



1<sup>st</sup> Quarter

Week	Unit/Lesson	Learning Objectives	Reporting Categories
1st:	<b>Welcome</b> <b>Collect &amp; log Supplies received</b> <b>Classroom Rules</b> <b>Curriculum overview</b> <b>Lab Safety</b>	Demonstrate safe practices during laboratory and field investigations. Demonstrate an understanding of the use and conservation of resources and the proper disposal or recycling of materials. Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology. Collect and organize qualitative and quantitative data, and make measurements with accuracy and precision. Analyze, evaluate, make inferences, and predict trends from data. Communicate valid conclusions supported by the data through methods such as lab reports, labeled drawings, graphic organizers, journals, summaries, oral reports, and technology-based reports.	BIOL.1A Demonstrate safe practices during laboratory and field investigations. BIOL.1B Demonstrate an understanding of the use and conservation of resources and the proper disposal or recycling of materials. BIOL.2E Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology. BIOL.2F Collect and organize qualitative and quantitative data, and make measurements with accuracy and precision. BIOL.2G Analyze, evaluate, make inferences, and predict trends from data. BIOL.2H Communicate valid conclusions supported by the data through methods such as lab reports, labeled drawings, graphic organizers, journals, summaries, oral reports, and technology-based reports.
2nd:	UNIT1: SCIENTIFIC METHOD	Communicate and apply scientific information extracted from various sources such as current events, news reports, published journal articles and marketing materials. Evaluate models according to their limitations in representing biological objects or events. Research and describe the history of biology and contributions of scientists	BIOL.3B Communicate and apply scientific information extracted from various sources such as current events, news reports, published journal articles and marketing materials. BIOL.3E Evaluate models according to their limitations in representing biological objects or events. BIOL.3F Research and describe the history of biology and contributions of scientists
3rd:	BIOMOLECULES	Compare the structures and functions of different types of biomolecules including carbohydrates, lipids, proteins, and nucleic acids.	BIOL.9A Compare the structures and functions of different types of biomolecules including carbohydrates, lipids, proteins, and nucleic acids.
4th:	UNIT1-CONTINUED	Analyze and evaluate the evidence regarding formation of simple organic molecules and their organization into long complex molecules having information such as the DNA molecule for self-replicating life.	BIOL.9D Analyze and evaluate the evidence regarding formation of simple organic molecules and their organization into long complex molecules having information such as the DNA molecule for self-replicating life.
5th:	UNIT2: CELL STRUCTURE AND FUNCTION	Evaluate models according to their limitations in representing biological objects or events.	BIOL.3E Evaluate models according to their limitations in representing biological objects or events.3(F) research and describe the history of chemistry and contributions of scientists.
6th:	UNIT2- CONTINUED	Investigate and explain cellular processes including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.	BIOL.4B Investigate and explain cellular processes including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.



*1<sup>st</sup> Quarter*

<i>1<sup>st</sup> Quarter</i>			
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7th:	UNIT 3: CELL GROWTH AND DIFFERENTIATION	Analyze, evaluate, make inferences, and predict trends from data. Describe the stages of the cell cycle, including DNA replication and mitosis, and the importance of the cell cycle to the growth of organisms. Examine specialized cells including roots, stems, and leaves of plants; and animal cells such as blood, muscle, and epithelium.	BIOL.2G Analyze, evaluate, make inferences, and predict trends from data. BIOL.5A Describe the stages of the cell cycle, including DNA replication and mitosis, and the importance of the cell cycle to the growth of organisms. BIOL.5B Examine specialized cells including roots, stems, and leaves of plants; and animal cells such as blood, muscle, and epithelium.
8th:	UNIT 3: CELL GROWTH AND DIFFERENTIATION-CONTINUED	Describe the roles of DNA, ribonucleic acid (RNA), and environmental factors in cell differentiation. Recognize that disruptions of the cell cycle lead to diseases such as cancer	BIOL.5C Describe the roles of DNA, ribonucleic acid (RNA), and environmental factors in cell differentiation. BIOL.5D Recognize that disruptions of the cell cycle lead to diseases such as cancer
9th:	UNIT 4: VIRUSES	Compare the structure of viruses to cells, describe viral reproduction, and describe the role of viruses in causing diseases, such as human immunodeficiency virus (HIV) and influenza.	BIOL.4C Compare the structure of viruses to cells, describe viral reproduction, and describe the role of viruses in causing diseases, such as human immunodeficiency virus (HIV) and influenza.

