



Maha Bodhi School  
2009 Continual Assessment 1  
Science

Name : \_\_\_\_\_ ( )

Date : 5 March 2009

Class : Pr 5 ( )

Duration: 1 h 30min ( Parts I & II )

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**Part I: ( 50 marks )**

For each question from 1 to 25, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3 or 4) on the Optical Mark Sheet (OMS).

1. Which of the following will happen when water freezes?

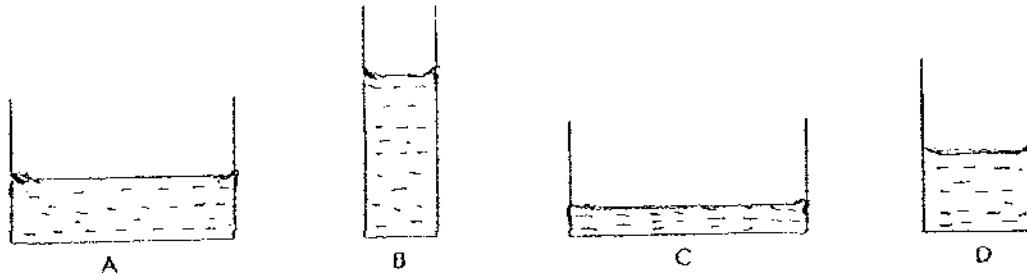
- A: It expands.
- B: It contracts.
- C: It takes in heat from the surroundings.
- D: It changes from liquid state to solid state.

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

2. A beaker of ice-cubes is left on the table for some time. Why are there water droplets formed on the outer surface of the beaker?

- (1) The beaker absorbed water from the surroundings.
- (2) The air in the surroundings condensed on the outer surface of the beaker.
- (3) The water vapour in the surroundings condensed on the outer surface of the beaker.
- (4) The ice-cubes in the beaker melted and formed water droplets on the outer surface of the beaker.

3. The four different containers in the diagram below hold the same amount of water. They are all placed at the window of the Science Laboratory. The amount of water left in each container is measured after 24 hours.



Which of the following **correctly** shows the four containers arranged in increasing amount of water left?

Least -----> Most

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

4. Look at the table below.

P	Q
Evaporation	Boiling
Condensation	Freezing
	Melting

Which would be the most suitable heading for P and Q?

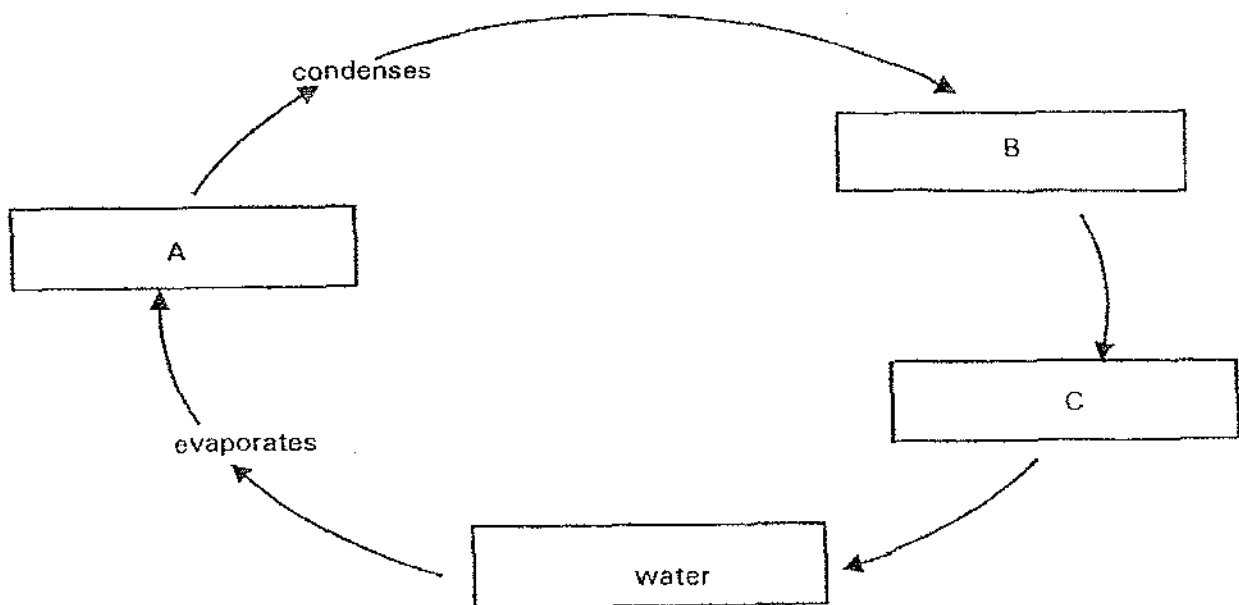
	P	Q
(1)	Processes that the substance loses heat to surroundings	Processes that the substance gains heat from surroundings
(2)	Processes that take place at all temperatures	Processes that take place at a fixed temperature
(3)	Processes that not change state of the substance	Processes that causes the change of state of the substance
(4)	Processes that does not require heating	Processes that require heating

