

Course Title: Intensive Science			
Course Number: 2000300			
NGSSS Benchmark	Content Focus	Number of Questions	Suggested Cognitive Complexity (per CPALMS)
<i>Reporting Category 1: Definition of Science, Scientific Method, Identify Sources, Theory & Law</i>			
SC.912.N.1.1	Define, investigate, communicate problems about the natural world.	4	1 level 1 2 level 2 1 level 3
SC.912.N.1.2,	Describe and explain what characterizes science and its methods.	1	1 level 3
SC.912.N.2.1	Identify what is science, what clearly is not science, and what superficially resembles science (but fails to meet the criteria for science).	1	1 level 3
SC.912.N.1.3	Recognize that the strength and usefulness of a scientific claim is evaluated through scientific argumentation.	2	2 level 2
SC.912.N.1.4	Identify sources of information and assess their reliability.	2	2 level 2
SC.912.N.3.1	Explain that a scientific theory is the culmination of many scientific investigations drawing together all the current evidence concerning a substantial range of phenomena; thus, a scientific theory represents the most powerful explanation scientists have to offer.	1	1 level 2
SC.912.N.3.4	Recognize that theories do not become laws, nor do laws become theories; theories are well supported explanations and laws are well supported descriptions.	1	1 level 2
<i>Reporting Category Total</i>		12	
<i>Reporting Category 2: Interdependent Relationships in Ecosystems</i>			
SC.912.L.17.18	Describe how human population size and resource use relate to environmental quality.	2	1 level 1 1 level 2
SC.912.L.17.1	Discuss the characteristics of populations, such as number of individuals, age structure, density, and pattern of distribution.	1	1 level 2
SC.912.L.17.2	Explain the general distribution of life in aquatic systems as a function of chemistry, geography, light, depth, salinity, and temperature.	2	1 level 1 1 level 2
SC.912.L.17.4	Describe changes in ecosystems resulting from seasonal variations, climate change and succession.	1	1 level 2
SC.912.L.17.5	Analyze how population size is determined by births, deaths, immigration, emigration, and limiting factors (biotic and abiotic) that determine carrying capacity.	1	1 level 2
SC.912.L.17.6	Compare and contrast the relationships among organisms, including predation, parasitism, competition, commensalism, and mutualism.	1	1 level 2

SC.912.L.17.7	Characterize the biotic and abiotic components that define freshwater systems, marine systems and terrestrial systems.	1	1 level 2
SC.912.L.17.8	Recognize the consequences of the losses of biodiversity due to catastrophic events, climate changes, human activity, and the introduction of invasive, non-native species.	1	1 level 2
SC.912.L.17.9	Use a food web to identify and distinguish producers, consumers, and decomposers. Explain the pathway of energy transfer through trophic levels and the reduction of available energy at successive trophic levels.	2	1 level 1 1 level 2
SC.912.L.17.10	Diagram and explain the biogeochemical cycles of an ecosystem, including water, carbon, and nitrogen cycle.	2	1 level 1 1 level 2
<i>Reporting Category Total</i>		14	
<i>Reporting Category 3: Environmental Impacts & Resources</i>			
SC.912.L.17.12	Political, social, and environmental consequences of sustainable use of land.	2	1 level 2 1 level 3
SC.912.L.17.11	Evaluate costs and benefits of renewable and nonrenewable resources and how they are produced, rates of use.	2	2 level 2
SC.912.L.17.19	Describe how different natural resources are produced and how their rates of use and renewal limit availability.	3	2 level 2 1 level 1
SC.912.L.17.16	Discuss large-scale environmental impacts resulting from human activity.	2	1 level 1 1 level 2
SC.912.L.17.20	Predict the impact of individuals on environmental systems and examine how human lifestyles affect sustainability.	1	1 level 3
SC.912.L.18.12	Discuss the special properties of water that contribute to Earth's suitability as an environment for life: cohesive behavior, ability to moderate temperature, expansion upon freezing, and versatility as a solvent.	2	2 level 2
SC.912.C.1.3	Evaluate how environment and personal health are interrelated.	2	1 level 2 1 level 3
<i>Reporting Category Total</i>		14	

Overall Percentage for Written Test: ____100%____

Overall Percentage for Performance Tasks: _____