Seventh Grade Life Science
Curriculum Map 2026-2027

FIRST SEMESTER		SECOND SEMESTER			
UNIT 1	**UNIT 2**	**UNIT 3**	**UNIT 4**	**UNIT 5**	**CAPSTONE**
Ecology	***Cells & Body Systems***	***Genetics***	***Evolution***	***Classification***	***Culminating Capstone Unit***
9 Weeks	***9 Weeks***	***7 Weeks***	***7 Weeks***	***3 Weeks***	***3 Weeks***
Unit Dates 8/3/2026- 10/9/2026	**Unit Dates** 10/12/2026- 12/18/2026	**Unit Dates** 1/4/2027- 2/26/2027	**Unit Dates** 3/1/2027- 4/23/2027	**Unit Dates** 4/26/2027 - 5/14/2027	**Unit Dates** 5/17/2027- 5/21/2027
RECOMMENDED ASSESSMENT WINDOW					
10/5-10/9	12/14- 12/18	2/22- 2/26	4/19- 4/23	5/10 - 5/14	5/17/ - 5/21
Standards S7L4a S7L4b S7L4c S7L4d	**Standards** S7L2a S7L2b S7L2c	**Standards** S7L3a S7L3b S7L3c	**Standards** S7L5a S7L5b S7L5c	**Standards** S7L1a S7L1b	**All Standards**

1st Semester (17 weeks – Science & Engineering Practices and Safety are taught continuously throughout)	
Unit 1 – Ecology	**Unit 2 – Cells & Body Systems**
Unit Dates | 9 W*eeks* 8/4/2025-10/3/2025	**Unit Dates | 8 *Weeks*** 10/6/2025-12/12/2025
S7L4. Obtain, evaluate, and communicate information to examine the interdependence of organisms with one another and their environments. a. Construct an explanation for the patterns of interactions observed in different ecosystems in terms of the relationships among and between organisms and abiotic components of the ecosystem. Clarification statement: The interactions include, but are not limited to, predator-prey relationships, competition, mutualism, parasitism, and commensalism.) b. Develop a model to describe the cycling of matter and the flow of energy among biotic and abiotic components of an ecosystem. (Clarification statement: Emphasis is on tracing movement of matter and flow of energy, not the biochemical mechanisms of photosynthesis and cellular respiration.) c. Analyze and interpret data to provide evidence for how resource availability, disease, climate, and human activity affect individual organisms, populations, communities, and ecosystems. d. Ask questions to gather and synthesize information from multiple sources to differentiate between Earth's major terrestrial biomes (i.e., tropical rain forest, savanna, temperate forest, desert, grassland, taiga, and tundra) and aquatic ecosystems (i.e., freshwater, estuaries, and marine). (Clarification statement: Emphasis is on the factors that influence patterns across biomes such as the climate, availability of food and water, and location.)	**S7L2. Obtain, evaluate, and communicate information to describe how cell structures, cells, tissues, organs, and organ systems interact to maintain the basic needs of organisms.** a. Develop a model and construct an explanation of how cell structures (specifically the nucleus, cytoplasm, cell membrane, cell wall, chloroplasts, lysosome, and mitochondria) contribute to the function of the cell as a system in obtaining nutrients to grow, reproduce, make needed materials, and process waste. (Clarification statement: The intent is for students to demonstrate how the component structures of the cell interact and work together to allow the cell to carry out various processes. Additional structures, beyond those listed, will be addressed in high school Biology.) b. Develop and use a conceptual model of how cells are organized into tissues, tissues into organs, organs into systems, and systems into organisms. c. Construct an argument that systems of the body (Cardiovascular, Excretory, Digestive, Respiratory, Muscular, Nervous, and Immune) interact with one another to carry out life processes. (Clarification statement: The emphasis is not on learning individual structures and functions associated with each system, but on how systems interact to support life processes.)

2nd Semester (17 weeks – Science & Engineering Practices and Safety are taught continuously throughout)		
Unit 3 – Genetics	**Unit 4 – Evolution**	**Unit 5 – Classification**
Unit Dates | 7*Weeks* 1/6/2026-2/20/2026	**Unit Dates | 7 *Weeks*** 2/23/2026-4/17/2026	**Unit Dates | 3 *Weeks*** 4/20/2026-5/8/2026
S7L3. Obtain, evaluate, and communicate information to explain how organisms reproduce either sexually or asexually and transfer genetic information to determine the traits of their offspring. a. Construct an explanation supported with scientific evidence of the role of genes and chromosomes in the process of inheriting a specific trait. b. Develop and use a model to describe how asexual reproduction can result in offspring with identical genetic information while sexual reproduction results in genetic variation. (Clarification statement: Models could include, but are not limited to, the use of monohybrid Punnett squares to demonstrate the heritability of genes and the resulting genetic variation, identification of heterozygous and homozygous, and comparison of genotype vs. phenotype.) c. Ask questions to gather and synthesize information about the	**S7L5. Obtain, evaluate, and communicate information from multiple sources to explain the theory of evolution of living organisms through inherited characteristics.** a. Use mathematical representations to evaluate explanations of how natural selection leads to changes in specific traits of populations over successive generations. (Clarification statement: Referencing data should be obtained from multiple sources including, but not limited to, existing research and simulations. Students should be able to calculate means, represent this data in a table or graph, and reference it when explaining the principles of natural selection.) b. Construct an explanation based on evidence that describes how genetic variation, and environmental factors influence the probability of survival and reproduction of a species. c. Analyze and interpret data for patterns in the fossil record that document the existence, diversity, and extinction of organisms and their relationships to modern organisms. (Clarification statement: Evidence of evolution found in comparisons of current/modern organisms such as homologous	**S7L1. Obtain, evaluate, and communicate information to investigate the diversity of living organisms and how they can be compared scientifically.** a. Develop and defend a model that categorizes organisms based on common characteristics. b. Evaluate historical models of how organisms were classified based on physical characteristics and how that led to the six-kingdom system (currently archaea, bacteria, protists, fungi, plants, and animals). (Clarification statement: This includes common examples and characteristics such as, but not limited to, prokaryotic, eukaryotic, unicellular, multicellular, asexual reproduction, sexual reproduction, autotroph, heterotroph, and unique cell structures. Modern classification will be addressed in high school.)

ways humans influence the inheritance of desired traits in organisms through selective breeding. (Clarification statement: The element specifically addresses artificial selection and the ways in which it is fundamentally different from natural selection.)	structures, DNA, and fetal development will be addressed in high school.)	