5. Shi Hui wanted to find out if the temperature of the surroundings affects the rate of evaporation. She carried out an experiment using three towels of the same material. What other variables must she consider in order to carry out a fair test?

- A: The size of the towels
- B: The places where the towels were hung
- C: The amount of water used to soak the towels

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

6. Below is a diagram of the water cycle with some of the words missing.



What do the letters A, B and C in the boxes stand for?

	A	B	C
(1)	rain	clouds	water vapour
(2)	water vapour	clouds	rain
(3)	clouds	rain	water vapour
(4)	water vapour	rain	clouds

7. The table below shows the differences between water and water vapour.

	Water	Water vapour
A	Visible	Not visible
B	No mass	Has mass
C	Cannot be compressed	Can be compressed
D	Fixed volume	No fixed volume

Which of the differences between water and water vapour are correct?

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

8. The table below shows the state of four substances A, B, C and D at different temperature.

Substance	State of substance at		
	20 °C	40 °C	60 °C
A	solid	solid	solid
B	solid	liquid	liquid
C	solid	solid	liquid
D	liquid	liquid	liquid

Which of the following statements is correct?

- (1) The boiling point of B is 20 °C.
- (2) The freezing point of C is 40 °C.
- (3) Substance A has the lowest boiling point
- (4) Substance D has the ~~highest~~ <sup>lowest</sup> freezing point.

9. Which one of the following statement about life cycle is not true?

- (1) All living things go through a life cycle.
- (2) Some life cycles are long and some short.
- (3) All living things go through a three stage life cycle.
- (4) Life cycle follows a pattern that repeats itself continuously.

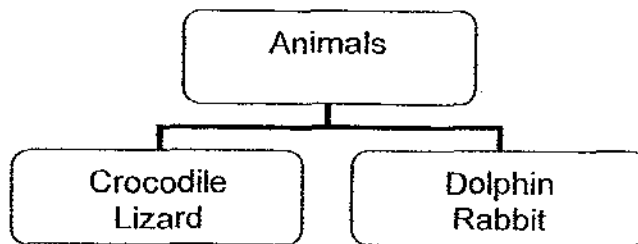
10. Living things reproduce so that \_\_\_\_\_

- (1) there is a variety of life on Earth
- (2) other living things can feed on them
- (3) the next generation can be stronger
- (4) more of their kind continue to be found on Earth

11. Frogs and fish lay many eggs to ensure that \_\_\_\_\_.

- (1) other animals can eat them
- (2) they are more fertile than other animals
- (3) some of the eggs develop into fish and frogs
- (4) they will be the greatest in number in the animal kingdom

12. Study the classification diagram below.



These animals are grouped according to \_\_\_\_\_.

- (1) where they live
- (2) how they reproduce
- (3) how they move
- (4) the types of food they eat

13. Dengue is a harmful disease spread by mosquitoes. At which stage(s) of the mosquito's life cycle is it easier to stop the insect from breeding?

