

UJIAN PERCUBAAN UPSR

TAHUN 2013

SAINS TAHUN 6

六年级 科学

1 jam 15 minit

1. 这份试卷分为两组：A 组和 B 组。回答所有的试题。
2. A 组有 30 题。每题有 A、B、C 和 D 四个选项，考生只能从中选出一个正确或最适当的答案。
3. B 组有 4 题。把答案写在试卷中指定的地方。
4. 考试结束时，必须把这份试卷交上。

姓名：.....

班级：.....

Section A
A 组
[30 marks]
(30 分)

Answer all questions.
回答所有的问题。

1. The diagram 1 shows a living thing.
图 1 显示一种生物。



Diagram 1
图 1

The living thing excretes its waste products through its...
这种生物通过.....来排泄。

- A. lungs
肺
B. kidneys
肾脏
C. moist skin
湿皮肤
D. trachea structure
气孔

2. The information shows the specific characteristics of two animals.
以下的资料显示两种动物的特征。

P Able to change skin colour
according to the surrounding.
身体的颜色随着四周环境的颜色而改变。

Q Has sharp claws to hurt its
enemies.
用利爪来残杀敌人。

Which of the following represent animals P and Q?
以下哪项代表动物P 和Q?

	P	Q
A	Arctic fox 北极狐	Elephant 大象
B	Chameleon 变色龙	Tiger 老虎
C	Zebra 斑马	Lion 狮子
D	Eagle 老鹰	Cow 牛

3. Diagram 2 shows animals classified into two groups, X and Y.
图2 显示动物被归类成X 和Y 两组。

X	Y
Rat 老鼠	Frog 青蛙
Bat 蝙蝠	Butterfly 蝴蝶
Lion 狮子	Turtle 海龟

Diagram 2
图2

Which are represent by X and Y?
下面哪项代表X 和Y?

A	X	Y
	Take care of their young 会照顾它们的幼儿	Take care of their eggs 会照顾它们的卵
B	Give birth 胎生	Take care of their eggs 会照顾它们的卵
	Live in solitary 独居	Live in group 群居
C	Give birth 胎生	Lay eggs 卵生
D		

4. Diagram 3 shows a plant.
图三显示一种植物。



Diagram 3
图 3

Which of the following plant have the same breeding method with the plants above?

以下哪项植物的繁殖方法和上述植物相同?

- A. Nest fern
鸟窝蕨
- B. Delonix
凤凰木
- C. Banana Tree
香蕉树
- D. Dandelion
蒲公英

5. Which of the following characteristics can help the plants avoid being uprooted when strong wind comes?

下列哪项外形特征使植物免于被强风连根拔起?

- A. Deciduous
落叶
- B. Stem with waxy stem
有蜡质层的茎
- C. Curly leaves
卷曲的叶片
- D. Firm and strong roots
牢固扎实的根

6. Which of the following are diseases caused by microorganisms?

以下哪一项疾病是由微生物所引起的?

- | | |
|------------------|----------------------|
| I Measle
麻疹 | II Lung cancer
肺癌 |
| III Mumps
腮腺病 | IV Asthma
哮喘 |

- | | |
|-------------------------|---------------------------|
| A. I and II
I 和 II | B. I and III
I 和 III |
| C. II and IV
II 和 IV | D. III and IV
III 和 IV |

7. Table 1 shows the average height of four type of plants.

表 1 显示四种植物的平均高度。

Table 1

表 1

Plants 植物	Average height / m 平均高度 / 米
Banana 香蕉	3.4
Rubber 橡胶树	8.1
Cocoa 可可	3.5
Coconut 椰树	10.9

Based on table 1, which plants could be planted together to avoid competition for sunlight?

根据表 1, 哪些植物可被种植在一起以避免竞争阳光?

- A. Banana plant and cocoa plant
香蕉树和可可
- B. Rubber tree and cocoa plant
橡胶树和可可
- C. Rubber tree and coconut tree
橡胶树和椰树
- D. Coconut tree and banana plant
椰树和香蕉树

8. What is meant by friction?

什么是摩擦力?

