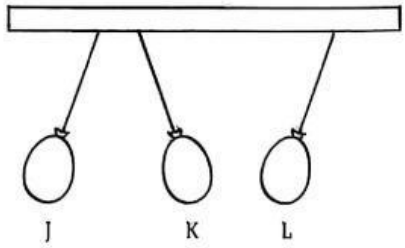
Praktis Stimulus

Praktis Ekstra | Kuiz

Bahagian A

7.1 Keelektrikan / Electricity

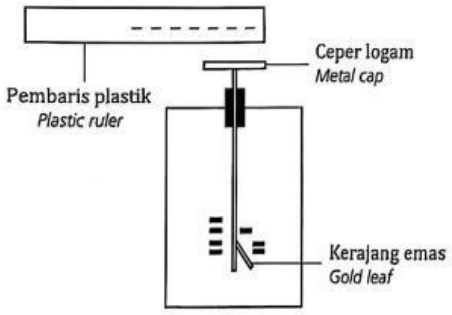
1 Rajah di bawah menunjukkan tiga biji belon J, K dan L yang telah dicaskan melalui geseran dan digantung secara bebas.
The diagram below shows three balloons J, K and L which have been charged through friction and hung freely.



Apakah kesimpulan yang dapat dibuat tentang jenis cas bagi belon J, K dan L?
What conclusion can be made about the type of charges of balloons J, K and L?

	J	K	L
A	Bercas positif *Positively charged*	Bercas positif *Positively charged*	Bercas positif *Positively charged*
B	Bercas negatif *Negatively charged*	Bercas positif *Positively charged*	Bercas negatif *Negatively charged*
C	Bercas negatif *Negatively charged*	Bercas negatif *Negatively charged*	Bercas positif *Positively charged*
D	Bercas positif *Positively charged*	Bercas negatif *Negatively charged*	Bercas positif *Positively charged*

2 Rajah berikut menunjukkan sebuah elektroskop bercas negatif.
The following diagram shows a negatively charged electroscope.



Sebatang pembaris plastik bercas negatif didekatkan kepada ceper logam tersebut.
A negatively charged plastic ruler is brought closer to the metal cap.

Antara pernyataan berikut, yang manakah benar tentang kerajang emas di dalam elektroskop tersebut?
Which of the following statements is true about the gold leaf in the electroscope?

A Mencapah lebih jauh
It diverges more

B Merapat ke ceper logam
It gets closer to the metal plate

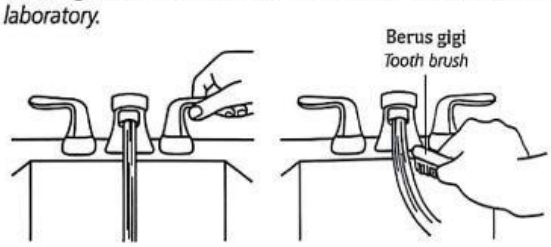
C Pencapahannya tidak berubah
Its divergence does not change

D Mencapah kemudian merapat semula
It diverges and later gets closer again

3 Antara berikut, yang manakah bukan suatu bentuk tenaga?
Which of the following is not a form of energy?

A Haba / *Heat*
B Nuklear / *Nuclear*
C Cahaya / *Light*
D Hidroelektrik / *Hydroelectric*

4 Rajah di bawah menunjukkan satu aktiviti yang dijalankan di dalam makmal.
The diagram below shows an activity carried out in the laboratory.



Sebatang berus gigi digosok dengan sehelai kain bulu dan kemudian dibawa menghampiri aliran air. Antara inferens berikut, yang manakah benar?
A tooth brush is rubbed with a piece of woollen cloth and then brought near the small stream of water. Which of the following inferences is true?

A Berus gigi bertindak sebagai elektromagnet untuk memesongkan aliran air
The tooth brush acts as an electromagnet to deflect the water stream

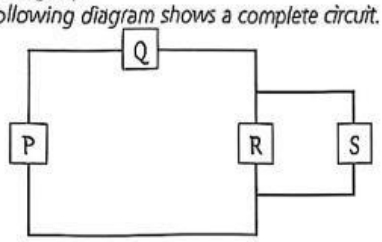
B Kutub yang berlainan antara berus gigi dengan aliran air menyebabkan aliran air terpesong
The different poles between the tooth brush and water stream cause the water stream to deflect

C Cas positif pada air ditarik oleh cas negatif pada berus gigi menyebabkan aliran air terpesong
The positive charges on water are attracted to the negative charges on the tooth brush, causing the water stream to deflect

D Cas negatif pada air ditarik oleh cas positif pada berus gigi menyebabkan aliran air terpesong
The negative charges on water are attracted to the positive charges on the tooth brush, causing the water stream to deflect

7.2 Pengaliran Arus Elektrik dalam Litar Bersiri dan Litar Selari
Flow of Electric Current in a Series Circuit and Parallel Circuit

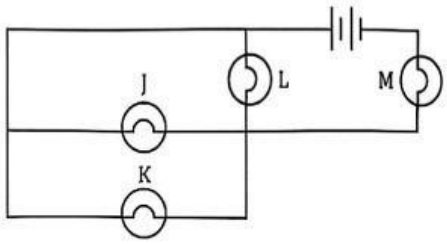
5 Rajah berikut menunjukkan sebuah litar elektrik yang lengkap.
The following diagram shows a complete circuit.



Kombinasi simbol yang manakah paling sesuai digunakan untuk mengukur rintangan sebiji mentol dalam litar lengkap?
Which combination of the symbols would be the most suitable to measure the resistance of a bulb in a complete circuit?

