**Exam Review Intro to Physical Science**

**Terms**: Define each of the following terms from your notes or your book.

Element

Compound

Valance Electrons

Atom

Bohr Diagram

Ion

Lewis Dot Model

Cation

Anion

Covalent Bonds

Chemical Change

Physical Change

Ionic Bond

Combining capacity

**Problems:**

1. Draw a Bohr Diagram and a Lewis Dot diagram for the following elements: Ar, Cl, S, P Si, Al, Mg, Na
2. List the name, atomic mass, number of protons, number of electrons, number of neutrons, valance electrons, ionic charge, family: Li, Be, B, C, N, O, F, Ne
3. In the following determine if it is a chemical or physical change and why.

\_\_\_\_\_\_\_\_\_dissolution of sugar in milk

\_\_\_\_\_\_\_\_\_rusting of iron

\_\_\_\_\_\_\_\_\_curdling of milk

\_\_\_\_\_\_\_\_\_melting of ice

\_\_\_\_\_\_\_\_\_yellowing of newspapers left in the sun

\_\_\_\_\_\_\_\_\_darkening of apples

\_\_\_\_\_\_\_\_\_evaporation of water

\_\_\_\_\_\_\_\_\_digestion of food

\_\_\_\_\_\_\_\_\_mixing of alcohol and water

\_\_\_\_\_\_\_\_\_fermentation of grapes into wine

\_\_\_\_\_\_\_\_\_drying of a wet towel

\_\_\_\_\_\_\_\_\_mixing a cake mix

\_\_\_\_\_\_\_\_\_baking that cake mix into a cake

\_\_\_\_\_\_\_\_\_dissolving both sugar and salt into water

Identify the products and the reactants of a chemical reaction.

Atomic Inventory

|  |  |  |
| --- | --- | --- |
| Formula | E or C | Atomic Inventory |
| AlPO4 |  |  |
| SrSO4 |  |  |
| KCN |  |  |
| (NH4)2CrO4 |  |  |
| Al2(SO4)3 |  |  |
| Cu2O |  |  |
| Cl2 |  |  |