- A. A force that acts on an object.
施加在一个物体上的力
- B. A force that changes the position of an object.
改变物体位置的力
- C. A force that opposes the movement of an object.
与物体移动的方向相反的力
- D. A force that increases the speed of the moving object.
使物体移动的速度增加的力

9. Diagram 4 shows the length of objects in the classroom.

图 4 显示课室里的物体的长度。

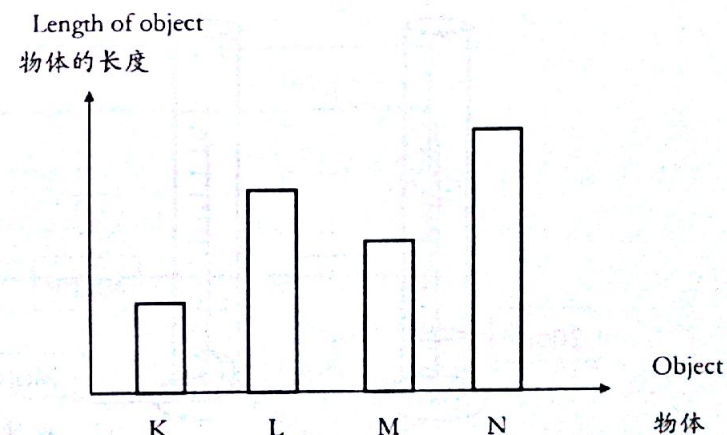


Diagram 4

图 4

Which of the following statement is correct?

以下哪一项说明是正确的?

- A. K is longer than L
K 比 L 长
- B. L is longer than N
L 比 N 长
- C. M is longer than L
M 比 L 长
- D. L is longer than K
L 比 K 长

10. Diagram 5 shows an experiment.

图 5 显示一项实验。

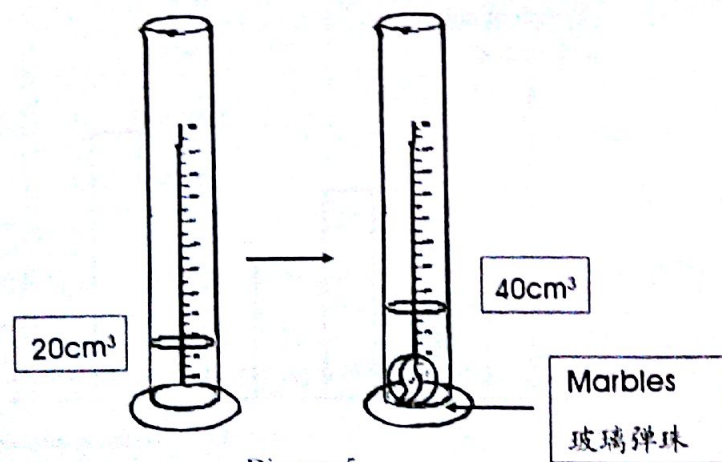


Diagram 5

图 5

How many marbles should be added to increase the water level to 80cm^3 ?

须再加入多少个玻璃弹珠才可让水位上升至 80cm^3 ?

- A. 2 marbles
2 个玻璃弹珠
- B. 3 marbles
3 个玻璃弹珠
- C. 4 marbles
4 个玻璃弹珠
- D. 7 marbles
7 个玻璃弹珠

11. Diagram 6 shows an electric circuit.

图 6 显示一个电路。

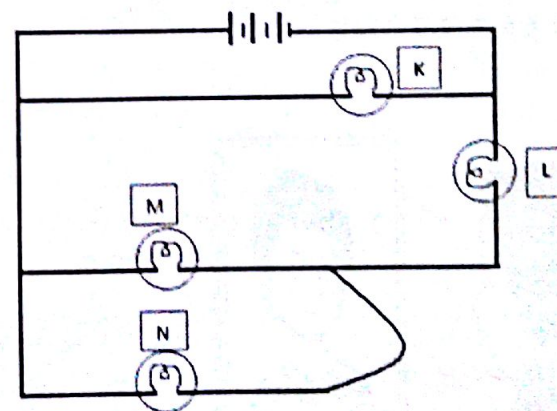


Diagram 6

图 6

Which of the bulb does **not** light up if bulb L blows?
如果灯泡 L 坏了, 哪些灯泡将不会发亮?

