

Name : _____ ()

Class : Primary 5 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 5 Continuous Assessment 1 – 2008 SCIENCE

BOOKLET A

27th February 2008

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

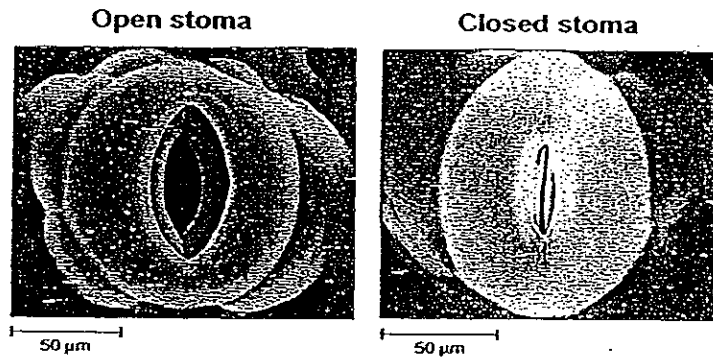
**30 questions
60 marks**

**Do not open this booklet until you are told to do so.
Follow all instructions carefully.
Answer all questions.**

Section A : (30 x 2 marks)

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

1. The diagrams below show a stoma from a leaf of a tropical plant.

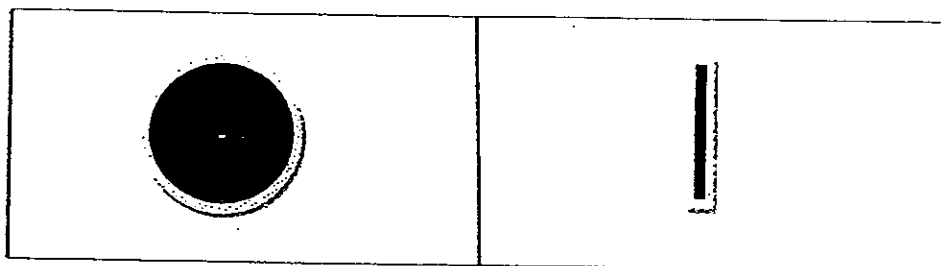


Which of the following statements about the stoma are not correct?

- (A) It allows gaseous exchange to take place.
- (B) It is found mostly on the underside of leaves..
- (C) It traps energy from the sun for photosynthesis.
- (D) It opens to absorb water for plant photosynthesis.

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

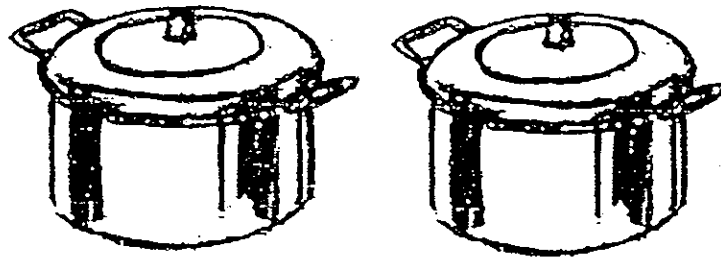
2. The following diagrams show 2 different shadows formed by the same object.



Which one of the following items could have formed the above shadows?

- (1) Ball
- (2) Coin
- (3) Ruler
- (4) Hula Hoop

3. Two pots, X and Y, of the same size and thickness contained 700ml and 400ml of water respectively. Both were heated over two separate flames till the water in them boiled.



Pot X
(700ml of water)

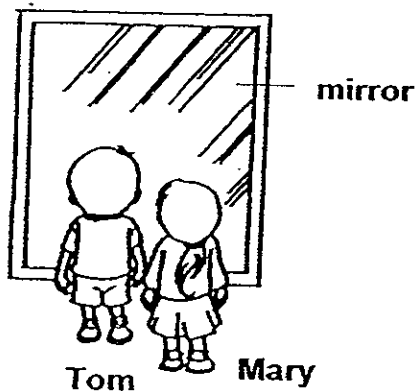
Pot Y
(400ml of water)

If the water in both pots took 12 minutes each to reach boiling point, what conclusions can be made?

- (A) Pot X is a better conductor of heat than pot Y.
- (B) The water in pot X is colder than that in pot Y.
- (C) The flame used for pot Y was weaker than that used for pot X.

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

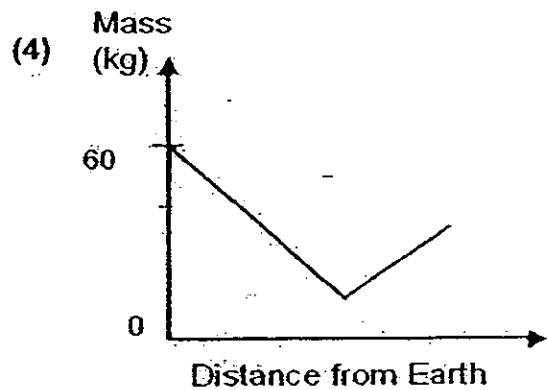
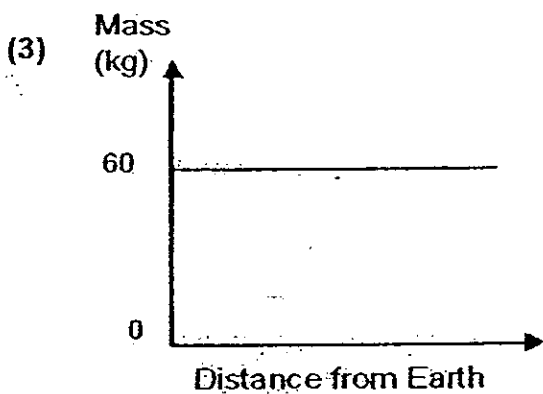
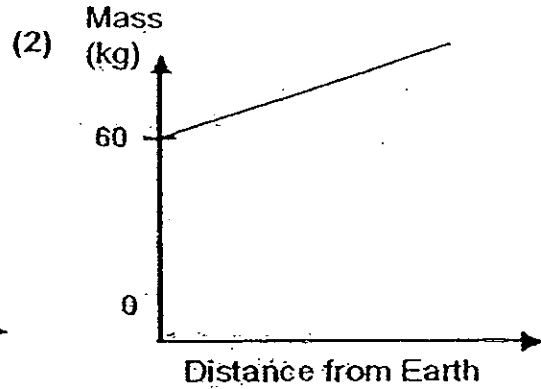
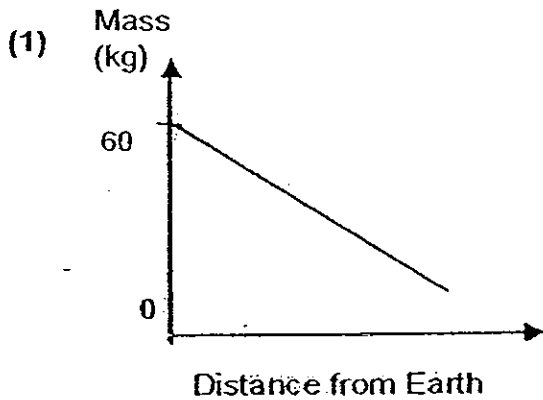
4. Tom and Mary stand in front of a mirror in a room. Even though Mary stands behind Tom but Tom can still see her clearly.



Which one of the following statements explains how Tom is able to see Mary?

- (1) Mary reflects light from the lamp into Tom's eyes.
- (2) The mirror gives off light which travels into Tom's eyes.
- (3) The light reflected by Mary is reflected by the mirror into Tom's eyes.
- (4) The light given off by Mary is reflected by the mirror into Tom's eyes.

5. As an astronaut travels from the Earth towards the Moon, which one of the graphs below correctly shows the change in the mass of the astronaut?

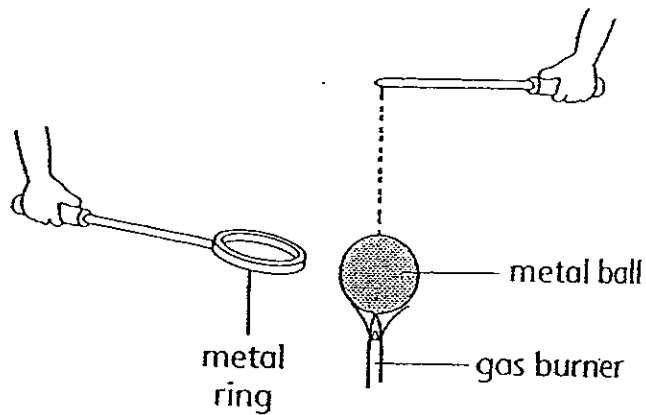


6. The functions of the blood in our body are to _____.

- (A) keep the lungs breathing
- (B) produce oxygen for the body
- (C) transport waste materials in the body
- (D) carry nutrients from the small intestines to all parts of the body

- (1) A and B only
- (2) C and D only
- (3) B, C and D only
- (4) All of the above

