**Practical Chemistry Syllabus 2019 – 2020**

**Mrs. Foster-Hood**

September:

* Sign lab safety rules, pass out reference tables.
* Memorize names and symbols of elements 1 – 20 in Table S for a quiz.
* Discuss glassware and equipment used in lab.
* Use of density formula, rearrange it to find Mass and Volume, elements 21 – 40 for a quiz.
* Scientific Method, accuracy and precision in measurement of volume and temperature.
* Use of Microsoft in graphing data, elements 41-60 for quiz.
* Units of measurement.

Test on topics above- labs – Bunsen burner use, measurement and uncertainty, pipetting, reading meniscus, density.

October:

* Matter, physical, chemical properties and changes, elements 61-83 for quiz.
* Phase change and heating curve.
* Periodic table, groups, metals, non-metals and metalloids.
* Percent composition formula, percent error.

Test on topics above: - labs on graphing phase change, % composition of sugar in gum, % Water in a hydrate.

November:

* Law of conservation of matter and energy.
* Atomic structure- Nuclear decay and half-life, bonding, electrons
* Naming covalent compounds
* Naming binary ionic compounds
* Naming polyatomic ionic compounds

Test on above topics- labs- periodic table, building molecular structures with model kits, decay of skittlelonium

December:

* Balancing equations.
* Types of reactions.
* Solutions and solubility.

Test on the topics above. Labs on double replacement reactions, solubility.

January:

* Acids and bases- properties and strength.
* Indicators with labs.
* ph.
* Titration of acids and bases.

Test on acids and bases. Labs on pH of household substances, titration.

March – April

* Organic Chemistry- hydrocarbons, structure and properties
* Naming, building and drawing models with kit.
* Macromolecules, nucleic acids, carbohydrates.

Test on topics above. Labs on organic substances.

April - May:

* Tye dye.
* Nuclear chemistry.
* Special topics.

Test on topics above. Lab on tie dying t-shirts, making ice cream.

June:

* Final Exam Review.
* Final Exam.