- A. K only
K 而已
- B. M and K
M 和 K
- C. M and N
M 和 N
- D. K and N
K 和 N

12. Diagram 7 shows Ali looking at his image in the mirror.

图 7 显示阿里正在看着他在镜子的影像。

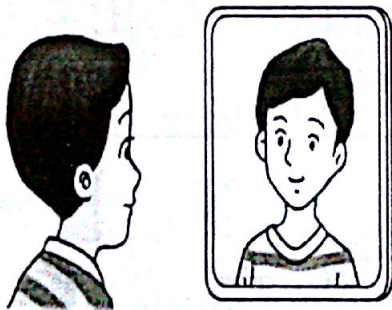
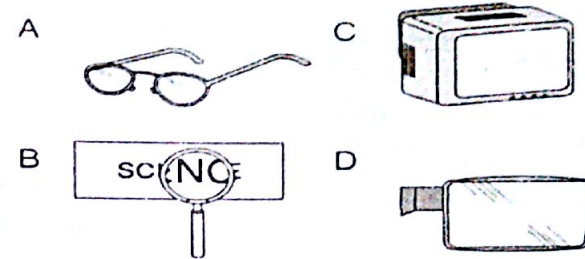


Diagram 7
图 7

Which of the following has the same function as the mirror?

下列哪项的用途和镜子一样?



13. Diagram 8 shows a squeezing toothpaste action.

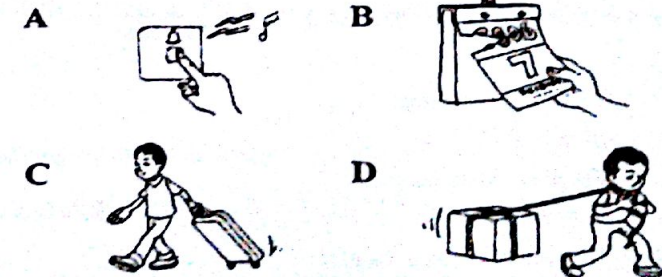
图 8 显示挤牙膏的动作。



Diagram 8
图 8

Which of the following using the same force as above?

以下哪项说明的力与上图一样?



14. Which of the following appliances changes electrical energy into light and sound energy?

下列哪个家庭电器把电能转换为光能和声能?

- A. Television
电视机
- B. Radio
收音机
- C. Alarm clock
闹钟
- D. Telephone
电话

15. Diagram 9 shows a cup of hot water.

图 9 显示一杯热水。



Diagram 9

图 9

What will be happened, if a few ice cubes were added into the cup?

如果放入几块冰于杯子里, 将会产生什么变化?

- I. The water gains heat
水吸收热能
- II. The water loses heat
水失去热能
- III. The water becomes warmer
水越来越热
- IV. The water becomes cooler
水越来越冷

A. I and II
I 和 II

B. I and III
I 和 III

C. II and IV
II 和 IV

D. III and IV
III 和 IV

16. The information below shows the steps of an investigation to measure the volume of solid.

以下的资料显示测量固体体积的步骤。

P - Pour water into measuring cylinder and record its initial volume

将水倒入量筒后并记录的体积

Q - Put a marble into a measuring cylinder

将玻璃弹珠放入量筒

R - Calculate the volume of marble

计算玻璃弹珠的体积

S - Record the final volume of water

记录实验后水的体积

Which of the following shows the correct sequence of the steps in the process ?

以下哪项是实验步骤的正确次序?

- A. Q,P, R, S
- B. P, Q, S,R
- C. Q, P, S, R
- D. Q, P, R, S

17. What is the characteristics of a spoilt food ?

已变质的食物有什么特征?

