



1 <sup>st</sup> Quarter (44 Days)			
Resources: Stem Scopes, Miscellanrous web-based resource			
Week	Unit/Lesson	Learning Objectives	Reporting Categories ( TEKS SEs)
1 <sup>st</sup> : Aug 10-12 (3 days)	Cell Structure and Function	TSW compare and contrast prokaryotic and eukaryotic cells, including their complexity, and compare and contrast scientific explanations for cellular complexity	B.4(A)
2 <sup>nd</sup> : Aug 15-19 (5 days)	Cell Structure and Function	TSW investigate and explain cellular processes, including homeostasis and transport of molecules	B.4(B)
3 <sup>rd</sup> : Aug 22-26 (3 days)	Cell Structure and Function	TSW compare the structures of viruses to cells, describe viral reproduction, and describe the role of viruses in causing diseases such as human immunodeficiency virus (HIV) and influenza	B.4(C)
4 <sup>th</sup> : Aug 29- Sep 2 (5 days)	Organism Growth and Cell Differentiation	TSW describe the stages of the cell cycle, including deoxyribonucleic acid (DNA) replication and mitosis, and the importance of the cell cycle to the growth of organisms	B.5(A)
5 <sup>th</sup> : Sept 6-9 Labor Day Holiday on Monday 9/5 (4 days)	Organism Growth and Cell Differentiation	TSW describe the stages of the cell cycle, including deoxyribonucleic acid (DNA) replication and mitosis, and the importance of the cell cycle to the growth of organisms	B.5(A)
6 <sup>th</sup> : Sept 12-16 (5 days)	Organism Growth and Cell Differentiation	TSW describe the roles of DNA, ribonucleic acid (RNA), and environmental factors in cell differentiation	B.5(B)
7 <sup>th</sup> : Sept 19-22 PD Day Friday 9/23 (4 days)	Organism Growth and Cell Differentiation	TSW recognize that disruptions of the cell cycle lead to diseases such as cancer	B.5(C)
8 <sup>th</sup> : Sept 26-30 (5 days)	Mechanisms of Genetics	TSW identify components of DNA, identify how information for specifying the traits of an organism is carried in the DNA, and examine scientific explanations for the origin of DNA	B.6(A)
9 <sup>th</sup> : Oct 3-7 (5 days)	Mechanisms of Genetics	TSW recognize that components that make up the genetic code are common to all organisms	B.6(B)
10 <sup>th</sup> : Oct 10-14 (5 days)	Mechanisms of Genetics	TSW explain the purpose and process of transcription and translation using models of DNA and RNA	B.6(C)



2nd Quarter (45 Days)

Resources:

Week	Unit/Lesson	Learning Objectives	Reporting Categories ( TEKS SEs)
1 <sup>st</sup> : Oct 17-21 (5 days)	Mechanisms of Genetics	TSW recognize that gene expression is a regulated process	B.6(D)
2 <sup>nd</sup> : Oct 24-28 (5 days)	Mechanisms of Genetics	TSW identify and illustrate changes in DNA and evaluate the significance of these changes	B.6(E)
3 <sup>rd</sup> : Nov 1-4 PT Conf Mon 10/31 (4 days)	Mechanisms of Genetics	TSW predict possible outcomes of various genetic combinations such as monohybrid crosses, dihybrid crosses, and non-Mendelian inheritance	B.6(F)
4 <sup>th</sup> : Nov 5-9 (5 days)	Mechanisms of Genetics	TSW recognize the significance of meiosis to sexual reproduction	B.6(G)
5 <sup>th</sup> : Nov 7-11 (5 days)	Evolutionary Theory	TSW analyze and evaluate how evidence of common ancestry among groups is provided by the fossil record, biogeography, and homologies, including anatomical, molecular, and developmental TSW analyze and evaluate the relationship of natural selection to adaptation and to the development of diversity in and among species	B.7(A) B.7(E)
6 <sup>th</sup> : Nov 14-18 (2 days)	Evolutionary Theory	TSW examine scientific explanations of abrupt appearance and stasis in the fossil record TSW analyze and evaluate how natural selection produces change in populations, not individuals	B.7(B) B.7(C)
7 <sup>th</sup> : Nov 21-25 Thanksgiving (0 days)	Thanksgiving Holiday		
8 <sup>th</sup> : Nov 28-Dec 2 (5 days)	Evolutionary Theory	TSW 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 TSW analyze other evolutionary mechanisms, including genetic drift, gene flow, mutation, and recombination	B.7(D) B.7(F)
9 <sup>th</sup> : Dec 5-9 (5 days)	Taxonomy of Organisms	TSW define taxonomy and recognize the importance of a standardized taxonomic system to the scientific community	B.8(A)



**2nd Quarter (45 Days)**

**Resources:**

Week	Unit/Lesson	Learning Objectives	Reporting Categories ( TEKS SEs)
<b>10<sup>th</sup>: Dec 12-16</b> (5 days)	<b>Taxonomy of Organisms</b>	TSW categorize organisms using a hierarchical classification system based on similarities and differences shared among groups	B.8(B)