**2nd Quarter**

<b>2nd Quarter</b>			
Week	Unit/Lesson	Learning Objectives	Reporting Categories
1st:	UNIT 5: COMPONENTS OF DNA	Identify components of DNA, and describe how information for specifying the traits of an organism is carried in the DNA	BIOL.6A Identify components of DNA, and describe how information for specifying the traits of an organism is carried in the DNA.
2nd:	UNIT 5: CONTINUED	Recognize that components that make up the genetic code are common to all organism	BIOL.6B Recognize that components that make up the genetic code are common to all organisms
3rd:	UNIT 6: TRANSCRIPTION AND TRANSLATION	Explain the purpose and process of transcription and translation using models of DNA and RNA. Recognize that gene expression is a regulated process.	BIOL.6C Explain the purpose and process of transcription and translation using models of DNA and RNA. BIOL.6D Recognize that gene expression is a regulated process.
4th:	UNIT 7: MUTATIONS: CHANGES IN DNA	Identify and illustrate changes in DNA and evaluate the significance of these changes.	BIOL.6E Identify and illustrate changes in DNA and evaluate the significance of these changes.
5th:	UNIT 8: GENETIC COMBINTION	Predict possible outcomes of various genetic combinations such as monohybrid crosses, dihybrid crosses, and non-Mendelian inheritance. Recognize the significance of meiosis to sexual reproduction	BIOL.6F Predict possible outcomes of various genetic combinations such as monohybrid crosses, dihybrid crosses, and non-Mendelian inheritance. BIOL.6G Recognize the significance of meiosis to sexual reproduction



**2nd Quarter**

2nd Quarter			
Week	Unit/Lesson	Learning Objectives	Reporting Categories
6 <sup>th</sup> :	UNIT 8: GENETIC COMBINATION CONTINUED	Describe how techniques such as DNA fingerprinting, genetic modifications, and chromosomal analysis are used to study the genomes of organisms.	BIOL.6H Describe how techniques such as DNA fingerprinting, genetic modifications, and chromosomal analysis are used to study the genomes of organisms
7 <sup>th</sup> :	UNIT 9: NATURAL SELECTION	Analyze and evaluate how natural selection produces change in populations, not individuals	BIOL.7CAalyze and evaluate how natural selection produces change in populations, not individuals
8 <sup>th</sup> :	UNIT 9: NATURAL SELECTION CONTINUED	Analyze and evaluate how the elements of natural selection including inherited variation, the potential of a population to produce more offspring than can survive, and a finite supply of environmental resources result in differential reproductive success. Analyze and evaluate the relationship of natural selection to adaptation, and to the development of diversity in and among species.	BIOL.7D Analyze and evaluate how the elements of natural selection including inherited variation, the potential of a population to produce more offspring than can survive, and a finite supply of environmental resources result in differential reproductive success. BIOL.7E Analyze and evaluate the relationship of natural selection to adaptation, and to the development of diversity in and among species.
9 <sup>th</sup> :	Benchmark	Review for benchmark	Review for benchmark

**3rd Quarter**

3rd Quarter			
Week	Unit/Lesson	Learning Objectives	Reporting Categories
1 <sup>st</sup> :	UNIT 10: EVIDNECE OF EVOLUTION	Analyze and evaluate how evidence of common ancestry among groups is provided by the fossil record, biogeography, and homologies including anatomical, molecular, and developmental.	BIOL.7A Analyze and evaluate how evidence of common ancestry among groups is provided by the fossil record, biogeography, and homologies including anatomical, molecular, and developmental.
2 <sup>nd</sup> :	UNIT 10: EVIDENCE OF EVOLUTION CONTINUED	Analyze and evaluate scientific explanations concerning any data of sudden appearance, stasis and sequential nature of groups in the fossil record.	BIOL 7B Analyze and evaluate scientific explanations concerning any data of sudden appearance, stasis and sequential nature of groups in the fossil record.
3 <sup>rd</sup> :	SCIENCE SYMPOSIUM	Symposium work and prepare for presentation	2(H) organize, analyze, evaluate, make inferences, and predict trends from data; and 2(I) communicate valid conclusions supported by the data through methods such as lab reports, labeled drawings, graphs, journals, summaries, oral reports, and technology-based reports.



**3rd Quarter**

3rd Quarter			
Week		Learning Objectives	Reporting Categories
4th:	SCIENCE SYMPOSIUM	Symposium work and prepare for presentation	3(A) in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student; 3(B) communicate and apply scientific information extracted from various sources such as current events, news reports, published journal articles, and marketing materials;
5th:	UNIT 11: OTHER MECHANISMS OF EVOLUTION	Analyze and evaluate the effects of other evolutionary mechanisms including genetic drift, gene flow, mutation, and recombination. Analyze and evaluate scientific explanations concerning the complexity of the cell.	BIOL 7F Analyze and evaluate the effects of other evolutionary mechanisms including genetic drift, gene flow, mutation, and recombination. BIOL 7G Analyze and evaluate scientific explanations concerning the complexity of the cell.
6th:	UNIT 11: OTHER MECHANISMS OF EVOLUTION -CONTINUED	Analyze and evaluate the effects of other evolutionary mechanisms including genetic drift, gene flow, mutation, and recombination. Analyze and evaluate scientific explanations concerning the complexity of the cell.	BIOL 7F Analyze and evaluate the effects of other evolutionary mechanisms including genetic drift, gene flow, mutation, and recombination. BIOL 7G Analyze and evaluate scientific explanations concerning the complexity of the cell.
7th:	UNIT 12: BIOLOGICAL CLASSIFICATION	Define taxonomy and recognize the importance of a standardized taxonomic system to the scientific community.	BIOL.8A Define taxonomy and recognize the importance of a standardized taxonomic system to the scientific community
8th:	UNIT 12: BIOLOGICAL CLASSIFICATION CONTINUED	Categorize organisms using a hierarchical classification system based on similarities and differences shared among groups. Compare characteristics of taxonomic groups including archaea, bacteria, protists, fungi, plants, and animals	BIOL.8B Categorize organisms using a hierarchical classification system based on similarities and differences shared among groups. BIOL.8C Compare characteristics of taxonomic groups including archaea, bacteria, protists, fungi, plants, and animals
9th:	UNIT 13: HOMEOSTASIS: KEEPING LIFE IN BALANCE	Describe the role of internal feedback mechanisms in the maintenance of homeostasis	BIOL.11A Describe the role of internal feedback mechanisms in the maintenance of homeostasis



