**Chemical and Physical Reactions**

Compare and contrast physical and chemical reactions.

How do you know a physical reaction has occurred?

How do you know a chemical reaction has occurred?

Give 3 examples of both chemical and physical reactions.

Know how to read a chemical formula. What does the subscript tell you?

Ex: How many different elements are in H2O? How many oxygen atoms are in H2O?

**Periodic Table**

What is the most reactive metal group on the periodic table? Which column is it?

What is the most reactive NONmetal group on the periodic table? Which column is it?

What is the most UNreactive group on the periodic table? Which column is it?

Which group are elements from group 2 most likely going to bond with? Why?

What are characteristics of a metal? nonmetal?

How can you determine the number of valence electrons (electrons in the OUTERMOST energy shell) just by looking at the periodic table?

Know the difference between row and period.

**Compounds and Mixtures**

Explain the difference between an element, molecule, compound, and mixture.

Draw an element, molecule, compound, and mixture using different color circles.

How do atoms form compounds? (Hint: How do Ionic and covalent bonds work?)

Compare/contrast ionic and covalent bonds.

What is the difference between a heterogenous mixture and a homogeneous mixture?

What is another word for a homogeneous mixture?

**Atomic Structure**

What does the atomic NUMBER tell you?

What two subatomic particles make up the atomic MASS?