**CHEMISTRY LAB**

**Instructor:** Laureen Rupert  
**Email:** laureen@sheep.education  
**Phone:** (843)991-8376  
**Grades:**  10th – 12th  
**Class time:**8:30 – 9:50 am  
**Required Texts:**  Discovering Design With Chemistry  by Dr. Jay Wile

**Prerequisites:**Algebra 1 and Physical Science (both required) and Biology (recommended)  
**Supplies:**  3-ring binder, pencil or pen, colored pencils, scientific calculator (TI-30X is recommended, students may not use phones as calculators)  
  
The lab class will cover the textbook concepts through labs, quizzes, worksheets, and 2 major projects. One project is due before Christmas Break, and the other is due before Spring Break. Projects are to be turned in on due date even if student is absent.

The Chemistry Lab grade is based on lab exercises/experiments, lab reports, projects, quizzes/summary assignments, and participation. This grade comprises 50% of the overall Chemistry grade. Absences are excused only with an email from parent within 24 hours of missed class. Late assignments drop 1 letter grade; no late assignments accepted after 1 week.

Tests, study guides, and on-your-own questions are graded by the parent are used for the remaining 50% of the Chemistry grade. Class time is allocated to assist with explanation of topics that students find difficult to understand from the textbook

Topics will include unit conversions, stoichiometry, atomic structure, the periodic table, balancing chemical equations, gas laws, acid/base reactions, chemical bonds, and thermodynamics.

**Class Communication Information**

Class communication will primarily take place on Edmodo. Please make sure you join the Edmodo class as soon as possible. You should have already received an e-mail from me with instructions on how to join. If you did not receive an e-mail, let me know. You should set up only one account in your student’s name that you both can access. The parent account feature does not work well.

Assignments and grades will also be posted on Edmodo. It is essential that you check it often. This will help you and your child to keep up with classwork.

Please feel free to send messages on Edmodo. You may also contact me by e-mail or phone when necessary.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Week | **CHEMISTRY – 2020-21** | Expected Progress |
|  | 1 | Lab #1.1, 1.2 Unit Conversions, Safety Quiz | Ch. 1 |
|  | 2 | Lab 1.3, Density, Unit Conversion practice |  |
|  | 3 | Lab #2.1 Mixtures |  |
|  | 4 | Lab #2.2 Conservation of Mass; | Ch. 2 |
|  | 5 | Periodic Chart Lab; Element Quiz #1 |  |
|  | 6 | Atomic Structure Worksheets Progress Check | Ch. 3 |
|  | 7 | DVD Orbitals; Electron Configuration |  |
|  | 8 | Lab 4.2; Lab 4.3 | Ch. 4 |
|  | 9 | Lab 5.2 Polar and Nonpolar |  |
|  | 10 | Lab 6.2 | Ch. 5 |
|  | 11 | Balancing Chemical Equations; Projects Due; |  |
|  | 12 | Lab 6.3; Candy Quiz | Ch. 6 |
|  |  | **Christmas Break** |  |
|  | 13 | Lab 7.2 Intro to Stoichiometry | Ch. 7 |
|  | 14 | Lab 7.3 |  |
|  | 15 | Elem Quiz#2; Lab 8.1 (Demo) | Ch. 8 |
|  | 16 | Lab 9.1; 9.2 |  |
|  | 17 | Lab 9.4 Review | Ch. 9 |
|  | 18 | Gas Law Worksheets |  |
|  | 19 | Gas Labs | Ch. 10 |
|  | 20 | Lab 11.1 |  |
|  | 21 | Lab 11.3 (Formal Lab Report) | Ch. 11 |
|  | 22 | Element Quiz #3; Lab #12. 1 |  |
|  | 23 | Review | Ch. 12 |
|  | 24 | Specific Heat Calorimetry Lab | Ch. 13 |
|  | 25 | Enthalpy |  |
|  | 26 | **Projects Due**; Lab 15.1 | Ch. 14 |
|  | 27 | Lab #15.2 (Formal Lab) |  |
|  | 28 | Final Elements Quiz; Review; Progress Check |  |
|  | 29 | Candy Quiz |  |