**­Grade 6 Science Scope and Sequence 2025-2026**

**TEKS Distribution among Units**

**Priority Standards are Bold**

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| **Content TEKS** |
|  | **6.6A** | **6.6B** | **6.6C** | **6.6D** | **6.6E** | **6.7A** | **6.7B** | 6.7C | 6.8A | **6.8B** | **6.8C** | **6.9A** | **6.9B** | 6.10A | **6.10B** | **6.10C** | **6.11A** | 6.11B | **6.12A** | 6.12B | 6.12C | **6.13A** | 6.13B | 6.13C |
| **Unit 1** | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Unit 2** |  |  |  |  |  | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Unit 3** |  |  |  |  |  |  |  |  | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Unit 4** |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  |  |  |  |  |  |
| **Unit 5** |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X |  |  |  |  |  |  |  |  |
| **Unit 6** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  |
| **Unit 7** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |
| **Unit 8** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X |  |  | X |

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| **Scientific and Engineering Practices (SEPs) TEKS** |  | **Recurring Themes and Concepts (RTCs) TEKS** |
|  | 6.1A | 6.1B | 6.1C | 6.1D | 6.1E | 6.1F | 6.1G | 6.1H | 6.2A | 6.2B | 6.2C | 6.2D | 6.3A | 6.3B | 6.3C | 6.4A | 6.4B | 6.4C |  |  | 6.5A | 6.5B | 6.5C | 6.5D | 6.5E | 6.5F | 6.5G |
| **Unit 1** | X | X | X | X |  |  | X |  |  | X |  |  | X | X | X |  |  |  |  | **Unit 1** | X | X | X |  | X |  |  |
| **Unit 2** |  | X | X | X |  | X | X |  |  |  |  | X |  | X |  |  |  |  |  | **Unit 2** |  | X | X |  |  |  | X |
| **Unit 3** |  | X | X |  | X | X | X |  |  |  |  | X | X |  | X |  |  |  |  | **Unit 3** |  | X | X | X | X |  |  |
| **Unit 4** |  |  | X |  |  |  | X |  |  | X |  |  |  | X | X |  |  |  |  | **Unit 4** | X |  |  | X |  |  |  |
| **Unit 5** | X |  | X |  |  |  | X |  | X |  |  |  |  | X | X |  |  |  |  | **Unit 5** |  |  |  | X | X |  | X |
| **Unit 6** | X | X | X | X |  | X | X |  |  | X | X | X | X | X |  | X |  | X |  | **Unit 6** | X | X |  |  |  |  | X |
| **Unit 7** | X | X | X | X |  | X |  | X |  |  |  |  | X |  | X | X | X | X |  | **Unit 7** | X | X |  |  |  |  |  |
| **Unit 8** | X | X | X |  |  | X | X |  | X | X |  |  | X | X |  |  |  |  |  | **Unit 8** | X | X | X | X |  | X | X |

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| **Grade 6 Science****Scope and Sequence 2025-2026** |
| **Integrated Standards:** |
| **Scientific and Engineering Practices (SEPs)** |
| 6.1A | Ask questions and define problems based on observations or information from text, phenomena, models, or investigations. |
| 6.1B | Use scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems. |
| 6.1C | Use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards. |
| 6.1D | Use appropriate tools such as graduated cylinders, metric rulers, periodic tables, balances, scales, thermometers, temperature probes, laboratory ware, timing devices, pH indicators, hot plates, models, microscopes, slides, life science models, petri dishes, dissecting kits, magnets, spring scales or force sensors, tools that model wave behavior, satellite images, hand lenses, and lab notebooks or journals. |
| 6.1E | Collect quantitative data using the International System of Units (SI) and qualitative data as evidence. |
| 6.1F | Construct appropriate tables, graphs, maps, and charts using repeated trials and means to organize data. |
| 6.1G | Develop and use models to represent phenomena, systems, processes, or solutions to engineering problems. |
| 6.1H | Distinguish between scientific hypotheses, theories, and laws. |
| 6.2A | Identify advantages and limitations of models such as their size, properties, and materials. |
| 6.2B | Analyze data by identifying any significant descriptive statistical features, patterns, sources of error, or limitations. |
| 6.2C | Use mathematical calculations to assess quantitative relationships in data. |
| 6.2D | Evaluate experimental and engineering designs. |
| 6.3A | Develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories. |
| 6.3B | Communicate explanations and solutions individually and collaboratively in a variety of settings and formats. |
| 6.3C | Engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence. |
| 6.4A | Relate the impact of past and current research on scientific thought and society, including the process of science, cost-benefit analysis, and contributions of diverse scientists as related to the content. |
| 6.4B | Make informed decisions by evaluating evidence from multiple appropriate sources to assess the credibility, accuracy, cost-effectiveness, and methods used. |
| 6.4C | Research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics (STEM) field to investigate STEM careers. |

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| **Recurring Themes and Concepts (RTCs)** |
