Unit #2:
Matter really Matters!

Unit Vocabulary

<table>
<thead>
<tr>
<th>Matter</th>
<th>Atom</th>
<th>Molecule</th>
<th>Compound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nucleus</td>
<td>Proton</td>
<td>Electron</td>
<td>Neutron</td>
</tr>
<tr>
<td>Mixture</td>
<td>Element</td>
<td>Quark</td>
<td>Ion</td>
</tr>
<tr>
<td>Isotope</td>
<td>Periodic Table</td>
<td>Atomic Weight</td>
<td>Atomic Number</td>
</tr>
<tr>
<td>Physical Property</td>
<td>Chemical Property</td>
<td>Chemical Change</td>
<td>Physical Change</td>
</tr>
<tr>
<td>Chemical Formula</td>
<td>Subscript</td>
<td>Coefficient</td>
<td>Exothermic</td>
</tr>
<tr>
<td>Endothermic</td>
<td>Solubility</td>
<td>Density</td>
<td>Phase of Matter</td>
</tr>
<tr>
<td>Stoichiometry</td>
<td>Melting</td>
<td>Boiling</td>
<td>Condensation</td>
</tr>
<tr>
<td>Sublimation</td>
<td>Freezing</td>
<td>Deposition</td>
<td>Acid</td>
</tr>
<tr>
<td>Base</td>
<td>H+ Ion</td>
<td>OH- Ion</td>
<td></td>
</tr>
</tbody>
</table>

Unit Themes:

1. What is Matter? What is NOT Matter?
2. What is the smallest form of matter?
3. How did Rutherford determine the shape of the atom?
4. What are some ways that the density of matter can change?
5. What are some examples of Physical and Chemical changes of matter?
6. What happens to matter when it goes through a Physical Change?
7. What happens to matter when it goes through a Chemical Change?
8. What are some ways that scientists have used Chemistry to improve our lives?
9. Identify some common Acids and Bases?
10. What makes something an Acid or a Base?

Unit Labs:

1. The Rutherford Experiment
2. Inquiry of Matter Lab
3. The Physical Properties of Matter Lab
4. The Density Test Tube Challenge
5. The Oobleck Lab
6. The Ice Cream Lab
7. Can Imploding Lab
8. The Dehydration of Sugar Demo
9. The Unknown Meteor Lab
10. Kitchen Chemistry Lab

Unit Quotes

"My name is Bond, Covalent Bond. Shared, not taken."