- | | |
|-------------------------------|-----------------------|
| I. Slimy
有黏液 | II. Tasteless
没有味道 |
| III. Unpleasant smell
有酸臭味 | IV. Last longer
耐久 |
-
- | | |
|-------------------------|---------------------------|
| A. I and II
I 和 II | B. I and III
I 和 III |
| C. II and IV
II 和 IV | D. III and IV
III 和 IV |

18. The following information is recorded when the blue and red litmus paper is being put into the substance L, M and N

下列资料显示当蓝色和红色石蕊试纸被放入物质 L、M 和 N 后的观察结果。

Substances L - Red litmus paper become blue colour.

物质 L - 红色石蕊试纸变蓝

Substances M - Blue litmus paper become red colour.

物质 M - 蓝色石蕊试纸变红

Substances N - Blue and red litmus paper has no changes.

物质 N - 蓝色和红色石蕊试纸的颜色没有变化

Which of the following represent substances L, M and N?

下列哪项显示物质 L、M 和 N?

	L	M	N
A	芒果 Mango	食油 Cooking Oil	蛋白 Egg white
B	蛋白 Egg white	芒果 Mango	食油 Cooking Oil
C	蛋白 Egg white	食油 Cooking Oil	芒果 Mango
D	食油 Cooking Oil	蛋白 Egg white	芒果 Mango

19. Which of the following are used as preservatives in food?

以下哪项是防腐剂?

- | | |
|-----------------|----------------|
| I. Vinegar
醋 | II. Water
水 |
| III. Sugar
糖 | IV. Salt
盐 |

- | | |
|---------------------------|---------------------------------|
| A. I and II
I 和 II | B. I, II and III
I, II 和 III |
| C. II and III
II 和 III | D. I, III and IV
I, III 和 IV |

20. Which of the following statements explain the benefits of recycling and reuse industrial waste?

以下哪个说明再循环及再使用工厂废物的好处?

- | |
|--|
| I. Reduce pollution.
减少污染 |
| II. Prevent the destruction of natural resources.
预防天然资源被破坏 |
| III. Produce new products from used materials.
把用过的材料制成新产品 |
| IV. Reduce the cost of waste disposal.
减少处理废物的费用 |

A. I and III

I 和 III

B. I, II and IV

I, II 和 IV

C. II, III and IV

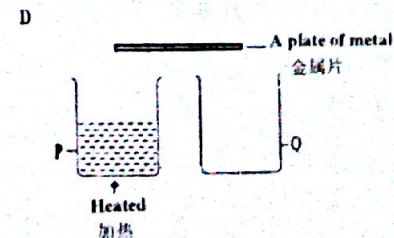
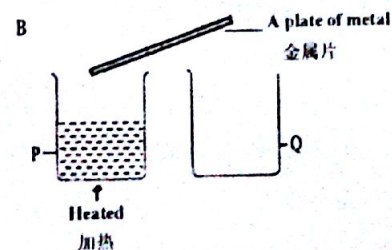
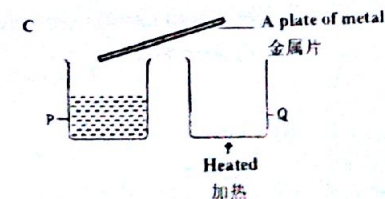
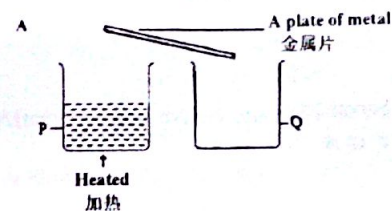
II, III 和 IV

D. I, II, III and IV

I, II, III 和 IV

21. Meng Wei wants to transfer the water from beaker P to beaker Q by using a plate of metal. Which of the following is the correct method can be done by Meng Wei?

明伟要用金属片把水从烧杯 P 移到烧杯 Q。以下哪个方法是明伟可以采用的?



