

Merrimack School District
Essential Learning Competencies

School	MHS
Discipline	Science
Course Title	Honor's Physical Science

Quarter 1

Essential Learning Competencies	Links to the Rubrics/Standards/Competency	Formative Assessments	Summative Assessments
Unit I: Scientific Process		Bookwork Virtual Labs Labs Quizzes Demos Worksheets	Written Assessment and Lab Practical
1. Design a controlled experiment and identify the controlled and manipulated variables.			
2. Apply the formula for density to solve quantitative problems.			
3. Recognize that density is a characteristic property of matter.			
Unit II: Matter and Energy		Bookwork Virtual Labs Labs Quizzes Demos Worksheets	Written Assessment and Lab Practical or Project Based Assessment
1. Develop from experimental evidence the law of conservation of matter.			
2. Describe the behavior of matter based upon the Kinetic Molecular Theory			
3. Explain how pressure, volume and temperature are interrelated in gases.			

Quarter 2

Essential Learning Competencies	Links to the Rubrics/Standards/Competency	Formative Assessments	Summative Assessments
Unit III: Atomic Structure		Bookwork Virtual Labs Labs Quizzes Demos Worksheets	Written Assessment and Project Based Assessment
1. Describe the nature of subatomic particles and their effect on the structure of atoms and the properties of matter.			
2. Understand the purpose of isotopes and calculate the average atomic mass.			
Unit IV: Periodic Table		Bookwork Virtual Labs Labs Quizzes Demos Worksheets	Written Assessment and Project Based Assessment
3. Recognize the arrangement and periodic trends found in the Periodic Table			
Unit V: Writing and Naming Chemical Formulas		Bookwork Virtual Labs Labs Quizzes Demos Worksheets	Written Assessment and Lab Practical
4. Name and write chemical formulas for ionic compounds.			
5. Identify and classify the 5 different types of chemical reactions.			
6. Complete chemical reactions			

Quarter 3

Essential Learning Competencies	Links to the Rubrics/Standards/Competency	Formative Assessments	Summative Assessments
1.			
2.			
3.			
4.			
5.			
6.			

Quarter 4

Essential Learning Competencies	Links to the Rubrics/Standards/Competency	Formative Assessments	Summative Assessments
1.			
2.			
3.			
4.			
5.			
6.			