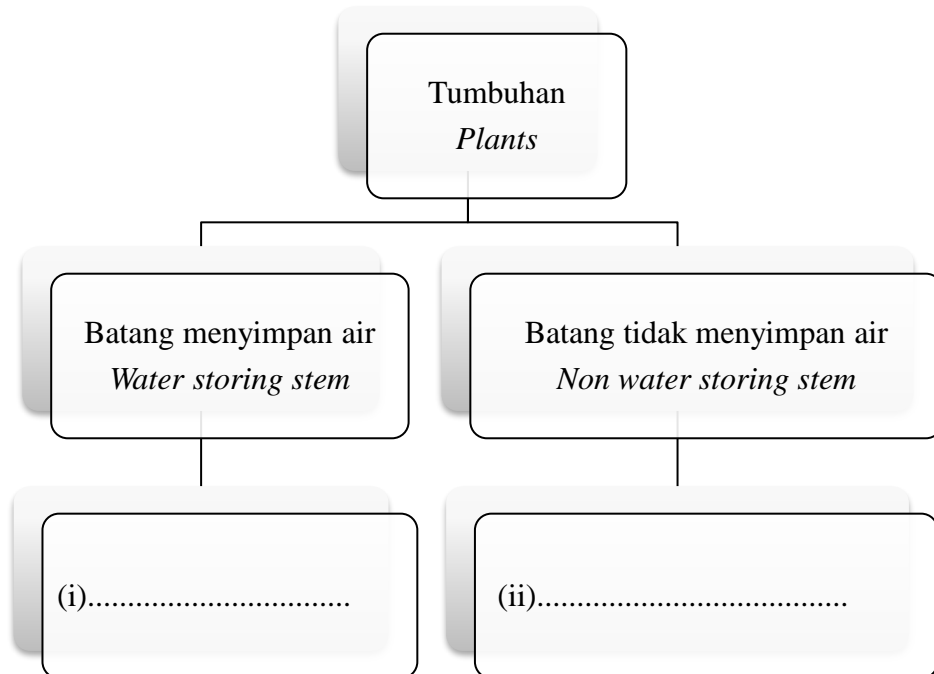


1. Jadual 1 menunjukkan ciri-ciri tumbuhan melindungi diri daripada cuaca panas melampau.  
*Table 1 shows the characteristics of plants to protect themselves from extreme hot weather.*

Tumbuhan <i>Plants</i>	Batang menyimpan air <i>Water storing stem</i>	Daun berbentuk jarum <i>Needle shaped leaves</i>	Akar panjang <i>Long Roots</i>
Kaktus <i>Cactus</i>	√	√	√
Pokok Pisang <i>Banana Tree</i>	√	X	X
Pokok kunyit <i>Tumeric Plant</i>	X	X	X

Jadual 1  
*Table 1*

- (a) Berdasarkan maklumat dalam Jadual 1, kelaskan tumbuhan mengikut ciri-ciri berikut.  
*Based on the information in Table 1, classify the plants according to the following characteristics.*



[1 mark]

(b) Berdasarkan maklumat dalam Jadual 1, nyatakan tumbuhan yang mempunyai batang menyimpan air dan tidak berakar panjang.

*Based on the information in Table 1, state the plant which has water storing stem and does not have long roots.*

.....  
.....

[1 mark]

(c) Nyatakan **satu** ciri yang berbeza di antara pokok kaktus dan pokok kunyit.

*State **one** difference characteristic between cactus and turmeric plant.*

.....

[1 mark]

(d) Nyatakan **satu** kepentingan tumbuhan kepada manusia.

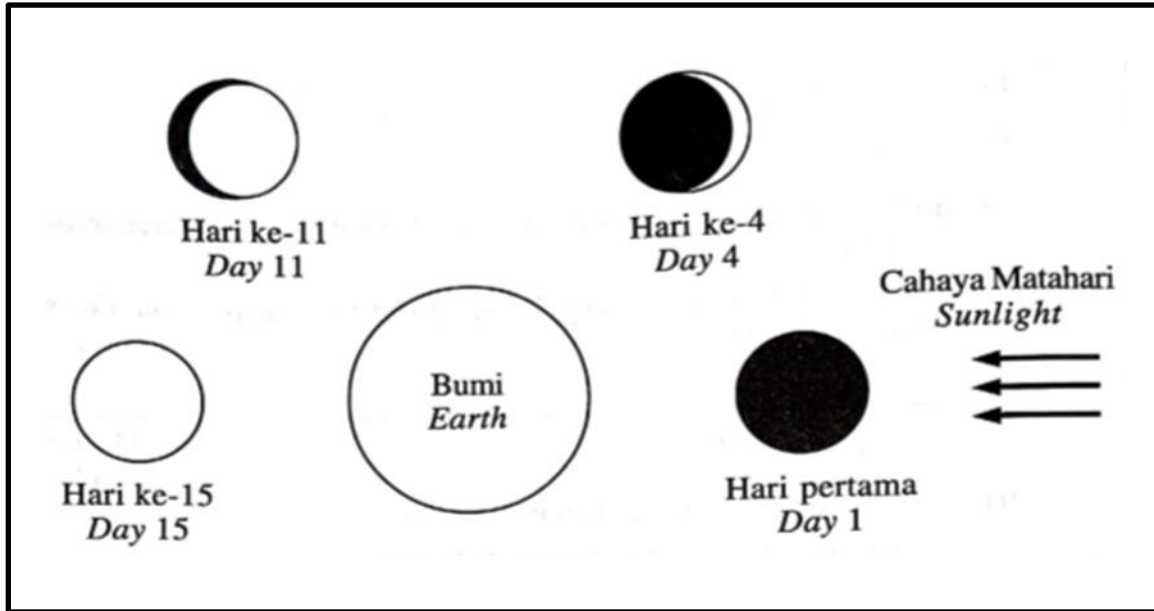
*State **one** importance of plants to humans.*

.....  
.....

[ 1 mark ]

2. Rajah 2 menunjukkan saiz fasa Bulan yang dapat dilihat dari Bumi pada hari-hari tertentu dalam Takwim Qamari.

*Diagram 2 shows the size of the phases of the Moon that can be seen from the Earth on certain days in the Lunar Calendar.*



Rajah 2  
Diagram 2

- (a) Berdasarkan situasi di atas, nyatakan:

*Based on the situation above, state:*

- (i) Pemboleh ubah dimanipulasi,

*The manipulated variable,*

.....

[1 mark]

- (ii) Pemboleh ubah dimalarkan.

*The constant variable.*

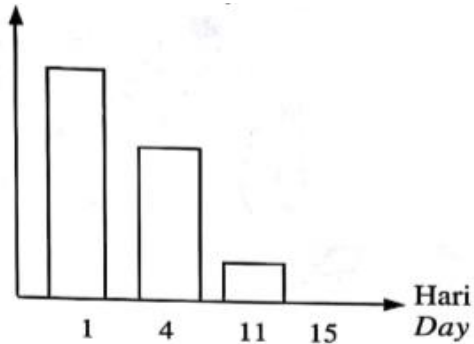
.....

[1 mark]

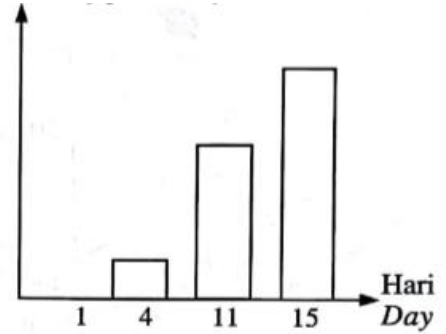
(b) Tandakan ( ✓ ) pada kotak di bawah bagi carta palang yang mewakili saiz fasa Bulan yang kelihatan berdasarkan Rajah 2.

*Tick ( ✓ ) in the box below the bar chart that represents the size of phases of the Moon that can be seen based on Diagram 2.*

Saiz fasa Bulan  
Size of phases of the Moon




Saiz fasa Bulan  
Size of phases of the Moon



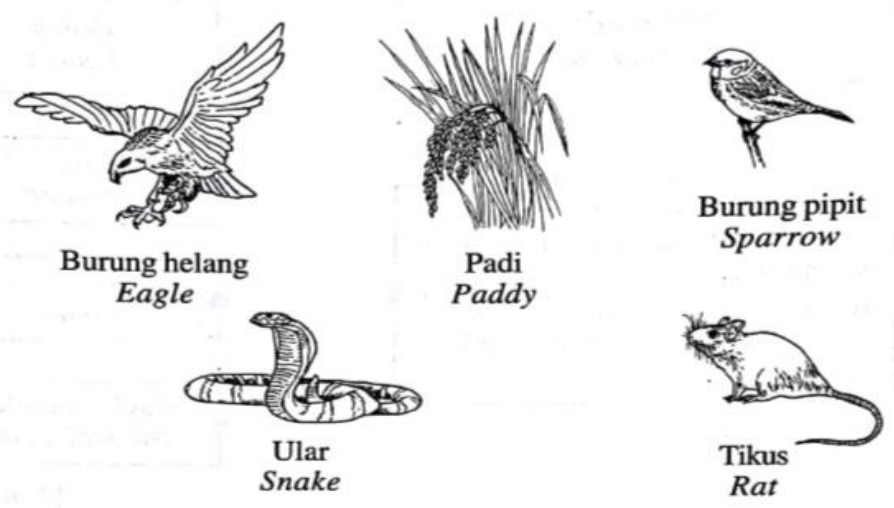

[ 1 mark ]

(c) Lukis bentuk Bulan yang kelihatan dari Bumi pada Hari ke-22 dalam Takwim Qamari.

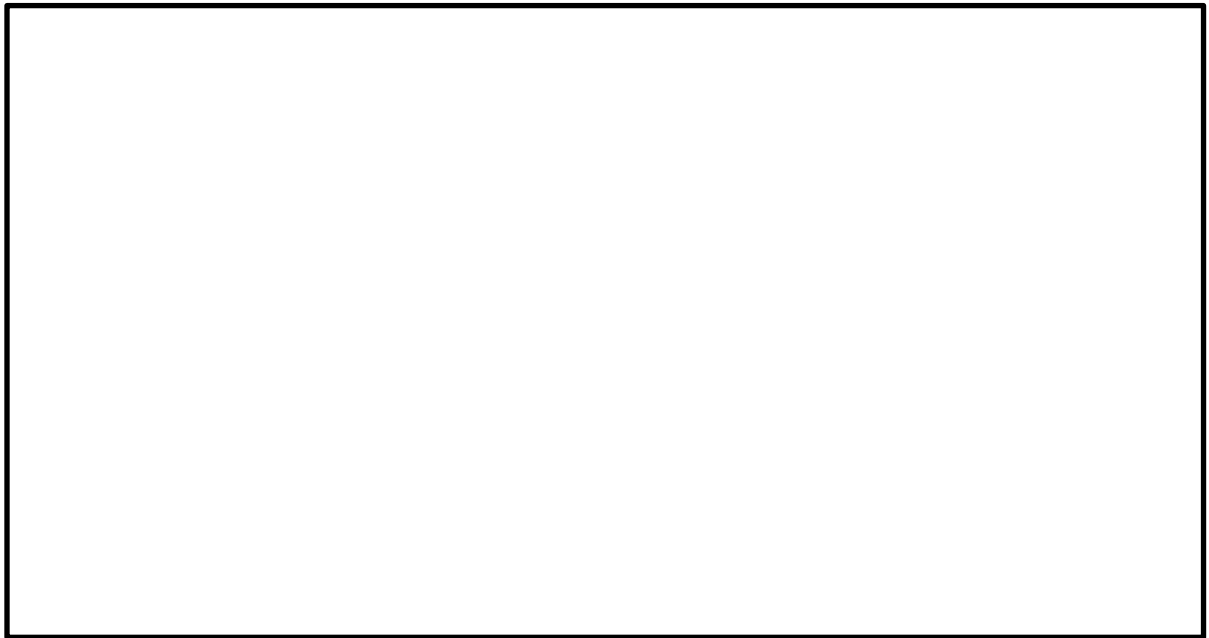
*Draw the shape of the Moon that can be seen from the Earth on Day 22 in the Lunar Calendar.*

[ 1 mark ]

3. Rajah 3 menunjukkan beberapa jenis hidupan dalam satu habitat.  
*Diagram 3 shows several types of living things in a habitat.*



- (a) Berdasarkan Rajah 3, bina satu siratan makanan.  
*Based on Diagram 3, draw one food web.*



[ 2 marks ]

(b) Jadual 3 menunjukkan keputusan penyiasatan yang dijalankan oleh sekumpulan murid terhadap bilangan tikus dalam habitat yang sama.