- A: Adult
- B: Egg
- C: Larva
- D: Pupa

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

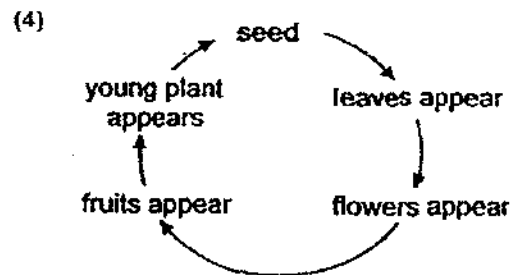
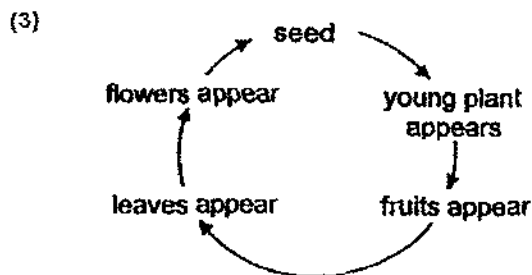
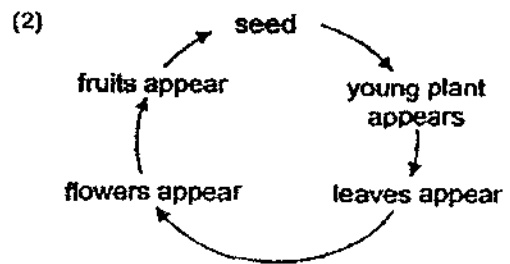
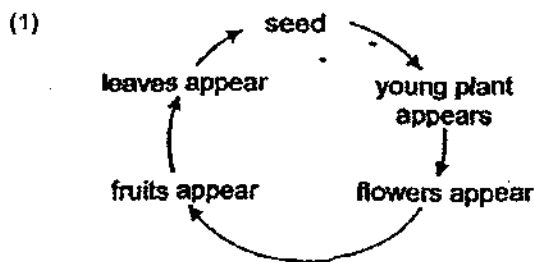
14. The table below shows a description of some characteristics of Animal X and Animal Y.

Description	Animal X	Animal Y
It lays eggs	Yes	Yes
Life cycle	3 stages	4 stages
It is food for humans	Yes	No
It has six legs	No	Yes

Which of the following correctly identifies Animal X and Animal Y?

	Animal X	Animal Y
(1)	Hen	Housefly
(2)	Frog	Grasshopper
(3)	Cockroach	Fish
(4)	Dragonfly	Butterfly

15. Which one of the following figures shows the stages of development of a string bean plant in the correct order?



16. Why are flowers important to plants?

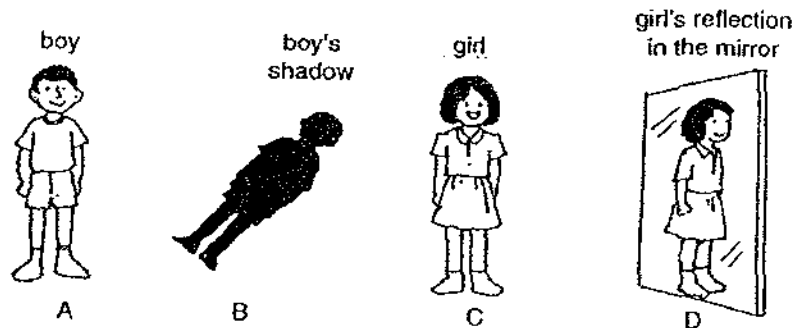
- (1) Flowers are needed to beautify the place.
- (2) The sweet smell of flowers is to attract more people to it.
- (3) The seeds in the flower are needed to grow into new plants.
- (4) Flowers are needed to attract animals like insects to it so that pollination can take place.

17. A seed needs \_\_\_\_\_ to germinate into a plant.

- A: water
- B: warmth
- C: air
- D: sunlight

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

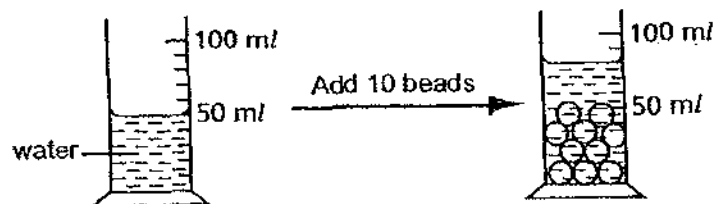
18. Diagram A shows a boy and Diagram B shows his shadow. Diagram C shows a girl and Diagram D shows her reflection in the mirror.



