Chemistry Semester 1 Final Study Guide

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| Topics to Study | |
| * Density * Percent composition * Balancing equations * Grams to moles * Moles to grams * Periodic trends * Periodic table groups * Grams to molecules * Predicting chemical products | * Ionic vs Covalent * Lewis Structures * Valence Electrons * Chemical Naming * Types of Reactions * VSEPR Shapes * Electron Configurations * Empirical formulas * isotopes |

1. How many electrons does a calcium ion have?
2. What is the correct Lewis Dot structure for boron
3. What is the short hand configuration for iodine?
4. When potassium hydroxide and barium chloride react, potassium chloride and barium hydroxide are formed. The balanced equation for this reaction is…
5. If you had 15 grams of gold (I) sulfide, how many molecules do you have?
6. What is the formula for copper (II) Fluoride
7. What is the ionic charge of zirconium in the ion in the ionic compound ZrO2

1. Name the compound NO4
2. What is the volume of 70.0 grams of ether if the density is .70g.ml
3. When the following equation is balanced, the coefficients of potassium chlorate is KClO3 → KCl + O2
4. Which of the following elements conducts heat?

a. Calcium b. Fluorine

c. Sulfur d. Argon