22. When the light of the sun completely obscured by the moon. Which of the following phenomena will be happen?
当太阳的光完全被月球遮住时，下面哪项现象将会产生？

A. partial solar eclipse
日偏食
B. total solar eclipse
日全食
C. total lunar eclipse
月全食
D. partial lunar eclipse
月偏食

23. Which of the following constellations point to the north?
下列哪个星座指向北方？

I. Southern Cross 南方十字座	II. Scorpion 天蝎座
III Orion 猎户座	IV. Big Dipper 北斗七星
A. I and II I 和 II	B. III and IV III 和 IV
C. II and IV II 和 IV	D. I and IV I 和 IV

24. Diagram 10 shows the time at point X on the Earth is 12 p.m.
图 10 显示地球表面 X 地区的时间是中午 12 时正。

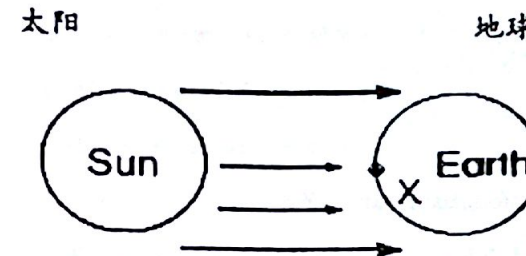


Diagram 10
图 10

After the Earth rotates one per four round, predict the correct time at point X.
当地球运转四分之一圈后，试预测 X 地区的正确时间。

A. 3:00p.m.
B. 6:00 p.m.
C. 9:00p.m.
D. 12:00a.m.

25. Xiao Min stands at the school field at 6:30 p.m. Predict the direction of shadow formed.

小民在下午六时三十分站在学校草场。试预测当时影子形成的方向。

- | | |
|---------------|---------------|
| A. North
北 | B. South
南 |
| C. East
东 | D. West
西 |

26. The following information is about X.

以下资料是关于 X。

- Huge chunk of rock
巨大的岩石
- Travel around the Sun
绕着太阳运转
- Situated between Mars and Jupiter
在火星和木星之间

What is X?

什么是 X?

- | | |
|--------------------|-----------------|
| A. Asteroid
小行星 | B. Planet
行星 |
| C. Comet
彗星 | D. Meteor
流星 |

27. Which of the following shows the correct sequence in the development of technology in water transportation?

以下哪项是水路交通工具的工艺进展的正确排列?

- A. Raft → sailing boat → sampan → motor boat
木筏 → 帆船 → 舢板 → 快艇
- B. Sailing boat → motor boat → sampan → raft
帆船 → 快艇 → 舢板 → 木筏
- C. Raft → sampan → sailing boat → motor boat
木筏 → 舢板 → 帆船 → 快艇
- D. Motor boat → sailing boat → raft → sampan
快艇 → 帆船 → 木筏 → 舢板

28. Diagram 11 shows the objects are classified into group X and Y.

图 11 显示被归类为 X 和 Y 组的物体。

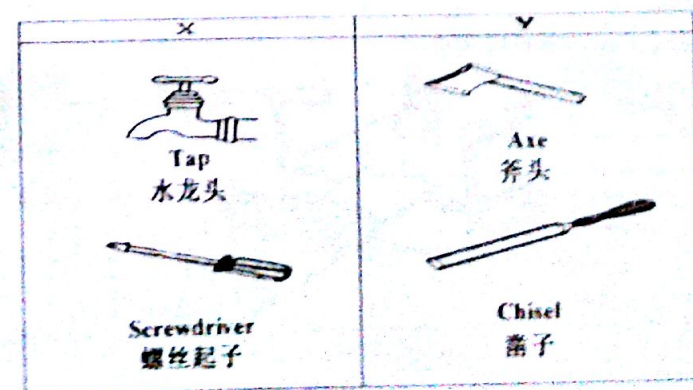


Diagram 11

图 11

Which of the following have been correctly classified into group X and group Y?

以下哪一项是X组和Y组的正确归类?

