

Main Criteria: Cogent Education's Interactive Cases
 Secondary Criteria: Texas Essential Knowledge and Skills (TEKS)
 Subject: Science
 Grades: 9, 10, 11, 12



Title	Common Among States	Texas Essential Knowledge and Skills (TEKS)	Texas Essential Knowledge and Skills (TEKS)	Texas Essential Knowledge and Skills (TEKS)	Texas Essential Knowledge and Skills (TEKS)
Action Potential -	TX	<p>TX.112.34. - Biology (One Credit).</p> <p>(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p> <p>9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories.</p> <p>9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.</p> <p>9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology.</p> <p>9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.</p> <p>9-11.2 (H) - 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.</p> <p>(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p> <p>9-11.3 (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.</p> <p>9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.</p> <p>(9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to:</p> <p>9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.</p> <p>(9-11.5) - Science concepts. The student knows how an organism grows and the importance of cell differentiation. The student is expected to:</p> <p>9-11.5 (B) - Examine specialized cells, including roots, stems, and leaves of plants; and animal cells such as blood, muscle, and epithelium.</p> <p>(9-11.9) - Science concepts. The student knows the significance of various molecules involved in metabolic processes and energy conversions that occur in living organisms. The student is expected to:</p> <p>9-11.9 (A) - Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids.</p> <p>9-11.9 (C) - Identify and investigate the role of enzymes.</p> <p>(9-11.10) - Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to:</p>	<p>TX.112.34. - Biology (One Credit).</p> <p>(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p> <p>9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories.</p> <p>9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.</p> <p>9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology.</p> <p>9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.</p> <p>9-11.2 (H) - 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.</p> <p>(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p> <p>9-11.3 (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.</p> <p>9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.</p> <p>(9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to:</p> <p>9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.</p> <p>(9-11.5) - Science concepts. The student knows how an organism grows and the importance of cell differentiation. The student is expected to:</p> <p>9-11.5 (B) - Examine specialized cells, including roots, stems, and leaves of plants; and animal cells such as blood, muscle, and epithelium.</p> <p>(9-11.9) - Science concepts. The student knows the significance of various molecules involved in metabolic processes and energy conversions that occur in living organisms. The student is expected to:</p> <p>9-11.9 (A) - Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids.</p> <p>9-11.9 (C) - Identify and investigate the role of enzymes.</p> <p>(9-11.10) - Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to:</p>	<p>TX.112.34. - Biology (One Credit).</p> <p>(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p> <p>9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories.</p> <p>9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.</p> <p>9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology.</p> <p>9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.</p> <p>9-11.2 (H) - 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.</p> <p>(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p> <p>9-11.3 (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.</p> <p>9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.</p> <p>(9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to:</p> <p>9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.</p> <p>(9-11.5) - Science concepts. The student knows how an organism grows and the importance of cell differentiation. The student is expected to:</p> <p>9-11.5 (B) - Examine specialized cells, including roots, stems, and leaves of plants; and animal cells such as blood, muscle, and epithelium.</p> <p>(9-11.9) - Science concepts. The student knows the significance of various molecules involved in metabolic processes and energy conversions that occur in living organisms. The student is expected to:</p> <p>9-11.9 (A) - Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids.</p> <p>9-11.9 (C) - Identify and investigate the role of enzymes.</p> <p>(9-11.10) - Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to:</p>	

		<p>9-11.10 (A) - Describe the interactions that occur among systems that perform the functions of regulation, nutrient absorption, reproduction, and defense from injury or illness in animals.</p> <p>9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.</p>	<p>9-11.10 (A) - Describe the interactions that occur among systems that perform the functions of regulation, nutrient absorption, reproduction, and defense from injury or illness in animals.</p> <p>9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.</p>	<p>9-11.10 (A) - Describe the interactions that occur among systems that perform the functions of regulation, nutrient absorption, reproduction, and defense from injury or illness in animals.</p> <p>9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.</p>
Cellular Respiration -	TX	<p>TX.112.34. - Biology (One Credit).</p> <p>(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p> <p>9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories.</p> <p>9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.</p> <p>9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology.</p> <p>9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.</p> <p>9-11.2 (H) - 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.</p> <p>(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p> <p>9-11.3 (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.</p> <p>9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.</p> <p>(9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to:</p> <p>9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.</p> <p>(9-11.9) - Science concepts. The student knows the significance of various molecules involved in metabolic processes and energy conversions that occur in living organisms. The student is expected to:</p> <p>9-11.9 (A) - Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids.</p> <p>9-11.9 (B) - Compare the reactants and products of photosynthesis and cellular respiration in terms of energy and matter.</p> <p>9-11.9 (C) - Identify and investigate the role of enzymes.</p>	<p>TX.112.34. - Biology (One Credit).</p> <p>(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p> <p>9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories.</p> <p>9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.</p> <p>9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology.</p> <p>9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.</p> <p>9-11.2 (H) - 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.</p> <p>(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p> <p>9-11.3 (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.</p> <p>9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.</p> <p>(9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to:</p> <p>9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.</p> <p>(9-11.9) - Science concepts. The student knows the significance of various molecules involved in metabolic processes and energy conversions that occur in living organisms. The student is expected to:</p> <p>9-11.9 (A) - Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids.</p> <p>9-11.9 (B) - Compare the reactants and products of photosynthesis and cellular respiration in terms of energy and matter.</p> <p>9-11.9 (C) - Identify and investigate the role of enzymes.</p>	<p>TX.112.34. - Biology (One Credit).</p> <p>(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p> <p>9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories.</p> <p>9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.</p> <p>9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology.</p> <p>9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.</p> <p>9-11.2 (H) - 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.</p> <p>(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p> <p>9-11.3 (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.</p> <p>9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.</p> <p>(9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to:</p> <p>9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.</p> <p>(9-11.9) - Science concepts. The student knows the significance of various molecules involved in metabolic processes and energy conversions that occur in living organisms. The student is expected to:</p> <p>9-11.9 (A) - Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids.</p> <p>9-11.9 (B) - Compare the reactants and products of photosynthesis and cellular respiration in terms of energy and matter.</p> <p>9-11.9 (C) - Identify and investigate the role of enzymes.</p>

		<p>9-11.9 (D) - 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.</p> <p>(9-11.10) - Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to:</p> <p>9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.</p>	<p>9-11.9 (D) - 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.</p> <p>(9-11.10) - Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to:</p> <p>9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.</p>	<p>9-11.9 (D) - 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.</p> <p>(9-11.10) - Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to:</p> <p>9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.</p>
Diffusion -	TX	<p>TX.112.34. - Biology (One Credit).</p> <p>(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p> <p>9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories.</p> <p>9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.</p> <p>9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology.</p> <p>9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.</p> <p>9-11.2 (H) - 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.</p> <p>(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p> <p>9-11.3 (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.</p> <p>9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.</p> <p>(9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to:</p> <p>9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.</p> <p>(9-11.5) - Science concepts. The student knows how an organism grows and the importance of cell differentiation. The student is expected to:</p> <p>9-11.5 (A) - 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.</p> <p>(9-11.9) - Science concepts. The student knows the significance of various molecules involved in metabolic processes and energy conversions that occur in living organisms. The student is expected to:</p>	<p>TX.112.34. - Biology (One Credit).</p> <p>(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p> <p>9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories.</p> <p>9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.</p> <p>9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology.</p> <p>9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.</p> <p>9-11.2 (H) - 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.</p> <p>(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p> <p>9-11.3 (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.</p> <p>9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.</p> <p>(9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to:</p> <p>9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.</p> <p>(9-11.5) - Science concepts. The student knows how an organism grows and the importance of cell differentiation. The student is expected to:</p> <p>9-11.5 (A) - 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.</p> <p>(9-11.9) - Science concepts. The student knows the significance of various molecules involved in metabolic processes and energy conversions that occur in living organisms. The student is expected to:</p>	<p>TX.112.34. - Biology (One Credit).</p> <p>(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p> <p>9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories.</p> <p>9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.</p> <p>9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology.</p> <p>9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.</p> <p>9-11.2 (H) - 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.</p> <p>(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p> <p>9-11.3 (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.</p> <p>9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.</p> <p>(9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to:</p> <p>9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.</p> <p>(9-11.5) - Science concepts. The student knows how an organism grows and the importance of cell differentiation. The student is expected to:</p> <p>9-11.5 (A) - 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.</p> <p>(9-11.9) - Science concepts. The student knows the significance of various molecules involved in metabolic processes and energy conversions that occur in living organisms. The student is expected to:</p>