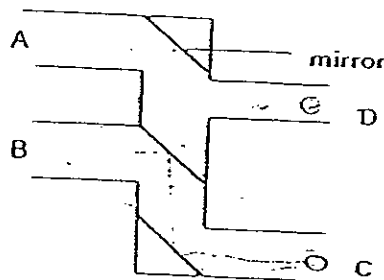
7. When the metal ball is heated, its _____



- (A) temperature rises
- (B) volume increases
- (C) shape changes
- (D) mass increases

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

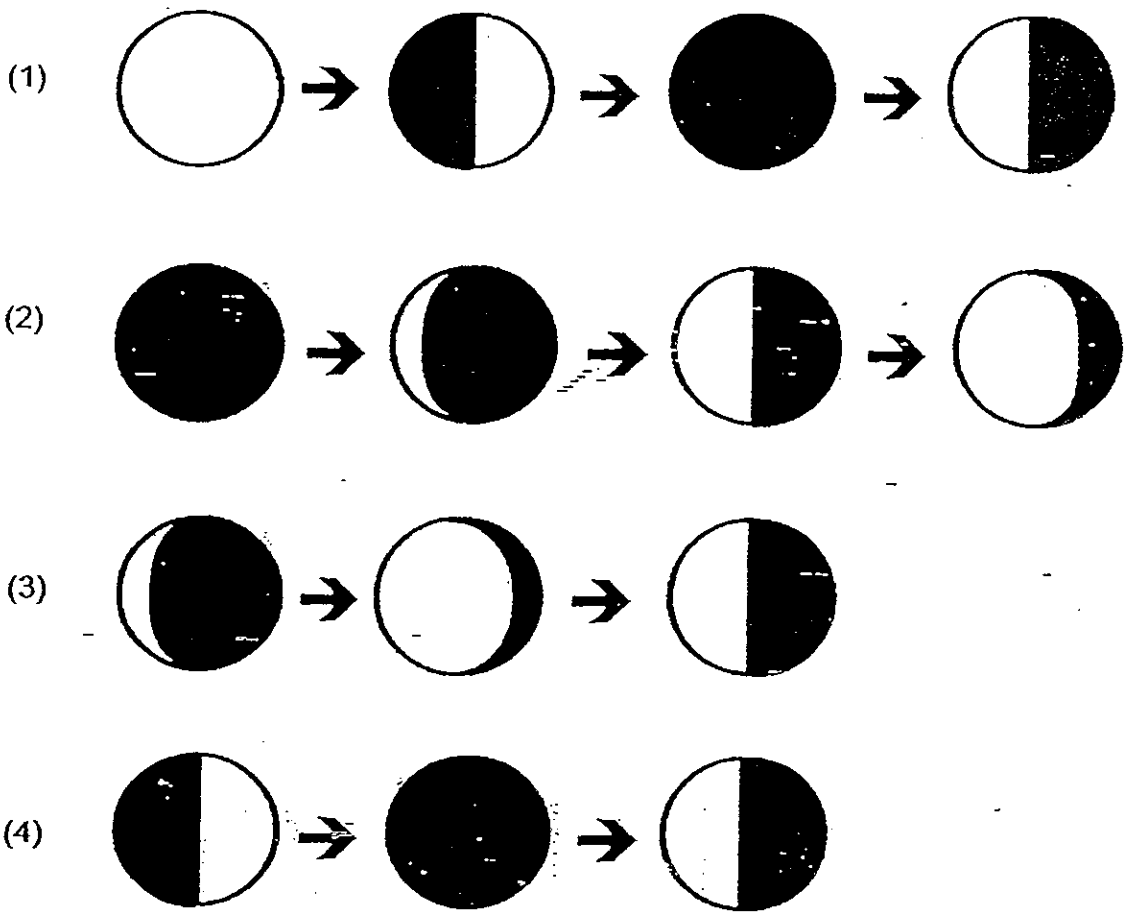
8. The diagram below shows a connection of pipes. 3 mirrors are placed inside the pipes.



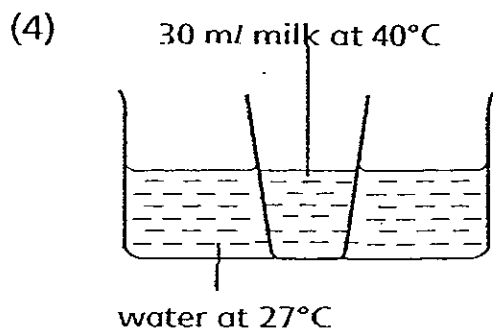
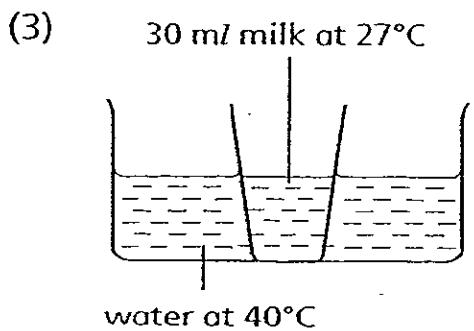
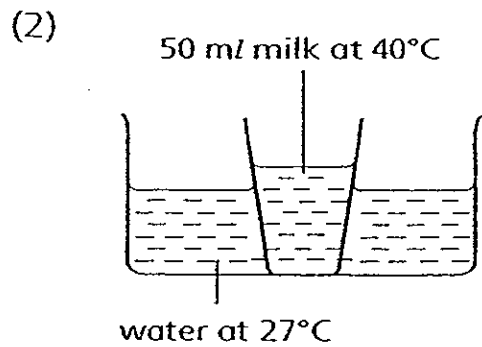
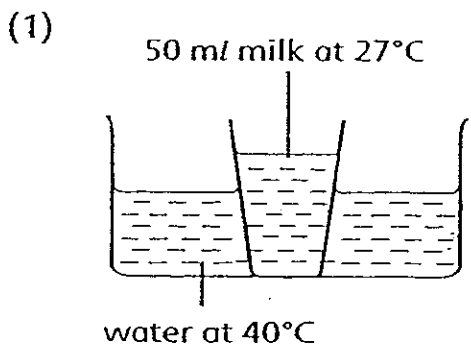
In order to see an object through the pipes, where should the eye and the object be placed respectively?

	Position of object	Position of eye
(1)	A	D
(2)	B	C
(3)	C	A
(4)	D	B

9. Which one of the following shows the correct phases of the moon from 14th April to 28th April?



10. In which one of the following will the milk gain the most amount of heat?



11. Which one of the following statements states the importance of the atmosphere?

- (1) It provides water for all living things.
- (2) It protects us from harmful rays of the Sun.
- (3) It provides heat and light energy for all living things.
- (4) It transmits signals from telephones, radios and televisions.

12. The following table shows some information about 4 of the planets in the Solar system.

Planet	Mars	Saturn	Uranus	Neptune
Distance from the Sun (million km)	228	1427	2870	4497
Time taken to make one revolution around the Sun	687 days	29 years	84 years	165 years
Time taken to make one rotation	24 hours	11 hours	17 hours	16 hours
Number of moons	2	30	21	8

Based on the information given, which of the following statements are correct?

- (A) The further a planet is from the Sun, the longer is the time taken for it to make one revolution around the Sun.
- (B) The planets have different number of moons.
- (C) When Saturn makes two rotations, Mars makes about one rotation.
- (D) When Uranus makes one revolution around the Sun, Saturn makes exactly two revolutions around the Sun.

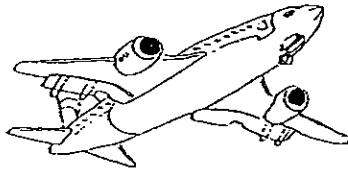
- (1) A and B only
- (2) B and D only
- (3) A, B and C only
- (4) A, C and D only

13. Which of the following is caused by revolution of the Moon around Earth?

- (1) The changes of the seasons.
- (2) The changes in daily tidal levels.
- (3) Northern lights at the polar regions of the Earth.
- (4) The rising of the Sun from the East and the setting of the Sun in the West.

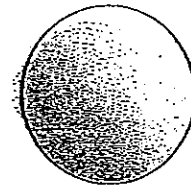
14. Which of the following is used in telecommunication?

(1)



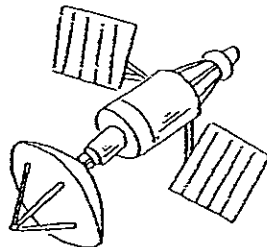
aeroplane

(2)



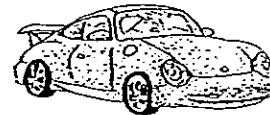
moon

(3)



satellite

(4)



car

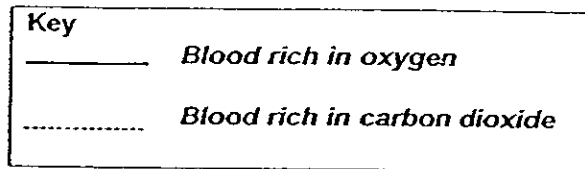
15. Heat produced by some sources is useful. There are also sources which produce heat that is not useful. Which of the following electrical appliances produces heat that is not useful?

