



## Unit #2: Matter really Matters!

### Unit Vocabulary

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

### 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.”**