		<p>9-11.9 (A) - Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids.</p> <p>9-11.9 (D) - 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.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.</p>	<p>9-11.9 (A) - Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids.</p> <p>9-11.9 (D) - 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.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.</p>	<p>9-11.9 (A) - Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids.</p> <p>9-11.9 (D) - 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.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.</p>	
Filtration -	TX	<p>TX.112.34. - Biology (One Credit).</p> <p>(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p> <p>9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories.</p> <p>9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.</p> <p>9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology.</p> <p>9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.</p> <p>9-11.2 (H) - 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.</p> <p>(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p> <p>9-11.3 (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.</p> <p>9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.</p> <p>(9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to:</p> <p>9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.</p> <p>(9-11.10) - Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to:</p> <p>9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.</p>	<p>TX.112.34. - Biology (One Credit).</p> <p>(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p> <p>9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories.</p> <p>9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.</p> <p>9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology.</p> <p>9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.</p> <p>9-11.2 (H) - 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.</p> <p>(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p> <p>9-11.3 (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.</p> <p>9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.</p> <p>(9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to:</p> <p>9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.</p> <p>(9-11.10) - Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to:</p> <p>9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.</p>	<p>TX.112.34. - Biology (One Credit).</p> <p>(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p> <p>9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories.</p> <p>9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.</p> <p>9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology.</p> <p>9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.</p> <p>9-11.2 (H) - 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.</p> <p>(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p> <p>9-11.3 (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.</p> <p>9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.</p> <p>(9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to:</p> <p>9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.</p> <p>(9-11.10) - Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to:</p> <p>9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.</p>	
Membrane Potential -	TX	<p>TX.112.34. - Biology (One Credit).</p>	<p>TX.112.34. - Biology (One Credit).</p>	<p>TX.112.34. - Biology (One Credit).</p>	

(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:
9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories.
9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.
9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology.
9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.
9-11.2 (H) - 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.
(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:
9-11.3 (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.
9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.
(9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to:
9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.
(9-11.5) - Science concepts. The student knows how an organism grows and the importance of cell differentiation. The student is expected to:
9-11.5 (B) - Examine specialized cells, including roots, stems, and leaves of plants; and animal cells such as blood, muscle, and epithelium.
(9-11.9) - Science concepts. The student knows the significance of various molecules involved in metabolic processes and energy conversions that occur in living organisms. The student is expected to:
9-11.9 (A) - Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids.
9-11.9 (C) - Identify and investigate the role of enzymes.
(9-11.10) - Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to:
9-11.10 (A) - Describe the interactions that occur among systems that perform the functions of regulation, nutrient absorption, reproduction, and defense from injury or illness in animals.
9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.
(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:

(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:
9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories.
9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.
9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology.
9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.
9-11.2 (H) - 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.
(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:
9-11.3 (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.
9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.
(9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to:
9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.
(9-11.5) - Science concepts. The student knows how an organism grows and the importance of cell differentiation. The student is expected to:
9-11.5 (B) - Examine specialized cells, including roots, stems, and leaves of plants; and animal cells such as blood, muscle, and epithelium.
(9-11.9) - Science concepts. The student knows the significance of various molecules involved in metabolic processes and energy conversions that occur in living organisms. The student is expected to:
9-11.9 (A) - Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids.
9-11.9 (C) - Identify and investigate the role of enzymes.
(9-11.10) - Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to:
9-11.10 (A) - Describe the interactions that occur among systems that perform the functions of regulation, nutrient absorption, reproduction, and defense from injury or illness in animals.
9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.
(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:

(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:
9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories.
9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.
9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology.
9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.
9-11.2 (H) - 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.
(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:
9-11.3 (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.
9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.
(9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to:
9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.
(9-11.5) - Science concepts. The student knows how an organism grows and the importance of cell differentiation. The student is expected to:
9-11.5 (B) - Examine specialized cells, including roots, stems, and leaves of plants; and animal cells such as blood, muscle, and epithelium.
(9-11.9) - Science concepts. The student knows the significance of various molecules involved in metabolic processes and energy conversions that occur in living organisms. The student is expected to:
9-11.9 (A) - Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids.
9-11.9 (C) - Identify and investigate the role of enzymes.
(9-11.10) - Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to:
9-11.10 (A) - Describe the interactions that occur among systems that perform the functions of regulation, nutrient absorption, reproduction, and defense from injury or illness in animals.
9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.
(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:

		9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.	9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.	9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.	
Membrane Transport - TX		<p>TX.112.34. - Biology (One Credit).</p> <p>(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p> <p>9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories.</p> <p>9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.</p> <p>9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology.</p> <p>9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.</p> <p>9-11.2 (H) - 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.</p> <p>(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p> <p>9-11.3 (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.</p> <p>9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.</p> <p>(9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to:</p> <p>9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.</p> <p>(9-11.5) - Science concepts. The student knows how an organism grows and the importance of cell differentiation. The student is expected to:</p> <p>9-11.5 (B) - Examine specialized cells, including roots, stems, and leaves of plants; and animal cells such as blood, muscle, and epithelium.</p> <p>(9-11.9) - Science concepts. The student knows the significance of various molecules involved in metabolic processes and energy conversions that occur in living organisms. The student is expected to:</p> <p>9-11.9 (A) - Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids.</p> <p>9-11.9 (C) - Identify and investigate the role of enzymes.</p> <p>9-11.9 (D) - 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.</p> <p>(9-11.10) - Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to:</p>	<p>TX.112.34. - Biology (One Credit).</p> <p>(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p> <p>9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories.</p> <p>9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.</p> <p>9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology.</p> <p>9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.</p> <p>9-11.2 (H) - 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.</p> <p>(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p> <p>9-11.3 (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.</p> <p>9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.</p> <p>(9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to:</p> <p>9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.</p> <p>(9-11.5) - Science concepts. The student knows how an organism grows and the importance of cell differentiation. The student is expected to:</p> <p>9-11.5 (B) - Examine specialized cells, including roots, stems, and leaves of plants; and animal cells such as blood, muscle, and epithelium.</p> <p>(9-11.9) - Science concepts. The student knows the significance of various molecules involved in metabolic processes and energy conversions that occur in living organisms. The student is expected to:</p> <p>9-11.9 (A) - Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids.</p> <p>9-11.9 (C) - Identify and investigate the role of enzymes.</p> <p>9-11.9 (D) - 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.</p> <p>(9-11.10) - Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to:</p>	<p>TX.112.34. - Biology (One Credit).</p> <p>(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p> <p>9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories.</p> <p>9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.</p> <p>9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology.</p> <p>9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.</p> <p>9-11.2 (H) - 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.</p> <p>(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p> <p>9-11.3 (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.</p> <p>9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.</p> <p>(9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to:</p> <p>9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.</p> <p>(9-11.5) - Science concepts. The student knows how an organism grows and the importance of cell differentiation. The student is expected to:</p> <p>9-11.5 (B) - Examine specialized cells, including roots, stems, and leaves of plants; and animal cells such as blood, muscle, and epithelium.</p> <p>(9-11.9) - Science concepts. The student knows the significance of various molecules involved in metabolic processes and energy conversions that occur in living organisms. The student is expected to:</p> <p>9-11.9 (A) - Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids.</p> <p>9-11.9 (C) - Identify and investigate the role of enzymes.</p> <p>9-11.9 (D) - 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.</p> <p>(9-11.10) - Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to:</p>	

		<p>9-11.10 (A) - Describe the interactions that occur among systems that perform the functions of regulation, nutrient absorption, reproduction, and defense from injury or illness in animals.</p> <p>9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.</p>	<p>9-11.10 (A) - Describe the interactions that occur among systems that perform the functions of regulation, nutrient absorption, reproduction, and defense from injury or illness in animals.</p> <p>9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.</p>	<p>9-11.10 (A) - Describe the interactions that occur among systems that perform the functions of regulation, nutrient absorption, reproduction, and defense from injury or illness in animals.</p> <p>9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.</p>	<p>9-11.10 (A) - Describe the interactions that occur among systems that perform the functions of regulation, nutrient absorption, reproduction, and defense from injury or illness in animals.</p> <p>9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.</p>
Nitrogen Cycle -	TX	<p>TX.112.34. - Biology (One Credit).</p> <p>(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p> <p>9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories.</p> <p>9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.</p> <p>9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology.</p> <p>9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.</p> <p>9-11.2 (H) - 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.</p> <p>(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p> <p>9-11.3 (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.</p> <p>9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.</p> <p>(9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to:</p> <p>9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.</p> <p>(9-11.9) - Science concepts. The student knows the significance of various molecules involved in metabolic processes and energy conversions that occur in living organisms. The student is expected to:</p>	<p>TX.112.32. - Aquatic Science (One Credit).</p> <p>(10-12.12) - Science concepts. The student understands how human activities impact aquatic environments. The student is expected to:</p> <p>10-12.12 (C) - Investigate the role of humans in unbalanced systems such as invasive species, fish farming, cultural eutrophication, or red tides.</p> <p>TX.112.34. - Biology (One Credit).</p> <p>(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p> <p>9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories.</p> <p>9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.</p> <p>9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology.</p> <p>9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.</p> <p>9-11.2 (H) - 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.</p> <p>(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p> <p>9-11.3 (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.</p> <p>9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.</p>	<p>TX.112.32. - Aquatic Science (One Credit).</p> <p>(10-12.12) - Science concepts. The student understands how human activities impact aquatic environments. The student is expected to:</p> <p>10-12.12 (C) - Investigate the role of humans in unbalanced systems such as invasive species, fish farming, cultural eutrophication, or red tides.</p> <p>TX.112.34. - Biology (One Credit).</p> <p>(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p> <p>9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories.</p> <p>9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.</p> <p>9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology.</p> <p>9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.</p> <p>9-11.2 (H) - 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.</p> <p>(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p> <p>9-11.3 (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.</p> <p>9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.</p>	<p>TX.112.32. - Aquatic Science (One Credit).</p> <p>(10-12.12) - Science concepts. The student understands how human activities impact aquatic environments. The student is expected to:</p> <p>10-12.12 (C) - Investigate the role of humans in unbalanced systems such as invasive species, fish farming, cultural eutrophication, or red tides.</p> <p>TX.112.37. - Environmental Systems (One Credit).</p> <p>(11-12.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p> <p>11-12.3 (D) - Evaluate the impact of research on scientific thought, society, and the environment.</p> <p>(11-12.4) - Science concepts. The student knows the relationships of biotic and abiotic factors within habitats, ecosystems, and biomes. The student is expected to:</p> <p>11-12.4 (C) - Diagram abiotic cycles, including the rock, hydrologic, carbon, and nitrogen cycles.</p> <p>11-12.4 (D) - Make observations and compile data about fluctuations in abiotic cycles and evaluate the effects of abiotic factors on local ecosystems and local biomes.</p> <p>11-12.4 (E) - Measure the concentration of solute, solvent, and solubility of dissolved substances such as dissolved oxygen, chlorides, and nitrates and describe their impact on an ecosystem.</p> <p>(11-12.9) - Science concepts. The student knows the impact of human activities on the environment. The student is expected to:</p> <p>11-12.9 (A) - Identify causes of air, soil, and water pollution, including point and nonpoint sources.</p> <p>11-12.9 (B) - Investigate the types of air, soil, and water pollution such as chlorofluorocarbons, carbon dioxide, pH, pesticide runoff, thermal variations, metallic ions, heavy metals, and nuclear waste.</p>

