

6th Grade TEKS Year-at-a-Glance

This year-at-a-glance is designed to cover 150 school days. Use your local guidelines to determine how to address the standards in the time you have.

Unit 0: Back-to-School (5 days)**Unit 1: Properties of Matter (16 days)**

- 6.6B - Pure Substances & Mixtures
- 6.6A - Matter & Kinetic Energy
- 6.6D - Comparing Density

Unit 2: Periodic Table & Chemical Changes (12 days)

- 6.6C - Classify Elements
- 6.6E - Evidence of Chemical Changes

Unit 3: Force & Motion (16 days)

- 6.7A - Forces in the Real-World
- 6.7B - Calculating Net Force
- 6.7C - Newton's Third Law of Motion

Unit 4: Energy (13 days)

- 6.8A - Compare & Contrast Energies
- 6.8B - Energy Transformation in Systems

Unit 5: Waves (7 days)

- 6.8C - Energy of Waves

Unit 6: Seasons & Tides (13 days)

- 6.9A - Modeling Earth's Tilt & Seasons
- 6.9B - Predicting Tides

Unit 7: Earth Science (15 days)

- 6.10A - Differentiate Between Earth's Spheres
- 6.10B - Modeling Layers of the Earth
- 6.10C - Processes in the Rock Cycle

Unit 8: Energy Resources (12 days)

- 6.11A - Resource Management
- 6.11B - Managing Energy Resources

Unit 9: Organisms (10 days)

- 6.13A - Development of Cell Theory
- 6.13B - Comparing Organisms

Unit 10: Ecosystems (21 days)

- 6.12C - Hierarchy of Ecosystems
- 6.12A - Biotic & Abiotic Competition
- 6.12B - Ecological Relationships
- 6.13C - Variations & Survival

Unit 11: STEM Challenges (10 days)

Unit 0: Back-to-School

We have several resources that can be used during the first week of class to engage students and build strong foundation skills. You can find these resources in the Beginning of the Year lesson collection.

- [Back to School Escape Room](#)
- [Lab Safety Station Lab](#)
- [Lab Safety Escape Room](#)
- [Graphing Station Lab](#)
- [Graphing Escape Room](#)
- [Measurement Station Lab](#)
- [Measurement Escape Room](#)
- [Scientific Method Station Lab](#)
- [Scientific Method Escape Room](#)
- [Engineering Design Station Lab](#)
- [Engineering Design Escape Room](#)

Unit 1: Properties of Matter

Content Standards:

- TEKS.6.6A - compare solids, liquids, and gases in terms of their structure, shape, volume, and kinetic energy of atoms and molecules
- TEKS.6.6B - investigate the physical properties of matter to distinguish between pure substances, homogeneous mixtures (solutions), and heterogeneous mixtures
- TEKS.6.6D - compare the density of substances relative to various fluids

Suggested Recurring Themes:

- TEKS.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

Suggested Science and Engineering Practices:

- TEKS.6.1B - use scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems
- TEKS.6.1G - develop and use models to represent phenomena, systems, processes, or solutions to engineering problems
- TEKS.6.2B - analyze data by identifying any significant descriptive statistical features, patterns, sources of error, or limitations
- TEKS.6.2D - evaluate experimental and engineering designs
- TEKS.6.3B - communicate explanations and solutions individually and collaboratively in a variety of settings and formats

Key Vocabulary

- | | |
|-------------------------|------------------|
| • pure substance | • kinetic energy |
| • element | • solid |
| • compound | • liquid |
| • homogeneous mixture | • gas |
| • heterogeneous mixture | • shape |
| • solution | • structure |
| • solute | • volume |
| • solvent | • density |
| • atoms | • mass |
| • molecules | • volume |

Unit 1: Properties of Matter

The unit plan below is a suggestion. Each day is based on a typical 45-minute class period.

Day 1	Day 2	Day 3	Day 4	Day 5
TEKS.6.6A Matter & Kinetic Energy Engagement TEKS.6.6A - Matter & Kinetic Energy Station Lab - Input Stations	TEKS.6.6A Matter & Kinetic Energy Station Lab - Output Stations TEKS.6.6A - Matter & Kinetic Energy Presentation and Paper INB	TEKS.6.6A Matter & Kinetic Energy Presentation and Paper INB	TEKS.6.6A Matter & Kinetic Energy Assessment	TEKS.6.6B Pure Substances & Mixtures Engagement TEKS.6.6B - Pure Substances & Mixtures Station Lab - Input Stations
Day 6	Day 7	Day 8	Day 9	Day 10
TEKS.6.6B Pure Substances & Mixtures Station Lab - Output Stations	TEKS.6.6B Pure Substances & Mixtures Presentation and Paper INB	TEKS.6.6B - Pure Substances & Mixtures Student Choice	TEKS.6.6B Pure Substances & Mixtures Student Choice	TEKS.6.6B - Pure Substances & Mixtures Assessment
Day 11	Day 12	Day 13	Day 14	Day 15
TEKS.6.6D Density Amazing Anchors Part 1 TEKS.6.6D - Density Inquiry Lab	TEKS.6.6D Density Inquiry Lab TEKS.6.6D - Comparing Density Presentation and Paper INB	TEKS.6.6D Comparing Density Presentation and Paper INB TEKS.6.6D - Comparing Density WIKI Ticket	TEKS.6.6D Comparing Density Writing Prompt TEKS.6.6D - Density Amazing Anchors Part 2	TEKS.6.6D Density Escape Room
Day 16				
TEKS.6.6D Comparing Density Assessment				

