

Topic: Ionic Size	Name:	Date:
<b>Questions/Main Ideas:</b>	<b>Notes:</b>	
What is ionic size?	Ionic size is the size	
	Ionic size _____ down a group because	
	Ionic size _____ left to right across a period because	
What happens to the size when an anion is formed?	When anions form, electrons are _____. With the same protons, but more electrons (pushing each other apart), the radius _____.	
	The more negative, the _____ the ion (for the same element)	
	Example: $S^{2-}$ is _____ than $Cl^-$	
What happens to the size when a cation is formed?	When cations form, electrons are _____. There is less repulsion and the electrons are _____ to the nucleus. Therefore, for positive ions, radius _____.	
	The more positive, the smaller the ion (for the same element)	
	$Mg^{2+}$ is _____ than $Na^+$	
What are <b>isoelectronic</b> atoms?	<b>Isoelectronic</b> atoms have	
	<div style="border: 1px solid black; padding: 10px;"> <p>Electron configurations of the neutral atoms:</p> <p><math>2s^2 2p^4</math>      <math>2s^2 2p^5</math>      <math>2s^2 2p^6</math>      <math>2s^2 2p^6 3s^1</math>      <math>2s^2 2p^6 3s^2</math></p> <p><b>Isoelectronic series:</b> all these species have ten electrons: <math>1s^2 2s^2 2p^6</math></p> </div>	
Fill in the trends for ionic size above. Then, answer the questions to the right. Be sure to explain <u>why</u> .	Which atom/ion has the largest radius? Why? P $P^-$ $P^{2-}$ $P^{3-}$	
	Which atom/ion has the smallest radius? Why? $Ca^{2+}$ $K^+$ Ar $Cl^-$	
<b>Summary and Question(s) I have:</b>		