Common Assessment Review

Shapes of atomic orbitals

What happens when electrons move energy levels? Think energy

Aufbau principle

How are electrons distributed in orbitals?

Unpaired electrons how will they arrange and be able to tell how many pair there are

Speed of light and speed of gamma rays in vacuums

Know how to calculate the frequency of a photon. Hint plank’s constant is used.

Compare energy levels of atoms with higher levels and lower levels of energy

Define the quantum mechanical model of the atom.

Heisenberg uncertainty principle. What is it all about?

Know which groups of elements are considered Group A, Group B and Group C.

What does all of the information in an element “square” represent?

What would make an element “inactive” as far as bonding?

Group 1A and Group 7A elements are examples of:

 Representative, transition, noble gases or nonmetallic elements.

What are representative elements?

Know how to identify atomic radius trends of the periodic table.

What are cations and anions all about?

Know electronegativity trends of the periodic table.

Know the ionization energy trend of the periodic table based on the radius of atom.

Definition of orbital and valence electrons.

Know how elements achieve a noble-gas configuration.

How do you figure net charge?

Formula unit of sodium nitride?

How do you make a formula with an element and a polyatomic ion?

Know what elements make ionic and covalent compounds.

At room temp what physical state (normally) are ionic, metallic and covalent bonds?

Know the characteristics of metals.

What information do you know about a structural formula of a molecule or polyatomic ion?

In what type of bond do atoms share electrons? Why are those electrons shared?

Diatomic elements name the 7 and what do most of them have in common as far as a “common

 name”?

What are coordinate covalent bonds? How are they different from other covalent bonds?

Molecular orbitals are formed how?

Where is most likely position of electrons in a molecular bond?

Draw the Lewis structure for ethane. What is the degree of the angle?

Know what a polar covalent bond is and how it forms.

Dispersion forces what is the cause?