Which of the following statements are true about the four diagrams?

- (1) Both A and C are matter.
- (2) B is matter while D is not.
- (3) A, B, C and D are all matter.
- (4) A, B and C are matter while D is not.

19. 50 ml of water is poured into a measuring cylinder.  
10 beads are then added into the cylinder as shown below.

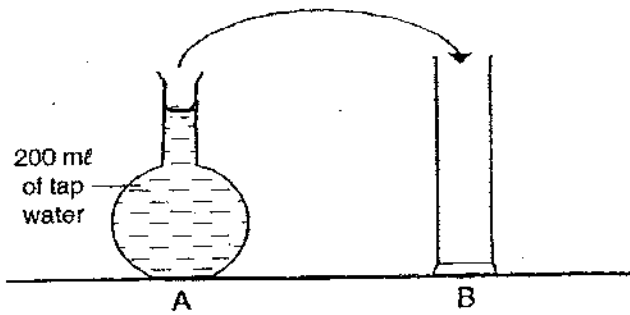


Which of the following statements are true as observed from the diagram above?

- A: The beads sink in the water.
- B: The volume of each bead is 3 ml.
- C: The water level in the measuring cylinder decreased.

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

20. Susan transfers 200ml of tap water from container A to container B.

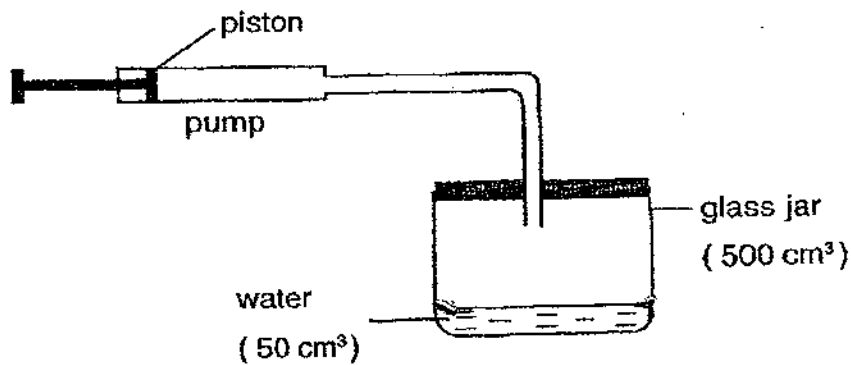


Which of the following changes would she notice about the water in B?

- A. mass
- B. shape
- C. volume
- D. level

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

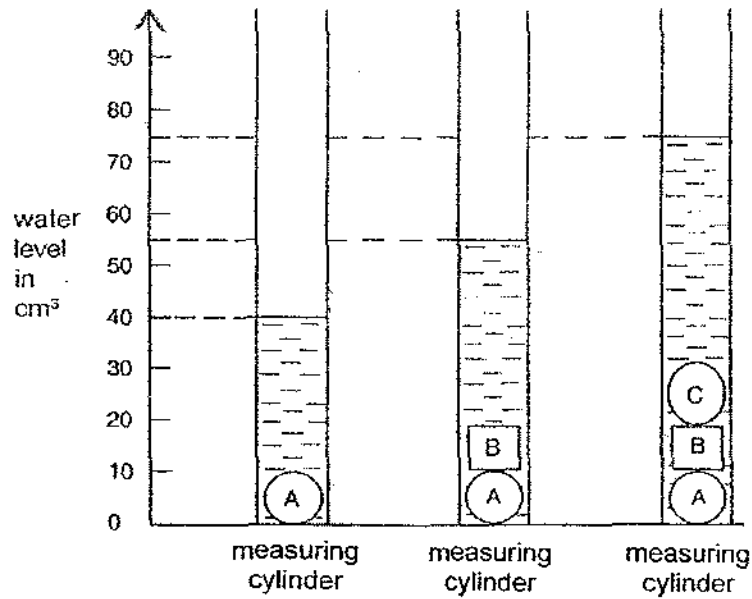
21. The diagram below shows a pump connected to a glass jar. The capacity of the jar is  $500 \text{ cm}^3$ . The jar contains  $50 \text{ cm}^3$  of water.