4th Quarter

Week	Unit/Lesson	Learning Objectives	Reporting Categories
1st:	UNIT 13: HOMEOSTASIS: KEEPING LIFE IN BALANCE CONTINUED	Investigate and analyze how organisms, populations, and communities respond to external factors. Summarize the role of microorganisms in both maintaining and disrupting the health of both organisms and ecosystems	BIOL.11B Investigate and analyze how organisms, populations, and communities respond to external factors. BIOL.11C Summarize the role of microorganisms in both maintaining and disrupting the health of both organisms and ecosystems
2nd:	UNIT 14: BIOLOGICAL PROCESSES IN ANIMAL AND PLANTS	Compare the reactants and products of photosynthesis and cellular respiration in terms of energy and matter	BIOL.9B Compare the reactants and products of photosynthesis and cellular respiration in terms of energy and matter
3rd:	UNIT 14: BIOLOGICAL PROCESSES IN ANIMAL AND PLANTS- CONTINUED	Identify and investigate the role of enzymes	BIOL.9C Identify and investigate the role of enzyme
4th:	UNIT 15: BIOLOGICAL SYSTEMS IN ANIMAL AND PLANTS	Describe the interactions that occur among systems that perform the functions of regulation, nutrient absorption, reproduction, and defense from injury or illness in animals.	BIOL.10A Describe the interactions that occur among systems that perform the functions of regulation, nutrient absorption, reproduction, and defense from injury or illness in animals
5th:	UNIT 15: BIOLOGICAL SYSTEMS IN ANIMAL AND PLANTS-CONTINUED	Describe the interactions that occur among systems that perform the functions of transport, reproduction, and response in plants. Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.	BIOL.10B Describe the interactions that occur among systems that perform the functions of transport, reproduction, and response in plants. BIOL.10C Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system
6th:	UNIT 16: MATTER AND ENERGY FLOW IN THE ECOSYSTEM	Analyze the flow of matter and energy through trophic levels using various models including food chains, food webs, and ecological pyramids. Describe the flow of matter through the carbon and nitrogen cycles and explain the consequences of disrupting these cycles. Describe how environmental change can impact ecosystem stability.	BIOL.12C Analyze the flow of matter and energy through trophic levels using various models including food chains, food webs, and ecological pyramids BIOL.12E Describe the flow of matter through the carbon and nitrogen cycles and explain the consequences of disrupting these cycles. BIOL.12F Describe how environmental change can impact ecosystem stability.
7th:	UNIT 17: VARIATIONS AND ADAPTATIONS IN ECOSYSTEMS.	Describe how events and processes that occur during ecological succession can change populations and species diversity. Compare variations and adaptations of organisms in different ecosystems. Recognize that long-term survival of species is dependent on changing resource bases that are limited Interpret relationships including predation, parasitism, commensalism, mutualism, and competition among organisms	BIOL.11D Describe how events and processes that occur during ecological succession can change populations and species diversity. BIOL.12B Compare variations and adaptations of organisms in different ecosystems. BIOL.12D Recognize that long-term survival of species is dependent on changing resource bases that are limited BIOL.12A Interpret relationships including predation, parasitism, commensalism, mutualism, and competition among organisms



4th Quarter

4th Quarter			
Week	Unit/Lesson	Learning Objectives	Reporting Categories
8th:	Review & STAAR TEST	Review & STAAR TEST	STAAR TEST
9th:	Wrap Up activities/Labs	Communicate valid conclusions supported by the data through methods such as lab reports, labeled drawings, graphs, journals, summaries, oral reports, and technology-based reports.	BIOL.1A Demonstrate safe practices during laboratory and field investigations. BIOL.1B Demonstrate an understanding of the use and conservation of resources and the proper disposal or recycling of materials. BIOL.2E Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology. BIOL.2F Collect and organize qualitative and quantitative