*Table 3 shows the results of an investigation carried out by a group of pupils on the number of rats in the same habitat.*

Bulan <i>Month</i>	1	2
Bilangan tikus <i>Number of rats</i>	200	50

Jadual 3

*Table 3*

(i) Berdasarkan Jadual 3, nyatakan **satu** pemerhatian.

*Based on Table 3, state **one** observation.*

.....  
.....

[1 mark]

(ii) Berdasarkan pemerhatian anda di 3(b)(i), nyatakan **satu** inferens.

*Based on your observation in 3(b)(i), state **one** inference.*

.....  
.....

[1 mark]

(iii)

Hasil pengeluaran padi dipengaruhi oleh bilangan tikus.  
*The paddy production is affected by the number of rats.*

Berdasarkan pernyataan di atas, nyatakan **satu** hipotesis.

*Based on the statement above, state **one** hypothesis.*

.....  
.....

[1 mark]

4. Satu penyiasatan telah dijalankan untuk mengenal pasti sifat kimia bahan J dan bahan K dengan menggunakan kertas litmus. Keputusan penyiasatan ditunjukkan dalam Jadual 4.1  
*An investigation has been carried out to identify the chemical properties of substances J and K by using litmus paper. The results of the investigation are shown in Table 4.1*

Bahan <i>Substance</i>	Perubahan warna kertas litmus <i>Change in colour of litmus paper</i>
L	Merah → Biru <i>Red Blue</i>
K	Biru → Merah <i>Blue Red</i>

Jadual 4.1  
*Table 4.1*

- (a) Berdasarkan Jadual 4.1, tulis satu pemerhatian.  
*Based on Table 4.1, write one observation.*

.....  
 .....

[1 mark]

- (b) Nyatakan satu contoh bagi bahan  
*State one example for substance*

L : .....

K : .....

[2 marks]

Satu penyiasatan lain dijalankan untuk mengenal pasti sifat kimia bahan L. Jadual 4.2 menunjukkan keputusan penyiasatan itu.

*Another investigation has been carried out to identify the chemical properties of substance L. Table 4.2 shows the results of the investigation.*

Bahan <i>Substance</i>	Perubahan warna kertas litmus <i>Change in colour of litmus paper</i>	Sifat kimia bahan <i>Chemical properties of substances</i>
L	<p>Biru → Biru <i>Blue Blue</i></p> <p>Merah → Merah <i>Red Red</i></p>	Neutral

Jadual 4.2  
*Table 4.2*

(a) Apakah definisi secara operasi bahan neutral?

*What is the operational definition of neutral substance?*

.....

.....

[1 mark]

(b) Ali ingin menguji sifat kimia suatu bahan makanan di rumahnya tetapi tidak mempunyai kertas litmus. Apakah yang Ali patut buat?

*Ali wants to determine the chemical properties of a type of food at home but he does not have a litmus paper. What should Ali do?*

.....

.....

[1 mark]

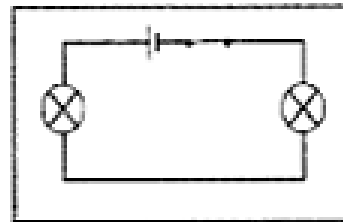
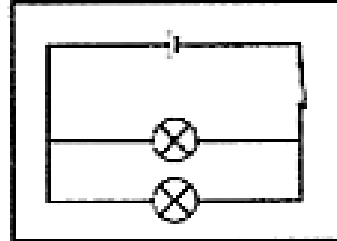


5. Rajah 5 menunjukkan dua jenis litar elektrik  
*Diagram 5 illustrates two types of circuits.*

(a) Padankan litar dengan betul  
*Match the circuit correctly.*

Litar bersiri  
*Series circuit*

Litar selari  
*Parallel circuit*



[ 2 marks ]

(b) Nyatakan satu kelebihan litar selari  
*State the advantage of parallel circuit.*

