

NGSSS Benchmark	Content Focus	Number of Questions	Suggested Cognitive Complexity (per CPALMS)
Reporting Category 1: Nature of Science			
SC.912.N.1.1	Describe how the process of science works starting from the formation of a question about the natural world to communication of results from a reliable experiment.	2	2 level 2
SC.912.N.1.2	Describe / explain the scientific method, understand inference	2	1 level 1 1 level 2
SC.912.N.1.6	Analyze graphs and tables to draw conclusions	2	1 level 1 1 level 2
SC.912.N.1.4	Reliability of information sources (global warming, whaling, shark finning, etc.)	1	1 level 3
<i>Reporting Category Total:</i>		7	
Reporting Category 2: Marine Ecology			
SC.912.L.15.13	Natural selection and adaptations in the marine environment.	3	3 level 2
SC.912.L.17.7	Explain how the biotic and abiotic factors of the marine ecosystem are interrelated.	4	2 level 1 2 level 2
SC.912.L.17.6	Marine symbiotic relationships including: predation, parasitism, competition, commensalism, and mutualism.	5-4	1 level 1 3 2 level 2 1 level 3
SC.912.L.17.8	Consequences of non-native and invasive species: <i>i.e. Asian tiger shrimp, lionfish, etc.</i>	2	2 level 2
SC.912.L.17.9	Food webs, food chains, energy transfer through trophic levels and reduction of available energy in successive trophic levels.	4-3	1 level 1 2 level 2 1 level 3 3 level 2
<i>Reporting Category Total:</i>		16	
Reporting Category 3: Marine Environment			
SC.912.L.17.2	Explain the distribution of marine ecosystems in terms of physical characteristics such as light, depth, salinity, and temperature change	4-4	———— ———— 4 level 2
SC.912.L.17.3	Explain how waves, tides, and currents influence marine ecosystems.	3	3 level 2
SC.912.L.17.4	Marine environment changes: climate change, seasonal variation (ENSO, etc.)	2	2 level 2
SC.912.L.17.10	Diagram and explain the water cycle, and carbon cycle.	2	1 level 1 1 level 2
SC.912.L.18.12	Properties of water including cohesion, adhesion, hydrogen bonding, polarity, ability to moderate temperature, and versatility as a solvent in the ocean.	3	1 level 1 2 level 2
SC.912.E.7.9	How the ocean water stores, and moves heat (ocean current influence on coastal environments).	2	1 level 2 1 level 1
SC.912.E.6.5	Describe common features of the ocean floor, and geologic development of present day oceans.	3	3 Level 2
<i>Reporting Category Total:</i>		18	

Reporting Category 4: Human Impacts			
SC.912.L.17.16	Large scale impacts from oil and waste spills, runoff, ozone depletion, fishing activity, and surface and ground water pollution.	2	1 level 1 1 level 2
SC.912.L.17.11	Costs and benefits of renewable and nonrenewable marine resources such as water, fossil fuel, and wildlife.	2	1 level 2 1 level 3
SC.912.L.14.6	Environmental factors that affect public health: i.e. biomagnification of mercury, and DDT. * No Marine specific items	2	1 level 1 1 level 2
Reporting Category Total:			4

Overall Percentage for Written Test: ___100%___

Overall Percentage for Performance Tasks: ___0%___