**Lesson Plan Title: Electron Configuration Practice**

**Teacher’s Name:** Click here to enter text. **Subject/Course:** Click here to enter text.

**Unit:** Click here to enter text. **Grade Level:** Click here to enter text.

**Overview of and Motivation for Lesson:**

Click here to enter text.

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| **Stage 1-Desired Results** | | |
| **Standard(s):**   * HS-PS1-1. Use the periodic table as a model to predict the relative properties of main group elements, including ionization energy and relative sizes of atoms and ions, based on the patterns of electrons in the outermost energy level of each element. Use the patterns of valence electron configurations, core charge, and Coulomb’s law to explain and predict general trends in ionization energies, relative sizes of atoms and ions, and reactivity of pure elements. Clarification Statement: \* Size of ions should be relevant only for predicting strength of ionic bonding. State Assessment Boundary: \* State assessment will be limited to main group (s and p block) elements. | | |
| **Aim/Essential Question:**   * Do elements with the same electron configuration ending have similar properties? | | |
| **Understanding(s):**  *Students will understand that . . .*   * Electron Configuration builds from the bottom to the top * Superscript equals the atomic number | | |
| **Content Objectives:**  *Students will be able to . . .*   * Write Electron Configuration * Identify Elements from electron Configuration | | **Language Objectives:**  ELD Level Choose an item. *Students will be able to . . . in English*   * Click here to enter text.   ELD Level Choose an item. *Students will be able to . . . in English*   * Click here to enter text. |
| **Key Vocabulary**   * Valence Electrons | | |
| **Stage 2-Assessment Evidence** | | |
| **Performance Task or Key Evidence**   * Students will problem solve the worksheets together or by themselves | | |
| **Key Criteria to measure Performance Task or Key Evidence**   * Students will answer the problems correctly and write them on the board | | |
| **Stage 3- Learning Plan** | | |
| **Learning Activities:**  Do Now/Bell Ringer/Opener: Students will get out plicker card from folders and answer three questions  Learning Activity 1:  Teacher will lead students through practice problems on how to write electron configuration  Students will write down example problems  Learning Activity 2:  Students will do practice examples which are displayed on the board on their own and then display problems on the board  Application  **Electron Configuration endings help determine periodic trends**  Summary/Closing  **How do we write electron configurations of elements?**  **Multiple Intelligences Addressed:**   |  |  |  |  | | --- | --- | --- | --- | | Linguistic | Logical-Mathematical | Musical | Bodily-kinesthetic | | Spatial | Interpersonal | Intrapersonal | Naturalistic |   **Student Grouping**  Whole Class  Small Group  Pairs  Individual  **Instructional Delivery Methods**  Teacher Modeling/Demonstration  Lecture  Discussion  Cooperative Learning  Centers  Problem Solving  Independent Projects | | |
| **Accommodations**  None | **Modifications**  For Honors teach them noble gas configuration  Will do d orbitals for Honors students | |
| **Homework/Extension Activities:**  Due Wednesday: | | |
| **Materials and Equipment Needed:**   * TV | | |

**Adapted from Grant Wiggins and Jay McTighe-*Understanding by Design***