

**Test Design Blueprint**

 Date 12/29/14
Chemistry I Honors  
 Course Title

2003350  
 Course Number

10 and 11  
 Grade(s)

<b>Main Idea</b> <i>(Big Idea/Domain/Strand/Standard)</i>	<b>Standard Code</b>	<b>Percent of Test Based on Time Devoted to Standard</b>	<b>Number of Test Questions</b> <i>(60 total)</i>
Differentiate among the four states of matter.	SC.912.P.8.1	1%	1
Phase transitions in terms of kinetic molecular theory	SC.912.P.12.11	2%	1
Behavior of ideal gases	SC.912.P.12.10	3%	2
Forms of energy and how it is transformed.	SC.912.P.10.1	2%	1
Distinguish between endothermic and exothermic reactions.	SC.912.P.10.7	3%	2
Differentiate between chemical and physical properties of matter.	SC.912. P.8.2	1%	1
Atomic theory: the structure of the atom.	SC.912.P.8.4	4%	2
Wavelength, frequency, and energy.	SC.912.P.10.18	2%	1
Quantization of energy at the atomic level.	SC.912.P.10.9	2%	1
Relate properties of atoms to their position on the periodic table.	SC.912.P.8.5	3%	2
Bonding forces that hold compounds together and other attractive forces.	SC.912.P.8.6	2%	1
Formula representations of molecules and compounds.	SC.912.P.8.7	11%	5
Mole Concept	SC.912.P.8.9	8%	5
Differentiate between chemical and nuclear reactions.	SC.912.P.10.12	3%	2
Types of chemical reactions: redox, acid/base, synthesis, and single/double replacement.	SC.912.P.8.8	5%	3
Law of Conservation of energy	SC.912.P.10.2	4%	2
Factors that affect the rate of a reaction.	SC.912.P.12.12	9%	4
Properties of water.	SC.912.L.18.12	3%	2
Magnitude and range of forces; weak and strong nuclear forces.	SC.912.P.10.10	2%	1

Equilibrium	SC.912.P.12.13	8%	5
.Interpret potential energy diagrams.	SC.912.P.10.6	2%	1
Relationship between entropy and energy.	SC.912.P.10.8	1%	1
Relate acidity to basicity to hydronium and hydroxyl ions.	SC.912.P.8.11	3%	2
Carbon atoms and carbon compounds: properties	SC.912.P.8.12	2%	1
Functional Groups	SC.912.P.8.13	2%	1
Natural resources their availability and use.	SC.912.L.17.19	1%	1
Explain data.	SC.912.N.1.3	0.2%	1
Developing a scientific theory.	SC.912.N.3.1	0.4%	
Scientific law	SC.912.N.3.3	0.4%	
Historical development of a theory	SC.912.N.3.2	0.2%	1
Creativity in constructing question, methods, or explanations.	SC.912.N.1.7	0.2%	
What characterizes science and its methods.	SC.912.N.1.2	0.2%	
Scientific Method	SC.912.N.1.1	0.2%	
Sources of information are evaluated according to scientific standards.	SC.912.N.1.4	0.2%	
Scientific knowledge is open to change.	SC.912.N.2.4	0.5%	1
How science relates to art, philosophy, and religion.	SC.912.N.2.2	0.5%	
Models in science.	SC.912.N.3.5	0.5%	
Inferences are drawn from scientific observations.	SC.912.N.1.6	0.5%	
Atomic model over time and how it changed.	SC.912.P.8.3	1%	1
Background of scientists influence their interpretations of events.	SC.912.N.2.5	1%	
Oxidation and reduction.	SC.912.P.8.10	1%	1
Nuclear reactions and safety.	SC.912.P.10.11	1%	1
Relate temperature to average kinetic energy	SC.912.P.10.5	1%	1
Alternative strategies for solving societal problems using science.	SC.912.N.4.2	0.2%	1
Science helps in decisions made by society.	SC.912.N.4.1	0.2%	
Effects of technology on the environment.	SC.912.L.17.15	0.6%	

Explain pseudoscience.	SC.912.N.2.3	0.2%	1
Similar experiments have similar outcomes.	SC.912.N.1.5	0.8%	
TOTALS		100 %	60

List All Common Course Teachers:

Wendy Reister                  Samantha Szentmartoni