Single eyelid, straight hair, fingerprints
 - (2) Double eyelids, curly hair, attached ear lobes
 - Single eyelid, length of hair, attached ear lobes
 - Double eyelids, pattern of iris, detached ear lobes
- 9. The diagram below shows Jenny's family tree.



From whom could Jenny have inherited her large eyes?

A : Her father

B : Her mother

C : Her paternal grandfather

D : Her maternal grandmother

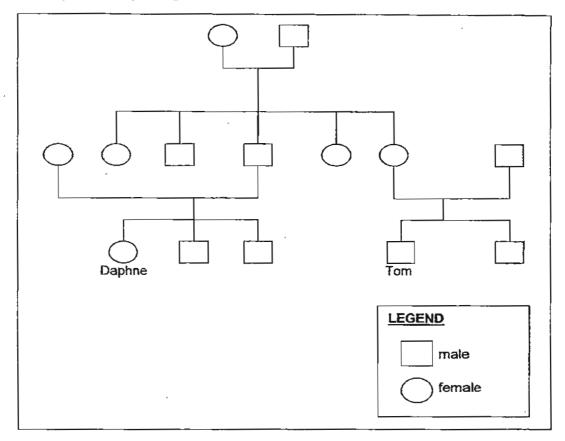
(1) A and C only

(2) C and D only

(3) A, B and C only

(4) A, B, C and D

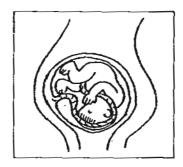
10. Study the family tree given below.



How are Tom and Daphne related to each other?

- (1) Tom is Daphne's Father.
- (2) Tom is Daphne's cousin
- (3) Daphne is Tom's sister.
- (4) Daphne is Tom's aunt.

- 11. Cindy and her younger sister can roll their tongues. However, both their parents can not. Which of the following is a **possible** reason?
 - (1) Their friends taught them how to do it.
 - (2) Their grandmother passed on the genes to them.
 - (3) They learnt it from their elder brother who could roll his tongue.
 - (4) The genes were inherited from their elder brother who could roll his tongue.
- 12. Brenda and her classmates saw the picture below in a science encyclopedia. It showed an unborn baby in his/her mother's womb.



After thorough examination of the picture, she and her classmates made the following remarks about the foetus in the womb.

Alice :At this stage, the foetus does not need any food.

Brenda :At this stage, the foetus is inside the mother's stomach.

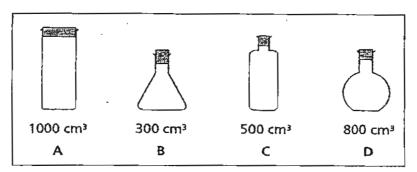
Cindy :At this stage, the foetus does not breathe through the nose,

Dolly :At this stage, the foetus depends on his/her mother for nutrients.

Which of the above girls made the correct remarks?

- (1) Alice and Brenda only
- (2) Alice and Cindy only
- (3) Cindy and Dolly only.
- (4) Brenda and Dolly only.

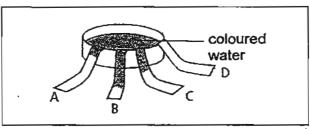
13. Containers A, B, C and D have different capacities as shown in the diagram below.



Jane decided to pump in another 500 cm³ of air into the containers. Which of the containers would be able to contain the extra 500 cm³?

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

John carried out an experiment using four different materials of equal lengths. He placed 5 cm of one end of each material into an empty Petri dish and poured coloured water gently into it. The diagram below shows what he observed after half an hour.



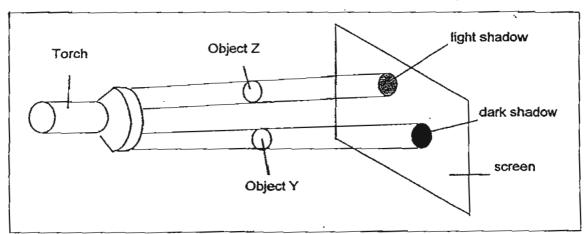
Which one of the following correctly represents materials A, B, C and D?

