

Chemistry Final Exam 2017-2018														
Chemistry #2003340	Item Types & Point Values						Estimated Item Difficulty			Item Complexity Webb's DOK				Total # of Items
Benchmark + Description	#Multiple Choice	Point Value per MC Question	#Constructed Response	Point Value per CR question	# Performance Tasks	Point Value per PT	# Easy	#Average	#Challenging	#Level 1 (Recall)	#Level 2 (Skill/Concept)	#Level 3 (Strategic Thinking)	#Level 4 (Extended Thinking)	
SC.912.P.8.2: Differentiate between physical and chemical properties and physical and chemical changes of matter.	3	0	0	0	0	0	2	1	0	1	1	1	0	3
SC.912.P.8.4: Explore the scientific theory of atoms (also known as atomic theory) by describing the structure of atoms in terms of protons, neutrons and electrons, and differentiate among these particles in terms of their mass, electrical charges and locations	3	0	0	0	0	0	0	2	1	1	2	0		3
SC.912.P.8.5: Relate properties of atoms and their position in the periodic table to the arrangement of their electrons.	3	0	0	0	0	0	0	2	1	0	2	1		3
SC.912.P.8.7: Interpret formula representations of molecules and compounds in terms of composition and structure.	3	0	0	0	0	0	1	2	0	0	1	2		3
SC.912.P.8.9: Apply the mole concept and the law of conservation of mass to calculate quantities of chemicals participating in reactions.	3	0	0	0	0	0	0	2	1	0	1	2		3
SC.912.P.8.8: Characterize types of chemical reactions, for example: redox, acid-base, synthesis, and single and double replacement reactions.	3	0	0	0	0	0	1	1	1	2	1	0		3
SC.912.P.12.10: Interpret the behavior of ideal gases in terms of kinetic molecular theory.	3	0	0	0	0	0	0	2	1	1	1	1		3
SC.912.P.12.11: Describe phase transitions in terms of kinetic molecular theory.	3	0	0	0	0	0	1	2	0	2	1	0		3
SC.912.P.8.11: Relate acidity and basicity to hydronium and hydroxyl ion concentration and pH.	3	0	0	0	0	0	1	1	1	2	1	0		3
SC.912.P.10.7: Distinguish between endothermic and exothermic chemical processes.	3	0	0	0	0	0	1	1	1	1	1	1		3
SC.912.P.12.12: Explain how various factors, such as concentration, temperature, and presence of a catalyst affect the rate of a chemical reaction.	3	0	0	0	0	0	0	2	1	1	2	0		3

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SC.912.P.10.12: Differentiate between chemical and nuclear reactions.	3	0	0	0	0	0	2	1	0	2	1	0		3
SC.912.P.10.9: Describe the quantization of energy at the atomic level.	3	0	0	0	0	0	1	1	1	1	2	0		3
SC.912.P.8.1: Differentiate among the four states of matter.	3	0	0	0	0	0	2	1	0	2	1	0		3
SC.912.P.8.3: Explore the scientific theory of atoms (also known as atomic theory) by describing changes in the atomic model over time and why those changes were necessitated by experimental evidence.	3	0	0	0	0	0	0	3	0	2	1	0		3
SC.912.P.8.6: Distinguish between bonding forces holding compounds together and other attractive forces, including hydrogen bonding and van der Waals forces.	3	0	0	0	0	0	1	1	1	1	1	1		3
SC.912.P.12.13: Explain the concept of dynamic equilibrium in terms of reversible processes occurring at the same rates.	3	0	0	0	0	0	1	1	1	0	3	0		3
SC.912.P.10.18: Explore the theory of electromagnetism by comparing and contrasting the different parts of the electromagnetic spectrum in terms of wavelength, frequency, and energy, and relate them to phenomena and applications.	3	0	0	0	0	0	1	1	1	2	1	0		3
	54		0		0		15	27	12	21	24	9		54
Total Points Per Item Type	54		0		0									
% of Points Per Item Type	100.0%		0.0%		0.0%									