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| --- | --- | --- | --- | --- | --- | --- |
|  |  | **Monday-** | **Tuesday-** | **Wednesday-** | **Thursday-** | **Friday-** |
| **Pre-Planning: Unpacking the Standards** | **TEKS:**  (R) - Readiness Standard  (S) -Supporting Standard | **Ⓡ SCI.8.5E** Investigate how evidence of chemical reactions indicate that new substances with different properties are formed.  **Ⓡ SCI.8.5D** Recognize that chemical formulas are used to identify substances and determine the number of atoms of each element in chemical formulas containing subscripts.  **Ⓢ SCI.8.5F** Recognize whether a chemical equation containing coefficients is balanced or not and how that relates to the law of conservation of mass. | **Ⓡ SCI.8.5E** Investigate how evidence of chemical reactions indicate that new substances with different properties are formed.  **Ⓡ SCI.8.5D** Recognize that chemical formulas are used to identify substances and determine the number of atoms of each element in chemical formulas containing subscripts.  **Ⓢ SCI.8.5F** Recognize whether a chemical equation containing coefficients is balanced or not and how that relates to the law of conservation of mass. | **Ⓡ SCI.8.5E** Investigate how evidence of chemical reactions indicate that new substances with different properties are formed.  **Ⓡ SCI.8.5D** Recognize that chemical formulas are used to identify substances and determine the number of atoms of each element in chemical formulas containing subscripts.  **Ⓢ SCI.8.5F** Recognize whether a chemical equation containing coefficients is balanced or not and how that relates to the law of conservation of mass. | **Ⓡ SCI.8.5E** Investigate how evidence of chemical reactions indicate that new substances with different properties are formed.  **Ⓡ SCI.8.5D** Recognize that chemical formulas are used to identify substances and determine the number of atoms of each element in chemical formulas containing subscripts.  **Ⓢ SCI.8.5F** Recognize whether a chemical equation containing coefficients is balanced or not and how that relates to the law of conservation of mass. | **Ⓡ SCI.8.5E** Investigate how evidence of chemical reactions indicate that new substances with different properties are formed.  **Ⓡ SCI.8.5D** Recognize that chemical formulas are used to identify substances and determine the number of atoms of each element in chemical formulas containing subscripts.  **Ⓢ SCI.8.5F** Recognize whether a chemical equation containing coefficients is balanced or not and how that relates to the law of conservation of mass. |
| **Verb(s)**  - What verbs define the actions students will need to take when mastering this objective? | * Recognize * Investigate | * Recognize * Investigate | * Recognize * Investigate | * Recognize * Investigate | * Recognize * Investigate |
| **Concept**  -What am I teaching?  -What do the students need to know? |  | Electron Configuration | Electron Configuration and determining the # of shells and valence electrons using the periodic table. | Electron Configuration and determining the # of shells and valence electrons using the periodic table. | Review structure of atom and periodic table |
| **Context**  ***Readiness:***   * Connections from previous grade level. * To what degree will this impact learning two years down the road?   ***Supporting:***   * What Readiness Standards or concepts from the Readiness Standards does it support? * How does it support the Readiness Standards? | **Prerequisites**  **In Grade 6, students:**   * were taught that an element is a pure substance represented by chemical symbols * differentiated between elements and compounds on the most basic level   **In Grade 7, students:**   * distinguished between physical and chemical changes in matter | **Prerequisites**  **In Grade 6, students:**   * were taught that an element is a pure substance represented by chemical symbols * differentiated between elements and compounds on the most basic level   **In Grade 7, students:**   * distinguished between physical and chemical changes in matter | **Prerequisites**  **In Grade 6, students:**   * were taught that an element is a pure substance represented by chemical symbols * differentiated between elements and compounds on the most basic level   **In Grade 7, students:**   * distinguished between physical and chemical changes in matter | **Prerequisites**  **In Grade 6, students:**   * were taught that an element is a pure substance represented by chemical symbols * differentiated between elements and compounds on the most basic level   **In Grade 7, students:**   * distinguished between physical and chemical changes in matter | **Prerequisites**  **In Grade 6, students:**   * were taught that an element is a pure substance represented by chemical symbols * differentiated between elements and compounds on the most basic level   **In Grade 7, students:**   * distinguished between physical and chemical changes in matter |