	A	3	C	B
(PK	Cloth	Tissue Paper	Cardboard	Plastic Sheet
(2)	Cardboard	Plastic Sheet	Cloth	Tissue Paper
(3E)	Cardboard	Tissue Paper	Cloth	Plastic Sheet
(4)~	Tissue Paper	Cloth	Plastic Sheet	Cardboard

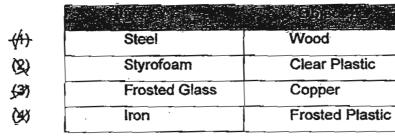
15. Doris took out a stick of ice-cream from the freezer. She left it on the table when the house phone rang and forgot all about it. After some time, it melted.

Which one of the following statements is true about the melting ice-cream?

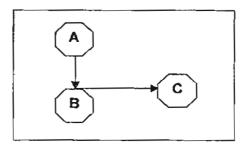
- The ice-cream loses heat and turns to liquid.
- (2) The ice-cream gains heat and changes to gas.
- The ice-cream loses heat to the surrounding and retains its state.
- (¾) The ice-cream gains heat from the surrounding and changes its state.
- 16. A torch was shone onto two objects, Y and Z, as shown in the diagram below:



The shadow formed by object Y seemed much darker than the one formed by object Z. Which are the materials that object Y and object Z likely to be made of?



17. In the diagram below, the arrows indicated the path of light.

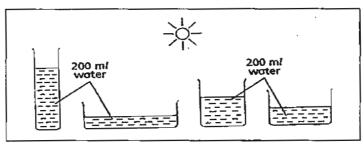


Which of the following options best fits A, B and C?

(1)
(24)
(3)
(4)

A	В	C
Object	Light source	Eyes
Light source	Object	Eyes
Eyes	Object	Light source
Eyes	Light source	Object

18. Nancy carried out an experiment on evaporation. She poured 200 m² of water into each of the four containers shown below. She then placed them at the same location, under the sun.

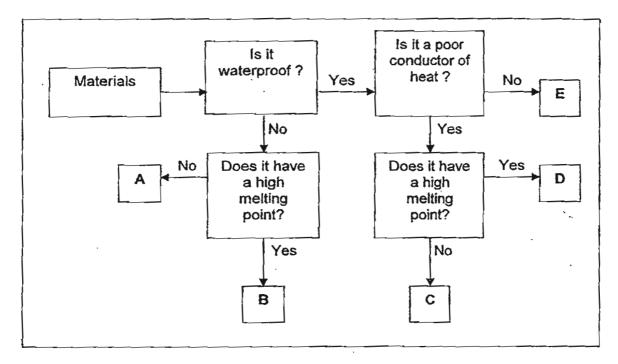


Based on her set up above, what was Nancy trying to find out?

She was trying to find out if ______ affects the rate of evaporation.

- (1) the amount of wind affects the rate of evaporation.
- (2) the level of humidity affects the rate of evaporation.
- (3) the surrounding temperature affects the rate of evaporation.
- (4) the amount of exposed surface area of water affects the rate of evaporation.

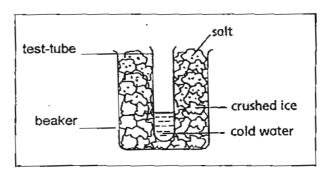
19. 5 materials A, B, C, D and E are classified using the flow chart below.



Which material(s) is/are most suitable to make firefighters' boots?

- (1) B only
- (2) D only
- (3) D and E
- (4) A and ∉

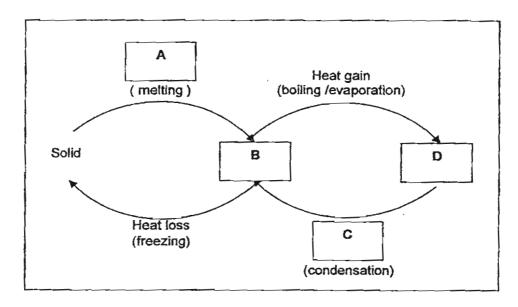
20. Lily carried out a science experiment. She places a test-tube of water into a beaker of crushed ice which has some salt added to it as shown in the diagram below.



