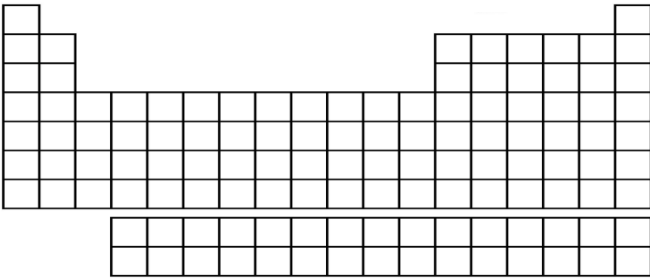
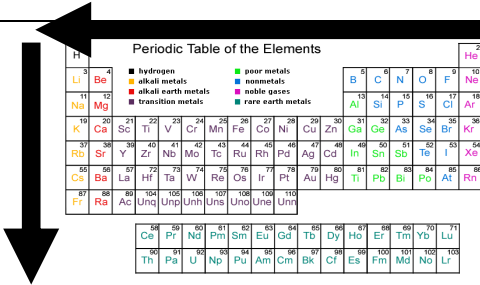


Topic: Effective Nuclear Charge and Atomic Radius	Name:	Date:
Questions/Main Ideas:	Notes:	
What are valence electrons?	The _____ electrons in an ____ or _____ orbital.	
Label the periodic table groups with the correct number of valence electrons.		
What is effective nuclear charge?	The actual charge of the nucleus (atomic number) minus the number of _____ - _____ electrons which "_____ " the _____ electrons from feeling the full attraction of the nucleus.	
	This is how much _____ the electron actually feels from the nucleus	
Ex: Find the effective nuclear charge of each:	Ca:	Cl:
What is the period trend for Effective Nuclear Charge? Why?		
What is the group trend for Effective Nuclear Charge? Why?		
What is the shielding effect?	The blocking of the nucleus's positive charge by the inner core electrons	
What is the period and group trend for the shielding effect?	_____ : across a given period because inner electrons are constant	
	_____ : going down a group because of increasing inner electrons	
What is Atomic Radius	half the distance between two of the same nuclei.	
What is the period and group trend for atomic radius?	_____ : down a group because there are more electron "shells" added as you descend.	
	_____ : going left to right across a period because of increasing effective nuclear charge	
Circle and label the atoms with the smallest radius and the atom with the largest radius.		
Summary and Question(s) I have:		