- (A) oven.
- (B) computer
- (C) refrigerator
- (D) a light bulb

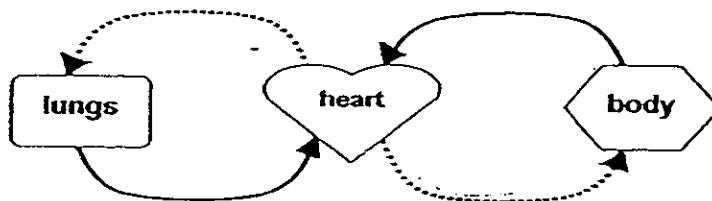
- (1) A and D only
- (2) B and C only
- (3) B, C and D only
- (4) A, B and C only

16. The circulatory system carries blood containing oxygen and carbon dioxide through blood vessels to all parts of the body. The diagram shows the parts of the circulatory system.

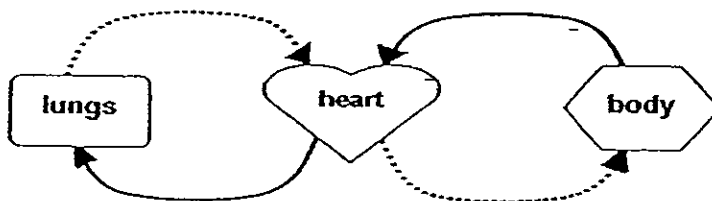
Which of the following shows the flow of blood in the human circulatory system?



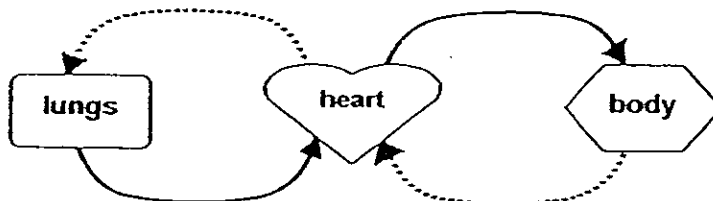
(1)



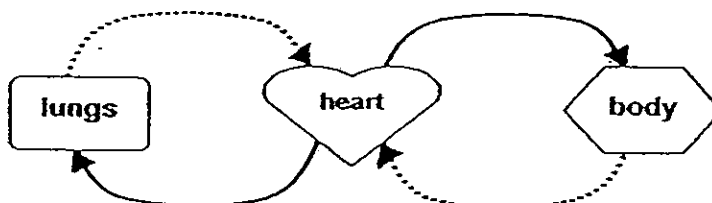
(2)



(3)

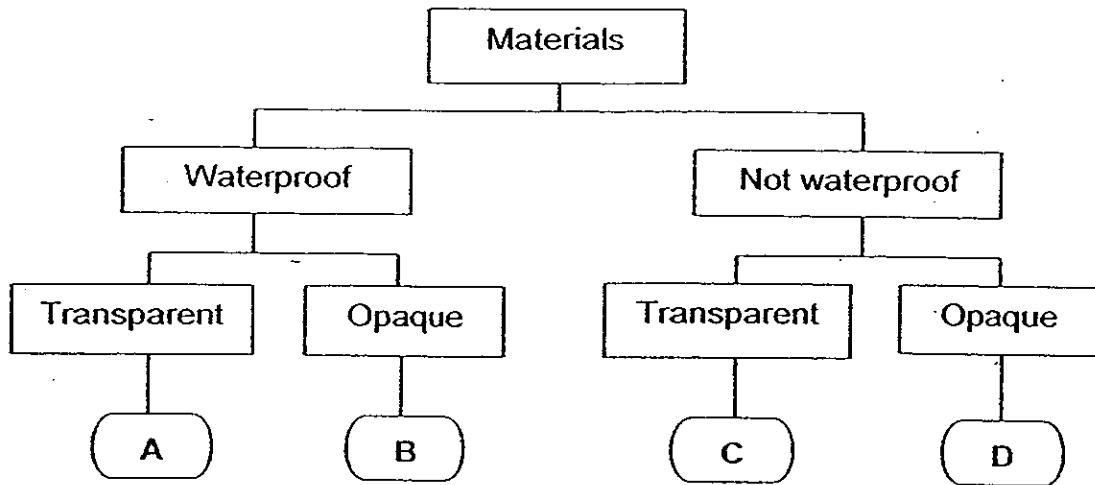


(4)



17. Study the classification chart below.

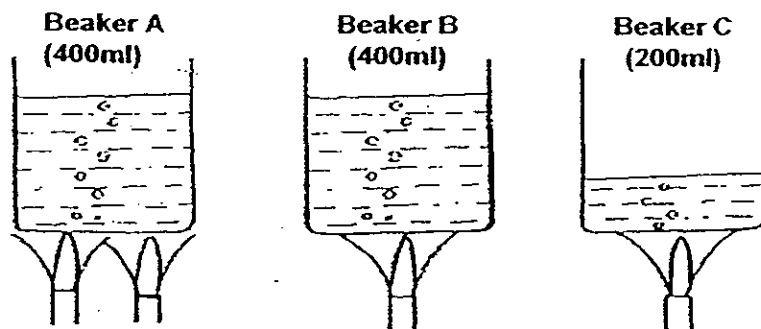
A, B, C and D are four objects made of different materials.



Which of the following could object A and D possibly be?

- (1) Glass and raincoat.
- (2) Glass and cardboard
- (3) Blanket and raincoat
- (4) Blanket and cardboard

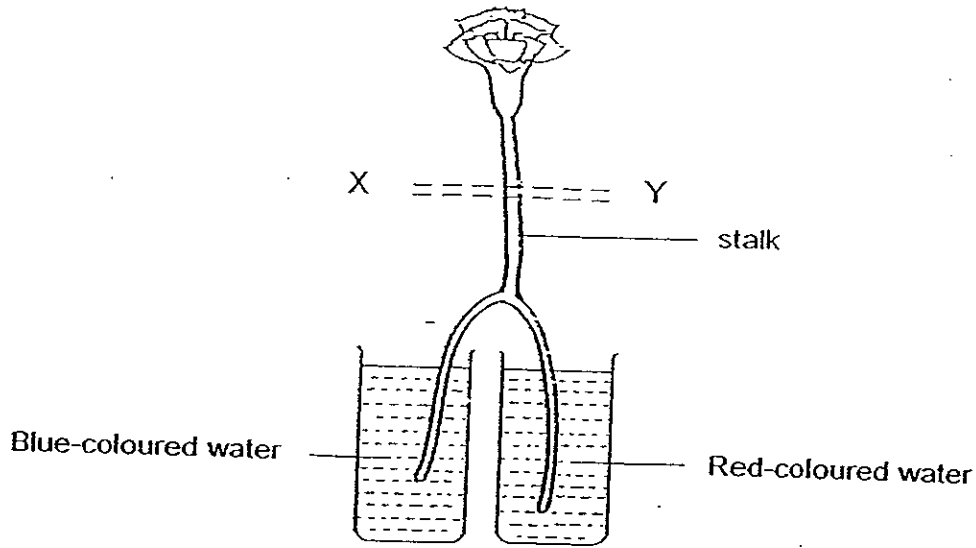
18. The diagram below shows three beakers A, B and C. Beaker A and B contained 400ml of water each and Beaker C contained 200ml of water. The three beakers were continuously heated even after the water was boiled.



The final temperature of the water in _____.

- (1) beaker A is the highest
- (2) beaker A is higher than the water in beaker B.
- (3) beaker C is higher than the water in beaker B
- (4) the three beakers is the same

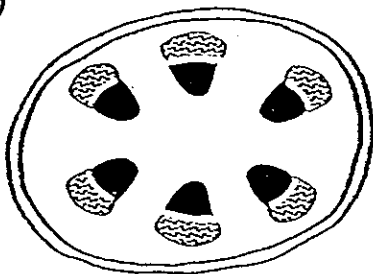
19. In an experiment, Heidi split part of the stalk of a white flower into half as shown in the diagram below.



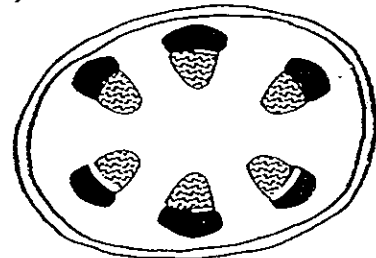
She put one half of the stalk of the flower in a jar with blue-coloured water while the other half in a jar with red-coloured water. Next day, she observed that half of the flower became blue and the other half became red.

At the end of the experiment, she cut the stalk at the part labelled XY. Which one of the following shows the cross-section of the stalk?