After 45 minutes, she observed that the water in the test-tube froze. The reason that this has happened is:

- A: the crushed ice in the beaker had melted
- B: the salt raised the temperature of the crushed ice
- C: the salt lowered the temperature of the crushed ice
- D: the water in the test-tube lost heat to the mixture in the beaker
- (1) A and B only
- (2) A and D only
- (3) B and C only
- (4) C and D only

21. The diagram below shows the changes in the states of matter.

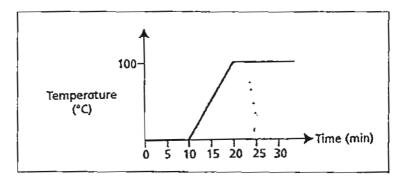


Which of the following sets best describes A, B, C and D?

的图

A	В	C	D
Heat gain	Liquid	Heat loss	Gas
Heat loss	Gas	Heat gain	Liquid
Heat loss	Gas	Heat loss	Liquid
Heat gain	Liquid	Heat gain	Gas

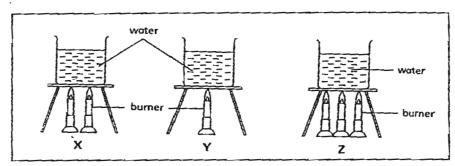
22. Linda heated a beaker with ice cubes for 30 minutes. She measured the temperature of the contents in the beaker at 5 minute intervals and plotted a graph. The graph looks like the one below.



Based on the graph above, what can Linda observe in the beaker at the $5^{\rm th}$ minute and $25^{\rm th}$ minute interval?

At 5 th minute	At 25 th minute
Ice only	Water only
Water only	Steam only
Ice and water	Water and steam
Ice and water	Water and water droplets
	lce only Water only Ice and water

23. Mrs Lim conducted an experiment with her class. She put an equal amount of pure water in each of the 3 identical beakers, X, Y and Z. Next she placed a different number of Bunsen burners under each beaker as shown below.



After that, she heated up the 3 beakers until the pure water in every beaker boiled. Which statement is <u>true</u> about the temperature of water in the beakers?

- (1) The water in beaker Y has the lowest temperature.
- (2) The water in beaker Z has the highest temperature.
- (3) The water in the 3 beakers has the same temperature.
- (4) The water in beaker X has a higher temperature than the water in beaker Z
- 24. Mrs Teo poured two identical beakers filled with the same amount of water into an empty, bigger container. The temperature of water in both beakers was 70°C. She then asked the class to predict the temperature of water in the bigger beaker immediately after mixing them. Below are some of the responses.

Student A	The temperature of the water will be much lower than 70°C.
Student B	The temperature of the water will be higher than 70°C.
Student C	The temperature of the water will be around 70°C.
Student D	The temperature of the water will be higher than 70°C but lower than 80°C.

Which of the students is/are correct?

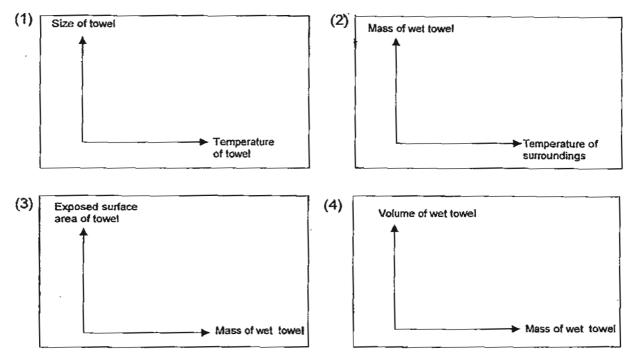
PH A only

(24) Bonly

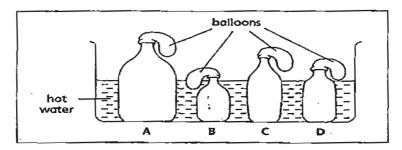
(3) Conly

(M) B and D only

25. Susan carried out an experiment to study the effect of temperature on the rate of evaporation of water from a wet towel. Which of the following axes should she use to draw a graph to show her results?



26. Betty fixed four similar balloons to the mouths of four bottles, A, B, C and D which are of different sizes. She immersed all four bottles at the same time into a trough filled with hot water as shown below.



Which of the following balloons will inflate <u>first</u> after they were placed in the trough of hot water? Arrange them in an ascending order.

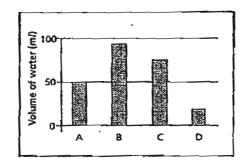
- (1) A, D, C, B
- (2) A, C, D, B
- (3) B, D, C, A
- (4) B, C, D, A

27. Four identical containers, A, B, C and D, were each filled with 100 mt of water. They were then placed in four different places under different conditions. The table below shows the conditions of each of the four containers.

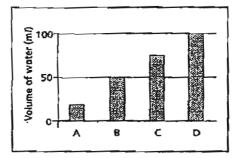
Container				
Conditions	Sunny	Cloudy	Cloudy	Sunny
	No wind	No wind	Wind	Wind

Which one of the graphs below will show the <u>correct</u> volume of water left in containers A, B, C and D after several hours?

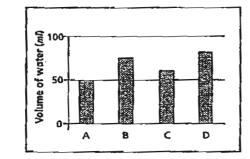




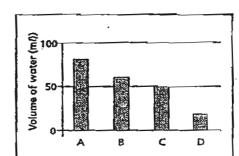
(2)



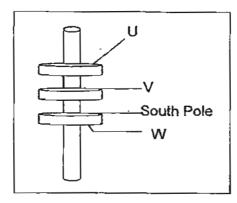
(3)



(4)



28. Tom arranged 3 identical ring magnets through a wooden stick and found that the three rings did not attract one another but rather they "floated" as shown below.

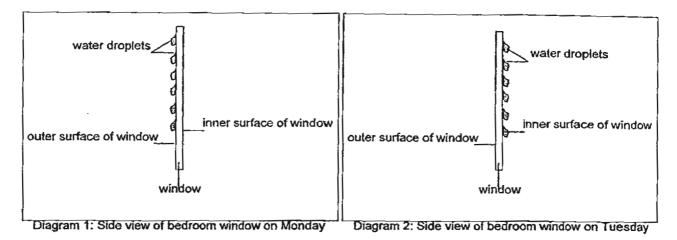


Which of the following correctly represents the poles of U, V and W?

(4)	
(2)	
(30)	
(4)	

Pole U	PoleV	Pole W
North	North	South
North	South	North
South	North	North
South	South	South

29. Maggie's bedroom was air-conditioned. On Monday, when she looked out of her bedroom window, she observed that there were water droplets found on the outer surface of her window as shown in Diagram 1.

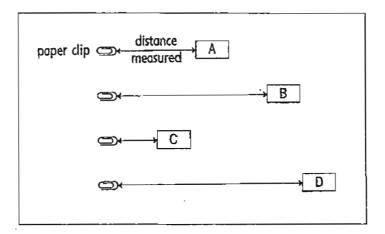


However, on Tuesday, she observed that water droplets were formed on the inner surface of her window as shown in Diagram 2.

Which of the following shows the possible temperature conditions of air, outside and in her bedroom during the two days?

, No.			
Temperature conditions of air	Temperature conditions of air	Temperature conditions of air	Temperature conditions of
outside bedroom	in bedroom	outside	air in
		bedroom	bedroom
cooler	warmer	warmer	cooler
cooler	cooler	warmer	warmer
warmer	cooler	cooler	warmer
warmer	warmer	cooler	cooler

(24) (24) (36) 30. Some students conducted the experiment below to determine which of the following magnets, A, B, C or D is the strongest.



They moved each of the magnets one at a time towards a paper clip until the paper clip is attracted by the magnet. They then measured the distance between the magnet and the paper clip. The above diagram showed the distance measured.

Which of the following is listed in the <u>correct</u> order <u>from the strongest to the weakest?</u>

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

METHODIST GIRLS' SCHOOL

Founded in 1887



CONTINUAL ASSESSMENT 2011 PRIMARY 5 SCIENCE

BOOKLET B

Total Time for Booklets A and B: 1 hour 45 minutes INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so. Follow all instructions carefully.

Answer all questions.

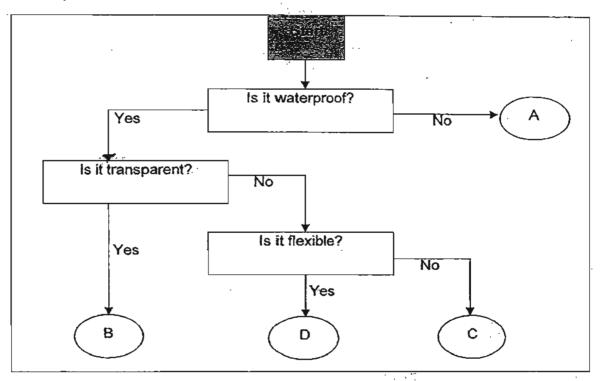
Write your answers in this booklet.