**3rd Quarter (42 Days)**

**Resources:**

Week	Unit/Lesson	Learning Objectives	Reporting Categories ( TEKS SEs)
<b>1<sup>st</sup> : Jan 4- 6</b> <b>Tues 1/3 PD Day</b> (3 days)	<b>Taxonomy of Organisms</b>	TSW compare characteristics of taxonomic groups, including archaea, bacteria, protists, fungi, plants, and animals	B.8(C)
<b>2<sup>nd</sup>: Jan 9- 13</b> (5 days)	<b>Molecules</b>	TSW compare the functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids	B.9(A)
<b>3<sup>rd</sup> : Jan 16- 20</b> <b>Mon 1/16 MLK Holiday</b> (4 days)	<b>Molecules</b>	TSW compare the reactants and products of photosynthesis and cellular respiration in terms of energy, energy conversions, and matter	B.9(B)
<b>4<sup>th</sup> : Jan 23- 27</b> (5 days)	<b>Molecules</b>	TSW identify and investigate the role of enzymes	B.9(C)
<b>5<sup>th</sup>: Jan 30 - Feb 3</b> (5 days)	<b>Levels of Biological Systems</b>	TSW describe the interactions that occur among systems that perform the functions of regulation, nutrient absorption, reproduction, and defense from injury or illness in animals	B.10(A)
<b>6<sup>th</sup>: Feb 6- 10</b> (5 days)	<b>Levels of Biological Systems</b>	TSW describe the interactions that occur among systems that perform the functions of transport, reproduction, and response in plants	B.10(B)
<b>7<sup>th</sup>: Feb 13- 17</b> (4 days)	<b>Levels of Biological Systems</b>	TSW analyze the levels of organization in biological systems and relate the levels to each other and to the whole system	B.10(C)
<b>8<sup>th</sup> : Feb 20- 24</b> <b>Mon 2/20 District PD</b>	<b>Ecological Succession</b>	TSW summarize the role of microorganisms in both maintaining and disrupting the health of both organisms and ecosystems	B.11(A)



**3rd Quarter (42 Days)**

<b>Resources:</b>			
<b>Week</b>	<b>Unit/Lesson</b>	<b>Learning Objectives</b>	<b>Reporting Categories ( TEKS SEs)</b>
<i>(4 days)</i>			
<b>9<sup>th</sup>: Feb 27 – Mar3</b> <i>(5 days)</i>	<b>Ecological Succession</b>	TSW describe how events and processes that occur during ecological succession can change populations and species diversity	B.11(B)
<b>10<sup>th</sup>: 1<sup>st</sup>: Mar 6- 10</b> <i>(5 days)</i>	<b>Spring Break</b>	<b>Spring Break</b>	<b>Spring Break</b>

**4th Quarter (49 Days)**

<b>Resources:</b>			
<b>Week</b>	<b>Unit/Lesson</b>	<b>Learning Objectives</b>	<b>Reporting Categories ( TEKS SEs)</b>
<b>1st: Mar 20- 24</b> <b>3/23 Ramadan Begins</b> <i>(5 days)</i>	<b>Organism Behavior</b>	TSW interpret relationships, including predation, parasitism, commensalism, mutualism, and competition, among organisms	B.12(A)
<b>2nd: Mar 27 - 31</b> <i>(5 days)</i>	<b>Organism Behavior</b>	TSW compare variations and adaptations of organisms in different ecosystems TSW analyze the flow of matter and energy through trophic levels using various models, including food chains, food webs, and ecological pyramids	B.12(B) B.12(C)
<b>3rd: Apr 3- 7</b> <i>(5 days)</i>	<b>Organism Behavior</b>	TSW describe the flow of matter through the carbon and nitrogen cycles and explain the consequences of disrupting these cycles	B.12(D)
<b>4th: Apr 10- 14</b> <b>Fri 4/14 Ramadan break starts</b> <i>(4 days)</i>	<b>Organism Behavior</b>	TSW describe how environmental change can impact ecosystem stability	B.12(E)
<b>5th: April 17- 21</b> <b>Ramadan / Eid Break</b> <i>(0 days)</i>	<b>STAAR REVIEW</b>	<b>STAAR REVIEW</b>	<b>STAAR REVIEW</b>
<b>6th: Apr 24- 28</b>	<b>STAAR REVIEW</b>	<b>STAAR REVIEW</b>	<b>STAAR REVIEW</b>



4th Quarter (49 Days)

Resources:

Week	Unit/Lesson	Learning Objectives	Reporting Categories ( TEKS SEs)
<i>(5 days)</i>			
<b>7th: May 1- 5</b> <i>(5 days)</i>	STAAR Testing		
<b>8th: May 8- 12</b> <i>(5 days)</i>	STAAR Testing		
<b>9th: May 15- 19</b> <i>(5 days)</i>	Scientific Process Standards	The student uses scientific practices and equipment during laboratory and field investigations	B.2(G) B.2(H)
<b>10th: May 22- 26</b> <b>5/26 Last Day of School</b> <i>(5 days)</i>	Scientific Process Standards	The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom	B.3(A)(B)(C)(D)(E)(F)