**LG 7:**

Name Chemistry 11

TA 2021-2022

* ****How to determine The features of a wave **AND** how to calculations dealing with Wave Length
* The different electron orbitals their associated energy levels (aka, which level to assign first, second, third, etc.)
* How to correctly assign an element’s electrons to the correct orbital

**LG 8:**

* How and why elements are organized the way they are on the periodic table
* How the general trends of atomic radius AND can explain how it affects reactivity
* How to explain ionization energy AND can explain why certain elements form different charges
* What electron affinity is AND why elements lose or gain electrons to be similar to noble gases

**LG 9:**

* How to draw Lewis dot diagrams for BOTH Ionic and Covalent Compounds
* How to determine the polarity of a molecule
* How to write Lewis structures for basic compounds
* The concept of Resonance AND can explain it using examples

**LG 10:**

* How to predict the shape of a molecule by look at its electrons
* How to look at an atoms Lewis structure and can predict the molecular shape it will form
* The different classifications of polarity AND can determine if a bond is polar or non-polar

**LG 11:**

* How to explain what the Kinetic Molecular Theory is AND can describe the different states
* How can determine the type of intermolecular forces a compound should contain
* How to describe terms such as high surface tension and viscosity which are related to liquids

**LG 12:**

* How to explain the terms saturated, unsaturated, super saturated, crystallization and precipitate as they pertain to solutions
* The processes of dissolving and crystallization can explain “like dissolves like”
* How to explain the terms: miscible, dipole (temporary and permanent), and solvation
* The steps needed to convert a solid to concentration in a known amount of liquid
* How to do concentration calculations and can complete example questi