	X	Y
A	Knife 刀	Spanner 扳手
B	Steering wheel 方向盘	Scissor 剪刀
C	Hammer 铁锤	Knife 刀
D	Ladder 梯子	Ice tong 冰钳

29. Diagram 12 below shows the use of a simple machine.

下图显示简单机械的用途。

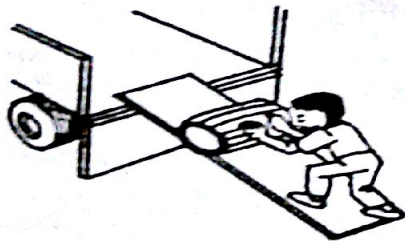


Diagram 12

图 12

Which of the following activities involves the use of the principle of a simple machine which is the same as the one shown above?

以下哪项活动所使用的简单机械原理与上图的机械原理相同?

- A. Raising a flag
升旗
- B. Pushing a trolley
推动手推车
- C. Sharpening a pencil
削铅笔
- D. Walking up the stairs
上楼梯

30. Diagram 13 shows time taken for a worker loading three barrels onto a lorry.

图十三显示一个工人把三个铁桶移上罗理所需要的时间。

Without simple machine 没有使用简单机械	Using simple machine 使用简单机械
30 minutes 30 分钟	10 minutes 10 分钟

Diagram 13

图 13

Which of the following statement is correct?

以下哪个说明是正确的?

- A. Work is faster when using a simple machine
当使用简单机械时, 工作变得较快
- B. Mass of barrels decreases when using a simple machine
当使用简单机械时, 铁桶的质量减少
- C. Longer time is needed when using a simple machine
当使用简单机械时需要较长的时间
- D. More energy are needed when using a simple machine
当使用简单机械时需要较多的能

Section B

B 组

(20 marks)

(20 分)

Answer all question.

回答所有的试题.

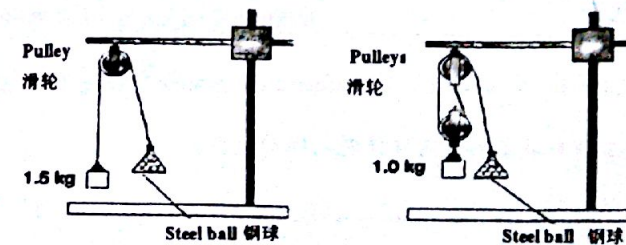
Write your answers in the space provided.

把答案写在虚线上.

1. A group of pupil carry out a fair test. They use a pulley to lift 8 steel balls and the mass of the load needed is recorded. After that, they use two pulleys to repeat the fair test. The diagram below shows the results of the fair test.

一群学生进行了一项实验。他们用滑轮举起 8 个钢球并记录了负荷的质量。然后, 他们利用两个滑轮重复以上的实验。

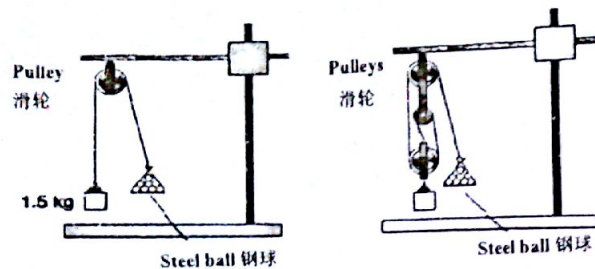
下图显示了实验结果。



- a) What is the purpose of this fair test?

这项实验的目的是什么?

(1 分)



- b) Predict the mass of a load X needed to lift the steel balls if three pulleys are used in the fair test.

如果使用三个滑轮来进行实验，预测举起负荷 X 的质量。

(1 分)

- c) State what is kept the same in this investigation.

写出这项实验中必须保持不变的事项。

(1 分)

- d) State one relationship between the two information gathered in this investigation.