| 6.5A | Identify and apply patterns to understand and connect scientific phenomena or to design solutions. |
| 6.5B | Identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems. |
| 6.5C | Analyze how differences in scale, proportion, or quantity affect a system's structure or performance. |
| 6.5D | Examine and model the parts of a system and their interdependence in the function of the system. |
| 6.5E | Analyze and explain how energy flows and matter cycles through systems and how energy and matter are conserved through a variety of systems. |
| 6.5F | Analyze and explain the complementary relationship between the structure and function of objects, organisms, and systems. |
| 6.5G | Analyze and explain how factors or conditions impact stability and change in objects, organisms, and systems. |

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| **Grading Period 1**  |
| **Unit 1: Matter**Estimated Time Frame: August 12 – September 16 (25 total school days)Instructional & Re-engagement Days in Unit: 21 days |
| **Assessments** |
| **State/National Assessment****N/A** | **District Assessment(s)**NWEA MAP Growth ScienceSeptember 16 – September 18 | **Common Formative Assessment Window**Unit 1, Concept 2 (1 day) August 26 – September 5 |
| **Concepts within the Unit** | **TEKS** |
| Concept #1 SafetySuggested Days: 5 (ongoing; embedded throughout the course) | **Integrated Standards:***Scientific and Engineering Practices (SEPs)*6.1C use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards. |
| Concept #2: Physical PropertiesSuggested Days: 13**CFA TEKS 6.6B and 6.6C**August 26 – September 5 | **Priority Standards****6.6B investigate the physical properties of matter to distinguish between pure substances, homogeneous mixtures (solutions), and heterogeneous mixtures.****Important Standards**6.6A compare solids, liquids, and gases in terms of their structure, shape, volume, and kinetic energy of atoms and molecules.6.6C identify elements on the periodic table as metals, nonmetals, metalloids, and rare Earth elements based on their physical properties and importance to modern life.6.6D compare the density of substances relative to various fluids.**Integrated Standards:** *Scientific and Engineering Practices (SEPs)*6.1A ask questions and define problems based on observations or information from text, phenomena, models, or investigations.6.1B use scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems.6.1C Use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards.6.1D use appropriate tools such as graduated cylinders, metric rulers, periodic tables, balances, scales, thermometers, temperature probes, laboratory ware, timing devices, pH indicators, hot plates, models, microscopes, slides, life science models, petri dishes, dissecting kits, magnets, spring scales or force sensors, etc.6.1G develop and use models to represent phenomena, systems, processes, or solutions to engineering problems.6.2B analyze data by identifying any significant descriptive statistical features, patterns, sources of error, or limitations.6.3A develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories.*Recurring Themes and Concepts (RTCs)*6.5A identify and apply patterns to understand and connect scientific phenomena or to design solutions.6.5E analyze and explain how energy flows and matter cycles through systems and how energy and matter are conserved through a variety of systems.6.5C analyze how differences in scale, proportion, or quantity affect a system’s structure or performance. |
| Concept #3: Evidence of Chemical Change\*Suggested Days: 7\*Includes 1 day for NWEA MAP testing | **Priority Standards****6.6E identify the formation of a new substance by using the evidence of a possible chemical change, including production of a gas, change in thermal energy, production of a precipitate, and color change.****Important Standards**There is not an important standard for this concept. **Integrated Standards***Scientific and Engineering Practices (SEPs)*6.1C Use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards.6.1D use appropriate tools such as graduated cylinders, metric rulers, periodic tables, balances, scales, thermometers, temperature probes, laboratory ware, timing devices, pH indicators, hot plates, models, microscopes, slides, life science models, petri dishes, dissecting kits, magnets, spring scales or force sensors, tools that model wave behavior, satellite images, hand lenses, and lab notebooks or journals.6.2B analyze data by identifying any significant descriptive statistical features, patterns, sources of error, or limitations.6.3B communicate explanations and solutions individually and collaboratively in a variety of settings and formats.6.3C engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.*Recurring Themes and Concepts (RTCs)*6.5B identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems. |
| **Unit 2: Forces**Estimated Time Frame: September 17 – October 10 (17 total school days)Instructional & Re-engagement Days in Unit: 15 days |
