

Course: Honors Chemistry
Unit Title: The Nature of Chemistry (chapter 1)

Grade: 11
Length: approximately 5-7 periods (67 minutes each)

<p>Topical Essential Questions This unit is about....</p> <p>What is the essential nature of chemistry?</p> <p>How are mathematics, laboratory safety, and the scientific method incorporated into this discipline?</p>	<p>Benchmarks (Skills/Knowledge) Students will be able to.</p> <ul style="list-style-type: none">○ Define the concept of chemistry.○ Explain and apply the scientific method.○ Understand and apply the concept of laboratory safety.○ Utilize the metric system and correlate it to English units of measure.○ Explain the concept of accuracy and precision and apply it in the laboratory.○ Explain the concept and rules for significant figures and apply them to mathematical calculations.○ Explain the concept of dimensional analysis and apply it to mathematical calculations.	<p>Frameworks Strand 3, Chemistry, learning standard 1, Properties of Matter. Strand 4, Technology and Engineering, Learning Standard 1.1 Engineering design. Guiding Principle V. Math Correlation.</p>	<p>Assessment (Informal/Formal)</p> <p>Chapter 1 exam Lab report Oral assessments Lab observations Practice problem corrections</p>
<p>Materials & Resources Textbook Problem Sets Various chemicals Various lab equipment to support activities.</p>		<p>SIP/Expectations</p>	<p>Writing Connected Activity</p> <p>Lab report for the Density Lab</p>
			<p>Presentation Connected</p>

Teacher:

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Suggested Activities

What will the students do?

The Density Lab.

Practice problem sets.

Vocabulary.

What will the teacher do?

Demo-The decomposition of hydrogen peroxide with manganese dioxide.

Demo- The reaction of calcium carbide with water.

Demo- The reaction of concentrated sulfuric acid and sucrose.

Technology Connected

Computer applications.

MCAS/Warn-Up Activities

Notes:

Teacher: