NAN HUA PRIMARY SCHOOL
PRIMARY FOUR 2012
SCIENCE
TERM REVIEW

30

Name : _____( )

Class : P4 _____

Date : _____

Duration : 1 hour

_____
Parent's Signature

SECTION A((9 x 2 marks=18MARKS)

Choose the correct answer and write your answer (1, 2, 3 or 4) in the brackets provided.

1 Which one of the following allows you to see through clearly when you look at it?

(1) A piece of aluminium foil
(2) A piece of frosted glass
(3) A piece of clear plastic
(4) A piece of shattered mirror

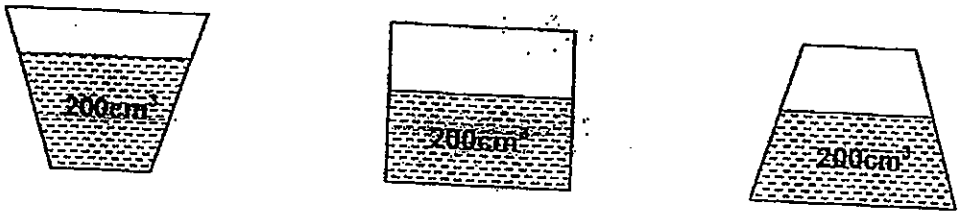
( )

2 Which state(s) of matter has/have a definite shape?

(1) Solid only
(2) Solid and liquid only
(3) Liquid and gas only
(4) Solid, liquid and gas

( )

3

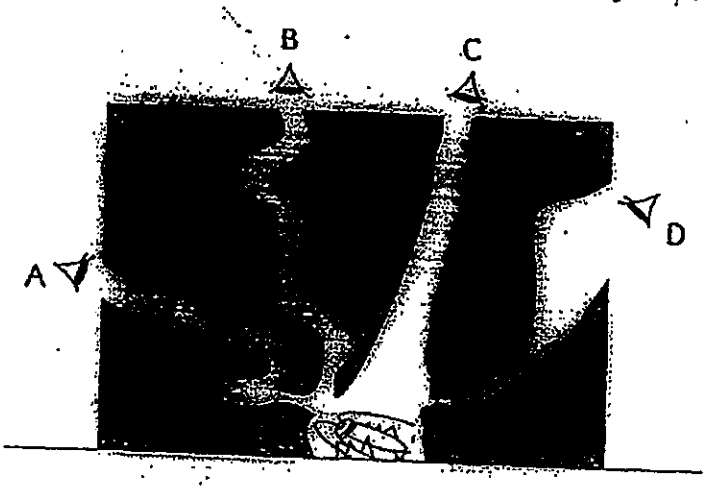


Equal amounts of fruit juice are poured into three glass containers as shown in the above diagram. The results show that the fruit juice has _____.

(1) a definite volume and definite shape
(2) a definite shape but no definite volume
(3) a definite volume but no definite shape
(4) no definite shape and no definite volume

( )

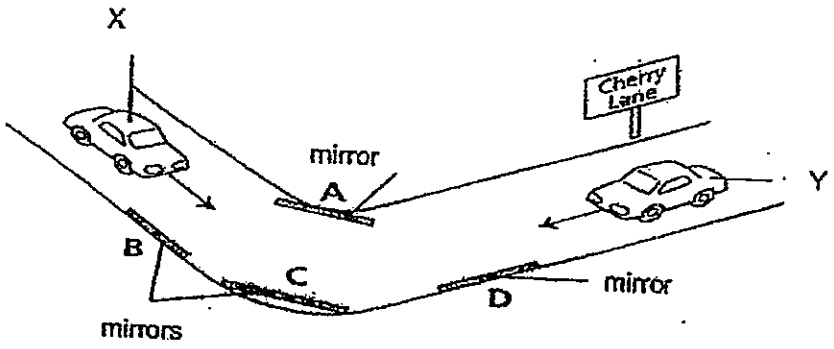
4 Which one of the holes in the wooden block would allow Penny to see the cockroach?



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

( )

5 The diagram below shows a sharp bend along a narrow road. Where would you place a mirror so as to avoid an accident between the two on-coming cars, X and Y?

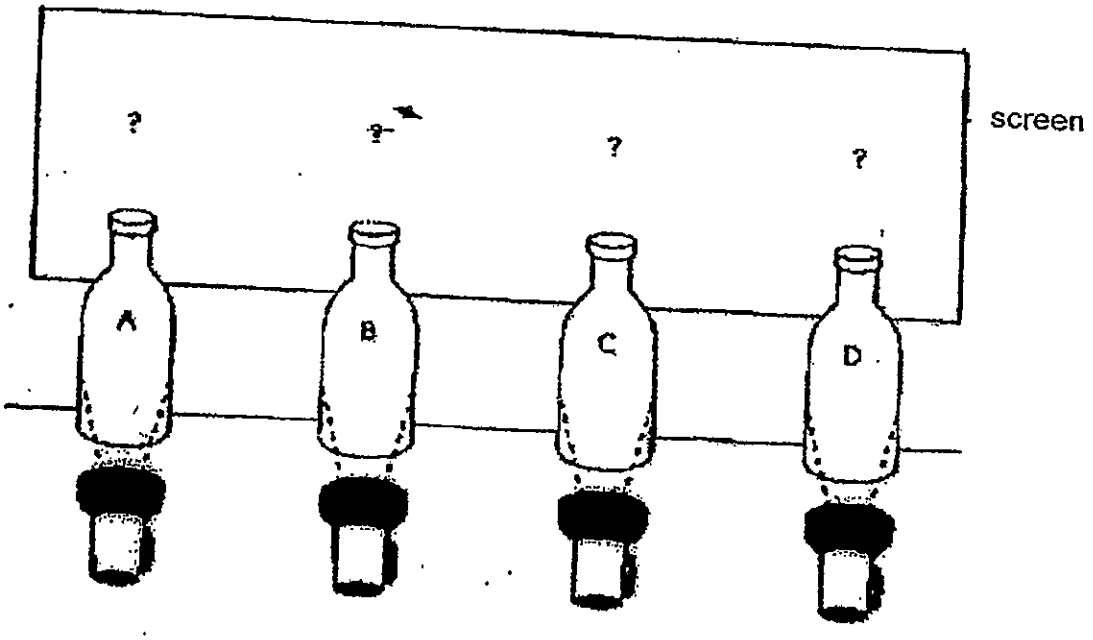


(1) Position A
(2) Position B
(3) Position C
(4) Position D

( )

6 Tom shines a torch on four glass bottles containing different substances. He wants to see which type of liquid allows light to pass through.

The four bottles contain the following:
Bottle A – tomato sauce
Bottle B – dark soya ~~sauce~~ sauce
Bottle C – chocolate milk
Bottle D – pure drinking water

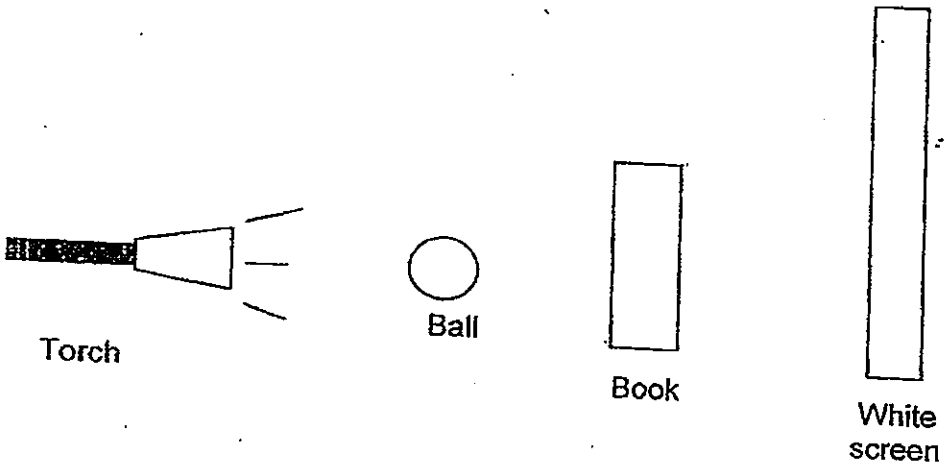


Which of the bottles will produce a patch of light on the screen?

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

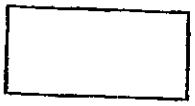
( )

7 Lewis placed a rubber ball and a book between a torch and a piece of white screen as shown below.



Which one of the following would be seen on the white screen?