| **Assessments** |
| **State/National Assessment****N/A** | **District Assessment(s)**NWEA MAP Growth Science September 16 – September 18 | **Common Formative Assessment Window**Unit 2, Concept 2 (1 day) October 6 – October 10 |
| **Concepts within the Unit** | **TEKS** |
| Concept #1 Types of Forces\*Suggested Days: 8\*Includes 2 days for NWEA MAP testing | **Priority Standards****6.7A identify and explain how forces act on objects, including gravity, friction, magnetism, applied forces, and normal forces, using real-world applications.****Important Standards**There is not an important standard for this concept.**Integrated Standards***Scientific and Engineering Practices (SEPs)*6.1C Use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards.6.1D use appropriate tools such as graduated cylinders, metric rulers, periodic tables, balances, scales, thermometers, temperature probes, laboratory ware, timing devices, pH indicators, hot plates, models, microscopes, slides, life science models, petri dishes, dissecting kits, magnets, spring scales or force sensors, tools that model wave behavior, satellite images, hand lenses, and lab notebooks or journals.6.1F construct appropriate tables, graphs, maps, and charts using repeated trials and means to organize data.6.1G develop and use models to represent phenomena, systems, processes, or solutions to engineering problems.6.2B analyze data by identifying any significant descriptive statistical features, patterns, sources of error, or limitations.6.3B communicate explanations and solutions individually and collaboratively in a variety of settings and formats.*Recurring Themes and Concepts (RTCs)*6.5B identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems. |
| Concept #2: Newton’s Third Law of MotionSuggested Days: 9 days**CFA TEKS 6.7A and 6.7B**October 6 – October 10 | **Priority Standards****6.7B calculate the net force on an object in a horizontal or vertical direction using diagrams and determine if the forces are balanced or unbalanced.****Important Standards**6.7Cidentify simultaneous force pairs that are equal in magnitude and opposite in direction that result from the interactions between objects using Newton's Third Law of Motion.**Integrated Standards***Scientific and Engineering Practices (SEPs)*6.1B use scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems.6.1C Use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards.6.2D evaluate experimental and engineering designs.6.3B communicate explanations and solutions individually and collaboratively in a variety of settings and formats.*Recurring Themes and Concepts (RTCs)*6.5B identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems.6.5G analyze and explain how factors or conditions impact stability and change in objects, organisms, and systems.6.5C analyze how differences in scale, proportion, or quantity affect a system's structure or performance. |

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| **Grading Period 2** |
| **Unit 3: Energy**Estimated Time Frame: October 21 – November 21 (24 total school days)Instructional & Re-engagement Days in Unit: 23 days |
| **Assessments** |
| **State/National Assessment**N/A | **District Assessment(s)**N/A | **Common Formative Assessment Window**Unit 3, Concept 3 (1 day) November 17 – November 21 |
| **Concepts within the Unit** | **TEKS** |
| Concept #1 Kinetic and Potential Energy Suggested Days: 6 | **Priority Standards**There is not a priority standard for this concept. **Important Standards**6.8A compare and contrast gravitational, elastic, and chemical potential energies with kinetic energy. **Integrated Standards***Scientific and Engineering Practices (SEPs)*6.1B use scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems.6.1C Use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards.6.1F construct appropriate tables, graphs, maps, and charts using repeated trials and means to organize data.6.1G develop and use models to represent phenomena, systems, processes, or solutions to engineering problems.*Recurring Themes and Concepts (RTCs)* 6.5C analyze how differences in scale, proportion, or quantity affect a system's structure or performance.6.5B identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems. |
| Concept #2: WavesSuggested Days: 7 | **Priority Standards****6.8C explain how energy is transferred through transverse and longitudinal waves.****Important Standards**There is not an important standard for this concept.**Integrated Standards***Scientific and Engineering Practices (SEPs)*6.1C Use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards.6.1E collect quantitative data using the International System of Units (SI) and qualitative data as evidence.6.3A develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories.6.3C engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.*Recurring Themes and Concepts (RTCs)*6.5D examine and model the parts of a system and their interdependence in the function of the system.6.5E analyze and explain how energy flows and matter cycles through systems and how energy and matter are conserved through a variety of systems. |
