

**PREAP CHEMISTRY LESSON PLAN**  
**UNIT 01: MATTER, MEASUREMENT, AND ENERGY**  
**AUGUST 27, 2007 – SEPTEMBER 7, 2007**

DAY	OBJECTIVE(S)	ACTIVITIES
<b>MONDAY</b>	1. Become aware of the expectations for Pre AP Chemistry.	<b>UNIT DAY 1 (30 min)</b>  1. Distribute Student Survey, Syllabus, Safety Contract, Pre-AP Contract 2. Discuss classroom policies and procedures, expectations, etc...
		<b>HW:</b> Read and sign Safety Contract with your parents. Student Surveys and Safety Contracts are due T, W, Th, or F. (You cannot participate in lab until completed.)
<b>TUESDAY</b>	1. Demonstrate lab safety rules.	<b>UNIT DAY 2 (45 min)</b>  1. Turn in any Safety Contracts and Surveys 2. Safety Scenarios Activity 3. Safety Tour
		<b>HW:</b> Lab safety quiz on Friday (20 min).
<b>WEDNESDAY/ THURSDAY BLOCK</b>	1. Take measurements with precision  2. Perform metric conversions using conversion factors and dimensional analysis.  3. Name the SI units of length, mass, volume, and time.  4. List and define the common metric prefixes.	<b>UNIT DAY 3 (90 min)</b>  1. Turn in any Safety Contracts and Surveys 2. Lecture: How to take a precise measurement 3. Activity: Scientific Measurements “Lab” 4. Lecture and Practice – Scientific Notation, Significant Figures, Temperature Conversions, Metric Conversions
		<b>HW:</b> Post Lab due Tuesday. Text Reference: Chapter 3: Scientific Measurement
<b>FRIDAY</b>	1. Express numbers and perform calculations using scientific notation  2. Convert between Celsius and Kelvin temperature scales.  3. Use the rules for significant figures in calculations.	<b>UNIT DAY 4 (45 min)</b>  1. Turn in ALL outstanding Safety Contracts and Surveys 2. Lab Safety Quiz (20 minutes) 3. Lecture and Practice cont. – Scientific Notation, Significant Figures, Temperature Conversions, Metric Conversions
		<b>HW:</b> Post Lab- Due Tuesday. Read Chapter 3: Scientific Measurement

DAY	OBJECTIVE(S)	ACTIVITIES
<b>MONDAY</b>		LABOR DAY HOLIDAY
<b>TUESDAY</b>	1. Distinguish between observations and interpretations 2. Distinguish between physical and chemical changes. 3. Apply the law of conservation of mass	<b>UNIT DAY 5</b> 1. Turn In: Measurement Post Lab 2. Activity: Observations vs. Interpretations 3. Activity: Physical vs. Chemical change 4. Activity: Conservation of Mass  <b>HW:</b> Pre-Lab: Density due next class. Quiz FRI.
<b>WEDNESDAY/ THURSDAY BLOCK</b>	1. Calculate the density of an object. 2. Distinguish between the accuracy and precision of a measurement 3. Use the rules for significant figures in calculations. 4. Solve problems dealing with error and deviation. 5. State the difference between mass and weight of an object	<b>UNIT DAY 6 (90 min)</b> 1. Turn in: Pre-LAB 2. Pre-Lab Lecture and Notes: Accuracy/Precision 3. LAB: Density  <b>HW:</b> Density Post Lab Due Tuesday. Quiz FRI. Unit Test ( Measurement, Matter, and Energy) 1 week from today.
<b>FRIDAY</b>	1. Apply the law of conservation of mass 2. Solve problems using scientific calculations. 3. Distinguish between exothermic and endothermic potential energy diagrams	<b>UNIT DAY 7</b> 1. Quiz: Scientific Calculations (sci notation, sig figs, conversions, accuracy, precision), Physical/Chemical Changes 2. Lecture: Conservation Laws and Potential Energy Diagrams  <b>HW:</b> Density Post Lab due Tuesday. Test next Wed/Th.