Priority Standards

PS 1: Interpreting and Constructing Models of Chemical Concepts

	4.0 (A+)(100) Applying skills and content to situations not taught in the classroom - Marzano Levels 4, 5, & 6	**Students will be able to:** **1.4.1:** Create highly complex models to represent chemical concepts. **1.4.2:** Interpret highly complex models representing chemical concepts. **1.4.3:** Create highly complex mathematical models to represent chemical concepts.
	3.5 (A) (96)	In addition to 3.0 performance, partial success at score 4.0 content
3.0 = COLLEGE READINESS SKILLS		
	3.0 (A-) (92) **Expected**, more complex skills and content- Marzano Level 3 & 4	No major errors or omissions from the 2.0 and 3.0 content. **Students will be able to:** **1.3.1:** Create complex models to represent chemical concepts. **1.3.2:** Interpret complex models representing chemical concepts. **1.3.3:** Create complex mathematical models to represent chemical concepts.
	2.5 (B-) (82)	No major errors or omissions regarding 2.0 content, and partial success at score 3.0 content
2.0 = FOUNDATIONAL SKILLS		
	2.0 (C-) (72) Basic skills and content that builds into 3.0 - Marzano's Levels 1 & 2	No major errors or omissions from the 2.0 content. **Students will be able to:** **1.2.1:** Create simple models to represent chemical concepts. **1.2.2:** Interpret simple models representing chemical concepts. **1.2.3:** Create simple mathematical models to represent chemical concepts.
	1.5 (D) (65)	Partial success at 2.0 content, but major errors or omissions regarding 3.0 content
	1.0 (D-) (62)	With help, partial success at 2.0 content and 3.0 content
	0.5 (F) (55)	With help, partial success at 2.0 content, but not at 3.0 content
	0 (F) (50)	Even with help, no success.

*****Simple models depict a representation of a current situation whereas a complex model shows changes in a situation. **Example:** particle model of a single state of matter would be a simple model while a series of particle models depicting changes in states of matter would be a complex model. See curriculum map for more specific examples of models.

PS 2: Designing and conducting experiments to collect and interpret data.

	4.0 (A+)(100) Applying skills and content to situations not taught in the classroom - Marzano Levels 4, 5, & 6	**Students will be able to:** **2.4.1:** Develop an alternate question raised by the investigation and modify the procedure to answer that alternate question. **2.4.2:** Propose modifications to the procedure of an investigation to increase precision and accuracy of observations and/or measurements. **2.4.3:** Manipulate data using advanced calculations and/or graphical analysis. **2.4.4:** Read, interpret, and examine the credibility and validity of scientific claims in different sources of information, such as scientific articles, advertisements, or media stories. **2.4.5:** Explain how an error in a specific measurement or observation would affect the results and/or conclusion of a scientific investigation.
	3.5 (A) (96)	In addition to 3.0 performance, partial success at score 4.0 content
3.0 = COLLEGE READINESS SKILLS		
	3.0 (A-) (92) **Expected**, more complex skills and content- Marzano Level 3 & 4	No major errors or omissions from the 2.0 and 3.0 content. **Students will be able to:** **2.3.1:** Explain how the experimental design of the investigation relates to the purpose and/or major concepts of the investigation. **2.3.2:** Record measurements and/or report results with the appropriate levels of precision (correct number of significant digits). **2.3.3:** Manipulate data via calculation and/or graphical analysis. **2.3.4:** Justify and/or explain a scientific conclusion using observations, background knowledge, and/or data analysis as evidence. **2.3.5:** Interpret percent error and propose a logical explanation that caused the percent error.
	2.5 (B-) (82)	No major errors or omissions regarding 2.0 content, and partial success at score 3.0 content
2.0 = FOUNDATIONAL SKILLS		
	2.0 (C-) (72) Basic skills and content that builds into 3.0 - Marzano's Levels 1 & 2	No major errors or omissions from the 2.0 content. **Students will be able to:** **2.2.1:** Identify the purpose of an investigation and/or the major concepts being investigated. **2.2.2:** Select required materials, equipment, and/or conditions for conducting an experiment. **2.2.3:** Employ appropriate methods for organizing data or observations (ie. create and complete a data table). **2.2.4:** Make a scientific conclusion that addresses the purpose of the experiment. **2.2.5:** Calculate the percent error value.
	1.5 (D) (65)	Partial success at 2.0 content, but major errors or omissions regarding 3.0 content
	1.0 (D-) (62)	With help, partial success at 2.0 content and 3.0 content
	0.5 (F) (55)	With help, partial success at 2.0 content, but not at 3.0 content
	0 (F) (50)	Even with help, no success.