Name:	()
Class:	Primary 5	
Date:	28 February 2011	

Booklet A	/ 60	
Booklet B	/ 40	
TOTAL	/ 100	

This booklet consists of 15 printed pages including this page.

31. Study the flow chart below.



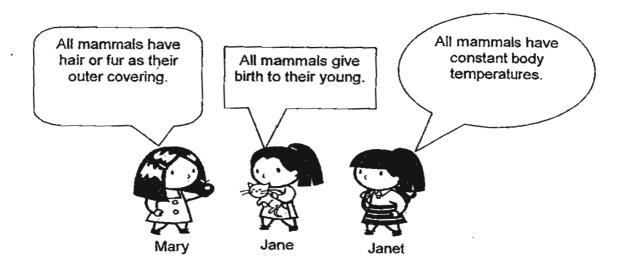
(a) Write the letters that best represent clear plastic and leather in the respective blanks.

(i)	Clear plastic		(1/2	n	n)	١
٠.	•		•		•	

(ii) Leather _____ (½ m)

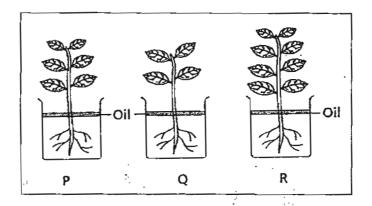
(b)	Explain why the lens of goggles are made of clear plastic.	(1m	

32. Three pupils made the following statements about mammals.



(a)	Whose statement is <u>incorrect</u> ?		
(b) _.	Explain your answer in (a).	(1 m)	

33. Three plants, P, Q and R were put into identical jars as shown below. Each jar was filled with 100ml of water and a layer of oil over the water.

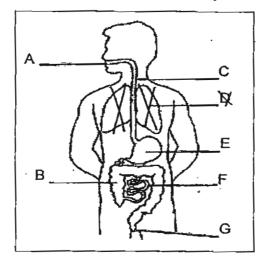


The table below shows the amount of water left in the jar after 3 days.

Plant	Р	Q	R
Number of leaves	6	4	8
Volume opware left	1m 88	92m2	83 M €

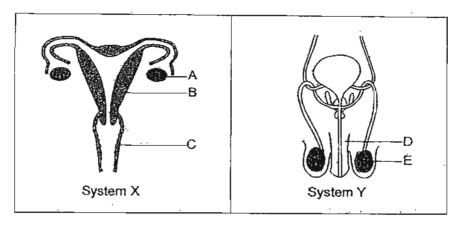
What is the <u>relationship</u> between the number of leaves and the volume water absorbed?		
What is the <u>purpose</u> of the layer of oil?	(1	
-		

34. The diagram below shows organs in the human body.



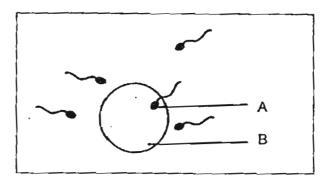
name the system that the at		(<i>7</i> 2m)
Name the part labelled B an	d state its <u>function</u> .	(1½m)
What happens to the digeste	ed food at the part labelled F?	(1m

35. The diagram below shows two reproductive systems of humans.



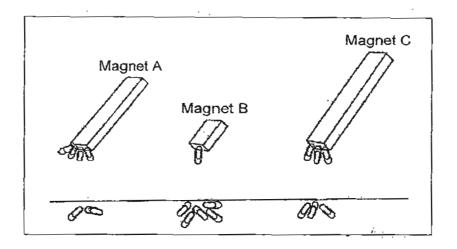
a)	Nam	e the pa	arts labelled:					(2½m)
	(ī)	. A:				-		
	(îi)	B:				_		
	-(iii)	C:						
٠	(iv)	D:				-		
	(v)	E:						
				2.7		. 1		
b)	How	is Syste	em X different	from Sys	tem Y in ter	ms of the	location i	n the body?