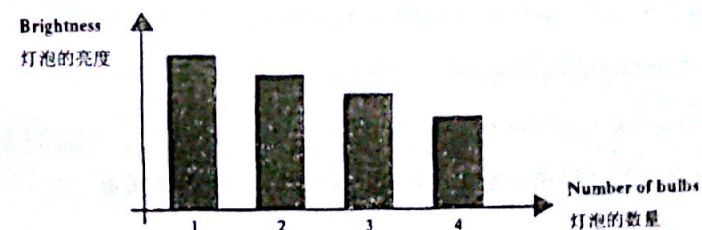
写出这项实验中所收集到的两项资料之间的关系。

(1 分)

2. Lily carried out an investigation. She connected one bulb in a series circuit and recorded the brightness of the bulb. She repeated this step for 3 and 4 bulbs. 丽丽进行一项实验。她以一个灯泡连接在串联电路中，并记录灯泡的亮度。过后，她再以 2 个，3 个和 4 个灯泡重复以上的实验。

The bar chart below shows this results.

以下条形统计图显示了他的观察结果。



- a) What is the aim of this investigation?

这项实验的目的是什么？

(1 分)

- b) State what is kept the same in this investigation.

写出这项实验中必须保持不变的事项。

(1 分)

c) What conclusion can she made from this investigation?

乙在项实验中能作出什么结论?

(1 分)

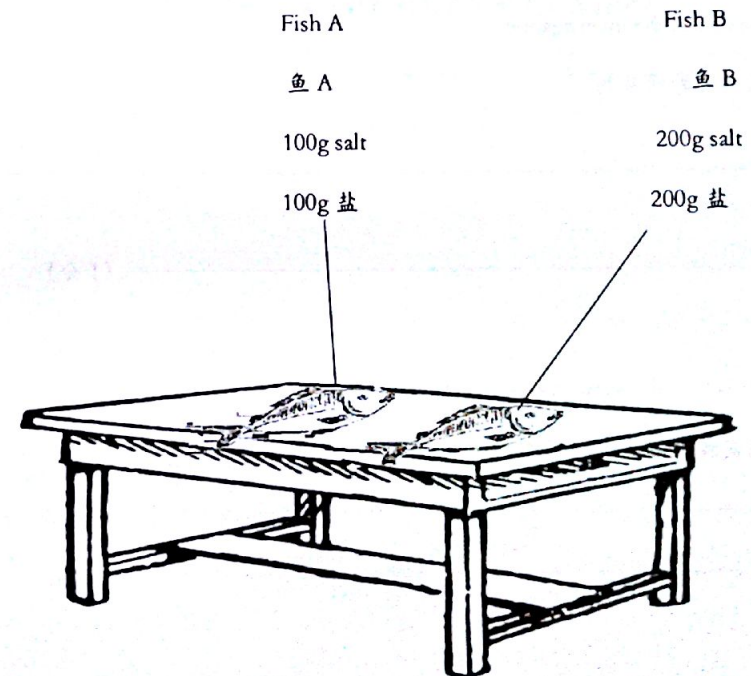
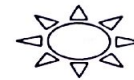
d) After that, Lily used 2 bulbs to connect in a parallel circuit. What could she observe if compared the brightness of the bulbs of the previous investigation which connecting 2 bulbs in a circuit series?

过后丽丽再用 2 个灯泡以并联方式衔接在电路后, 并与串联电路中的 2 个灯泡亮度作比较, 试写出观察结果?

(1 分)

3. Diagram 2 shows a group of pupils carried out an investigation about the time for the fish last longer. Both of fish smeared with different quantity of salt and placed under the sun within 3 days at the same place.

下图显示一群学生研究有关鱼的保鲜实验。两条鱼各洒上不同分量的盐并置放在相同地点曝晒长达 3 天。



Result

实验结果

Fish 鱼	Time for the fish to last longer/day 鱼保鲜的时间/天
A	15
B	30

a) State the aim of the investigation.

写出这项实验的目的

_____ (1分)

b) State what is kept the same in this investigation.

写出这项实验中必须保持不变的事项。

_____ (1分)

c) State one information gathered in this investigation.

写出实验中所收集的一项资料。

_____ (1分)

d) What is the trend of change in the time for the fish to last longer when the quantity of salt increase?

当盐的分量增加时，鱼保鲜的时间变化形式是怎样的？

_____ (1分)

4. A group of pupil from Class 6 Gemilang carried out an investigation about the stability of an object. Four stools of similar base area placed on the table. The table were shaken untill the stools toppled.

