

**Chemistry- Law of Conservation of Matter/Reactions Weekly HW**

8.P.1.4: Explain how the idea of atoms and a balanced chemical equation support the conservation of mass.

MONDAY	TUESDAY	WEDNESDAY	THURSDAY
<p>5 <b>Vocabulary</b></p> <hr/> <p>Define</p> <ol style="list-style-type: none"> <li>Law of conservation of mass/matter</li> <li>Products</li> <li>Reactants</li> <li>Coefficient</li> <li>Subscript</li> <li>Closed system</li> <li>Chemical Equation</li> <li>Chemical Reaction</li> </ol> <p>Remember...</p> <p><u>FRONT OF CARD:</u>            Word, picture and initials in top left corner</p> <p><u>BACK OF CARD:</u>            Definition &amp; source</p> <p><b>DUE WEDNESDAY</b></p>	<p>6 <b>Critical Thinking</b></p> <hr/> <ol style="list-style-type: none"> <li>What is a closed container in relation to the law of conservation of mass?</li> <li>Create a Venn diagram that compares and contrasts a chemical reaction in an open and closed container. Provide one example of each.</li> <li>Create a chart that includes 4 signs of a chemical reaction and an explanation why.</li> </ol> <p><b>DUE FRIDAY</b></p>	<p>7 <b>Critical Thinking</b></p> <hr/> <ol style="list-style-type: none"> <li>What happens to the arrangement of atoms during a chemical equation?</li> <li>Why must a chemical equation be balanced? How does this relate to the law of conservation of mass?</li> <li>Jim started his experiment with 43g of substance Z and 52g of substance A. After this reaction, he only has 82g. What is a possible explanation for the lost mass?</li> </ol> <p><b>DUE FRIDAY</b></p>	<p>8 <b>Analysis</b></p> <hr/> <p><b>CH<sub>4</sub>+O<sub>2</sub>→ CO<sub>2</sub>+H<sub>2</sub>O</b></p> <ol style="list-style-type: none"> <li>Using the equation above, label the parts of this equation using this week's vocabulary (see Monday's words).</li> <li>Balance the above equation so it supports the law of conservation of mass.</li> <li>Write the chemical formula for a compound that has 1 atom of Nitrogen and 3 atoms of Hydrogen.</li> </ol> <p><b>DUE FRIDAY</b></p>

Staple this sheet to the front of your completed homework packet prior to submitting them on Friday.