Unit 6: Chemical Reactions

**Learning Targets & Success Criteria**

Learning Targets are broken into success criteria—these are the individual skills you must demonstrate to show mastery of each learning target. They are shown as the bullets underneath the learning target. The general rubric below will be used with each of the learning targets:

**Rubric for all Learning Targets**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **0**  **No Evidence** | **5**  **Not Yet** | **7**  **Approaching** | **8.5**  **Proficient** | **9 - 10**  **Advanced** |
| Left 2 or more questions blank on the assessment | No evidence of proficiency with the learning target but attempted the questions. | Shows beginning proficiency with the learning target, but is inconsistent or makes several errors (>4 errors) | Demonstrates understanding of most or all of the learning target, but misses no more than 1 success criteria or makes 3-4 errors | Demonstrates mastery of learning target; makes no more than  1-2 minor errors |

**LT 6.1: Explain the relationship between balancing chemical equations and the law of conservation of mass.**

* I can model a chemical reaction to show conservation of mass.
* I can analyze experimental evidence and explain differences in initial and final mass using the Law of Conservation of Matter.
* I can balance simple chemical reactions.
* I can balance chemical reactions that contain polyatomic ions and combustion reactions.

**LT 6.2: Apply the patterns seen in chemical reactions to predict the products and create chemical equations.**

* I can identify the reactants and products of a chemical reaction, as well as recognize their state of matter by their symbol: (s), (l), (g), (aq).
* I can identify the 5 types of chemical reactions: synthesis, decomposition, single displacement (replacement), double displacement (replacement), and combustion.
* I can predict the products of a synthesis reaction involving a metal and non-metal.
* I can predict the products of hydrocarbon combustion reactions.

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