六年级红班的一组学生进行一项有关物体稳定性的实验。四张底部面积相同的凳子置放在桌上。桌子被摇动至凳子倒下。

Table below shows the result of investigation.

下表显示实验结果。

Stool 凳子	P	R	S	T
Height of stool/cm 凳子的高度/厘米	20	40	60	80
Time taken to topple/s 倒下所需的时间/秒	90	80	70	60

- a) State one information gathered in this investigation.

写出实验中所收集的一项资料。

(1 分)

- b) State the relationship between the height of stool and the stability.

写出凳子的高度与其稳定性之间的关系。

(1 分)

- c) Predict the time taken of stool to topple if the height of stool is 90cm.

如果凳子的高度是 90cm，预测凳子倒下所需的时间。

(1 分)

The time taken of an object to topple is affected by the base area of the object.

物体倒下所需的时间受到物体底部面积所影响。

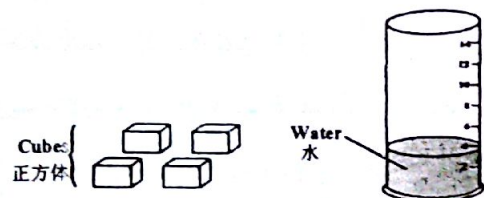
- d) State the relationship between the two informations gathered based on the statement above.

根据上述说明，写出所收集的两个资料之间的关系。

(1 分)

4. Hua An did an experiment .He put cubes into the measuring cylinder one by one that contained water.

华安进行一项实验，他把不同数量的正方体放入装了水的量筒里。



The table below shows the result of his observation.

下表显示了他的观察结果。

The number of cubes 正方体的数量 (个)	0	2	3	4
The reading of the measuring cylinder 量筒的读数 (ml)	4	20	28	36

- a) State one information gathered in this experiment.

写出这项实验必须记录的一项资料。

(1 分)

- b) State the trend of changes for the readings of the measuring cylinder.

写出这项实验中量筒的读数的变化形式。

(1 分)

- c) Predict the reading of the measuring cylinder if 6 cubes are put into the cylinder.

如果放了 6 个方块，试预测量筒的读数。

(1 分)

- d) What conclusion can be made from this investigation?

从这项实验中能做出什么结论？

(1 分)

A组答案

<u>1 D</u>	<u>4 C</u>	<u>7 A</u>	<u>10 A</u>	<u>13 A</u>	<u>16 B</u>	<u>19 D</u>	<u>22 B</u>	<u>25 C</u>	<u>28 B</u>
<u>2 B</u>	<u>5 D</u>	<u>8 C</u>	<u>11 C</u>	<u>14 A</u>	<u>17 B</u>	<u>20 D</u>	<u>23 B</u>	<u>26 A</u>	<u>29 D</u>
<u>3 D</u>	<u>6 B</u>	<u>9 D</u>	<u>12 D</u>	<u>15 C</u>	<u>18 B</u>	<u>21 A</u>	<u>24 B</u>	<u>27 C</u>	<u>30 A</u>

B组答案

1 a) 为了研究滑轮的数量和负荷的质量之间的关系。

b) 0.5kg

c) 8个/1个钢球的质量/钢球的数量

d) 滑轮的数量越多，负荷的质量越轻。

2 a) 为了研究灯泡的数量和灯泡的亮度之间的关系。

b) 干电池的数量

c) 灯泡的数量越多，灯泡越暗。

d) 并联电路中的灯泡较亮//反之

3 a) 为了研究盐的分量和与鱼保鲜的时间之间的关系。

b) 进行实验的时间/地点

c) 盐的分量/鱼保鲜的时间

d) 增加

4 a)- 凳子的种类/质量/形状/底部面积

-凳子的高度

-凳子到下所需的时间

b) 凳子的高度越高，凳子越不稳定//反之

c) 55秒

d) 物体的底部面积越大，物体到下所需的时间越长//反之

5 a) 方块的数量/量筒的读数

b) 增加

c) 52ML

d) 方块的数量越多，量筒的读数越高/多。