36. Look at the diagram below carefully.



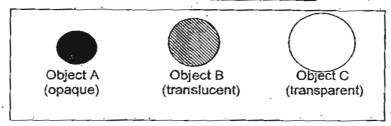
lame the parts labe	elled A and B.
١:	
3:	-
What is the function	of the part labelled A?
Explain how the part	t labelled A is adapted to carry out its function

37. Susie set up the experiment as shown below. She tried to lift up 6 paper clips from the same height using 3 different magnets. The results are shown below.

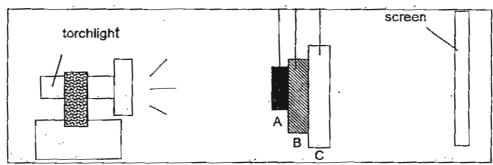


Which magnet is the strongest?		(½m) (1m)
	1 () ()	
State a reason for the answer you ga	ive in (a)	(1m)
What is one conclusion that she can	make at the end of this exper	iment? (1m)

38. The diagram below shows three circles of different sizes cut from various materials.



The objects are then suspended by strings and placed between a torch and a white screen.

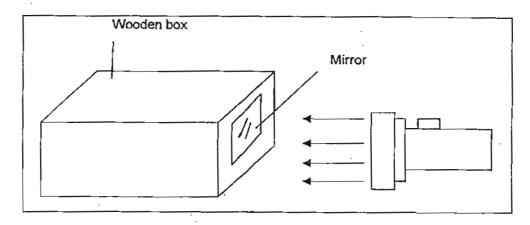


(a) Object A was slowly moved closer to the torchlight, while Objects B and C remained in their positions. Which of the following are possible images that could be formed on the white screen. Put a tick (√) in the correct box. (2m)

	lmage	Possible	NOT Possible
(i)			
(ii)			
(iii)			
(iv)			

(b)	Explain how black shadows are formed.	(1m)

39. The following set-up was placed in a dark room. An object was placed in the wooden box. John shone a light on the box and tried to see the object through the mirror.



Do you think John would be able to	ee the object in the wooden box clearly? (½ m
Explain your answer in (a).	_ (1m)
What should he do if he wants to see	the object clearly? (1rp)

40. Candy collected a small amount of water from three different parts of the river, the upper, the middle and the lower. She also counted the number of living things that lived in those parts of the river and recorded her findings as shown in the table below.

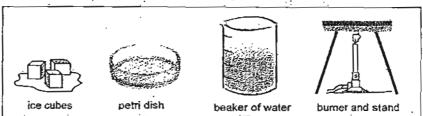
	Upper part of river	Middle part of river	Lower part of river
Number of	200	50	90
living things			

She then tested the water for Chemical X, which is harmful to living things. The amount of Chemical X is measured on a scale of 0 to 10. 0 indicates that Chemical X is absent while 10 indicates that the amount of Chemical X is the highest. She then recorded her findings as shown in the table below.

	Upper part of river	Middle part of river	Lower part of river
Amount of	, 0	10	7
Chemical X			

(a)	Base	ed on her findings above,	
	(i)	which part of the river is the most polluted?	(1m)
	(ii)	what is the relationship between the amount of Chemical X ar number of living things in that river?	nd the (1m)
(b)	From	villagers living near the river usually catch fish from the river for for which part of the river would you advise them to catch the fish to eat? Why?	

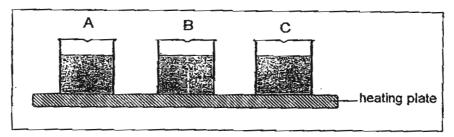
41. Regina's teacher wanted her to set up an experiment to simulate the water cycle. She was given the following materials and apparatus.



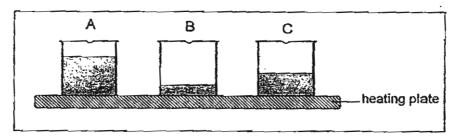
(a)		v and label clearly in the box provided below, a people that Regina could prepare, to show the change	
(b)	Expl:	ain clearly how your set up above is able to simula	ate the water cycle. (2m
	_		
In the ab (c)	, Whic	ch one of the materials and apparetus given above beent:	e, did Regina use to
	(i)	the oceans and the seas?	(½m)
	(ii)	the rain?	(½m)

(Go on to the next page)

42. A, B and C are three containers of the same size. Each container is filled with the same amount of water. The containers are then placed on a heating plate as shown in the diagram below.