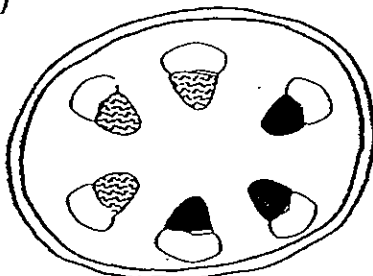
(1)



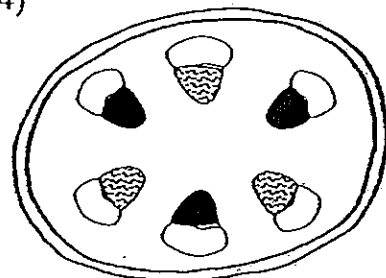
(2)



(3)



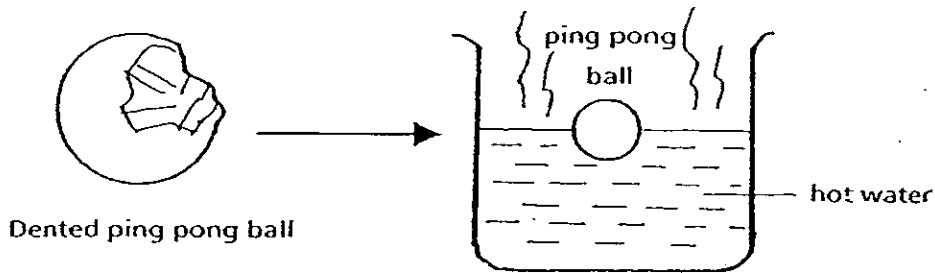
(4)



Key:



20. When a dented ping pong ball is placed in a beaker of hot water as shown in the diagram below, it becomes round again.

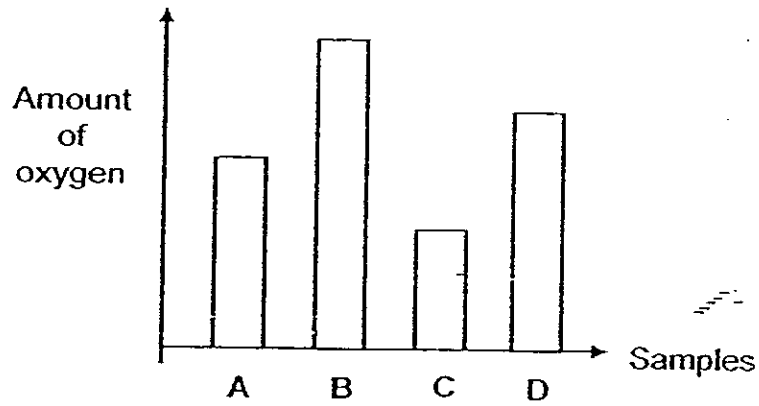


Which one of the following explains the observation made correctly?

- (1) Hot air enters the ball.
 - (2) Hot water enters the ball.
 - (3) The ball increases in mass.
 - (4) Air in the ball increases in volume.
21. Which of the following comparison between Earth and the Moon is **not** correct?

	Earth	Moon
(1)	A planet	A star
(2)	Reflects light	Reflects light
(3)	Revolves around the Sun	Revolves around the Earth
(4)	Takes a longer time to complete one revolution	Takes a shorter time to complete one revolution

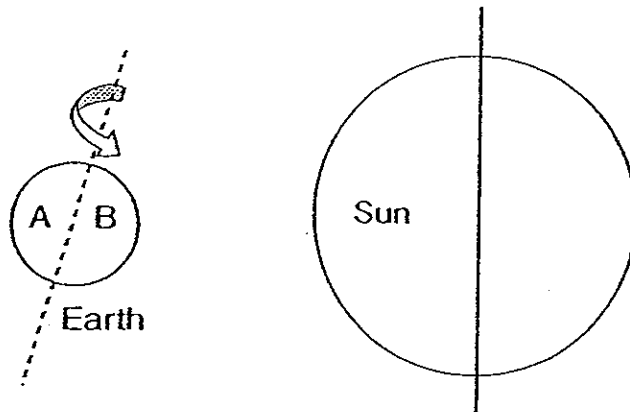
22. Four blood samples A, B, C and D were taken from different blood vessels in the body. The graph below shows the amount of oxygen in each of the blood samples.



Which blood sample was most probably taken from the blood vessel carrying blood from the heart to the lungs?

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

23. The diagram below shows the position of the Earth and the Sun.



Which one of the following conclusions can you draw from the above diagram?

- (1) A and B are both in the light.
- (2) A reflects light from the Moon.
- (3) A is in darkness while B is in the light.
- (4) A reflects light from the Sun while B is in darkness.

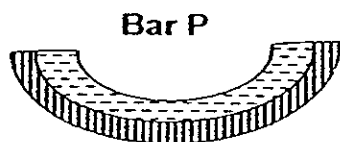
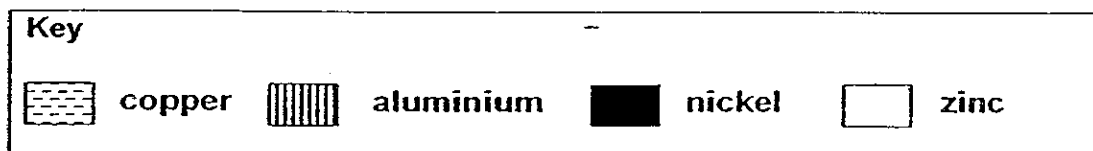
24. Laura did an investigation to find out how the different times of the day would affect the length of shadows formed. She placed a one metre pole in the middle of a school field and recorded the length of the shadows at different times of the day for four consecutive days as shown in the table below.

Day	Length of shadow at different times			
	8 a.m	10 a.m	12 p.m	5 p.m
1	1.7 m	0.8 m	0.01 m	2.1 m
2	1.6 m	0.7 m	0.02 m	2.1 m
3	1.7 m	1.1 m	0.01 m	2.6 m
4	1.6 m	0.7 m	0.01 m	2.2 m

She made a mistake while recording the results on one of the days. On which day could she have made a mistake?

- (1) Day 1
 - (2) Day 2
 - (3) Day 3
 - (4) Day 4
25. Bars P, Q, R and S are each made by joining together two different metal strips of the same length. Mary heated the four bars for 10 minutes each.

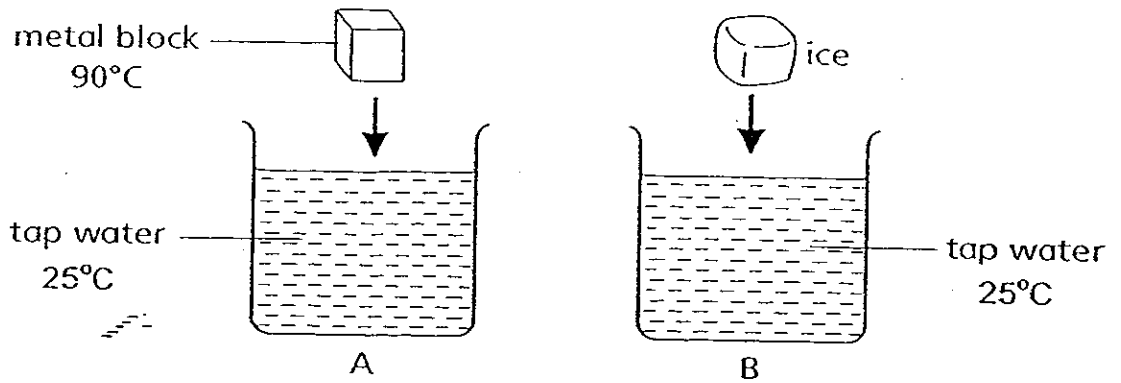
Her results are shown below.



Which one of the following shows the arrangement of the metals according to the rate of expansion, starting with the one that expands the most?

- (1) copper, nickel, aluminium and zinc
- (2) aluminium, nickel, zinc and copper
- (3) zinc, aluminium, copper and nickel
- (4) zinc, copper, nickel and aluminium

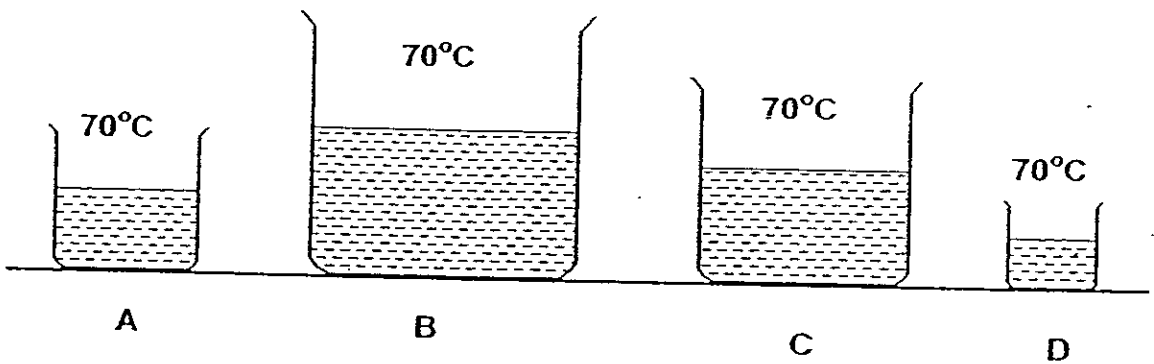
26. Study the diagram below.



When the metal block and the ice cube are lowered into beakers A and B respectively, which one of the following will show the greatest heat gain?