<p>9-11.9 (A) - Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids.</p> <p>9-11.9 (C) - Identify and investigate the role of enzymes.</p> <p>9-11.9 (D) - 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.</p> <p>(9-11.10) - Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to:</p> <p>9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.</p> <p>9-11.11 (C) - Summarize the role of microorganisms in both maintaining and disrupting the health of both organisms and ecosystems.</p> <p>(9-11.12) - Science concepts. The student knows that interdependence and interactions occur within an environmental system. The student is expected to:</p> <p>9-11.12 (A) - Interpret relationships, including predation, parasitism, commensalism, mutualism, and competition among organisms.</p> <p>9-11.12 (E) - Describe the flow of matter through the carbon and nitrogen cycles and explain the consequences of disrupting these cycles.</p> <p>9-11.12 (F) - Describe how environmental change can impact ecosystem stability.</p>	<p>(9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to:</p> <p>9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.</p> <p>(9-11.9) - Science concepts. The student knows the significance of various molecules involved in metabolic processes and energy conversions that occur in living organisms. The student is expected to:</p> <p>9-11.9 (A) - Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids.</p> <p>9-11.9 (C) - Identify and investigate the role of enzymes.</p> <p>9-11.9 (D) - 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.</p> <p>(9-11.10) - Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to:</p> <p>9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.</p> <p>9-11.11 (C) - Summarize the role of microorganisms in both maintaining and disrupting the health of both organisms and ecosystems.</p> <p>(9-11.12) - Science concepts. The student knows that interdependence and interactions occur within an environmental system. The student is expected to:</p> <p>9-11.12 (A) - Interpret relationships, including predation, parasitism, commensalism, mutualism, and competition among organisms.</p> <p>9-11.12 (E) - Describe the flow of matter through the carbon and nitrogen cycles and explain the consequences of disrupting these cycles.</p> <p>9-11.12 (F) - Describe how environmental change can impact ecosystem stability.</p>	<p>(9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to:</p> <p>9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.</p> <p>(9-11.9) - Science concepts. The student knows the significance of various molecules involved in metabolic processes and energy conversions that occur in living organisms. The student is expected to:</p> <p>9-11.9 (A) - Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids.</p> <p>9-11.9 (C) - Identify and investigate the role of enzymes.</p> <p>9-11.9 (D) - 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.</p> <p>(9-11.10) - Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to:</p> <p>9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.</p> <p>9-11.11 (C) - Summarize the role of microorganisms in both maintaining and disrupting the health of both organisms and ecosystems.</p> <p>(9-11.12) - Science concepts. The student knows that interdependence and interactions occur within an environmental system. The student is expected to:</p> <p>9-11.12 (A) - Interpret relationships, including predation, parasitism, commensalism, mutualism, and competition among organisms.</p> <p>9-11.12 (E) - Describe the flow of matter through the carbon and nitrogen cycles and explain the consequences of disrupting these cycles.</p> <p>9-11.12 (F) - Describe how environmental change can impact ecosystem stability.</p> <p>TX.112.37 - Environmental Systems (One Credit).</p> <p>(11-12.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p> <p>11-12.3 (D) - Evaluate the impact of research on scientific thought, society, and the environment.</p> <p>(11-12.4) - Science concepts. The student knows the relationships of biotic and abiotic factors within habitats, ecosystems, and biomes. The student is expected to:</p> <p>11-12.4 (C) - Diagram abiotic cycles, including the rock, hydrologic, carbon, and nitrogen cycles.</p> <p>11-12.4 (D) - Make observations and compile data about fluctuations in abiotic cycles and evaluate the effects of abiotic factors on local ecosystems and local biomes.</p> <p>11-12.4 (E) - Measure the concentration of solute, solvent, and solubility of dissolved substances such as dissolved oxygen, chlorides, and nitrates and describe their impact on an ecosystem.</p>	<p>11-12.9 (C) - Examine the concentrations of air, soil, and water pollutants using appropriate units.</p> <p>11-12.9 (D) - Describe the effect of pollution on global warming, glacial and ice cap melting, greenhouse effect, ozone layer, and aquatic viability.</p>
--	---	--	--