When the piston is pushed completely in,  $50 \text{ cm}^3$  of air is forced into the jar. The piston was pushed 3 times. What is the volume of air in the jar?

- (1)  $50 \text{ cm}^3$
- (2)  $150 \text{ cm}^3$
- (3)  $450 \text{ cm}^3$
- (4)  $500 \text{ cm}^3$

22. Tom has 3 objects A, B and C. First he puts A in a measuring cylinder containing some water. The water level rises. Then he puts in B followed by C. The diagram below shows the water level changes after each object is put in.

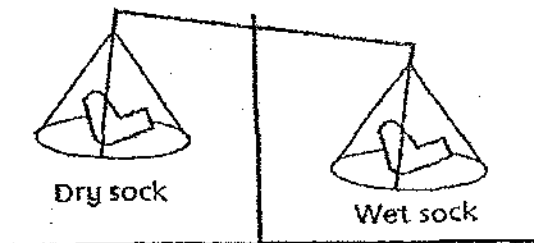


Using only the information in the graph, which of the following statements are true?

- A. The volume of B is 15 cm<sup>3</sup>.
- B. All the objects occupy space.
- C. The volume of C is the largest.
- D. All the objects have a fixed volume.

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

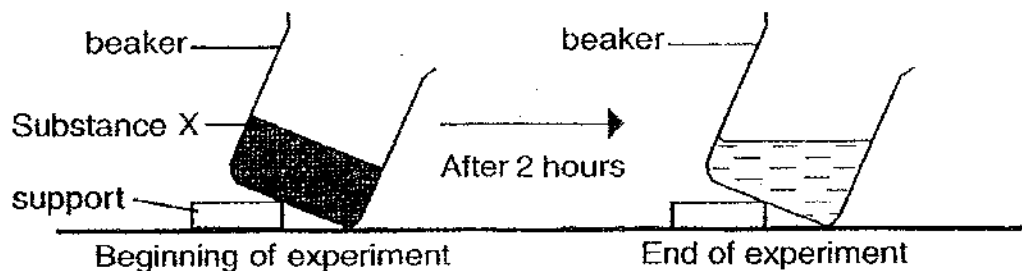
23. The diagram below shows the pans of a weighing scale that were not balanced when 2 similar socks were placed on them.



After a few days the pans became level. Why was this so?

- (1) The lever lost its accuracy.
- (2) Water from the wet sock evaporated.
- (3) The dry socks gained weight from the heat.
- (4) The pan will become heavier on the left side.

24. A beaker containing substance X is allowed to stand on a table for two hours as shown.



At the end of the experiment, it is observed that X has undergone a/some change(s). Which of the following statements(s) about the change(s) is/are correct?

- A. X has undergone a change in state.
- B. X has undergone a change in weight.
- C. X has undergone a change of volume.

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

25. The table below shows some properties of three objects, X, Y and Z.

Object \ Property	X	Y	Z
Fixed Shape?	No	Yes	Yes
Fixed Volume ?	Yes	Yes	Yes
Float on water?	Yes	No	Yes

Which of the following correctly identifies objects X, Y and Z?

