Stage 1 Desired Results

ESTABLISHED GOALS (CCSS)

RST.11-12.1-3

RST.11-12.4-6

RST.11-12.7-9

WHST.11-12.2a-e

RL.11-12.1,2,3,4,7

Transfer

Students will be able to independently use their learning to…

Use the periodic chart to identify metals, non-metals, and metalloids

Use the periodic chart to predict charge, electronegativity, size, valence electrons, etc.

Meaning

UNDERSTANDINGS	**ESSENTIAL QUESTIONS:**
Students will understand that… **Based on group and period number you can predict charge, electronegativity, size, valence electrons, metallic character**	**Why are elements arranged by period and group?** **What can location on the periodic chart tell us about elements?**

Acquisition

Students will know…	***Students will be skilled at…***
Charge, electronegativity, ionization energy, size, ionic, covalent bonds	**Using the periodic chart to determine charge, electronegativity, size, valence electrons, etc.** **Translating knowledge about location on the periodic chart to physical and chemical properties in the laboratory.**

Stage 2 - Evidence

Evaluative Criteria	**Assessment Evidence**
PERFORMANCE TASKS	**CURRICULUM EMBEDED PERFOMANCE ASSESSMENT (PERFORMANCE TASKS):** **End of Unit exam that allows students to calculate moles, and predict properties based on the location of the periodic chart.** **Lab reports that involve construction of graphs, data charts, and data analysis. Additionally, the labs in this unit require students to predict real word observations from pre-lab analysis of the periodic chart.**
	OTHER EVIDENCE: **Daily assignments.** **Two lab write ups** **Exam Review** **Exam**

CLAIMS LAM	**CLAIM 1** **CLAIM 2** **CLAIM 3** **CLAIM 4** **CLAIM 1** **CLAIM 2** **CLAIM 3** **CLAIM 4**
DEPTH OF KNOWLEDGE LEVELS	**DOK 1** **DOK2** **DOK 3** **DOK4**
ACHIEVEMENT LEVEL DESCRIPTORS	**ALD 1** **ALD 2** **ALD 3** **ALD 4**
Stage 3 – Learning Plan	

Summary of Key Learning Events and Instruction	- Take notes on Periodic Law
	  o Logic behind the arrangement of the periodic chart into periods and groups
	  o Use electron configuration to predict location on the periodic chart
	  o How to use the periodic chart to predict properties, electron configuration, and number of valence electrons
	  o Define electronegativity, ionization energy, electron affinity, atomic size, metallic character
	- Complete labs
	  o Flame test to identify metals
	  o Reactivity of halides
	- Complete homework
	  o Periodic law practice
	  o Periodic trends practice
	- White board practice to check understanding
	- Review and final practice
	- Exam on periodic law