Chemistry Formative Assessment Day (FAD Day)

Each student will be have no more than five minutes to explain and demonstrate mastery of the objectives below. This can be done in any creative way or simply just have a discussion with the teacher. The teacher wants to help clear up any misconceptions and meet the need of each individual learner. Please be prepared (study) and be ready to show just how awesome you are and what you have learned within this unit.

Essential Standard		Clarifying Objectives	
8.P.1	Understand the properties of matter and changes that occur when matter interacts in an open and closed container.	8.P.1.1	Classify matter as elements, compounds, or mixtures based on how the atoms are packed together in arrangements.
		8.P.1.2	Explain how the physical properties of elements and their reactivity have been used to produce the current model of the Periodic Table of elements.
		8.P.1.3	Compare physical changes such as size, shape and state to chemical changes that are the result of a chemical reaction to include changes in temperature, color, formation of a gas or precipitate.
		8.P.1.4	Explain how the idea of atoms and a balanced chemical equation support the law of conservation of mass.

Understand the following terms:

- atom
- compound
- mixture (heterogeneous and homogenous)
- element
- pure substance
- valence electrons
- chemical reaction
- chemical property/change
- physical property/change

Understand the relationship of solids, liquids, and gases.

Identify the locations/charge of protons, neutrons, electrons. How do you know how many protons, neutrons, electrons of an atom of an element? What makes up the atomic mass?

Using a periodic table, understand the arrangement of rows and periods and determine which atoms are

- metal or non-metal
- stable or unstable
- number of energy levels, number of valence electrons
- reactive
- solids, liquids, or gases

How is the Periodic Table organized? What are the names of the different families?

Understand the law of conservation of matter.

Looking at a chemical reaction, understand that the mass of the products is the same as the mass of the reactants. For example:

$H_2 + O \rightarrow H_2O$

6g 3g → 9g

How do you determine if an equation is balanced?