- (1)

Object X	Object Y	Object Z
Balloon	Ice	Oil
- (2)

Object X	Object Y	Object Z
Paper plate	Balloon	Magnet
- (3)

Object X	Object Y	Object Z
Oil	Magnet	Styrofoam cup
- (4)

Object X	Object Y	Object Z
Ice	Copper coin	Cork

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Maha Bodhi School  
2009 Continual Assessment 1  
Science

Name : \_\_\_\_\_ ( )

Class : Pr 5 ( )

Duration : 1 h 30 min ( Parts I & II )

Date : 5 March 2009

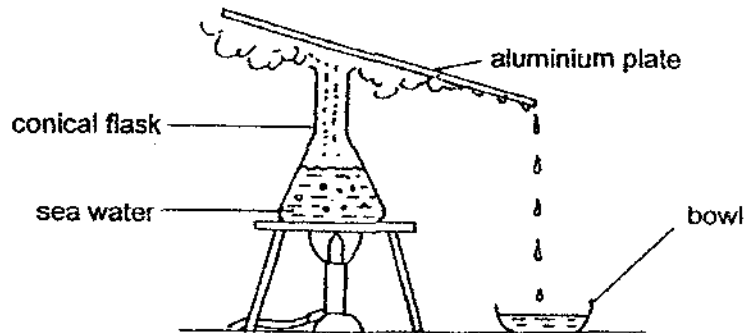
Parent's Signature : \_\_\_\_\_

Part I ( 50 marks )	
Part II ( 30 marks )	
Practical Test ( 20 marks )	
CA1 ( 100 marks )	

**Part II: ( 30 marks )**

**Write your answers to questions 26 to 37 in this script.**

26. An experiment is set up as shown below.



(a) What is the liquid collected in the bowl? [ 1 ]

\_\_\_\_\_

(b) Explain the process that happened at the aluminium plate. [ 2 ]

\_\_\_\_\_

\_\_\_\_\_

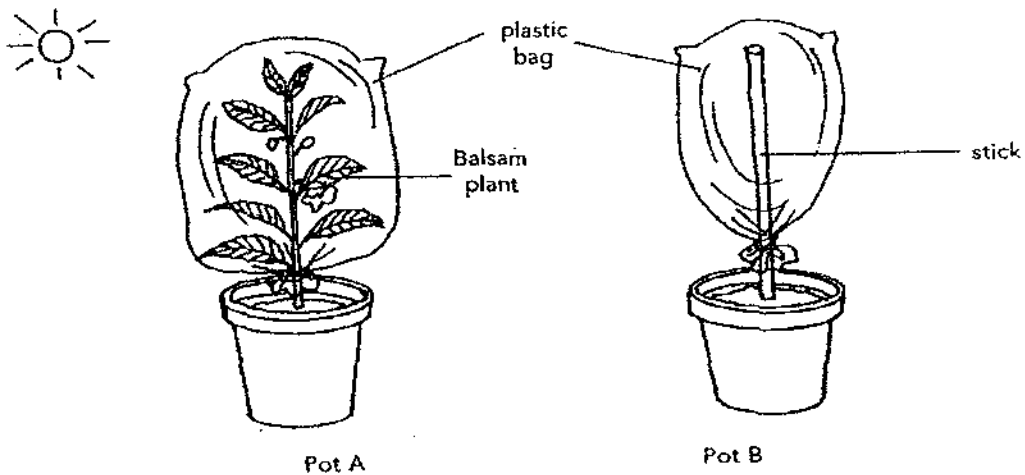
\_\_\_\_\_

27. Three identical containers with equal amounts of water were left in the sun to investigate the rate of evaporation of water. The conditions and the time taken for water to evaporate were recorded in the table below.

Container	Temperature of Water	Presence of Wind	Time taken for water to evaporate (minutes)
A	28 °C	No	50
B	60 °C	No	35
C	100 °C	No	20