(1) 

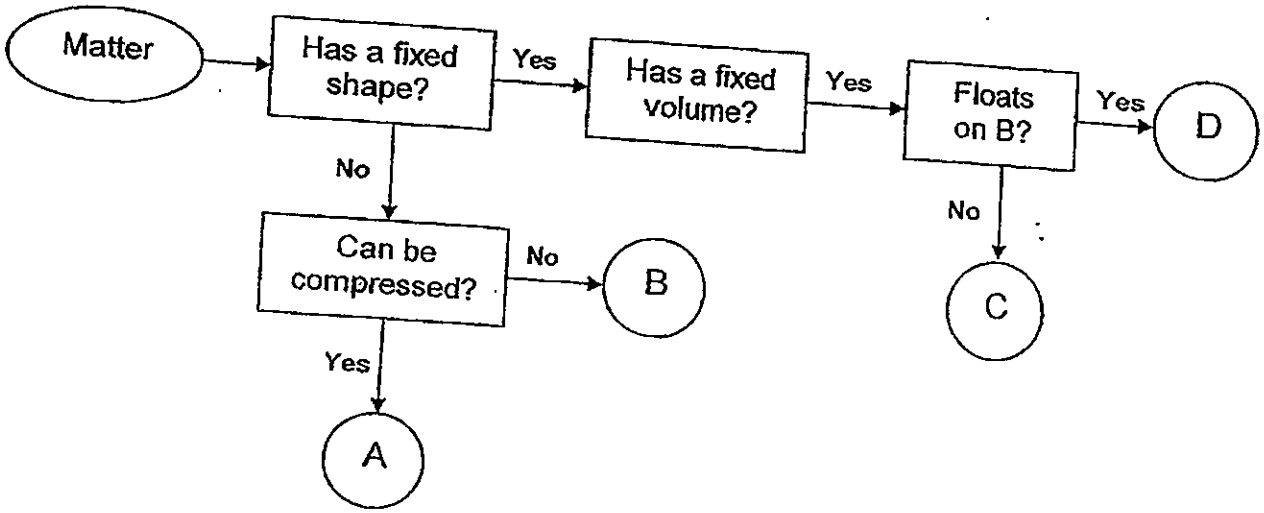
(2) 

(3) 

(4) 

( )

8 Study the flowchart below.



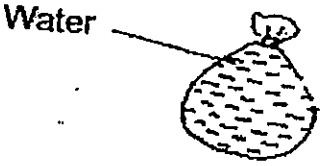
What could A, B, C and D be?

	A	B	C	D
(1)	Air	Oil	Eraser	Metal spoon
(2)	Alcohol	Air	Iron ball	Paper
(3)	Carbon dioxide	Water	Metal ruler	Ice
(4)	Water	Oxygen	Ceramic mug	Oil

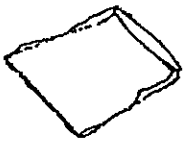
( )

9 Jasmine has three identical plastic bags. She blows air into the first plastic bag and fills the second one with water. The third plastic bag is left empty.

First plastic bag



Second plastic bag



Third plastic bag

Which one of the following sets of readings is she most likely to get when she weighs each of the plastic bags?

