**Process Targets All Science**

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| **Problem Solving** |
| I can recognize multiple ways to solve a problem. |
| I can judge which problem solving method will be more effective. |
| I can identify flaws in the scientific method. |
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| **Experimental Design** |
| I can design an experiment that will provide data to solve a problem. |
| I can isolate one variable in a complex system and manipulate that variable. |
| I can identify controls in a complex systems experiment. |
| I can identify constants in an experiment. |
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| **Gathering Data** |
| I can organize a variety of data. |
| I can choose the most concise and effective means of representing data. |
| I can balance trusting data with questioning data that does not make sense. |
| I can adapt to using a wide variety of observation and measurement tools. |
| I can identify and follow the necessary safety precautions to complete a lab. |
| I can set up and use a variety of Lab Pro probes to collect data. |
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| **Interpretation of Data** |
| I can create and use a graph with multiple trend lines. |
| I can extrapolate future trends from my data. |
| I can isolate descriptions of data from inferences of that data. |
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| **Communicate Results** |
| I can use quantitative and qualitative means to support conclusions drawn from data. |
| I can share results of my experiment concisely through a variety of means to appropriate audiences. |
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| **Real World Applications** |
| I can recognize the connection of scientific concepts to current events and trends in daily life. |
| I can connect distinct aspects of what I am learning to complex global scientific issues. |

**Prime Chemistry Content Targets**

* I can express a chemical or nuclear reaction in words or by writing a balanced equation.
* I can visualize matter using pictures and words.
  + compounds, elements, mixtures, solids, liquids, gases
* I understand the differences between a chemical change and a physical change and I can recognize them.
* I can predict amounts used or made in a chemical reaction.
* I can explain the differences between elements in terms of atomic structure.
* I can predict shape and chemical properties of a substance by drawing molecular structures.
* I can describe the behavior of gases in words, pictures, and equations.
* I can describe the nature of a solution using words, pictures, and equations.
* I can predict the products of chemical reactions.
* I understand the structure of the Periodic table and can use it to find information.
* I understand the concept of the mole and can apply its use in calculations.

**Chemistry Content Targets (In Addition to Above)**

* I can qualitatively describe the factors that affect the reaction rate of a chemical reaction.
* I can qualitatively describe a chemical reaction at equilibrium and how it is affected by outside factors.

**Honors Chemistry Content (In Addition to Above)**

* I can describe the energy gained or released in a chemical reaction and use a variety of methods to calculate the energy changes involved in physical and chemical processes.
* I can qualitatively and quantitatively describe the factors that affect the reaction rate of a chemical reaction.
* I can qualitatively and quantitatively describe a chemical reaction at equilibrium and how it is affected by outside factors.

**AP Chemistry Content (In Addition to Above)**

* I can describe the energy gained or released in a chemical reaction and use a variety of methods to calculate the energy changes involved in physical and chemical processes.
* I can qualitatively and quantitatively describe the factors that affect the reaction rate of a chemical reaction.
* I can qualitatively and quantitatively describe a chemical reaction at equilibrium and how it is affected by outside factors.