

High School Biology Essence Statements (2026)

Biological Structures, Function, and Processes 1

- 1 Biology (5) Science concepts. The student knows that biological structures at multiple levels of organization perform specific functions and processes that affect life. (Readiness and Supporting Standard) 1.1
- 2 Biology (6) Science concepts. The student knows how an organism grows and the importance of cell differentiation. (Readiness and Supporting Standard) 1.2
- 3 Biology (11) Science concepts. The student knows the significance of matter cycling, energy flow, and enzymes in living organisms. (Readiness and Supporting Standard) 1.3
- 4 Biology (12) Science concepts. The student knows that multicellular organisms are composed of multiple systems that interact to perform complex functions. (Readiness and Supporting Standard) 1.4

Mechanisms of Genetics 2

- 1 Biology (7) Science concepts. The student knows the role of nucleic acids in gene expression. (Readiness and Supporting Standard) 2.1
- 2 Biology (8) Science concepts. The student knows the role of nucleic acids and the principles of inheritance and variation of traits in Mendelian and non-Mendelian genetics. (Readiness and Supporting Standard) 2.2

Biological Evolution 3

- 1 Biology (9) Science concepts. The student knows evolutionary theory is a scientific explanation for the unity and diversity of life that has multiple lines of evidence. (Readiness and Supporting Standard) 3.1
- 2 Biology (10) Science concepts. The student knows that evolutionary theory is a scientific explanation for the unity and diversity of life that has multiple mechanisms. (Readiness and Supporting Standard) 3.2

Interdependence within Environmental Systems 4

- 1 Biology (13) Science concepts. The student knows that interactions at various levels of organization occur within an ecosystem to maintain stability. (Readiness and Supporting Standard) 4.1