- (1) Ice in Beaker B
- (2) Water in Beaker A
- (3) Water in Beaker B
- (4) Metal block in Beaker A

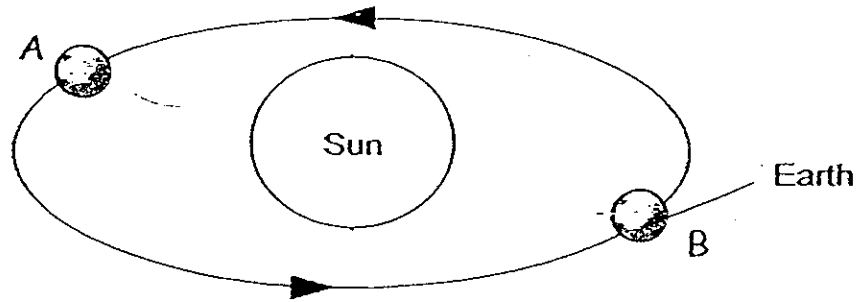
27. The diagram below shows four different beakers, A, B, C and D. Each beaker contains a different volume of water at 70°C.



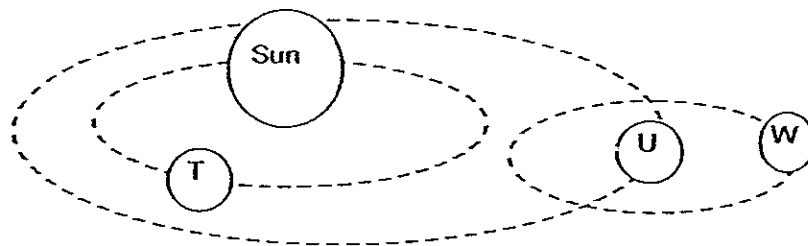
Which one of the following shows the correct arrangement of the amount of heat in each beaker of water in ascending order?

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

28. How long does it take for the Earth to revolve from position A to B?



- (1) About 12 days
 - (2) About 28 days
 - (3) About 183 days
 - (4) About 365 days
29. The diagram below shows the orbits of some objects.



Based on the diagram above, which of the following statements can you infer?

- (A) T, U and W revolve around the Sun.
 - (B) T will have a higher surface temperature than U.
 - (C) W is kept in orbit, due to the gravitational pull exerted on it by U.
 - (D) When T completes one revolution around the Sun, U would have completed two revolutions.
- (1) A and B only
 - (2) A and D only
 - (3) B and C only
 - (4) B, C and D only

30. Which of the following are made possible due to the presence of man-made satellites?
- (A) We can get current updates on world events via internet.
 - (B) Surgeons can perform surgeries on people in other parts of the world.
 - (C) We can watch the live telecasts of sports games from other parts of the world.
 - (D) Drivers can use the Global Positioning System (GPS) to aid them in their navigation.
- (1) A and D only
 - (2) B and C only
 - (3) A, C and D only
 - (4) B, C and D only

----- End of Section A -----

Name : _____ ()

Class : Primary 5 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 5
Continuous Assessment 1 – 2008
SCIENCE
BOOKLET B

27th February 2008

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

16 questions
40 marks

Booklet A	60
Booklet B	40
Total	100

Do not open this booklet until you are told to do so.
Follow all instructions carefully.

Parent's Signature/Date

Section B : (40 marks)

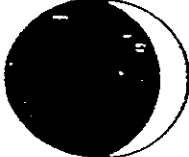

Answer the following questions in the spaces provided.

31. The table below contains some information on 2 planets, R and S in a certain Star System.

Planet	Atmospheric Composition		Availability of water
R	Oxygen	15%	No evidence of water
	Nitrogen	80%	
	Carbon Dioxide	5%	
S	Oxygen	32%	Traces of water found under crust of the planet
	Nitrogen	65%	
	Carbon dioxide	3%	

Which planet would be able to support life? Give two reasons to support your answer. (2m)

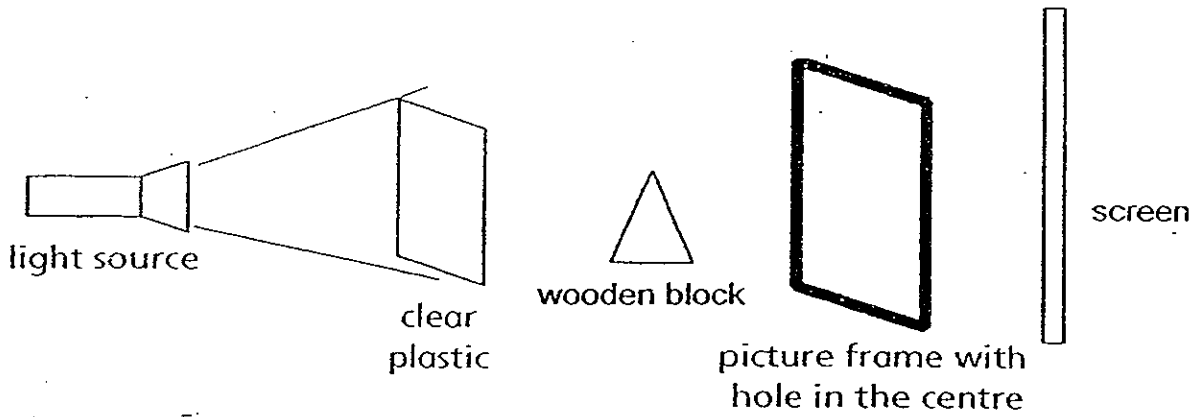
32. Study the diagram below.

			
5 th July	12 th July	19 th July	26 th July

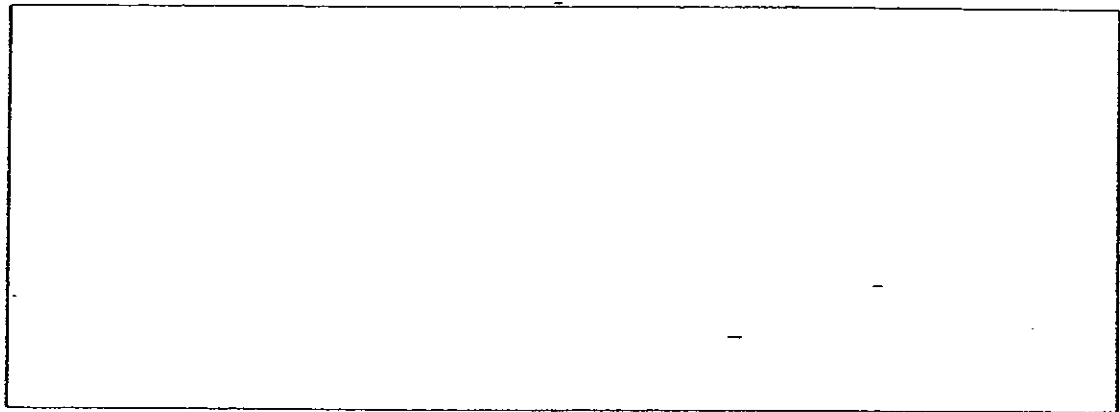
- (a) Draw the phases of the Moon on 5th and 26th July. (1m)
- (b) What will be the phase of the Moon on 1st August? (1m)



33. Study the set-up below.



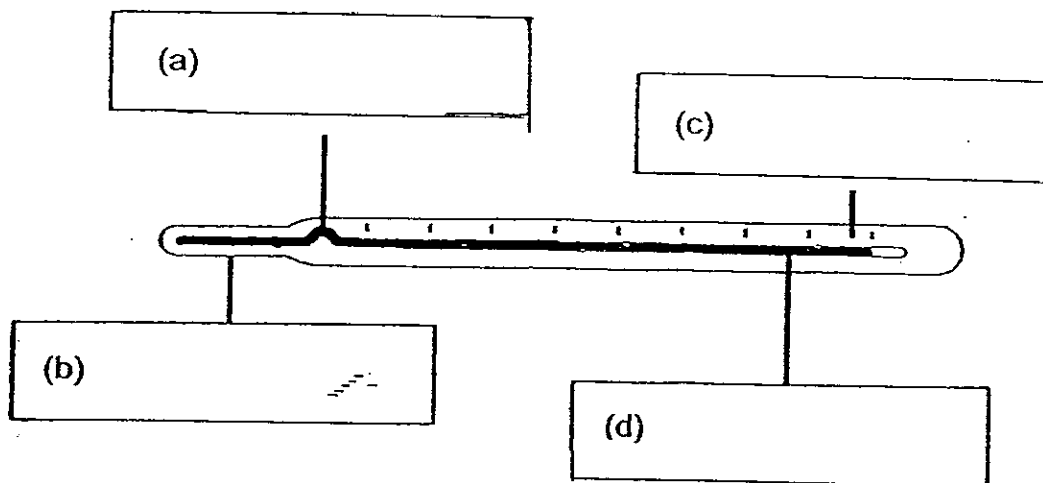
(a) Draw the shadow that would be formed on the screen. (1m)



