

ATOM AND NUCLEUS

1. The following table shows the formation of ion X.

(a) Complete the table with the correct answers.

ATOM X				ION X		
Subatomic particles	Number	Charge		Subatomic particles	Number	Charge
Neutrons, n	20			Neutrons, n	20	
Protons, p	20			Protons, p	20	
Electrons, e	20			Electrons, e	18	

(b) How is ion X formed?

Atom X loses one electron.

Atom X loses two electrons.

Atom X gains one electron.

Atom X gains two electron.

(c) Based on your answer in (b), state the charge on ion X.

One

Two

2. Choose the correct answer regarding positive ion and negative ion.

Positive ion is formed by (gaining ; losing) one or more (electron ; proton). The number of protons is (greater ; less) than the number of electrons. Positive ion is also known as (anion; cation).

Negative ion is formed by (gaining ; losing) one or more (electron ; proton). The number of proton is (greater ; less) than the number of electrons. Negative ion is also known as (anion ; cation).