After 45 minutes, the amount of water left in the containers was observed as shown in the diagram below. (No water was added or poured out of the containers.)



. (a)	From the different amount of water left in the containers, what can you conclude about containers, A and B?	(2m)

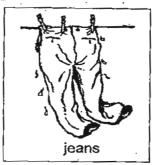
(b) Which one of the containers can be used to keep food warm for the longest time? (1 m)

43. Write "True" or "False" for each statement below.

(2m)

	Statement	"True" or "False"
(a)	In the water cycle, water returns from the sky to the Earth only as rain.	
(b)	In the water cycle, the temperature of the air must be at 100°C for water to change to water vapour.	
(c)	Clouds are water in its gaseous state.	
(d)	The changes in the water cycle are part of a continuous process.	

44. Sandy carried out a test. She weighed her jeans before washing it in the washing machine. After washing, she weighed her it again. Next, Sandy hung her jeans on a clothesline as shown in the diagram below.



(a)	Sandy's jeans weighed more after washing. Why is this so?	(1m)

After hanging it on the clothesline, Sandy weighed her jeans every 15 minutes and recorded in the table below.

Time (min)	Mass of denim jeans (g)				
0	850				
15	600				
30	520				
45	480				
60	420				
. 75	420				

	(1m)
· .	
Sandy repeated her test the next day. She washed and of the same way. This time, the jeans dried faster. Give <u>two</u> possible reasons why the jeans dried <u>more queens</u> her test.	ickly when she repea
the same way. This time, the jeans dried faster. Give <u>two</u> possible reasons why the jeans dried <u>more qu</u>	-



Answer Sheet

EXAM PAPER 2011

SCHOOL: MGS PRIMARY

SUBJECT: PRIMARY 5 SCINECE

TERM : CA1



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

Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30
4	2	4	1	4	3	3	2	3	1	3	3	1

31)a)i)B ii)D

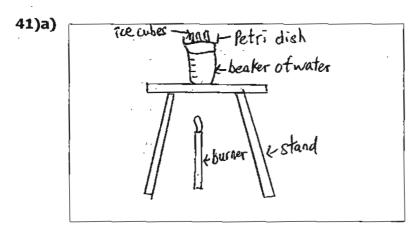
b)Because the goggles has to be waterproof so no water can pass through it and it also has no be transparent so we can see through it.

32)a)Jane's statement is incorrect.

b)Not all mammals give birth to their young and platypus is a mammal and it lays eggs.

- 33)a)The more leaves, the more water will be absorbed.
 - b)To ensure no water will evaporate.
- 34)a)The digestive system.
 - b) It removes water from undigested food.
- c)It will be absorbed into the blood stream and transported to all parts of the body.
- 35)a)i)ovary ii)womb iii)vagina iv)penis v)testis b)System Y is found outside the body of the male.
- 36)a)Fertilisation
 - b)A: Sperm B: Egg
 - c) It fuses with the egg to develop into a baby.
 - d)It has tail to swim very fast.
- 37)a)magnet A.
 - b)It attracted the most paper clips.
 - c)The strength of the magnet does not depend on its size.

- 38)a)i)Possible ii)Possible iii)Not vi)Not
 - b)It is formed when an opaque object blocks the path of light.
- 39)a)No.
 - b)The mirror is opaque and does not allow light to pass through.
 - c)Change the mirror into a transparent object.
- 40)a)i)Middle part of river.
- ii)The smaller the amount of Chemical X, the higher the number of living things in the river.
- b)Upper part of river, because there is no Chemical X in that part of the river. Upper part. That part has no Chemical X which is harmful to living things.



- b) The water will evaporate and condense on the cool surface of the petri dish, the water droplets will get heavy and it will fall back into the beaker of water. It's the same for the water cycle on Earth.
 - c)i)The beaker of water.
 - ii)The water droplets drips back into the beaker.
- 42)a)Container A is a poor conductor of heat while container B is a good conductor of heat.
 - b)A.
- 43)a)F b)F c)F d)T
- 44)a)Because water has mass and it will make the jean heavier because there is water in it.
 - b)60 min, because 420g is the mass of the jeans.
 - c)It could be more windy or there could be more sun.