				(11-12.9) - Science concepts. The student knows the impact of human activities on the environment. The student is expected to: 11-12.9 (A) - Identify causes of air, soil, and water pollution, including point and nonpoint sources. 11-12.9 (B) - Investigate the types of air, soil, and water pollution such as chlorofluorocarbons, carbon dioxide, pH, pesticide runoff, thermal variations, metallic ions, heavy metals, and nuclear waste. 11-12.9 (C) - Examine the concentrations of air, soil, and water pollutants using appropriate units. 11-12.9 (D) - Describe the effect of pollution on global warming, glacial and ice cap melting, greenhouse effect, ozone layer, and aquatic viability.		
Osmosis -	TX	TX.112.34. - Biology (One Credit). (9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to: 9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories. 9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories. 9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology. 9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data. 9-11.2 (H) - 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. (9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to: 9-11.3 (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. 9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events. (9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to: 9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules. (9-11.5) - Science concepts. The student knows how an organism grows and the importance of cell differentiation. The student is expected to: 9-11.5 (A) - 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. (9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to: 9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.	TX.112.34. - Biology (One Credit). (9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to: 9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories. 9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories. 9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology. 9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data. 9-11.2 (H) - 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. (9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to: 9-11.3 (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. 9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events. (9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to: 9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules. (9-11.5) - Science concepts. The student knows how an organism grows and the importance of cell differentiation. The student is expected to: 9-11.5 (A) - 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. (9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to: 9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.	TX.112.34. - Biology (One Credit). (9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to: 9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories. 9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories. 9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology. 9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data. 9-11.2 (H) - 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. (9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to: 9-11.3 (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. 9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events. (9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to: 9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules. (9-11.5) - Science concepts. The student knows how an organism grows and the importance of cell differentiation. The student is expected to: 9-11.5 (A) - 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. (9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to: 9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.	TX.112.34. - Biology (One Credit). (9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to: 9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories. 9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories. 9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology. 9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data. 9-11.2 (H) - 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. (9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to: 9-11.3 (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. 9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events. (9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to: 9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules. (9-11.5) - Science concepts. The student knows how an organism grows and the importance of cell differentiation. The student is expected to: 9-11.5 (A) - 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. (9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to: 9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.	
Photosynthesis -	TX	TX.112.34. - Biology (One Credit).	TX.112.34. - Biology (One Credit).	TX.112.34. - Biology (One Credit).	TX.112.37. - Environmental Systems (One Credit).	

