

CHAPTER 7: ELECTRICITY & MAGNETISM (TP1,TP2 & TP4)

1 Apakah cas elektrostatik?/What are electrostatic charges? TP1

Cas-cas elektrik yang/Electrical charges that .

- ☐ tidak bergerak/do not move
- ☐ sentiasa bergerak/ always move

2 Apakah cas yang terhasil pada belon selepas digosok dengan kain bulu? TP2

What are the charges that are produced on the balloon after it is rubbed with the woollen cloth?

- ☐ caj elektrik/ electric charges
- ☐ caj elektrostatik /electrostatic charges

3 Tandakan (✓) jenis-jenis cas elektrik./Tick (✓) the types of electric charges. TP1

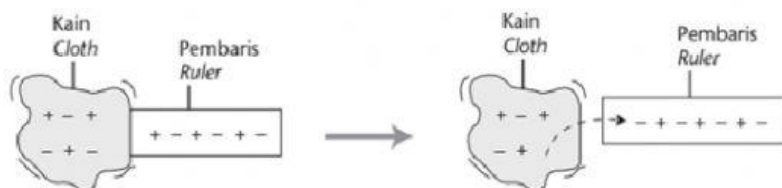
- ☐ Cas positif
Positive charge
- ☐ Cas negatif
Negative charge
- ☐ Cas neutral
Neutral charge

4 Tandakan (✓) apa yang berlaku kepada pembaris plastik selepas digosok dengan kain bulu. TP1

Tick (✓) what happens to the plastic ruler after it is rubbed with the woollen cloth.

- ☐ Pemindahan proton
Transfer of protons
- ☐ Pemindahan elektron
Transfer of electrons
- ☐ Tindak balas kimia
Chemical reaction

5. Pilih jawapan yang betul untuk menyatakan jenis cas yang diperoleh apabila kain dan pembaris di bawah digosok bersama./Choose the correct answers for the types of charge gained when the cloth and the ruler below are rubbed together. TP2



- (a) The cloth loses (protons, electrons) to the ruler. Now, the cloth is charged (positive, negative) because it has excess (protons or positive charges, electrons or negative charges).
- (b) The ruler receives (protons, electrons) from the cloth. Now, the ruler is charged (positive, negative) because it has excess (proton or positive charges, electrons or negative charges).

5. Terangkan beberapa fenomena harian yang disebabkan oleh cas elektrostatik dan langkah-langkah keselamatan yang perlu diambil semasa mengendalikan cas elektrostatik.
 Explain some daily phenomena caused by electrostatic charges and the safety measures that should be taken when dealing with electrostatic charges.

a)

Berlawanan Opposite	Konduktor kilat Lightning conductors	Wap air Water vapour	Kilat Lightning	Bumi Earth	Zarah-zarah udara Air particles
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TP4/KBAT

Clouds are charged when the _____ in them rubs with the _____. When a negatively-charged cloud moves closer to another cloud or to the Earth's surface that has an _____ charge, the negative charges 'jump' from one charged cloud to another, or to the ground. _____ is produced. _____ that are fixed at the top of a building allow the charges of lightning to flow to the _____ and reduce the risk of the building from being struck by lightning.

b)

Cas Charges	Rantai logam Metal chain	Bergeser Rub
Bunga api Sparks	Menghalang Prevent	Elektrostatik Electrostatic



TP4/KBAT

A petrol tanker becomes charged with _____ charges as it moves and _____ with the air. The rubber tyres _____ the charges from flowing to the Earth. Therefore, a _____ is fixed to the tanker to allow the _____ to flow to the Earth as the chain touches the road to prevent _____ that can cause a fire from being produced.