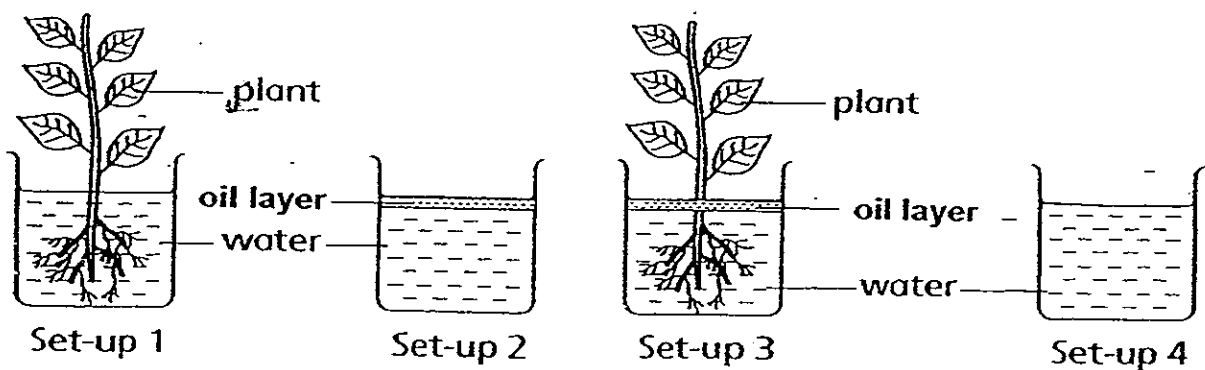
(b) Explain how the shadow would change if a piece of glass of the same shape replaces the wooden block instead? (2m)



34. Label the parts of a clinical thermometer shown below. (2m)



35. Laura plans an experiment to show that roots take in water. She has four different set-ups as shown below.

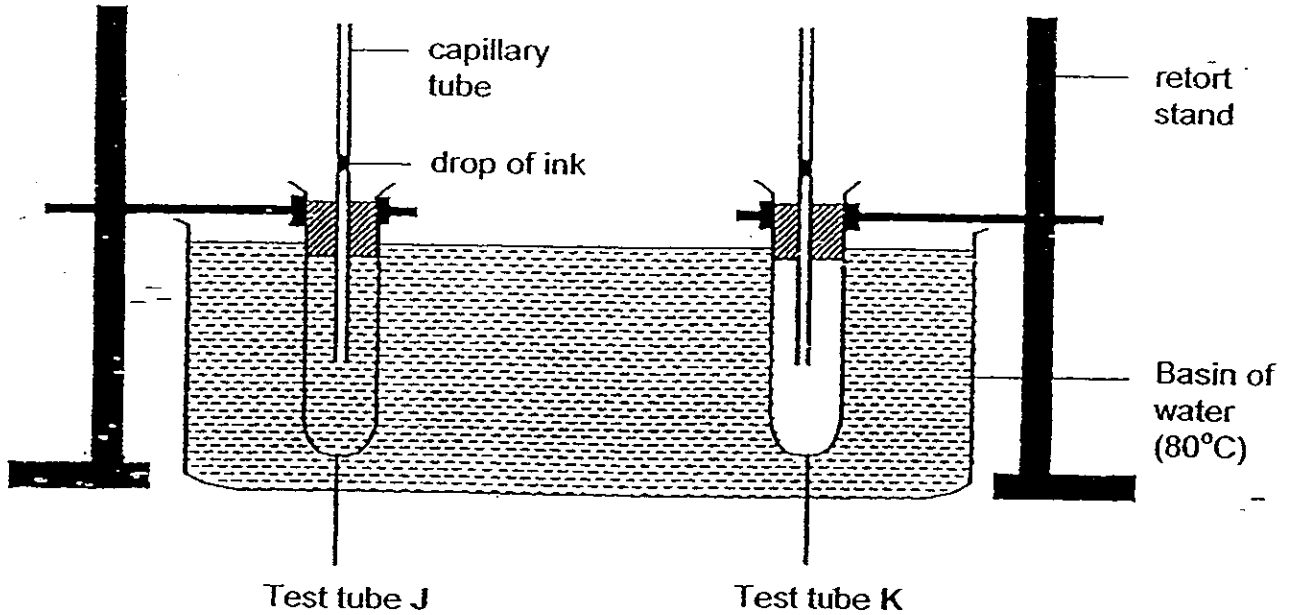


(a) Which pair of set-ups should she use to make a fair comparison? Explain your answer. (2m)

(b) What would Laura observe at the end of the experiment? (1m)



36. Two capillary tubes, with a drop of ink at the same level, were placed in test tubes J and K. Test Tube J was full of water but test tube K was empty. Both test tubes were then immersed in a basin of water at 80°C for about 10 minutes.



- (a) What will happen to the drop of ink in test tube J and test tube K after 10 minutes? (1m)

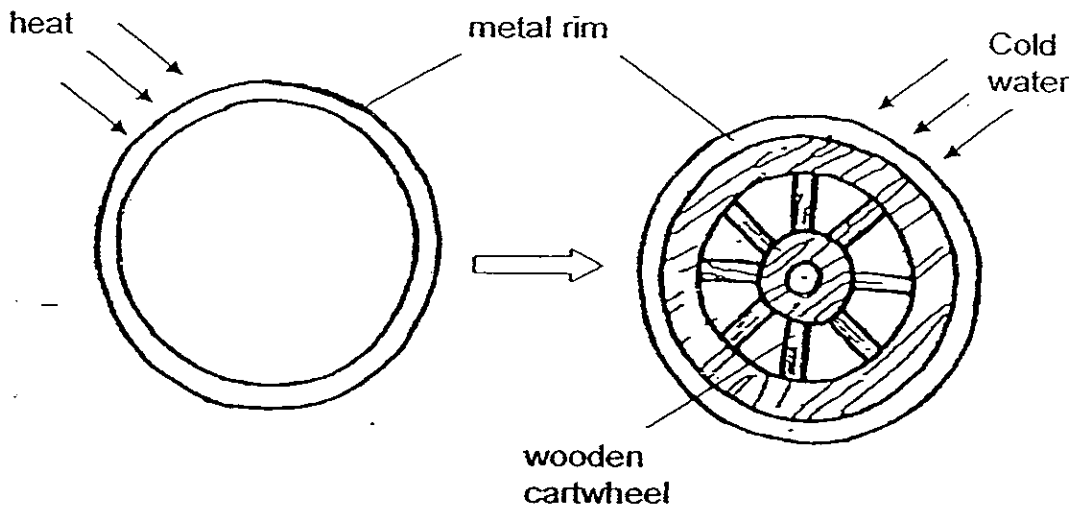
Test tube J : _____

Test tube K :

- (b) Based on the observation in (a), what can you conclude about the properties of water and air? (2m)



37. The diagram show how a metal rim is fitted tightly round a wooden cartwheel.



Step 1 : A large amount of heat is applied to the metal rim.

Step 2 : The metal rim is placed round the wooden cartwheel.

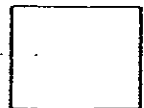
Step 3 : Cold water is poured over them.

(a) What are the reasons for carrying out Step 1 and Step 3? (1m)

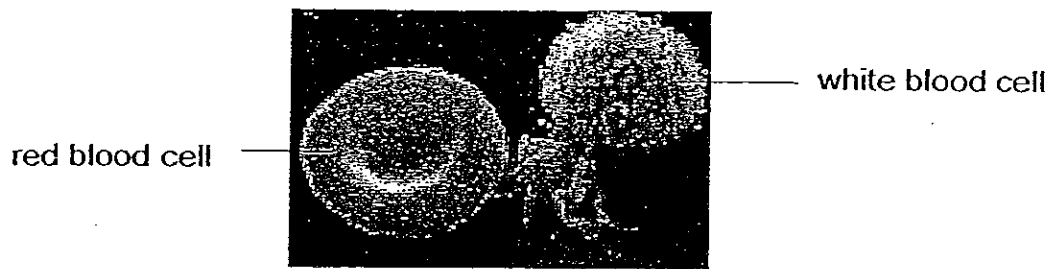
Step 1 : _____

Step 3 : _____

(b) It is not advisable to fit a wooden rim together with a metal cartwheel. Explain why this is so. (2m)



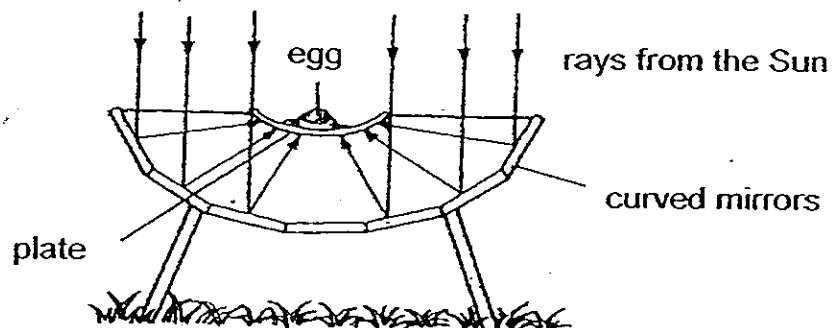
38. The diagram below shows a red blood cell and white blood cell.