<p>(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p>	<p>(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p>	<p>(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p>	<p>(11-12.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p>
<p>9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories. 9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.</p>	<p>9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories. 9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.</p>	<p>9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories. 9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.</p>	<p>11-12.3 (D) - Evaluate the impact of research on scientific thought, society, and the environment.</p>
<p>9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology. 9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.</p>	<p>9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology. 9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.</p>	<p>9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology. 9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.</p>	<p>11-12.9 (A) - Identify causes of air, soil, and water pollution, including point and nonpoint sources.</p>
<p>9-11.2 (H) - 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.</p>	<p>9-11.2 (H) - 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.</p>	<p>9-11.2 (H) - 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.</p>	<p>11-12.9 (B) - Investigate the types of air, soil, and water pollution such as chlorofluorocarbons, carbon dioxide, pH, pesticide runoff, thermal variations, metallic ions, heavy metals, and nuclear waste.</p>
<p>(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p>	<p>(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p>	<p>(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p>	<p>11-12.9 (C) - Examine the concentrations of air, soil, and water pollutants using appropriate units.</p>
<p>9-11.3 (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.</p>	<p>9-11.3 (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.</p>	<p>9-11.3 (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.</p>	<p>11-12.9 (D) - Describe the effect of pollution on global warming, glacial and ice cap melting, greenhouse effect, ozone layer, and aquatic viability.</p>
<p>9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.</p>	<p>9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.</p>	<p>9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.</p>	<p>11-12.9 (H) - Analyze and evaluate different views on the existence of global warming.</p>
<p>(9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to:</p>	<p>(9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to:</p>	<p>(9-11.4) - Science concepts. The student knows that cells are the basic structures of all living things with specialized parts that perform specific functions and that viruses are different from cells. The student is expected to:</p>	
<p>9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.</p>	<p>9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.</p>	<p>9-11.4 (B) - Investigate and explain cellular processes, including homeostasis, energy conversions, transport of molecules, and synthesis of new molecules.</p>	
<p>(9-11.8) - Science concepts. The student knows that taxonomy is a branching classification based on the shared characteristics of organisms and can change as new discoveries are made. The student is expected to:</p>	<p>(9-11.8) - Science concepts. The student knows that taxonomy is a branching classification based on the shared characteristics of organisms and can change as new discoveries are made. The student is expected to:</p>	<p>(9-11.8) - Science concepts. The student knows that taxonomy is a branching classification based on the shared characteristics of organisms and can change as new discoveries are made. The student is expected to:</p>	
<p>9-11.8 (B) - Categorize organisms using a hierarchical classification system based on similarities and differences shared among groups.</p>	<p>9-11.8 (B) - Categorize organisms using a hierarchical classification system based on similarities and differences shared among groups.</p>	<p>9-11.8 (B) - Categorize organisms using a hierarchical classification system based on similarities and differences shared among groups.</p>	
<p>9-11.8 (C) - Compare characteristics of taxonomic groups, including archaea, bacteria, protists, fungi, plants, and animals.</p>	<p>9-11.8 (C) - Compare characteristics of taxonomic groups, including archaea, bacteria, protists, fungi, plants, and animals.</p>	<p>9-11.8 (C) - Compare characteristics of taxonomic groups, including archaea, bacteria, protists, fungi, plants, and animals.</p>	
<p>(9-11.9) - Science concepts. The student knows the significance of various molecules involved in metabolic processes and energy conversions that occur in living organisms. The student is expected to:</p>	<p>(9-11.9) - Science concepts. The student knows the significance of various molecules involved in metabolic processes and energy conversions that occur in living organisms. The student is expected to:</p>	<p>(9-11.9) - Science concepts. The student knows the significance of various molecules involved in metabolic processes and energy conversions that occur in living organisms. The student is expected to:</p>	
<p>9-11.9 (A) - Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids.</p>	<p>9-11.9 (A) - Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids.</p>	<p>9-11.9 (A) - Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids.</p>	
<p>9-11.9 (B) - Compare the reactants and products of photosynthesis and cellular respiration in terms of energy and matter.</p>	<p>9-11.9 (B) - Compare the reactants and products of photosynthesis and cellular respiration in terms of energy and matter.</p>	<p>9-11.9 (B) - Compare the reactants and products of photosynthesis and cellular respiration in terms of energy and matter.</p>	
<p>9-11.9 (C) - Identify and investigate the role of enzymes.</p>	<p>9-11.9 (C) - Identify and investigate the role of enzymes.</p>	<p>9-11.9 (C) - Identify and investigate the role of enzymes.</p>	