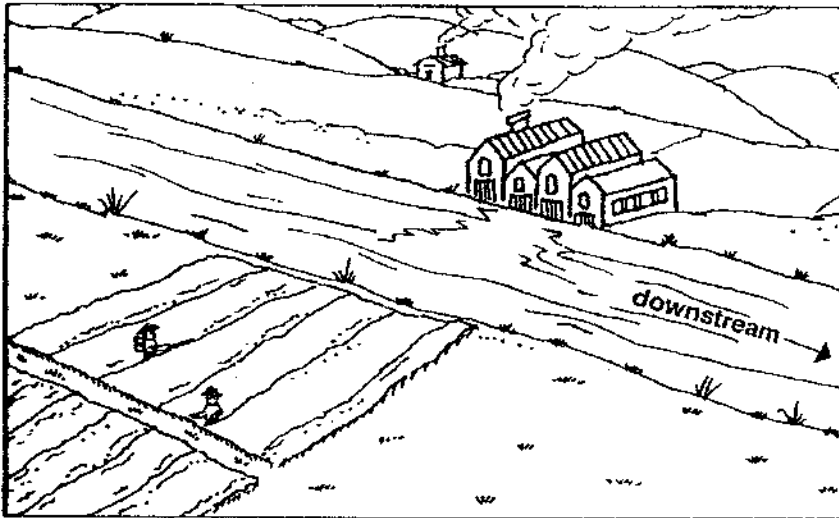
- (a) Which variable was kept constant? [1]
- 
- (b) Which container had the highest rate of evaporation? [1]
- 
- (c) What is the relationship between the rate of evaporation and the temperature of the water? [2]
- 
- 

28. Some pupils set-up the two pots as shown below.



- (a) What would pupils observe after a few hours? [1]
- 
- (b) Explain why ~~Part B~~ was set up in the experiment. [2]
- 
-

29. The picture below shows a river flowing downstream towards the sea. Situated near the river was a factory and a farm.



Residents living further downstream complained that the water in the river was polluted. Give two reasons how the river became polluted.

[2]

- (a) \_\_\_\_\_  
\_\_\_\_\_
- (b) \_\_\_\_\_  
\_\_\_\_\_

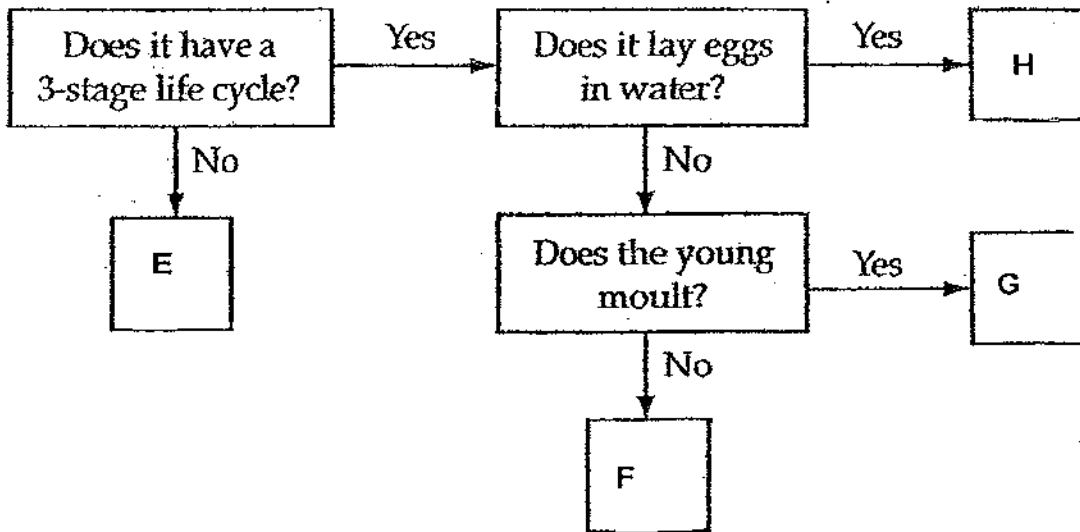
30. (a) State two **similarities** between the life cycle of a butterfly and a grasshopper. [1]

\_\_\_\_\_  
\_\_\_\_\_

- (b) State two **differences** between the life cycle of a butterfly and a grasshopper. [1]

\_\_\_\_\_  
\_\_\_\_\_

31. Study the flow chart below.



(a) Use the words given below to answer the questions.

Grasshopper    clown fish    alligator    housefly

Identify animals E, F, G and H.

[2]

E: \_\_\_\_\_

F: \_\_\_\_\_

G: \_\_\_\_\_

H: \_\_\_\_\_

(b) State one difference between the young of Animal G and the young of Animal F.

