

2 Gariskan jawapan yang betul tentang ion positif dan ion negatif. (TP2)

Underline the correct answer regarding positive ion and negative ion.

(a) Ion positif (kation) Positive ion (cation)	- Terbentuk melalui (penambahan, kehilangan) satu atau lebih elektron. Formed by (gain, loss) of one or more electrons. - Bilangan proton (lebih besar, lebih kecil) daripada bilangan elektron. The number of protons is (greater, less) than the number of electrons.
(b) Ion negatif (anion) Negative ion (anion)	- Terbentuk melalui (penambahan, kehilangan) satu atau lebih elektron. Formed by (gain, loss) of one or more electrons. - Bilangan proton (lebih besar, lebih kecil) daripada bilangan elektron. The number of protons is (greater, less) than the number of electrons.

3 Jadual berikut menunjukkan pembentukan ion X. (TP3)

The following table shows the formation of ion X.

Atom X / Atom X			Ion X / Ion X		
Zarah subatom Subatomic particles	Bilangan Number	Cas Charge	Zarah subatom Subatomic particles	Bilangan Number	Cas Charge
neutron, n neutrons, n	20		neutron, n neutrons, n	20	
proton, p protons, p	20		proton, p protons, p	20	
elektron, e electrons, e	20		elektron, e electrons, e	18	

(a) Lengkapkan jadual tersebut dengan jawapan yang betul.
Complete the table with the correct answers.

(b) Bagaimanakah ion X terbentuk?
How ion X is formed?

(c) Berdasarkan jawapan anda di 3(b), nyatakan cas pada ion X.
Based on your answer in 3(b), state the charge on ion X.

Kation dan anion
Cations and anions

Tahukah anda cas pada ion boleh ditentukan melalui kedudukan unsur dalam Jadual Berkala. Kation terbentuk daripada unsur logam manakala anion terbentuk daripada unsur bukan logam. *Can you know that the charge of an ion can be determined by the element's position in the Periodic Table. Cations are formed from metal elements while anions are formed from non-metal elements. For example:*

Kumpulan / Group	Nama / Name	Cas / Charge
1	Logam alkali / Alkali metals	+ 1
2	Logam alkali bumi / Alkaline earth metals	+ 2
16	Kalkogen / Chalcogens	- 2
17	Halogen / Halogens	- 1



4 Lukis dan lengkapkan petak kosong berikut mengenai pembentukan ion fluorin. Kemudian, berikan penjelasan anda.
Draw and complete the following empty boxes regarding formation of fluoride ion. Then, give your explanation. (TP3)

Atom fluorin, F
Fluorine atom, F

9 proton =

9 protons =

9 electron =

9 electrons =

Jumlah cas =

Total charge =

terima satu elektron
gain one electron

Ion fluorin, F⁻
Fluoride ion, F⁻

9 proton =

9 protons =

10 electron =

10 electrons =

Jumlah cas =

Total charge =