**Syllabus – Physical Science**

Course Title: Physical Science

Teacher Information:

 Dean Patton

 A102

 Pattonw2@ccschools.k12tn.net

Textbook: Glencoe, “Glencoe Physical Science” ISBN 0078901782

Required Materials:

 Notebook

 Pencil

 Pen (Black or Blue)

 Calculator

Course Description:

 9 Weeks Basic Physics:

 Measurement

 Motion and Speed

 Newton’s Laws

 Energy

 Work and Machines

 Heat

 Waves

 Electricity

 9 Weeks Basic Chemistry:

 Phases of Matter

 Classification of Matter

 Periodic Table

 Chemical Bonds

 Chemical Reactions

 Acids and Bases

Evaluation: Grading Procedure

 Daily – 40%

 Bell Ringers

 Worksheets

 Quizzes

 Test – 40%

 Chapter Tests

 Element Tests

 Term Exams – 20%

 Midterm

 Final

Make-Up Policy:

3 Days as per handbook

Student’s responsibility to request work

Student Expectations:

1. On time and prepared
2. Seated and working when bell rings
3. Bell to Bell focus, attention, and work

Projects:

Draw, Color, Label the Periodic Table

Flash cards of the elements

Donations Please**:**

5.00 dollars

or any of the following

Paper Towels

Tissues

Clorox Wipes

Dry Erase markers

Hand Held pencil sharpeners

**Pacing Guide: Term 1**

**Topic/Section Days Objectives**

|  |  |  |
| --- | --- | --- |
| Classroom RulesSafety | 2 | Identify classroom rulesIdentify lab safety rules |
| Measurement | 6 +1 safe day | Name prefixes in the SI systemIdentify symbols and unitsConvert related units |
| Motion and Speed | 6 + 1 safe day | Distance vs DisplacementSpeed vs VelocityInterpret motion graphsCalculate Acceleration |
| Forces | 6 + 1 safe day | Explain force, mass, acceleration relationshipObserve 3 types of frictionDescribe and give examples of Newton’s first law  |
| Energy | 5 + 1 safe day | Kinetic vs Potential EnergyDescribe examples of energy conversionState the law of conservation of energy |
| Work and Machines | 7 + 1 safe day | Explain and calculate work, power, and MADescribe 6 types of simple machines |
| Thermal Energy | 6 + 1 safe day | Compare and Contrast: thermal energy, heat, and temperatureCalculate change in thermal energy |
| ElectricityWaves | 5 + 1 safe day | Define vocabulary related to electricity Define vocabulary related to waves |

**Pacing Term 2**

**Topic / Section Days Objectives**

|  |  |  |
| --- | --- | --- |
| Phases of Matter | 6 + 1Safe day | Explain Kinetic Theory of MatterDescribe particle movement of 4 statesDiscuss: Archimedes, Bernoulli, Pascal |
| Classification of Matter | 5 +1Safe day | Substance vs MixtureElements vs CompoundsPhysical vs Chemical Property and Change |
| Periodic Table | 10 +1 safe day | Identify names and symbolsDescribe electron cloud modelUse the periodic table to obtain information |
| Types of bonds | 10+1 safe day | Ionic vs Covalent BondsPolar vs Non-polar covalent bonds |
| Chemical Reactions | 8 +1 safe day | Reactants vs ProductsExpress chemical changes in equationsIdentify 4 general types of reactionsExergonic vs endergonic reactionsBalance chemical equations |
| Acids and Bases | 5 +1 safe | Acids vs BasesDetermine the meaning of PH |
| Midterm and Final exam reviews | 5 each |  |
|  |  |  |