| **I will know my students have mastered this standard when they can….** | Identify the evidences in chemical reactions after an investigation | Identify the evidences in chemical reactions after an investigation | Identify the evidences in chemical reactions after an investigation | Counting Atoms by making models of different formulas | Counting Atoms by making models of different formulas |
| **I will assess the standard by…..** | Check for understanding using scenarios | Check for understanding using scenarios | Check for understanding using scenarios | Check for understanding chemical formulas | Check for understanding chemical formulas |
| **Vocabulary**  (Academic and Content) | * **covalent bond** * **electron** * **valence electron** * **isotope** * **subscript** * **formula** * **reactant** * **precipitate** * **coefficient** * **atom** * **molecule** * **chemical reaction** * **equation** * **precipitate** * **physical/chemical property** * **atomic mass** * **law of conservation of mass** * **solvent** * **reactant product** * **chemical Formula** * **atom** * **element** * **molecule** * **substances** * **mixture** * **product** * **solid** * **liquid** * **dissolve** | * **covalent bond** * **electron** * **valence electron** * **isotope** * **subscript** * **formula** * **reactant** * **precipitate** * **coefficient** * **atom** * **molecule** * **chemical reaction** * **equation** * **precipitate** * **physical/chemical property** * **atomic mass** * **law of conservation of mass** * **solvent** * **reactant product** * **chemical Formula** * **atom** * **element** * **molecule** * **substances** * **mixture** * **product** * **solid** * **liquid** * **dissolve** | * **covalent bond** * **electron** * **valence electron** * **isotope** * **subscript** * **formula** * **reactant** * **precipitate** * **coefficient** * **atom** * **molecule** * **chemical reaction** * **equation** * **precipitate** * **physical/chemical property** * **atomic mass** * **law of conservation of mass** * **solvent** * **reactant product** * **chemical Formula** * **atom** * **element** * **molecule** * **substances** * **mixture** * **product** * **solid** * **liquid** * **dissolve** | * **covalent bond** * **electron** * **valence electron** * **isotope** * **subscript** * **formula** * **reactant** * **precipitate** * **coefficient** * **atom** * **molecule** * **chemical reaction** * **equation** * **precipitate** * **physical/chemical property** * **atomic mass** * **law of conservation of mass** * **solvent** * **reactant product** * **chemical Formula** * **atom** * **element** * **molecule** * **substances** * **mixture** * **product** * **solid** * **liquid** * **dissolve** | * **covalent bond** * **electron** * **valence electron** * **isotope** * **subscript** * **formula** * **reactant** * **precipitate** * **coefficient** * **atom** * **molecule** * **chemical reaction** * **equation** * **precipitate** * **physical/chemical property** * **atomic mass** * **law of conservation of mass** * **solvent** * **reactant product** * **chemical Formula** * **atom** * **element** * **molecule** * **substances** * **mixture** * **product** * **solid** * **liquid** * **dissolve** |
| **Lesson Topic** (Content Objective) | Evidences in chemical reactions | Evidences in chemical reactions | Evidences in chemical reactions | Counting atoms | Counting Atoms |