| Concept #3: Energy ConservationSuggested Days: 11**CFA TEKS 6.8B and 6.8C**November 17 – November 21 | **Priority Standards****6.8B describe how energy is conserved through transfers and transformations in systems such as electrical circuits, food webs, amusement park rides, or photosynthesis.** **Important Standards**There is not an important standard for this concept.**Integrated Standards***Scientific and Engineering Practices (SEPs)*6.1C Use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards.6.1G develop and use models to represent phenomena, systems, processes, or solutions to engineering problems.6.2D evaluate experimental and engineering designs.6.3A develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories.*Recurring Themes and Concepts (RTCs)*6.5E analyze and explain how energy flows and matter cycles through systems and how energy and matter are conserved through a variety of systems. |
| **Unit 4: Seasons and Tides**Estimated Time Frame: December 1 – December 19 (15 total school days)Instructional & Re-engagement Days in Unit: 15 days |
| **Assessments** |
| **State/National Assessment**N/A | **District Assessment(s)**N/A | **Common Formative Assessment Window**N/A |
| **Concepts within the Unit** | **TEKS** |
| Concept #1 SeasonsSuggested Days: 7 | **Priority Standards****6.9A model and illustrate how the tilted Earth revolves around the Sun, causing changes in seasons.****Important Standards**There is not an important standard for this concept. **Integrated Standards***Scientific and Engineering Practices (SEPs)*6.1C Use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards.6.1G develop and use models to represent phenomena, systems, processes, or solutions to engineering problems.6.3B communicate explanations and solutions individually and collaboratively in a variety of settings and formats.6.3C engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.*Recurring Themes and Concepts (RTCs)*6.5A identify and apply patterns to understand and connect scientific phenomena or to design solutions.6.5D examine and model the parts of a system and their interdependence in the function of the system. |
| Concept #2: TidesSuggested Days: 8 days | **Priority Standards****6.9B describe and predict how the positions of the Earth, Sun, and Moon cause daily, spring, and neap cycles of ocean tides due to gravitational forces.** **Important Standards** There is not an important standard for this concept.**Integrated Standards***Scientific and Engineering Practices (SEPs)*6.1C Use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards.6.2B analyze data by identifying any significant descriptive statistical features, patterns, sources of error, or limitations.6.3B communicate explanations and solutions individually and collaboratively in a variety of settings and formats.*Recurring Themes and Concepts (RTCs)*There is not a RTC for this concept.  |

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| **Grading Period 3**  |
| **Unit 5: The Earth**Estimated Time Frame: January 8 – February 12 (25 total school days)Instructional & Re-engagement Days in Unit: 21 days |
| **Assessments** |
| **State/National Assessment**N/A | **District Assessment(s)**NWEA MAP Growth ScienceFebruary 2 - February 4 | **Common Formative Assessment Window**Unit 5, Concept 2 (1 day) January 21 – January 27 |
| **Concepts within the Unit** | **TEKS** |
| Concept #1 Earth’s SpheresSuggested Days: 4 | **Priority Standards**There is not a priority standard for this concept. **Important Standards**6.10A differentiate between the biosphere, hydrosphere, atmosphere, and geosphere and identify components of each system.**Integrated Standards***Scientific and Engineering Practices (SEPs)*6.1A ask questions and define problems based on observations or information from text, phenomena, models, or investigations.6.1C Use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards.6.1G develop and use models to represent phenomena, systems, processes, or solutions to engineering problems.6.2A identify advantages and limitations of models such as their size, properties, and materials.*Recurring Themes and Concepts (RTCs)*6.5D examine and model the parts of a system and their interdependence in the function of the system.6.5E analyze and explain how energy flows and matter cycles through systems and how energy and matter are conserved through a variety of systems. |
