Digital Agenda 8.19-8.23

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***Teacher:*** | Ms. Athwal | ***Date:*** | August 19-23 | ***Course:*** | Chemistry | ***Grade:*** | 11 |
| ***CA Standard(s):***  1c. Students know how to use the periodic table to identify alkali metals, alkaline earth metals, and transition metals, trends in ionization energy, electronegativity, and the relative sizes of ions and atoms  1b. Students know how to use the periodic table to identify metals, semi-metals, and non-metals, and halogens  1d. Students know how to use the Periodic Table to determine the number of electrons available for bonding | | | | | | | |
| ***Learning Objective (s):***  LT 1.4: Electron Configuration  LT 1.5: Periodic Groups, Metals, Non-Metals, Semi-Metals | | | | | | | |
| ***Essential Question(s):*** What is an atom? How do elements affect your every day life? What is the relationship between the number of protons, neutrons and electrons in an atom and the respective element’s atomic number and atomic mass number | | | | | | | |
| ***Assessment:***Quiz Wednesday. Daily exit slips, Homework 1.3 and Homework 1.4  Exit Tickets:   1. Draw the Bohr structure for Phosphorus 2. How many electrons must it gain/lose to satisfy the Octet Rule? What will the charge of its ion be? 3. What is wrong with the drawing below?     1. Sodium belongs to what group on the Periodic Table?  2. Arsenic is a metal, non-metal, or semimetal?  3. A student states that fluorine is a metal that is part of the noble gas family. What is wrong with this statement?  4. Why do all alkali metals demonstrate a similar reactivity? | | | | | | | |
| ***Do Now:***  *1. What did Thomson discover?*  *2. Describe Thomson’s experiment that led to his discovery.*  *3. What was Rutherford’s experiment and what did he discover?*  *4. How many protons, neutrons, and electrons are there in Beryllium?*  *1. What are the trends for ionization energy on the Periodic Table?*  *2. Sort from lowest to highest IE: C, F, O*  *3. Sort from highest to lowest IE: Mg, Ca, Sr*  [***H.W. 1.3 Due Wednesday***](../LT%201.3%20Periodic%20Table/1.3.hw.atomic_number.docx)  [***H.W. 1.4 Due Thursday/Friday***](../LT%201.4%20Electron%20Configuration/1.4.hw.octet_rule.doc) | | | | | | | |

|  |
| --- |
| **WHOLE GROUP/ DIRECT INTRUCTION** |
| * The octet rule: atoms form ions in order to complete their shells * Valence electrons * Periodic table grouping * Characteristics of each group * Ionization Energy and trends across the table * Charges of each group |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SMALL GROUP STATION** |  | **COLLABORATIVE STATION** |  | **COMPUTER ASSISTED STATION** |
| -Review the octet rule, electron configurations, and ions  -Colour code different groups of periodic table |  | -Rally Coach game/questions  -Periodic table cards grouping |  | -[ACT Exam reflection](0.5.Diagnostic%20ACT%20Reflection.docx): google drive/ dropbox  -Building and atom simulator: http://phet.colorado.edu/en/simulation/build-an-atom  -Start Achieve 3000 |