(a) State one difference between the functions of red blood cell and white blood cell in the human circulatory system. (2m)

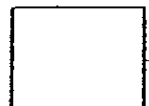
(b) Name another type of cells which helps blood to clot when there is a cut. (1m)

39. The diagram below shows the cross-section of a semicircular device designed to cook an egg outdoors.

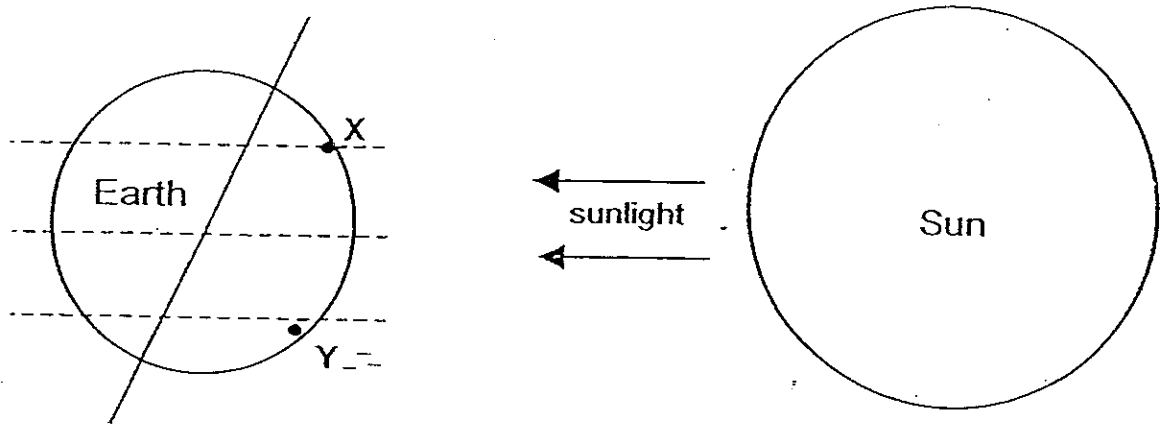


(a) State the source of energy to cook the egg. (1m)

(b) Explain the use of the curved mirrors in the device. (1m)



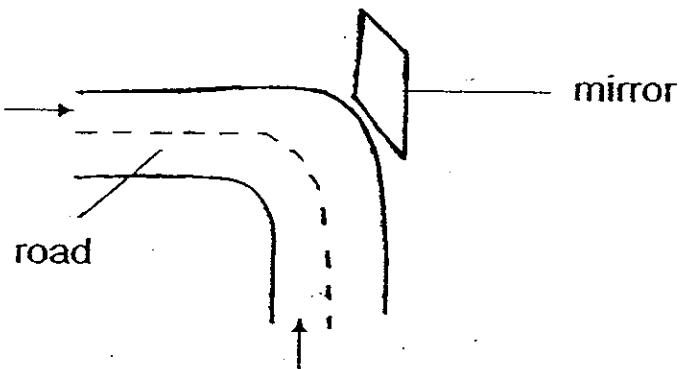
40. The diagram below shows the position of the Sun and the Earth during a particular month of the year.



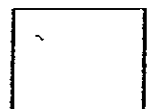
- (a) At which point, X or Y, will the people on Earth feel colder? (1m)

- (b) Explain your answer in (a) above. (1m)

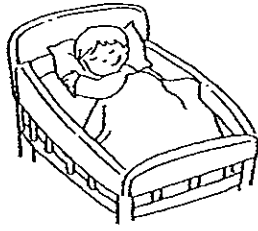
41. A mirror is placed at the turn of a road as shown below.



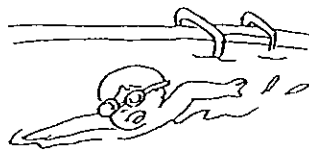
- What is the purpose of the mirror? (2m)



42. Danny carried out the following activities.



A

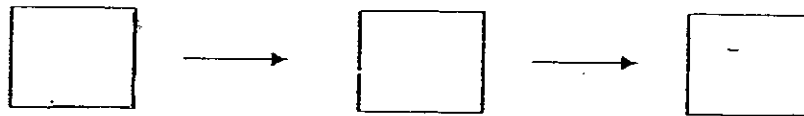


B



C

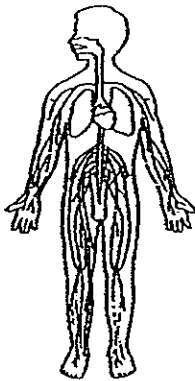
(a) Arrange the above activities A, B and C in order of the descending pulse rates. (1½ m)



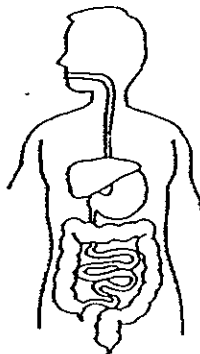
Highest pulse rate

Lowest pulse rate

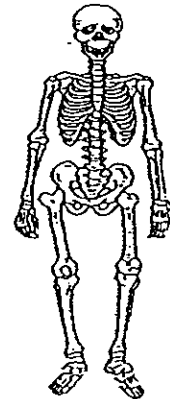
The diagrams below show three of Danny's body systems, A, B and C.



A



B



C

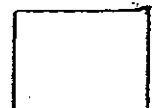
(b) Identify the three body systems. (1½ m)

A: _____

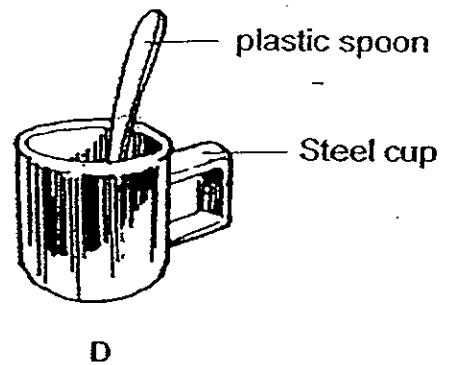
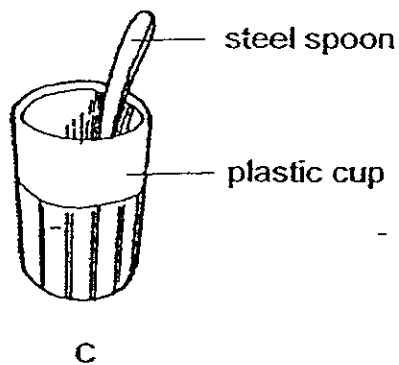
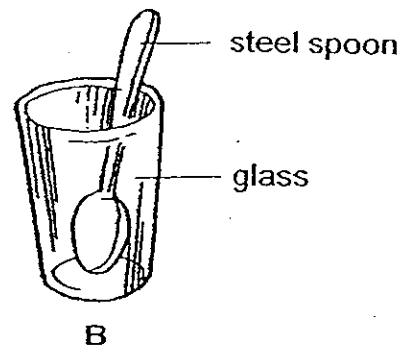
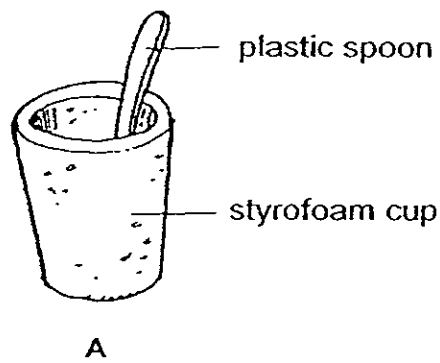
B: _____

C: _____

(c) Which two systems does Danny need to enable his muscle cells to get food for energy? (1m)



43. Study the diagram below.



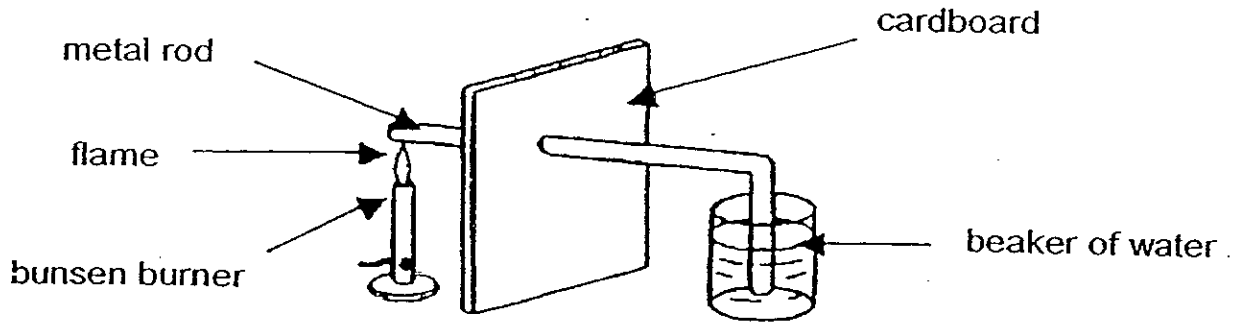
(a) Mrs Lee wants to make some hot milk for her six-year-old son. Which set of cup and spoon is most suitable for keeping the milk warm? (1m)

(b) Explain your answer in (a). (1m)

(c) Which set of cup and spoon will cool the milk the fastest? (1m)



