**Essential Skills Template**

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| --- | --- | --- |
| **Course Name** | **Grade** | **Team Members** |
| Honors Chemistry | 10 | Lang, Scalise, Wien |

**Essential Skill:**

Given an element name and/or symbol from the periodic table, students will write out the entire electron configuration.

**Description of common assessment (attach optional):**

Students were given 2 elements ( Iron & Platinum) and asked to write out the entire electron configuration using the diagonal rule in their notes.

**Proficiency Scale & Results**

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| --- | --- | --- | --- |
| Score | Description | Student Achievement (%) | Student Proficiency (%) |
| 4 | Electron configurations were completely correct | **43%**  **68%** | **49%**  **89%** |
| 3 | Electron configurations were correct, but students just miscounted the number of electrons. | **6%**  **21%** |
| 2 | The order of sublevels was incorrect | **24%**  **1%** | **51%**  **11%** |
| 1 | Electron count, order, and capacities were incorrect | **24%**  **10%** |
| 0 | Did not complete | **3%**  **<1%** |

**List of students who did not achieve proficiency (after intervention):**

1. Adam
2. April
3. Avery
4. Aiden
5. Kendell
6. Mya
7. Emily
8. Chris
9. Colton
10. Cameron
11. Kalil
12. Frank
13. Mark
14. Jake
15. Ruvim
16. Luke
17. Douglas
18. Justyn
19. Zeke
20. Malikai
21. Noah
22. Nick
23. NIck
24. Bryanna
25. Jeffrey
26. Cole
27. Emily
28. Cayden
29. Tyler

**Intervention Plan:** Students were divided into 2 groups based upon their proficiency. The non-proficient students spent about 40 minutes reviewing the diagonal rule, practicing various elements, and re-took the common assessment.

All students will learn how to write out electron configurations using the Periodic Table. Those who are still not proficient will be called in during Lunch & Learn to work through both strategies.

**Enrichment Plan:** Students were divided into 2 groups based upon their proficiency. The proficient students moved on to writing out exceptions to the diagonal rule as well as drawing out the orbital spin diagrams based upon the electron configuration.