| Concept #2: Earth’s LayersSuggested Days: 9**CFA TEKS 6.10B**January 21 – January 27 | **Priority Standards****6.10B model and describe the layers of Earth, including the inner core, outer core, mantle, and crust.****Important Standards**There is not an important standard for this concept. **Integrated Standards***Scientific and Engineering Practices (SEPs)*6.1C Use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards.6.1G develop and use models to represent phenomena, systems, processes, or solutions to engineering problems.6.2A identify advantages and limitations of models such as their size, properties, and materials.6.3C engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.*Recurring Themes and Concepts (RTCs)*6.5A identify and apply patterns to understand and connect scientific phenomena or to design solutions.6.5E analyze and explain how energy flows and matter cycles through systems and how energy and matter are conserved through a variety of systems. |
| Concept #3: The Rock Cycle\*Suggested Days: 11\*includes 3 days for NWEA Map testing | **Priority Standards****6.10C describe how metamorphic, igneous, and sedimentary rocks form and change through geologic processes in the rock cycle.****Important Standards**There is not an important standard for this unit. **Integrated Standards***Scientific and Engineering Practices (SEPs)*6.1C Use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards.6.3B communicate explanations and solutions individually and collaboratively in a variety of settings and formats.*Recurring Themes and Concepts (RTCs)*6.5B identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems.6.5E analyze and explain how energy flows and matter cycles through systems and how energy and matter are conserved through a variety of systems.6.5G analyze and explain how factors or conditions impact stability and change in objects, organisms, and systems. |
| **Unit 6: Resource Management**Estimated Time Frame: February 17 – March 13 (18 total school days)Instructional & Re-engagement Days in Unit: 18 days |
| **Assessments** |
| **State/National Assessment**TELPAS February 16 – March 27 | **District Assessment(s)****N/A** | **Common Formative Assessment Window****N/A** |
| **Concepts within the Unit** | **TEKS** |
| Concept #1 Air and Water ResourcesSuggested Days: 9 | **Priority Standards****6.11A research and describe why resource management is important in reducing ~~global energy~~, ~~poverty~~, ~~malnutrition~~, and air and water pollution.****Important Standards**6.11B explain how conservation, increased efficiency, and technology can help manage air, water, ~~soil, and energy~~ resources.**Integrated Standards***Scientific and Engineering Practices (SEPs)*6.1A ask questions and define problems based on observations or information from text, phenomena, models, or investigations.6.1B use scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems.6.1C Use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards.6.1D use appropriate tools such as graduated cylinders, metric rulers, periodic tables, balances, scales, thermometers, temperature probes, laboratory ware, timing devices, pH indicators, hot plates, models, microscopes, slides, life science models, petri dishes, dissecting kits, magnets, spring scales or force sensors, tools that model wave behavior, satellite images, hand lenses, and lab notebooks or journals.6.1G develop and use models to represent phenomena, systems, processes, or solutions to engineering problems.6.2D evaluate experimental and engineering designs.6.3A develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories.*Recurring Themes and Concepts (RTCs)*6.5A identify and apply patterns to understand and connect scientific phenomena or to design solutions.6.5B identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems. |
| Concept #2 Soil and Energy ResourcesSuggested Days: 9 | **Priority Standards****6.11A research and describe why resource management is important in reducing global energy, poverty, malnutrition, and ~~air and water pollution.~~****Important Standards**6.11B explain how conservation, increased efficiency, and technology can help manage ~~air, water,~~ soil, and energy resources.**Integrated Standards***Scientific and Engineering Practices (SEPs)*6.1B use scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems.6.1C Use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards.6.1F construct appropriate tables, graphs, maps, and charts using repeated trials and means to organize data.6.2B analyze data by identifying any significant descriptive statistical features, patterns, sources of error, or limitations.6.2C use mathematical calculations to assess quantitative relationships in data.6.3B communicate explanations and solutions individually and collaboratively in a variety of settings and formats.6.4A relate the impact of past and current research on scientific thought and society, including the process of science, cost-benefit analysis, and contributions of diverse scientists as related to the content.6.4C research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics (STEM) field to investigate STEM careers.*Recurring Themes and Concepts (RTCs)*6.5B identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems.6.5G analyze and explain how factors or conditions impact stability and change in objects, organisms, and systems. |