		<p>9-11.9 (D) - 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.</p> <p>(9-11.10) - Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to:</p> <p>9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (C) - Summarize the role of microorganisms in both maintaining and disrupting the health of both organisms and ecosystems.</p> <p>(9-11.12) - Science concepts. The student knows that interdependence and interactions occur within an environmental system. The student is expected to:</p> <p>9-11.12 (F) - Describe how environmental change can impact ecosystem stability.</p>	<p>9-11.9 (D) - 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.</p> <p>(9-11.10) - Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to:</p> <p>9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (C) - Summarize the role of microorganisms in both maintaining and disrupting the health of both organisms and ecosystems.</p> <p>(9-11.12) - Science concepts. The student knows that interdependence and interactions occur within an environmental system. The student is expected to:</p> <p>9-11.12 (F) - Describe how environmental change can impact ecosystem stability.</p>	<p>9-11.9 (D) - 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.</p> <p>(9-11.10) - Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to:</p> <p>9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (C) - Summarize the role of microorganisms in both maintaining and disrupting the health of both organisms and ecosystems.</p> <p>(9-11.12) - Science concepts. The student knows that interdependence and interactions occur within an environmental system. The student is expected to:</p> <p>9-11.12 (F) - Describe how environmental change can impact ecosystem stability.</p> <p>TX.112.37. - Environmental Systems (One Credit).</p> <p>(11-12.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p> <p>11-12.3 (D) - Evaluate the impact of research on scientific thought, society, and the environment.</p> <p>(11-12.9) - Science concepts. The student knows the impact of human activities on the environment. The student is expected to:</p> <p>11-12.9 (A) - Identify causes of air, soil, and water pollution, including point and nonpoint sources.</p> <p>11-12.9 (B) - Investigate the types of air, soil, and water pollution such as chlorofluorocarbons, carbon dioxide, pH, pesticide runoff, thermal variations, metallic ions, heavy metals, and nuclear waste.</p> <p>11-12.9 (C) - Examine the concentrations of air, soil, and water pollutants using appropriate units.</p> <p>11-12.9 (D) - Describe the effect of pollution on global warming, glacial and ice cap melting, greenhouse effect, ozone layer, and aquatic viability.</p> <p>11-12.9 (H) - Analyze and evaluate different views on the existence of global warming.</p>	
Synaptic Transmission - TX	<p>TX.112.34. - Biology (One Credit).</p> <p>(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p> <p>9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories.</p> <p>9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.</p> <p>9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology.</p> <p>9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.</p> <p>9-11.2 (H) - 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.</p>	<p>TX.112.34. - Biology (One Credit).</p> <p>(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p> <p>9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories.</p> <p>9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.</p> <p>9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology.</p> <p>9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.</p> <p>9-11.2 (H) - 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.</p>	<p>TX.112.34. - Biology (One Credit).</p> <p>(9-11.2) - Scientific processes. The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p> <p>9-11.2 (B) - Know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories.</p> <p>9-11.2 (D) - Distinguish between scientific hypotheses and scientific theories.</p> <p>9-11.2 (E) - Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology.</p> <p>9-11.2 (G) - Analyze, evaluate, make inferences, and predict trends from data.</p> <p>9-11.2 (H) - 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.</p>		

	<p>(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p> <p>9-11.3 (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.</p> <p>9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.</p> <p>(9-11.5) - Science concepts. The student knows how an organism grows and the importance of cell differentiation. The student is expected to:</p> <p>9-11.5 (B) - Examine specialized cells, including roots, stems, and leaves of plants; and animal cells such as blood, muscle, and epithelium.</p> <p>(9-11.9) - Science concepts. The student knows the significance of various molecules involved in metabolic processes and energy conversions that occur in living organisms. The student is expected to:</p> <p>9-11.9 (A) - Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids.</p> <p>9-11.9 (C) - Identify and investigate the role of enzymes.</p> <p>(9-11.10) - Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to:</p> <p>9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.</p>	<p>(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p> <p>9-11.3 (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.</p> <p>9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.</p> <p>(9-11.5) - Science concepts. The student knows how an organism grows and the importance of cell differentiation. The student is expected to:</p> <p>9-11.5 (B) - Examine specialized cells, including roots, stems, and leaves of plants; and animal cells such as blood, muscle, and epithelium.</p> <p>(9-11.9) - Science concepts. The student knows the significance of various molecules involved in metabolic processes and energy conversions that occur in living organisms. The student is expected to:</p> <p>9-11.9 (A) - Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids.</p> <p>9-11.9 (C) - Identify and investigate the role of enzymes.</p> <p>(9-11.10) - Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to:</p> <p>9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.</p>	<p>(9-11.3) - Scientific processes. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:</p> <p>9-11.3 (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.</p> <p>9-11.3 (E) - Evaluate models according to their limitations in representing biological objects or events.</p> <p>(9-11.5) - Science concepts. The student knows how an organism grows and the importance of cell differentiation. The student is expected to:</p> <p>9-11.5 (B) - Examine specialized cells, including roots, stems, and leaves of plants; and animal cells such as blood, muscle, and epithelium.</p> <p>(9-11.9) - Science concepts. The student knows the significance of various molecules involved in metabolic processes and energy conversions that occur in living organisms. The student is expected to:</p> <p>9-11.9 (A) - Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids.</p> <p>9-11.9 (C) - Identify and investigate the role of enzymes.</p> <p>(9-11.10) - Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to:</p> <p>9-11.10 (C) - Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system.</p> <p>(9-11.11) - Science concepts. The student knows that biological systems work to achieve and maintain balance. The student is expected to:</p> <p>9-11.11 (A) - Describe the role of internal feedback mechanisms in the maintenance of homeostasis.</p>
--	--	--	--



Publisher content is reviewed and aligned to educational standards by EdGate's experienced and highly skilled subject experts giving the high quality results demanded by today's market.