

Quiz Review

February 20, 2018 9:40 AM

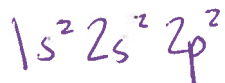
State the most common ion formed by each of the following atoms:

A) Be					B) O					C) Cl
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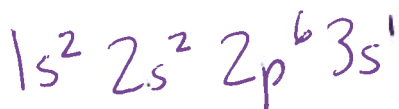


State the electron configuration for:

Carbon atom = 6

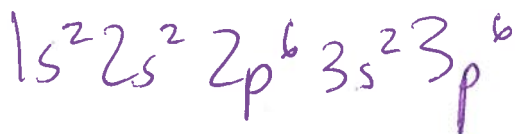


Sodium atom = 11



Chlorine ION (application question, won't be on quiz)

= 17



Briefly describe the difference between the experimentally determined and predicted electron configurations of the atom copper. (I would know chromium too)

Expected = $[\text{Ar}] 5s^2 4d^9$

Experimental = $[\text{Ar}] 4d^{10} 5s^1$

↳ s orbital more stable, fill 9 first.

Which of the following atoms would have the largest electronegativity?

Li

Na

K

Rb

Lithium. As you move down a group, electrons have a weaker electronegativity, shielding effect interferes with the attraction b/n nucleus and valence e^-

Which of the following atoms would have the largest radius?

B

C

O

F

Boron, as you move across a period, radius smaller. Net nuclear attraction, protons \uparrow , \uparrow attraction.

Which is larger, a chlorine ion or a chlorine atom?

Chlorine atom \rightarrow An ion you are adding electrons which causes a \downarrow in net nuclear attraction.

Briefly describe if the following quantum numbers are allowed and why?

$n=2$

$l=2$

$m_l=2$

Not allowed,
 $l \neq 2$ if $n=2$

$n=4$

$l=0$

$m_l=0$

Allowed.