Zeff @ Effective nuclear charge



Example Element N has electronic configuration
$_{11}N = 1s^2\ 2s^2\ 2p^6\ 3s^1$

Quick note:

Zeff = proton number – inner shell electron
= 11 -10
= +1

Question 2:

Fill in the blank:

ELEMENT	ELECTRONIC CONFIGURATION	GROUP	PERIOD	BLOCK	Valence e	Z_{eff}
F	$1s^2\ 2s^2\ 2p^5$					
G	$1s^2\ 2s^2\ 2p^6\ 3s^2$					
H	$1s^2\ 2s^2\ 2p^6\ 3s^2\ 3p^6\ 4s^2$					
I		13	4	p		
J		3	4	d		
K		17	3	p		

(a) State how the elements ***F*** to ***K*** are arranged in the periodic table?
The elements are arranged in the order of _____

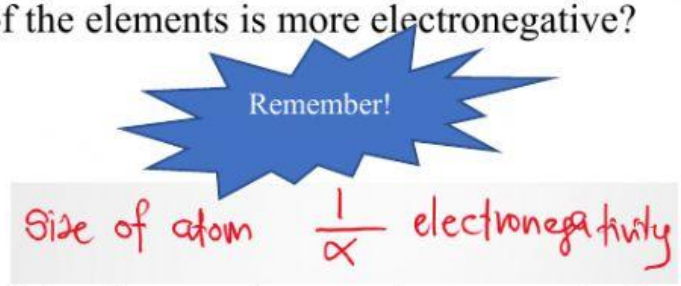
(b) State the elements that are in the same group?
_____ **and** _____**.**

(c) Why are elements ***G*** and ***K*** are in the same period?
Both elements have the same _____**.**

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(d) Between F and K, which is one of the elements is more electronegative?

_____.



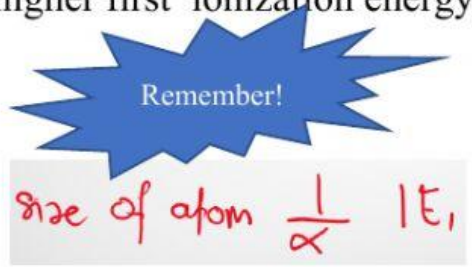
(e) Between G and H, which is one of the elements is more electronegative?

_____.

(f) Between F and K, which elements has higher first ionization energy (IE1)?

_____.

_____



(g) Between G and H, which elements has higher first ionization energy (IE1)?

_____

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