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| **Grading Period 4** |
| **Unit 7: Organisms – Living Things**Estimated Time Frame: March 23 – April 15 (17 total school days) Instructional & Re-engagement Days in Unit: 15 days |
| **Assessments** |
| **State/National Assessment**TELPAS February 16 – March 27RLA STAAR April 7-9 (only 1 day) | **District Assessment(s)**N/A | **Common Formative Assessment Window**Unit 7, Concept 2 (1 day) April 9 – April 15 |
| **Concepts within the Unit** | **TEKS** |
| Concept #1 Cell TheorySuggested Days: 5 | **Priority Standards****6.13A describe the historical development of cell theory and explain how organisms are composed of one or more cells, which come from pre-existing cells and are the basic unit of structure and function.****Important Standards**There is not an important standard for this concept. **Integrated Standards***Scientific and Engineering Practices (SEPs)*6.1A ask questions and define problems based on observations or information from text, phenomena, models, or investigations.6.1B use scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems.6.1C Use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards.6.1D use appropriate tools such as graduated cylinders, metric rulers, periodic tables, balances, scales, thermometers, temperature probes, laboratory ware, timing devices, pH indicators, hot plates, models, microscopes, slides, life science models, petri dishes, dissecting kits, magnets, spring scales or force sensors, tools that model wave behavior, satellite images, hand lenses, and lab notebooks or journals.6.1F use scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems.6.1H distinguish between scientific hypotheses, theories, and laws.6.3A develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories.6.3C engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.6.4A relate the impact of past and current research on scientific thought and society, including the process of science, cost-benefit analysis, and contributions of diverse scientists as related to the content6.4C research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics (STEM) field to investigate STEM careers.*Recurring Themes and Concepts (RTCs)*6.5B identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems. |
| Concept #2: Characteristics of Living ThingsSuggested Days: 12**CFA TEKS 6.13A and 6.13B**April 9 – April 15 | **Priority Standards**There is not a priority standard for this concept. **Important Standards**6.13B identify and compare the basic characteristics of organisms, including prokaryotic and eukaryotic, unicellular, and multicellular, and autotrophic and heterotrophic.**Integrated Standards***Scientific and Engineering Practices (SEPs)*6.1A ask questions and define problems based on observations or information from text, phenomena, models, or investigations.6.1B use scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems.6.1C Use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards.6.1D use appropriate tools such as graduated cylinders, metric rulers, periodic tables, balances, scales, thermometers, temperature probes, laboratory ware, timing devices, pH indicators, hot plates, models, microscopes, slides, life science models, petri dishes, dissecting kits, magnets, spring scales or force sensors, tools that model wave behavior, satellite images, hand lenses, and lab notebooks or journals.6.1F construct appropriate tables, graphs, maps, and charts using repeated trials and means to organize data.6.1H distinguish between scientific hypotheses, theories, and laws.6.3A develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories.6.4A relate the impact of past and current research on scientific thought and society, including the process of science, cost-benefit analysis, and contributions of diverse scientists as related to the content.6.4B make informed decisions by evaluating evidence from multiple appropriate sources to assess the credibility, accuracy, cost-effectiveness, and methods used.6.4C research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics (STEM) field to investigate STEM careers.*Recurring Themes and Concepts (RTCs)*6.5A identify and apply patterns to understand and connect scientific phenomena or to design solutions. 6.5B identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems. |
| **Unit 8: Interactions within an Ecosystem**Estimated Time Frame: April 16 – May 28 (30 total school days)Instructional & Re-engagement Days in Unit: 23 days |
| **State/National Assessment**Math STAAR April 21-23 (only 1 day) | **District Assessment(s)**NWEA MAP Growth ScienceMay 19 – May 21 | **Common Formative Assessment Window**N/A |
| **Concepts within the Unit** | **TEKS** |