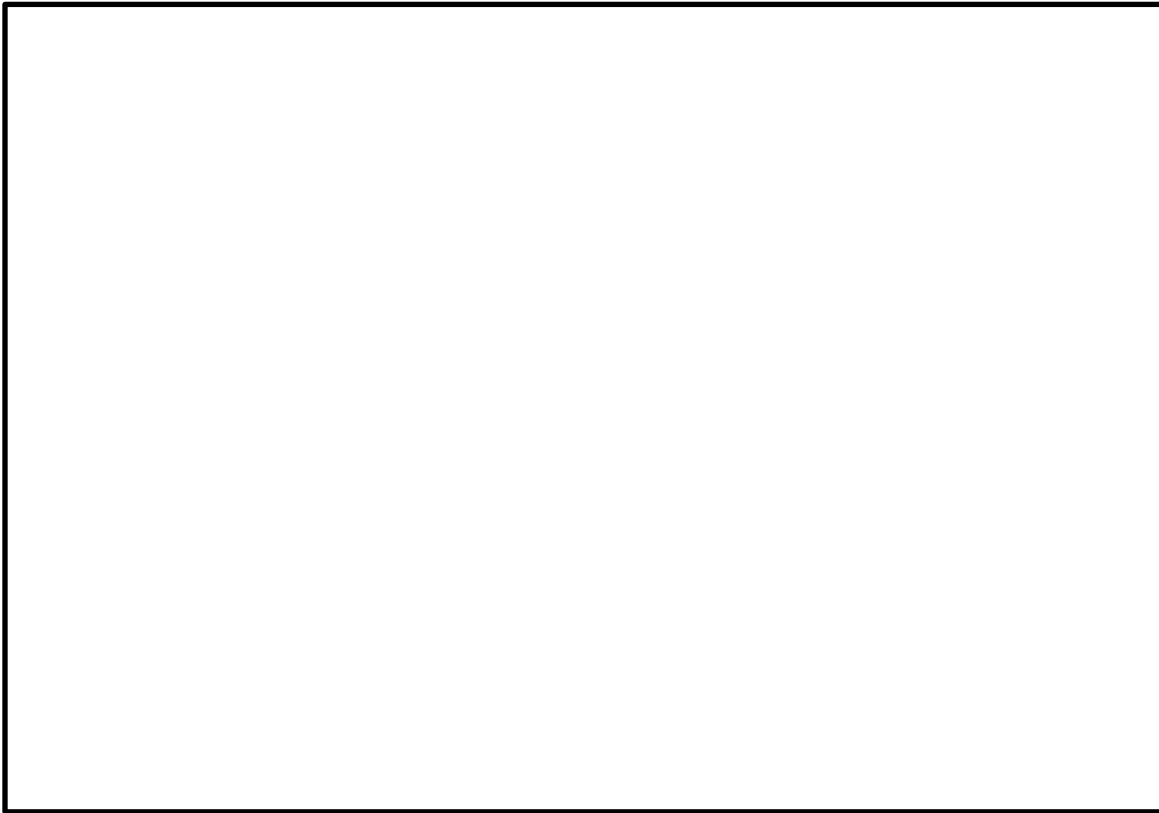
.....

.....

[ 1 mark ]

- (c) Lakarkan litar bersiri yang mengandungi komponen-komponen berikut  
*Sketch an electric circuit in series, consisting of the following components.*

3 Mentol	2 Sel kering	1 Suis	Wayar
<i>3 Bulbs</i>	<i>2 Dry cells</i>	<i>1 Switch</i>	<i>Wire</i>



[ 2 marks]

6. Jadual 6 menunjukkan pemerhatian yang direkodkan oleh Mona dalam penyiasatan tentang perubahan suhu air apabila menerima haba.

*Table 6 shows the observation recorded by Mona in investigating the changes in water temperature when it gains heat.*

Masa (minit) <i>Time (minutes)</i>	0	2	4	6
Suhu air ( °C) <i>Temperature of water (°C)</i>	28	48	68	88

Jadual 6

*Table 6*

- (a) Berdasarkan jadual di atas, apakah corak perubahan bagi suhu air?

*Based on the above table, what is the pattern of change in the water temperature?*

.....

[ 1 mark ]

- (b) Ramalkan suhu air pada minit ke-8 jika penyiasatan diteruskan.

*Predict the water temperature at 8th minute if the investigation continues.*

.....

[ 1 mark ]

- (c) Nyatakan inferens bagi jawapan di 6 (b)

*Give inference for your answer in 6 (b)*

.....

.....

[ 1 mark ]

(d) Nyatakan pemboleh ubah:

*State the variables:*

(i) Di manipulasi :

*Manipulated* : .....

(ii) Bergerak balas :

*Responding*: .....

[ 1 mark ]

(e) Nyatakan hipotesis




*State the hypothesis.*

.....