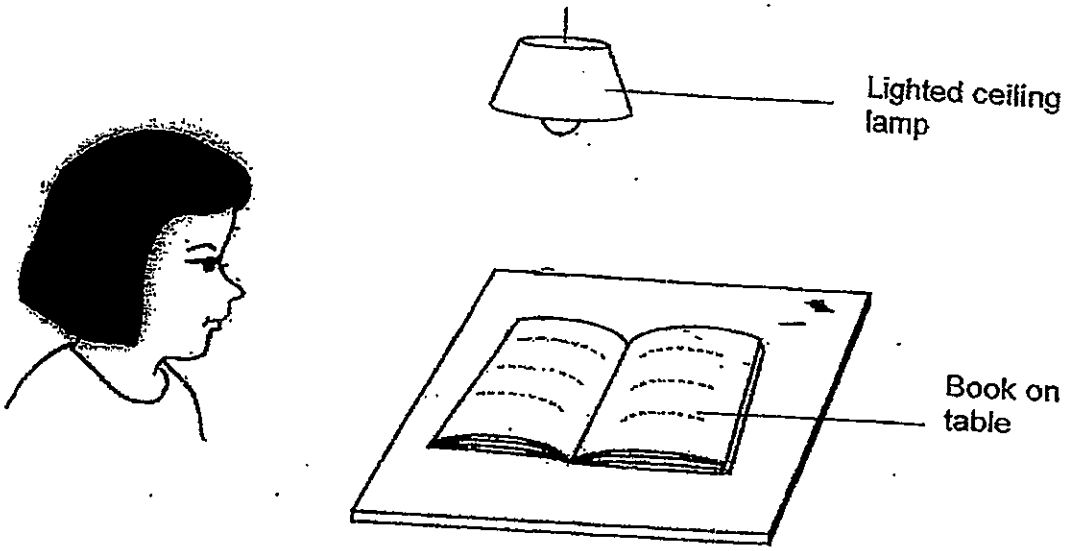
	First Plastic Bag	Second Plastic Bag	Third Plastic Bag
(1)	10g	100g	10g
(2)	100g	100g	10g
(3)	100g	20g	10g
(4)	20g	100g	10g

( )

SECTION B (Total 12 Marks)

For question 10 to 15, write your answers in the space provided. The number of marks is shown in the brackets ( ) at the end of each question or part question.

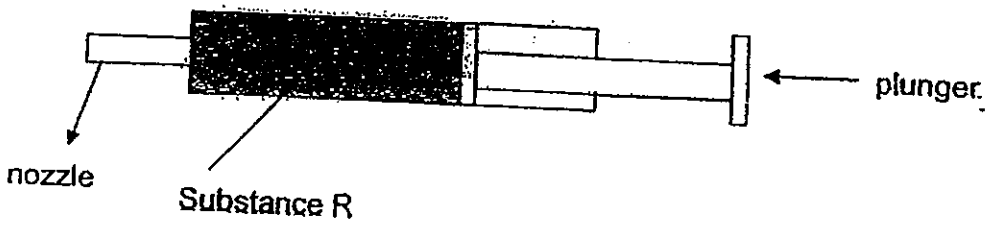
10 The diagram shows Sally in a room lighted with the ceiling lamp and a book on a table.



Draw arrows (⟶) that show the direction of light ray on how she can see the book.
[2]

Score	
	2

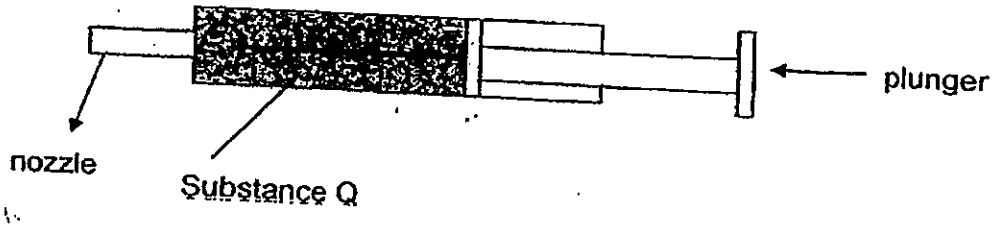
11 Jane placed Substance R in a syringe as shown. She covered the nozzle with her finger and attempted to push the plunger. She found out she could push the plunger in.



(a) Based on the above information, what is Substance R most likely to be? Give a reason for your answer.

[1]

Jane then replaced Substance R with Substance Q in the syringe as shown below and repeated the procedures as mentioned above. She found out that she could not push the plunger in at all.

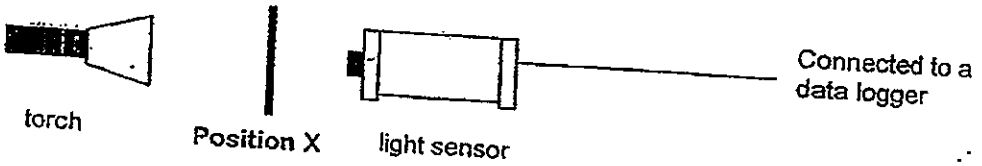


(b) Based on the above information, what is Substance Q most likely to be? Give a reason for your answer.

