

PRACTICE TEST ANSWER KEY

LS MISA



Maryland Comprehensive Assessment Program

Item Number	Key	Evidence Statements
1	D	HS-LS2-2/1.b.i Students identify the given explanation(s) to be supported of factors affecting biodiversity and population levels, which include the following ideas: the populations and number of organisms in ecosystems vary as a function of the physical and biological dynamics of the ecosystem.
2	B	HS-LS2-2/1.b.i Students identify the given explanation(s) to be supported of factors affecting biodiversity and population levels, which include the following ideas: the populations and number of organisms in ecosystems vary as a function of the physical and biological dynamics of the ecosystem.
3	B, D	HS-LS2-2/3.b Students describe the given mathematical representations in terms of their ability to support explanation(s) for the effects of modest to extreme disturbances on an ecosystem’s capacity to return to original status or become a different ecosystem.
4	D	HS-LS4-5/2.a.ii Students identify and describe additional evidence (in the form of data, information, models, or other appropriate forms) that was not provided but is relevant to the claims and to evaluating the given evidence, including: environmental factors that can determine the ability of individuals in a species to survive and reproduce.
5	C	HS-LS2-2/1.b.i Students identify the given explanation(s) to be supported of factors affecting biodiversity and population levels, which include the following ideas: the populations and number of organisms in ecosystems vary as a function of the physical and biological dynamics of the ecosystem.
6	CR-4	HS-LS4-5/3.b Students assess the ability of the given evidence to be used to determine causal or correlational effects between environmental changes, the changes in the number of individuals in each species, the number of species in an environment, and/or the emergence or extinction of species.
7	A	HS-LS1-5/1.a.ii Students identify and describe the components of the model relevant for illustrating that photosynthesis transforms light energy into stored chemical energy by converting carbon dioxide plus water into sugars plus released oxygen, including breaking of chemical bonds to absorb energy.
8	D, C	HS-LS1-5/2.a Students identify the following relationship between components of the given model: Sugar and oxygen are produced by carbon dioxide and water by the process of photosynthesis.
9	A, D	HS-LS1-5/3.c.i Students use the given model to illustrate the transfer of matter and flow of energy between the organism and its environment during photosynthesis.
10	B, C	HS-LS2-5/1.a.iii Students describe relationships between components of their model, including: the biosphere, atmosphere, hydrosphere, and geosphere.
11	A, D	HS-LS2-5/2.a.i Students describe relationships between components of their model, including: the exchange of carbon (through carbon-containing compounds) between organisms and the environment.
12	CR-2	HS-LS2-5/3.b Students make a distinction between the model’s simulation and the actual cycling of carbon via photosynthesis and cellular respiration.

■ = Written response.