[1]

\_\_\_\_\_  
\_\_\_\_\_

32. The diagrams below show two animals.

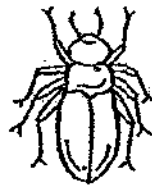


(a) Based on the diagrams above only, state two ways the animals are similar. (Do not compare their shapes and sizes.) [1]

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(b) The diagram below shows an **imaginary** creature.

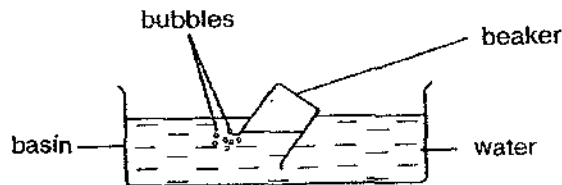


Is it an insect? Why? [1]

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33. Look at the diagram below.



As the beaker is tilted and pushed into a basin of water, bubbles can be seen coming out of the beaker. Explain the observation made. [2]

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34. (a) How many stages does a plant have in its life cycle? [1]

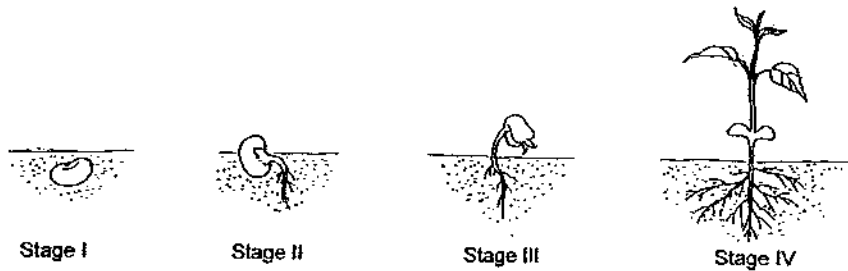
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(b) Name the stages. [1]

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35. The diagram below shows the development of a seed into a young plant.



(a) Where does the young seedling at Stage II and III get its food from? [1]

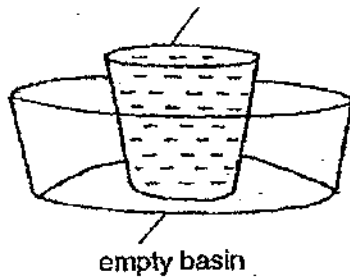
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(b) How does the young seedling at Stage IV get its food? [1]

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36.

cup filled to the brim with water



What happens when a heavy object A is dropped into the cup? [2]

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37. Classify the following into matter and non-matter.

[3]

time	light	heat	iron
electricity	air	sound	dust

Matter	Non-matter

# ANSWER SHEET

EXAM PAPER 2009

SCHOOL : MAHABODHI 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
1	3	1	2	2	2	3	4	3	4	3	2	4	1	2	4	3

Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25
1	2	2	3	3	2	3	3

26)a)Water droplets.

b)The hot water vapour from the conical flask touch the cool surface of the aluminium plate and condenses into tiny water droplets and dripped into the bowl.

27)a)Presence of wind.

b)Container C.

c)The higher the temperature of the water, the faster the rate of evaporation is.

28)a)Some tiny water droplets will form in the inner surface of pot A , while nothing changes in pot B.

b)Pot B is a control to show that the liquid was not from the air in the plastic bag.

29)a)Untreated waste are thrown into the river.

b)Insecticide used by farmers polluted the water.

30)a)They both lay eggs. Both of their young's will moult.

b)The butterfly have four stages while the grasshopper have only three. The butterfly's young does not look like it adult but a young of a grasshopper does.

31)a)E: House fly            F: Alligator  
      G: Grasshopper        H: Clown fish

b)The young of Animal G moults but the young of animal F does not moult.

32)a)They both have six legs. They both have feelers.

b)No, it has eight legs but all insect has only six legs.

33)When the beaker is pushed down, air is collected and the bubbles are the air. The air escapes and allows water to go in.

34)a)It has three stages.

b)Seed, young plant and Adult plant.

35)a)They get it from their seed leaves.

b)It makes food through photosynthesis.

36)Heavy object A will sink and the cup filled to the brim with water will over flow.

37)Matter: air, iron, dust

Non-matter: time, electricity, light, heat, sound