.....

[ 1 mark ]

7. Jadual 7 menunjukkan keputusan penyiasatan tentang belon yang di pam .  
*Table 7 display the results of a pumping balloon investigation.*

Bilangan pam <i>Number of pump</i>	2	4	6
Saiz belon <i>Size of ballon</i>			

Jadual 7  
*Table 7*

- (a) Apakah tujuan penyiasatan?  
*What is the aim of investigation?*

.....  
 .....

[ 1 mark ]

- (b) Nyatakan **dua** ciri bagi gas.  
*State **two** properties of gas.*

- (i) .....
- (ii) .....

[ 2 Marks ]

- (c) Apakah kesimpulan yang dapat di buat berdasarkan penyiasatan  
*What is the conclusion that can be made from this investigation?*

.....  
 .....

[ 1 mark ]

- (d) Padankan maklumat berikut dengan pemboleh ubah berdasarkan penyiasatan  
*Match the following information to the correct variables in this investigation.*

**Maklumat**  
*Information*

Saiz belon  
*Size of the balloon*

Ketebalan belon  
*Thickness of balloon*

**Pemboleh Ubah**  
*Variable*

Pembolehubah dimanipulasi  
*Manipulated Variable*

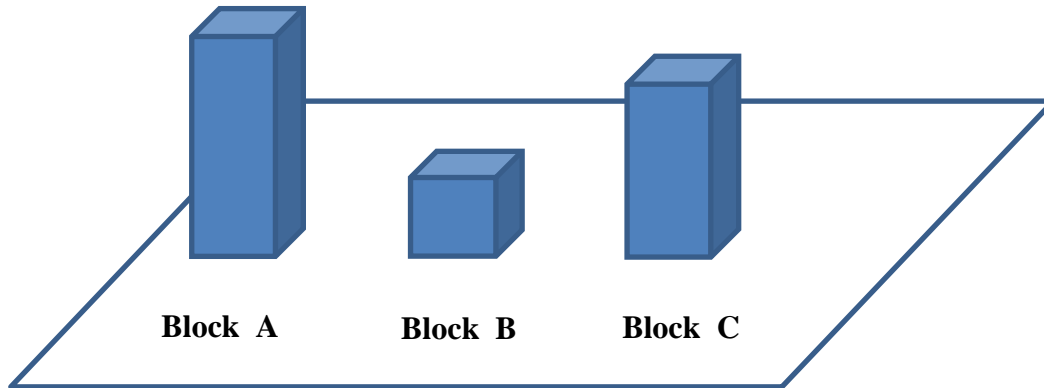
Pembolehubah bergerakbalas  
*Responding Variable*

Pembolehubah dimalarkan  
*Constant Variable*

[ 2 Marks ]

8. Rajah 8 menunjukkan 3 bongkah kayu yang berbeza ketinggian di letakkan di atas sekeping kadbod.

*Diagram 8 shows three wooden blocks of different height being placed on a piece of cardboard.*



Rajah 8  
Diagram 8

Kadbod tersebut di naikkan perlahan-lahan pada bahagian hujung kadbod sehingga semua bongkah tumbang.

*The cardboard is being lifted slowly at one end until all the blocks topple. The time taken for the blocks to topple is recorded in Table 8.*

Bongkah Kayu <i>Wooden block</i>	A	B	C
Masa yang diambil untuk tumbang (saat) <i>Time taken for the block to topple (second)</i>	5	15	10

- (a) Apakah pemerhatian yang dapat dibuat daripada penyiasatan ini?

*What observation can be made from this investigation?*

.....

.....

[ 1 Mark ]

(b) Berikan alasan (inferens) berdasarkan jawapan di 8 (a)  
*Give reason (inference) based on your answer in 8 (a).*

.....  
.....

[ 1 Mark ]

(c) Berikan **dua** faktor yang memberikan kesan kepada kestabilan objek  
*Give **two** factors affecting the stability of an object.*

i).....

ii).....

[ 2 Marks ]

(d) Kira luas tapak bagi kuboid jika panjang kuboid ialah 6 cm dan lebar ialah 4 cm .  
*Calculate the base area of the cuboid if the length is 6cm and width is 4 cm.*

Luas tapak = Panjang X Lebar  
*Base area = Length X Width*

.....  
.....

[ 2 Marks ]