

Chemistry Unit Review

- Safety
 - Know the definition of WHIMIS and HGPS
 - Know basic warning symbols for both systems.
- Definitions
 - Malleability, Lustre, Viscosity, Ion, Cation, Anion, Alloy, Valence, Element, Compound, Pure Substance, Mixture, Matter, Atom, Molecule
- Lab Equipment
 - Be able to identify all lab equipment from diagrams or pictures
- States of Matter
 - Know the three states of matter and how to differentiate them.
 - Know the 4 points of particle theory
- Chemical and Physical Changes
 - Know the five signs of a chemical change. Be able to describe an example of both a chemical and a physical change.
- Quantitative vs Qualitative
 - Be able to define qualitative and quantitative and give an example of each.
- Non-metals vs Metals vs Metalloids
 - Be able to define, give properties of, and examples of each.
- Periodic Table and Standard Notation
 - Be able to find the mass, atomic number, and symbol from the periodic table.
 - Be able to represent an elements in standard atomic notation.
- Subatomic Particles
 - Be able to name, identify the location, mass, and charge of all three subatomic particles. Be able to calculate number of protons, number of electrons, and number of neutrons.
- Bohr-Rutherford Diagram
 - Be able to draw Bohr-Rutherford diagrams.
 - Be able to identify an element based on it's Bohr-Rutherford diagram.
- Periodic Families
 - Know where the alkaline and alkali metals are, as well as halogen and number gases.
- Ions
 - Be able to draw ions.
 - Be able to predict the charge of an ion.
 - Know the stable octet and duet rule.
- Bonding
 - Know the types of bonding, and which type will form between two elements.
 - Be able to draw diagrams of both ionic and covalent bonding.
- Testing for Gases
 - Be able to identify the test for hydrogen, oxygen, and carbon dioxide.