[1]

Score	
	2

12 Tom wants to find out how much light can pass through various materials placed at position X by using a light sensor as shown below.

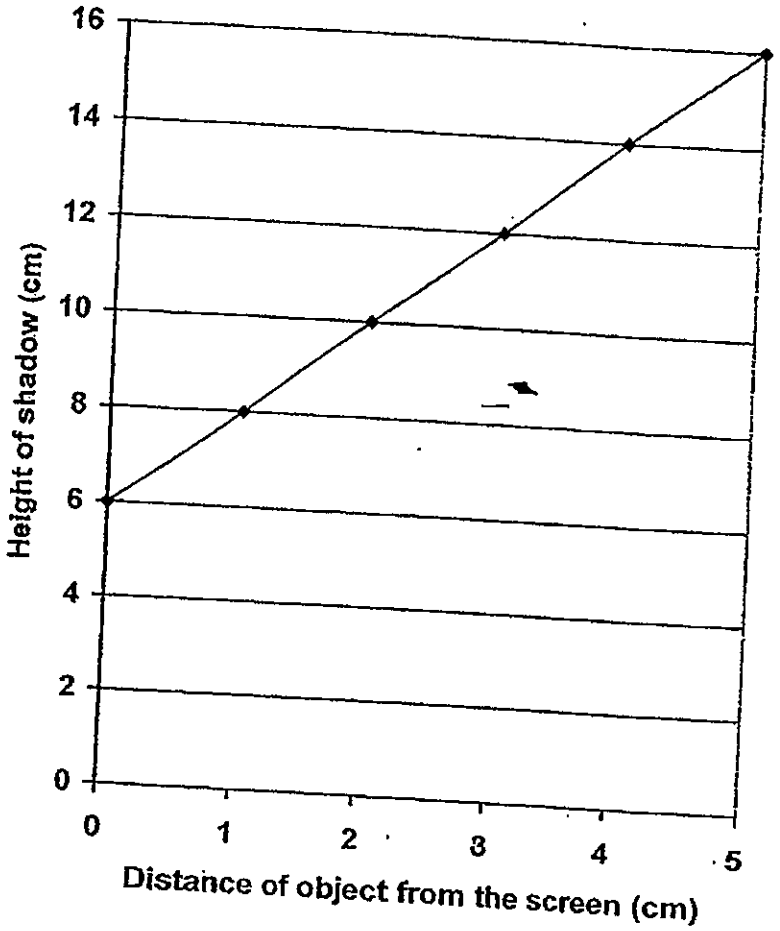


(a) Name the variable he should change (independent variable) in this investigation. [1]

(b) Write down one variable that should remain constant (controlled variable) in this investigation. [1]

Score 2

13 Study the graph below. It shows the changes in the height of the shadow formed by an object on the screen as the distance between the object and the screen changes.



(a) What is the height of the object?

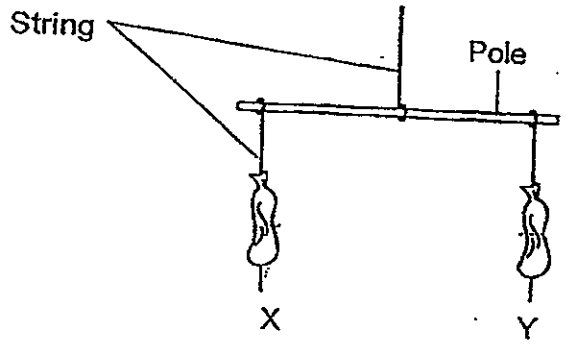
[1]

(b) What is the relationship between the height of the shadow and the distance of the object from the screen?

[1]

Score	
	2

14 Praveen conducted an experiment to test if air is a matter. He hung two balloons, X and Y, at both ends of a pole and observed that the set-up was balanced as shown in the diagram below.



Which of the following can be observed to the setup when Balloon X is inflated? Put a tick (✓) in the appropriate box.

