

## Quiz 3.1 – Ionic Compounds

Name: \_\_\_\_\_

**Question 1**

Predict which ion each element will form, with the correct charge:

Li      O      Sr      Al      Cl      P      K      I      Mg      Ba

**Question 2**

For each pair of elements, circle the one with higher ionization energy:

K and Na      N and O      Rb and Ca      Li and Be      Br and Cl      Sr and Ca

**Question 3**

For each pair of elements, circle the one with higher magnitude electron affinity:

Rb and Cs      F and O      K and Mg      Br and Cl      Cl and S      Li and Na

**Question 4**Give the electronic configuration for each of these ions (Hint: Noble gas notation makes these *very* short) $S^{2-}$        $Ca^{2+}$        $Br^{-}$        $Ti^{4+}$        $N^{-3}$        $Na^{+}$ **Question 5**

Give the name for each of these ions

 $Se^{2-}$        $Be^{2+}$        $F^{-}$        $Ti^{4+}$        $N^{-3}$        $Fe^{2+}$ **Question 6**

Give the symbol for each of these ions

Oxide Ion      Potassium Ion      Chromium(III) Ion      Chloride Ion      Magnesium Ion      Vanadium(IV) Ion

*If—*

By Rudyard Kipling

If you can keep your head when all about you  
Are losing theirs and blaming it on you,  
If you can trust yourself when all men doubt you,  
But make allowance for their doubting too;  
If you can wait and not be tired by waiting,  
Or being lied about, don't deal in lies,  
Or being hated, don't give way to hating,  
And yet don't look too good, nor talk too wise:

If you can dream—and not make dreams your master;  
If you can think—and not make thoughts your aim;  
If you can meet with Triumph and Disaster  
And treat those two impostors just the same;  
If you can bear to hear the truth you've spoken  
Twisted by knaves to make a trap for fools,  
Or watch the things you gave your life to, broken,  
And stoop and build 'em up with worn-out tools:

If you can make one heap of all your winnings  
And risk it on one turn of pitch-and-toss,  
And lose, and start again at your beginnings  
And never breathe a word about your loss;  
If you can force your heart and nerve and sinew  
To serve your turn long after they are gone,  
And so hold on when there is nothing in you  
Except the Will which says to them: 'Hold on!'

If you can talk with crowds and keep your virtue,  
Or walk with Kings—nor lose the common touch,  
If neither foes nor loving friends can hurt you,  
If all men count with you, but none too much;  
If you can fill the unforgiving minute  
With sixty seconds' worth of distance run,  
Yours is the Earth and everything that's in it,  
And—which is more—you'll be a Man, my son!