44. Pamela sets up an experiment as shown below.



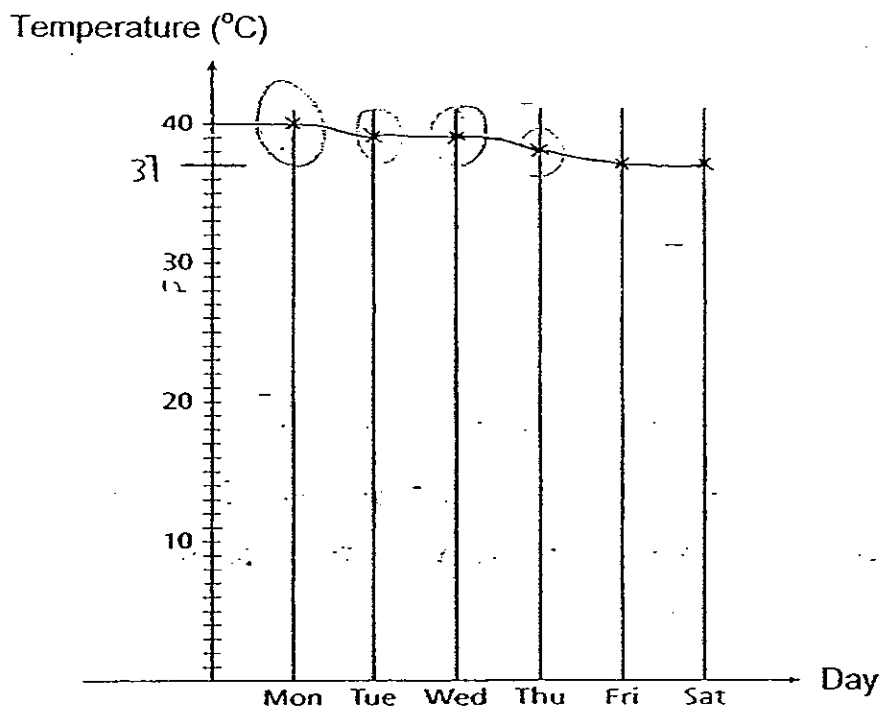
(a) What is Pamela trying to prove from the experiment above? (1m)

(b) What will happen to the temperature of the water in the beaker after a few minutes? (1m)

45. Read the statements below and put a tick in the correct box. (2m)

		True	False	Not Possible to tell
(a)	The Earth takes 365 days to rotate one round about its axis.			
(b)	The Sun, the Moon and the Stars are examples of natural light sources.			
(c)	It takes about 31 days for the Moon to orbit the Earth once.			
(d)	The tidal movement on Earth is caused mainly by the Moon.			

46. Raymond was hospitalized for six days due to a dengue fever. His temperature was recorded everyday as shown in the graph below.

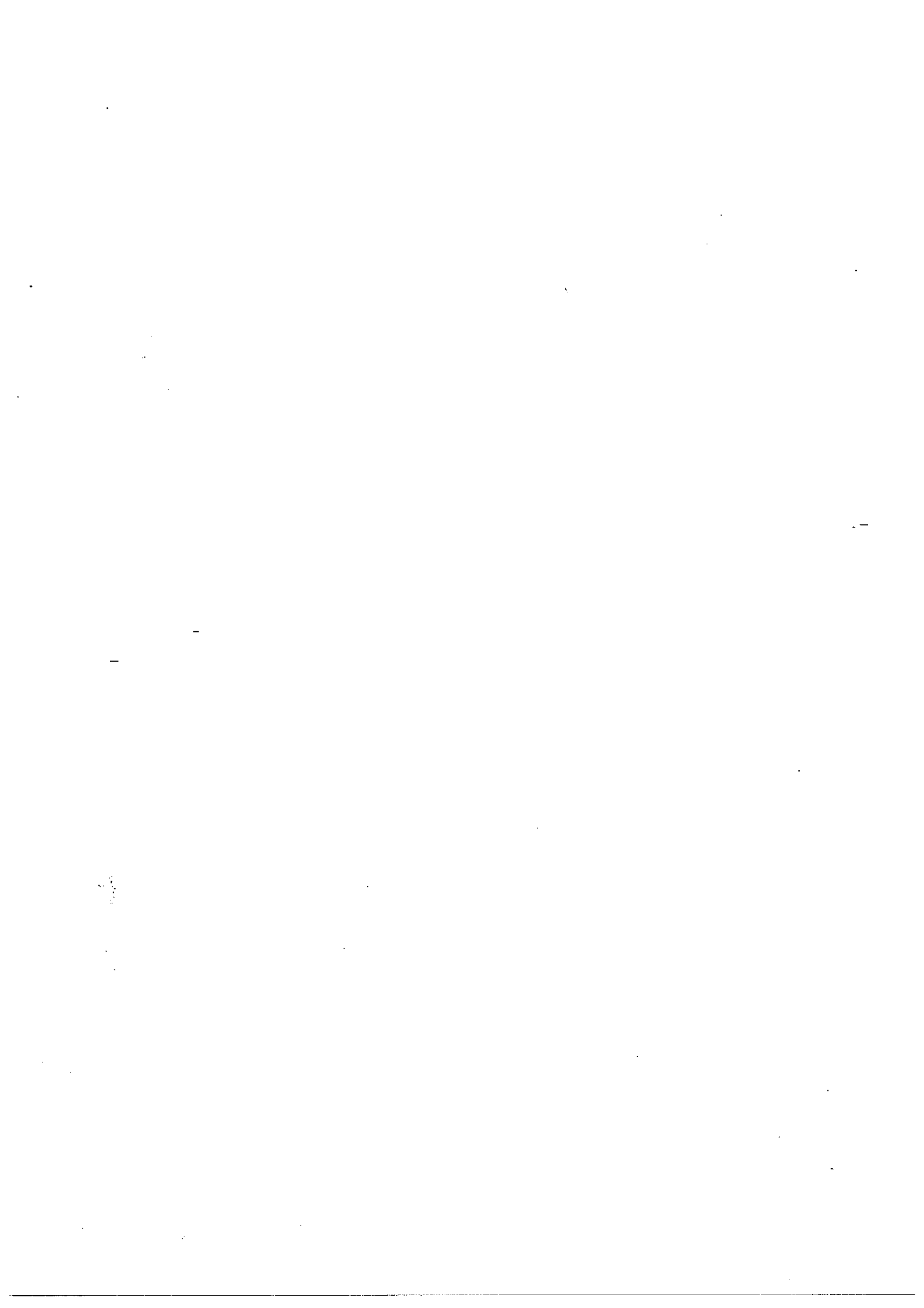


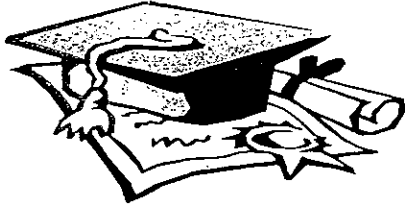
- (a) On which day is his temperature the highest? (1m)

- (b) For how long was he having fever? (1m)



----- End of Paper -----





ANSWER SHEET

EXAM PAPER 2008

SCHOOL : CHIJ PRIMARY SCHOOL
SUBJECT : PRIMARY 5 SCIENCE

TERM : CA 1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17
4	2	2	3	3	2	4	2	4	3	2	3	2	3	3	3	2
Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30				
4	3	4	1	3	3	3	3	2	4	3	3	3				

31) Planet S. There is more oxygen and water is present.

32)a)



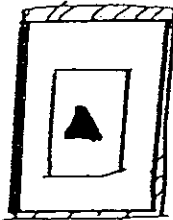
5th July



26th July

b) It will be a crescent moon.

33)a)



b) No triangle-shaped shadow will be formed as the glass is transparent.

34)a)constriction b)Bulb c)Glass tube d)Mercury

35)a)Set-up 2 and 3. The layer of oil ensures there is evaporation of water.

b)The water level in set-up 3 will decrease while the water in set-up 2 remains the same.

36)a)J: The ink drop will rise.

K: The drop of ink will move upwards slowly.

b)When heated, air expands more than water.

37)a)1)To expand the metal rim.

2)To contract the metal rim.

b)As metal is a better conductor of heat than wood, the metal cart wheel will expand more than the wooden rim, causing the wooden rim to break.

38)a)The red blood cell transport oxygen from the lungs to all parts of the body while the white blood cells help to fight the germs in the body.

b)Platelets.

39)a)The sun.

b)The curved mirrors light rays from the sun to the egg.

40)a)Y.

b)Point Y is further away from the sun and hence received relatively less sunlight.

41)The mirror allows the people to see any incoming at the turn of the road.

42)a)B→C→A

b)A: circulatory system. B)Digestive system.

C)Skeletal system.

c)The digestive and circulatory system.

43)a)Set A.

b)Styrofoam and the plastic spoon are poor conductors of heat.

c)Set D.

44)a)She is trying to show that heat travels from a hotter region to a cooler region.

b)The temperature will increase.

45)a)F b)F c)F d)T

46)a)On Monday.

b)Four days.