# Westside High School - Weekly Lesson Plan (Week At a Glance) – SY 25-26

Subject: AP Chemistry

Course: AP Chemistry – Periodic Trends & Chemical Reactions

Week of: September 15–19, 2025

Unit Focus: Periodic Trends & Chemical Reactions (AP Chemistry Units 1 & 4)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Day | Learning Target (LT) | Success Criteria (SC) | Activation of Learning (5 min) | Focused Instruction – I DO (10 min) | Guided Instruction – WE DO (10 min) | Collaborative Learning – Y’ALL DO (10 min) | Independent Learning – YOU DO (10 min) | Closing (5 min) |
| Monday | I am learning about period trends. | I can predict element behavior based on position on the periodic table. | Coulomb’s Law question. | Discuss lab instructions. | Student inquiry lab. | Student inquiry lab. | Student inquiry lab. | Check Progress. |
| Tuesday – Ionization Energy | I can explain how ionization energy trends across periods and down groups are related to effective nuclear charge and electron shielding. | SC1: I can predict ionization energy trends across the periodic table.SC2: I can justify exceptions to trends using Coulomb’s law and electron configurations. | Quick Write: “What factors make it easier or harder to remove an electron?” | Think-Aloud Modeling: Teacher works through periodic table trends with annotated examples. | Graphic Organizer (Guided): Students complete scaffolded chart showing ionization energy trends. | Jigsaw Strategy: Groups become “experts” on one section (s-block, p-block, d-block) and share. | Worked Examples: Students solve AP-style multiple-choice questions on ionization energy. | Exit Ticket: Write 1 exception to IE trend and explain why it occurs. |
| Wednesday – Atomic & Ionic Radii | I can compare atomic and ionic radii across periods and within groups using periodic trends. | SC1: I can explain how effective nuclear charge impacts atomic radius.SC2: I can compare sizes of isoelectronic species. | Anticipation Guide: True/False statements about atomic size (ex: “Na+ is larger than Na”). | Direct Instruction (Mini-Lecture) with anchor chart on radius trends. | Error Analysis: Students identify and correct flawed reasoning in sample AP FRQ responses. | Collaborative Annotation: Students annotate diagrams of ionic/atomic radii and share reasoning. | Choice Board: Students choose task—short essay, diagram, or problem set on radii trends. | 3-2-1 Summary: 3 facts about radius, 2 comparisons, 1 question. |
| Thursday – Electronegativity & Electron Affinity | I can analyze how electronegativity and electron affinity explain chemical bonding and reactivity. | SC1: I can rank elements by electronegativity/electron affinity using periodic trends.SC2: I can explain how these values relate to polarity and bond strength. | Do Now: Match element symbols to high/low electronegativity positions. | Modeling with Worked Examples: Teacher solves polarity/bond strength examples. | Reciprocal Teaching: Groups summarize, question, clarify, and predict using textbook excerpt. | Team Problem Solving: Groups determine bond polarity and strength in given compounds. | Performance Task: Write a short claim-evidence-reasoning response on “Which halogen is most reactive and why?” | One-Minute Summary: Students explain how electronegativity connects to chemical bonding. |
| Friday – Periodic Trends of Reactivity | I can evaluate how periodic trends affect the reactivity of metals and nonmetals. | SC1: I can predict which metals and nonmetals are most reactive.SC2: I can explain periodic trends of reactivity using electron configuration and energy concepts. | Engaging Video with Prompt: Reactivity demonstrations (alkali metals in water). Students predict outcomes. | Demonstration with Think-Aloud: Teacher models predicting reactivity patterns. | Socratic Seminar: Students debate “Which periodic family is most reactive?” citing evidence. | Gallery Walk: Groups create posters showing reactivity trends and rotate to critique others. | Independent Practice: AP-style FRQ predicting and explaining reactivity trends. | Peer Debrief: Partners share one misconception corrected during today’s lesson. |