| **ELPS** (Language Objective) | * ELPS C.1a Use prior knowledge and experiences to understand meanings in English. * ELPS C.1e Internalize new basic and academic language by using and reusing it in meaningful ways in speaking and writing activities that build concept and language attainment. * ELPS C.4g Demonstrate comprehension of increasingly complex English by participating in shared reading, retelling or summarizing material, responding to questions, and taking notes commensurate with content area and grade level needs.   ELPS C.5b Write using newly acquired basic vocabulary and content-based grade-level vocabulary. | * ELPS C.1a Use prior knowledge and experiences to understand meanings in English. * ELPS C.1e Internalize new basic and academic language by using and reusing it in meaningful ways in speaking and writing activities that build concept and language attainment. * ELPS C.4g Demonstrate comprehension of increasingly complex English by participating in shared reading, retelling or summarizing material, responding to questions, and taking notes commensurate with content area and grade level needs.   ELPS C.5b Write using newly acquired basic vocabulary and content-based grade-level vocabulary. | * ELPS C.1a Use prior knowledge and experiences to understand meanings in English. * ELPS C.1e Internalize new basic and academic language by using and reusing it in meaningful ways in speaking and writing activities that build concept and language attainment. * ELPS C.4g Demonstrate comprehension of increasingly complex English by participating in shared reading, retelling or summarizing material, responding to questions, and taking notes commensurate with content area and grade level needs.   ELPS C.5b Write using newly acquired basic vocabulary and content-based grade-level vocabulary. | * ELPS C.1a Use prior knowledge and experiences to understand meanings in English. * ELPS C.1e Internalize new basic and academic language by using and reusing it in meaningful ways in speaking and writing activities that build concept and language attainment. * ELPS C.4g Demonstrate comprehension of increasingly complex English by participating in shared reading, retelling or summarizing material, responding to questions, and taking notes commensurate with content area and grade level needs.   ELPS C.5b Write using newly acquired basic vocabulary and content-based grade-level vocabulary. | * ELPS C.1a Use prior knowledge and experiences to understand meanings in English. * ELPS C.1e Internalize new basic and academic language by using and reusing it in meaningful ways in speaking and writing activities that build concept and language attainment. * ELPS C.4g Demonstrate comprehension of increasingly complex English by participating in shared reading, retelling or summarizing material, responding to questions, and taking notes commensurate with content area and grade level needs.   ELPS C.5b Write using newly acquired basic vocabulary and content-based grade-level vocabulary. |
| **Lesson Cycle** | **Engage:**  **Warm-Up/Opening**  **(5 min)** | Elephant toothpaste | Does it run on batteries (Page 118). |  | Counting atom activity |  |
| **Explore:**  **INM/Review (0 min):** | “Where did it come from?”  Page 119 | Lights Off  (Teacher Demo) |  | Counting atoms (Fruit Loops) |  |
| **Explain:**  **Guided Practice** |  | Students will observe and write in their notebooks. | Page 120-121: Signs of chemical reactions |  |  |
| **Elaborate:**  **Independent Practice (20 min):** |  |  |  | Students will do a worksheet to determine counting atoms of the given elements and compounds. | Lab stations  Review evidence of chemical reactions and counting atoms. |
| **Evaluate:**  **Closing (5 min.):** | Identify the evidences of chemical reactions | Plicker Question(s): Identify the evidences of chemical reactions | Plicker Question(s): Identify the evidences of chemical reactions | Plicker Question(s): Identify the evidences of chemical reactions | Plicker Question(s): Identify the evidences of chemical reactions |
| **Reinforcement** | **Materials/ Resources:** | Lab Supplies, triple beam balances |  |  |  |  |
| **Homework** |  |  |  |  |  |
| **MODIFICATIONS and/or ACCOMODATIONS:**  *-Gifted and Talented*  *-ELL/ ESL*  *-Special Education* | Shortened Assignments, Highlight key vocabulary, Print Lectures for Student | Shortened Assignments, Highlight key vocabulary, Print Lectures for Student | Shortened Assignments, Highlight key vocabulary, Print Lectures for Student | Shortened Assignments, Highlight key vocabulary, Print Lectures for Student | Shortened Assignments, Highlight key vocabulary, Print Lectures for Student |

**\*All lesson plans are subject to revisions and addendums by teacher.**