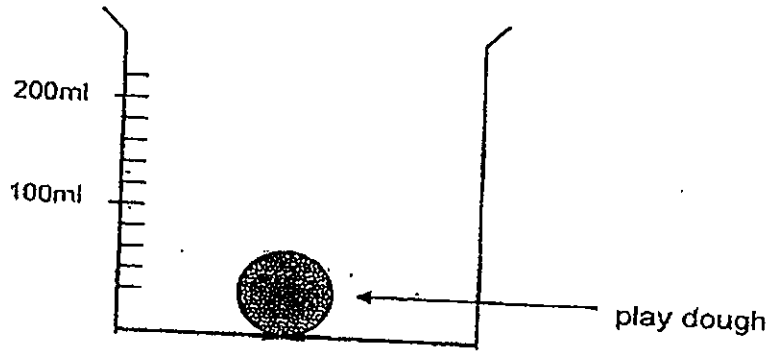
[1]

Statements	
Sides of the pole with Balloon X and Y remain the same.	
Side of the pole with Balloon X will tilt downwards.	
Side of the pole with Balloon Y will tilt downwards.	
Sides of the pole with Balloon X and Y will move downwards.	

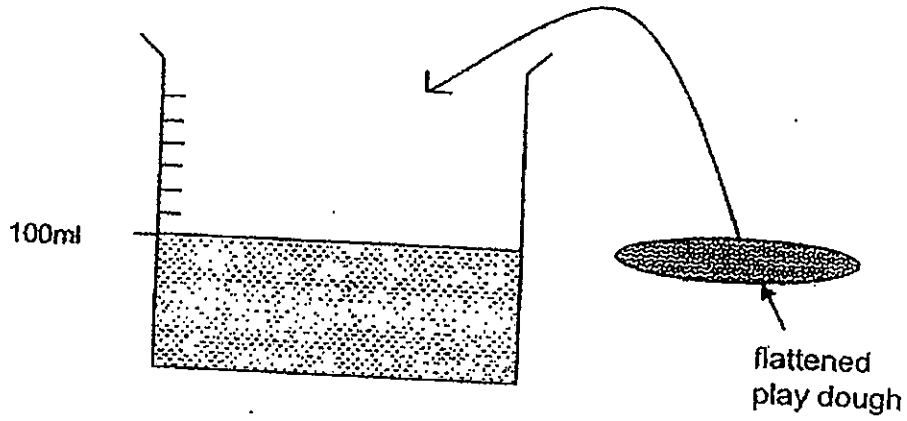
Score	/ 1

15 Alice lowered a ball of play dough into a beaker containing 100ml of water. The volume of the play dough was 30 cm^3.

(a) **Draw the water level** with your pencil and ruler in the diagram below. [1]



After that, she took the same amount of play dough and flattened it before she lowered into another beaker containing 100 ml of water as shown below.

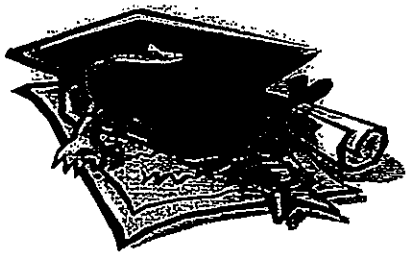


(b) What would be the new water level when she lowered the flattened play dough into the beaker gently? [1]

(c) What can you conclude about the property of play dough from your answer in (a) and (b)? [1]

-End of paper-

Score 3



ANSWER SHEET

EXAM PAPER 2012

SCHOOL : NAN HUA
SUBJECT : PRIMARY 4 SCIENCE

TERM : CA1

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

10)

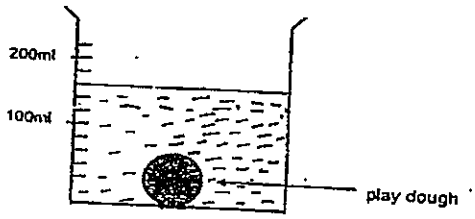
11)a)It is most likely to be a gas. Gas has no definite volume and can be compressed, therefore it is most likely to be a gas.
b)It is most likely to be liquid. Liquid has a definite volume and cannot be compressed, therefore it is most likely to be a liquid.

12)a)The type of materials had to change.
b)The size of material, thickness of material, the distance between the torch and the light sensor, and the distance between the material and the torch must remain constant.

13)a)The height of the object is 6cm.
b)The height of the shadow increases as the distance of the object from the screen increase.

14)Side of the pole with Balloon X will tilt downwards.

15)a)



b)It will still be 130cm3
c)The play dough has a definite volume.