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| **Teacher** | **Ms. Moodie** |
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| **Phone #** | **(336) 893-4884** |

Pre-ap chemistry western Guilford high school



**Course Description**

Pre-AP Chemistry provides opportunities for students to develop understanding of the Pre-AP Chemistry key concepts and skills articulated in the course framework through the four units of study. The course provides opportunities for students to engage in the Pre-AP shared instructional principles of:

* close observation and analysis
* evidence-based writing
* higher-order questioning
* academic conversation

The components of this course have been crafted to prepare not only the next generation of chemists, but also a broader base of chemistry-informed citizens who are well equipped to respond to the array of science-related issues that impact our lives at the personal, local, and global levels.

The Pre-AP Chemistry course resources are designed to expose students to a wide range of career opportunities that depend upon chemistry knowledge and skills. Chemistry lies at the interface of the physical and life sciences. As science, engineering, and healthcare move increasingly towards the molecular scale, chemistry provides ideal preparation for 21st century careers.

**Course Objectives**

***By the end of this course, you should be able to:***

1. Analyze how the macroscopic properties of solids, liquids, and gases can be explained by differences at the particle level.
2. Explain the role energy plays in phase transitions and how these transitions can be represented using phase diagrams and heating curves.
3. Predict properties and behavior of gases from the kinetic molecular theory.
4. Describe and classify matter, with a focus on how intermolecular and intramolecular forces determine the properties of matter.
5. Relate the properties of molecular compounds to molecular structure.
6. State the differences between covalent and ionic bonding, with an emphasis on the electrostatic nature of ionic attractions.
7. Use the mole concept to count by weighing.
8. Use balanced chemical equations to determine the amounts of reactants and products in chemical reactions.
9. Investigate how solubility is related to precipitation and can drive chemical reactions.
10. Identify the properties of acids and bases and how proton transfer can drive chemical reactions.
11. State the factors that influence reaction rates.

**Grading Scale & Weights**

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| *A*  | *90-100* |
| B | 80-89 |
| C | 70-79 |
| D | 60-69 |
| F | 0-50  |
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| ***Product-****Quizzes**Tests/Projects* | *40%* |
| **Process-**  | 60% |
| ClassworkHomeworkWorksheets |  |
| ***Total*** | ***100%*** |

**Rules & Procedures**

**Rules:**

* Be prepared for class with all relevant materials in your assigned seat when the bell rings.
* Respect everyone and their property.
* Cell phones should be turned off and invisible during the class period.
* Follow all rules outlined according to Western Guilford High and Guilford County Schools handbook rules.

**Procedures:**

* Upon entering the class and taking assigned seat, each student will start working on the opening activity located on the board.
* Raise your hand to speak.
* Pick up after yourself before you leave.