	P	Q	R	S
A	A		V	
B		A		V
C	V			A
D		V	A	

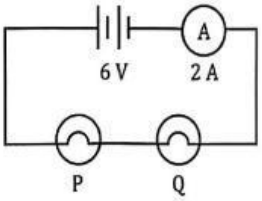
6 Rajah di bawah menunjukkan sebuah litar dengan kombinasi sambungan selari dan bersiri.
The diagram below shows a circuit with the combination of parallel and series connections.



Mentol yang manakah akan menyebabkan mentol yang lain tidak menyala apabila terbakar?
Which bulb will cause the other bulbs to light off when it is fused?

A J
B K
C L
D M

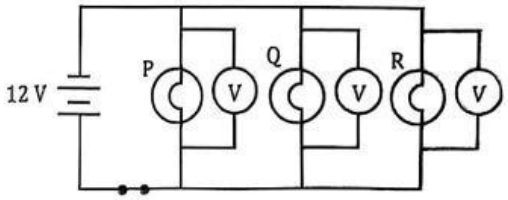
7 Rajah 6 menunjukkan sebuah litar elektrik yang lengkap.
Diagram 6 shows a complete electric circuit.



Hitung rintangan di dalam mentol P dan Q.
Calculate the resistance in bulbs P and Q.

	P	Q
A	3 Ω	3 Ω
B	2 Ω	2 Ω
C	1 Ω	1 Ω
D	1.5 Ω	1.5 Ω

8 Rajah di bawah menunjukkan litar selari dengan tiga mentol yang serupa P, Q dan R.
The diagram below shows a parallel circuit with three identical bulbs P, Q and R.

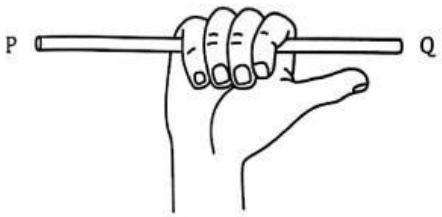


Apakah bacaan voltmeter merentasi mentol R sekiranya mentol Q terbakar?
What is the voltmeter reading across bulb R if bulb Q is burnt out?

A 0 V
B 4 V
C 6 V
D 12 V

7.3 Kemagnetan
Magnetism

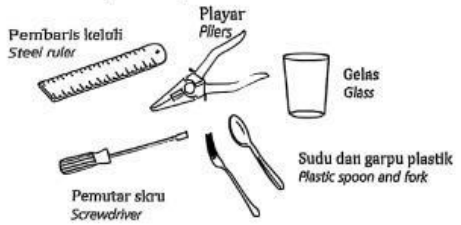
9 Rajah berikut menunjukkan petua genggaman tangan kanan.
The following diagram shows the right-hand grip rule.



Pasangan manakah yang betul tentang arah arus dan arah medan magnet?
Which pair is correct about the direction of current and the direction of magnetic field?

	Arah arus *Direction of current*	**Arah medan magnet** *Direction of magnetic field*
A	P ke Q *P to Q*	Ikut arah jam *Clockwise*
B	P ke Q *P to Q*	Lawan arah jam *Anticlockwise*
C	Q ke P *Q to P*	Ikut arah jam *Clockwise*
D	Q ke P *Q to P*	Lawan arah jam *Anticlockwise*

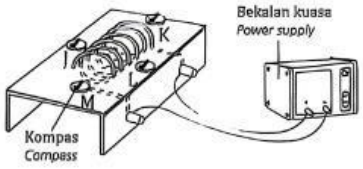
10 Rajah berikut menunjukkan satu aktiviti untuk mengelaskan bahan magnet dan bahan bukan magnet.
The following diagram shows an activity to classify magnetic and non-magnetic objects.



Antara pasangan berikut, yang manakah betul?
Which of the following pairs is correct?

	Bahan magnet *Magnetic object*	Bahan bukan magnet *Non-magnetic object*
A	Pembaris keluli, playar dan pemutar skru *Steel ruler, pliers and screwdriver*	Gelas serta sudu dan garpu plastik *Glass and plastic spoon and fork*
B	Pembaris keluli dan pemutar skru *Steel ruler and screwdriver*	Playar, gelas serta sudu dan garpu plastik *Pliers, glass and plastic spoon and fork*
C	Pembaris keluli dan playar *Steel ruler and pliers*	Pemutar skru, gelas serta sudu dan garpu plastik *Screwdriver, glass and plastic spoon and fork*
D	Playar dan pemutar skru *Pliers and screwdriver*	Pembaris keluli, gelas serta sudu dan garpu plastik *Steel ruler, glass and plastic spoon and fork*

11 Rajah berikut menunjukkan empat kedudukan kompas J, K, L dan M. Kompas tersebut diletakkan berdekatan dengan solenoid yang dililit pada teras besi.
The following diagram shows four positions of the compasses J, K, L and M. They are placed near to a solenoid that is wound around an iron core.



Antara berikut, yang manakah menunjukkan arah jarum kompas yang betul?
Which of the following shows the correct direction of the compass needle?

A J dan L *J and L*
B J dan M *J and M*
C K dan L *K and L*
D K dan M *K and M*

12 Antara pernyataan berikut, yang manakah benar tentang magnet kekal?
Which of the following statements are true about permanent magnet?

I Kutub yang sama akan saling menolak
Like poles will repel each other
II Mempunyai kutub utara dan kutub selatan
Has north pole and south pole
III Menarik semua jenis logam di sekitarnya
Attracts all types of metal around it
IV Jarum kompas menunjuk ke arah kutub selatan Bumi
The compass needle always points to the south pole of the Earth

A I dan II *I and II*
B III dan IV *III and IV*
C II dan III *II and III*
D I dan IV *I and IV*