

Basic Life Science Objectives

Interactions of Life The student will be able to:	LPS Standard	State Standard	Text Pages
1. compare the different levels of biological organization and living relationships important in ecology.	12.1.6a	12.4.4c	255-261 284-291
2. trace the path of energy and matter in an ecosystem	12.1.6b	12.4.4b 12.4.5b 12.7.3c	272-283
3. analyze how nutrients are cycles in the biotic and abiotic parts of the biosphere.	12.1.6c	12.4.4a	292-297
4. identify the major limiting factor affecting distribution of biomes.	12.1.6d	12.4.5c	262-267
5. relate the reproductive patterns of different populations of organisms to models of population growth.	12.1.6e	112.7.2a 2.4.4d	263 268-269
6. use inquiry to carry out a scientific investigation.	12.1.6f	12.1.a-b 12.1.2a-f 12.1.3c 12.2.1a-f 12.8.1c 12.8.2b-c	
7. describe human impact on biodiversity.	12.1.7a	12.4.4e 12.7.4a 12.8.3a	272-273 298-299
8. list how human health may be affected by changes in the environment.	12.1.7b	12.7.2a 12.7.4a	404
9. identify examples of successful solutions to environmental problems.	12.1.7c	12.7.4a 12.8.3a	

Diversity of Life The student will be able to:	LPS Standard	State Standard	Text Pages
1. examine and evaluate the criteria required for evolution to take place.	12.1.8a	12.4.3a	98-99
2. investigate and understand genetic variation (mutations) during sexual reproduction.	12.1.8b	12.4.2c 12.4.3a	86-87
3. explain how carrying capacity and biotic potential influence the genetic makeup of a population.	12.1.8c	12.4.4d	262
4. describe and understand how natural selection provides a connection between fossil record and molecular similarities among species.	12.1.9a	12.1.5a 12.4.3c	100-109
5. investigate, understand, and explain diversity.	12.1.9b	12.4.3b	124-127
6. understand how and why classification is used.	12.1.9c	12.4.3d	118-121
7. investigate the effects of homeostasis on behavior.	12.1.10a	12.4.6b	20
8. investigate how behaviors evolved through natural selection.	12.1.10b	12.4.6b 12.4.6c	248-252
9. discuss how biology relates to other sciences including psychology and anthropology.	12.1.10c	12.4.6d	110-111

Textbook: *Concepts and Challenges Life Science*, Bernstein et al, Globe Fearon, 2003