STAAR Alternate 2 Spring 2026
Biology Essence Statements

STAAR Strand 1	STAAR Strand 2	STAAR Strand 3	STAAR Strand 4
Biological Structures, Function, and Processes	**Mechanisms of Genetics**	**Biological Evolution**	**Interdependence within Environmental Systems**
Knowledge and Skills Statement **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) **Essence Statement** Knows that all living things are composed of cells that perform specific functions and that viruses are different from cells. **Knowledge and Skills Statement** **Biology (6) Science concepts.** The student knows how an organism grows and the importance of cell differentiation. (Readiness and Supporting Standard) **Essence Statement** Recognizes the importance of the cell cycle and cell differentiation to the growth of organisms. **Knowledge and Skills Statement** **Biology (11) Science concepts.** The student knows the significance of matter cycling, energy flow, and enzymes in living organisms. (Readiness and Supporting Standard) **Essence Statement** Recognizes energy conversions in living organisms and the functions of various biomolecules.	**Knowledge and Skills Statement** **Biology (7) Science concepts.** The student knows the role of nucleic acids in gene expression. (Readiness and Supporting Standard) **Essence Statement** Recognizes the structure of DNA. **Knowledge and Skills Statement** **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) **Essence Statement** Knows that the structure of DNA determines inherited traits in organisms.	**Knowledge and Skills Statement** **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) **Essence Statement** Knows evolutionary theory is a scientific explanation for the unity and diversity of life. **Knowledge and Skills Statement** **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) **Essence Statement** Knows that the unity and diversity caused by evolution can occur by multiple mechanisms.	**Knowledge and Skills Statement** **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) **Essence Statement** Recognizes the balance and interdependence within biological systems and their interactions within the environment.

Knowledge and Skills Statement **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) **Essence Statement** Knows that biological systems have functions and interact.			