| Concept #1 Ecosystem OrganizationSuggested Days: 7 | **Priority Standards**There is not a priority standard for this concept. **Important Standards**6.12C describe the hierarchical organization of organism, population, and community within an ecosystem.**Integrated Standards***Scientific and Engineering Practices (SEPs)*6.1A ask questions and define problems based on observations or information from text, phenomena, models, or investigations.6.1B use scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems.6.1C Use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards.6.1G develop and use models to represent phenomena, systems, processes, or solutions to engineering problems. 6.3A develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories.6.3B communicate explanations and solutions individually and collaboratively in a variety of settings and formats.*Recurring Themes and Concepts (RTCs)*6.5A identify and apply patterns to understand and connect scientific phenomena or to design solutions.6.5B identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems.6.5D examine and model the parts of a system and their interdependence in the function of the system. |
| Concept #2 Competition Among OrganismsSuggested Days: 6 | **Priority Standards****6.12A investigate how organisms and populations in an ecosystem depend on and may compete for biotic factors such as food and abiotic factors such as availability of light and water, range of temperatures, or soil composition.****Important Standards**There is not an important standard for this concept. **Integrated Standards***Scientific and Engineering Practices (SEPs)*6.1A ask questions and define problems based on observations or information from text, phenomena, models, or investigations.6.1C Use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards.6.1F use scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems.6.1G develop and use models to represent phenomena, systems, processes, or solutions to engineering problems.6.3A develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories.6.3B communicate explanations and solutions individually and collaboratively in a variety of settings and formats.*Recurring Themes and Concepts (RTCs)*6.5B identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems.6.5C analyze how differences in scale, proportion, or quantity affect a system's structure or performance.6.5D examine and model the parts of a system and their interdependence in the function of the system.6.5G analyze and explain how factors or conditions impact stability and change in objects, organisms, and systems. |
| Concept #3 Interactions within an Ecosystem Suggested Days: 5  | **Priority Standards**There is not a priority standard for this concept. **Important Standards**6.12B describe and give examples of predatory, competitive, and symbiotic relationships between organisms, including mutualism, parasitism, and commensalism.**Integrated Standards***Scientific and Engineering Practices (SEPs)*6.1A ask questions and define problems based on observations or information from text, phenomena, models, or investigations.6.1C Use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards.6.1F use scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems.6.1G develop and use models to represent phenomena, systems, processes, or solutions to engineering problems.6.3A develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories.6.3B communicate explanations and solutions individually and collaboratively in a variety of settings and formats.*Recurring Themes and Concepts (RTCs)*6.5A identify and apply patterns to understand and connect scientific phenomena or to design solutions. |
| Concept #4 Variations in Populations\*Suggested Days: 12\*includes 3 days for NWEA MAP testing  | **Priority Standards**There is not a priority standard for this concept. **Important Standards**6.13C describe how variations within a population can be an advantage or disadvantage to the survival of a population as environments change.**Integrated Standards***Scientific and Engineering Practices (SEPs)*6.1C Use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards.6.1F use scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems.6.1G develop and use models to represent phenomena, systems, processes, or solutions to engineering problems.6.2A identify advantages and limitations of models such as their size, properties, and materials.6.2B analyze data by identifying any significant descriptive statistical features, patterns, sources of error, or limitations.6.3A develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories.6.3B communicate explanations and solutions individually and collaboratively in a variety of settings and formats.*Recurring Themes and Concepts (RTCs)*6.5F analyze and explain the complementary relationship between the structure and function of objects, organisms, and systems.6.5G analyze and explain how factors or conditions impact stability and change in objects, organisms, and systems. |