Unit 2: Periodic Table & Chemical Changes

Content Standards:

- TEKS.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
- TEKS.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

Suggested Recurring Themes:

- TEKS.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
- TEKS.6.5G - analyze and explain how factors or conditions impact stability and change in objects, organisms, and systems

Suggested Science and Engineering Practices:

- TEKS.6.3A - develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories
- TEKS.6.3C - engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence
- TEKS.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

Key Vocabulary

- | | |
|---------------------|-------------------|
| • metal | • chemical change |
| • nonmetal | • reactants |
| • metalloid | • products |
| • periodic table | • precipitate |
| • chemical reaction | |

Unit 2: Periodic Table & Chemical Changes

The unit plan below is a suggestion. Each day is based on a typical 45-minute class period.

Day 1	Day 2	Day 3	Day 4	Day 5
TEKS.6.6C Metals, Nonmetals, & Metalloids Amazing Anchors Part 1 TEKS.6.6C - Metals, Nonmetals, & Metalloids Inquiry Lab	TEKS.6.6C Metals, Nonmetals, & Metalloids Inquiry Lab	TEKS.6.6C Metals, Nonmetals, & Metalloids Inquiry Lab TEKS.6.6C - Classify Elements Presentation and Paper INB	TEKS.6.6C Classify Elements Presentation and Paper INB TEKS.6.6C - Metals, Nonmetals, & Metalloids WIKI Ticket	TEKS.6.6C Metals, Nonmetals, & Metalloids Science Reading Comprehension Passage TEKS.6.6C Metals, Nonmetals, & Metalloids Amazing Anchors Part 2
Day 6	Day 7	Day 8	Day 9	Day 10
TEKS.6.6C Classify Elements Assessment	TEKS.6.6E Evidence of Chemical Changes Engagement TEKS.6.6E - Evidence of Chemical Changes Station Lab - Input Stations	TEKS.6.6E Evidence of Chemical Changes Station Lab - Output Stations	TEKS.6.6E Evidence of Chemical Changes Inquiry Lab	TEKS.6.6E Evidence of Chemical Changes Presentation and IMB TEKS.6.6E Chemical Changes WIKI Ticket
Day 11	Day 12			
TEKS.6.6E Chemical Changes Escape Room	TEKS.6.6E Evidence of Chemical Changes Assessment			

Unit 3: Force & Motion

Content Standards:

- TEKS.6.7A - identify and explain how forces act on objects, including gravity, friction, magnetism, applied forces, and normal forces, using real-world applications
- TEKS.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
- TEKS.6.7C - identify 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

Suggested Recurring Themes:

- TEKS.6.5B - identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems
- TEKS.6.5C - analyze how differences in scale, proportion, or quantity affect a system's structure or performance
- TEKS.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

Suggested Science and Engineering Practices:

- TEKS.6.1H - distinguish between scientific hypotheses, theories, and laws
- TEKS.6.2B - analyze data by identifying any significant descriptive statistical features, patterns, sources of error, or limitations
- TEKS.6.3A - develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories

Key Vocabulary

- | | |
|--------------------|--------------------------------|
| • force | • net force |
| • magnetism | • vector |
| • gravity | • motion |
| • friction | • magnitude |
| • applied force | • Newton's third law of motion |
| • normal force | • reaction |
| • balanced force | • action |
| • unbalanced force | |

Unit 3: Force & Motion

The unit plan below is a suggestion. Each day is based on a typical 45-minute class period.

Day 1	Day 2	Day 3	Day 4	Day 5
TEKS.6.7A Forces in the Real-World Engagement TEKS.6.7A Forces in the Real-World Station Lab - Input Stations	TEKS.6.7A Forces in the Real-World Station Lab - Output Stations	TEKS.6.7A Forces in the Real-World Presentation and Paper INB	TEKS.6.7A Forces in the Real-World Presentation and Paper INB	TEKS.6.7A Forces in the Real-World Assessment TEKS.6.7B Net Force Amazing Anchors Part 1
Day 6	Day 7	Day 8	Day 9	Day 10
TEKS.6.7B Net Force Inquiry Lab	TEKS.6.7B Calculating Net Force Presentation and Paper INB TEKS.6.7B Net Force WIKI Ticket	TEKS.6.7B Net Force Writing Prompt TEKS.6.7B Net Force Amazing Anchors Part 2	TEKS.6.7B Net Force Escape Room	TEKS.6.7B Calculating Net Force Assessment
Day 11	Day 12	Day 13	Day 14	Day 15
TEKS.6.7C Newton's Third Law of Motion Engagement TEKS.6.7C Newton's Third Law of Motion Station Lab - Input Stations	TEKS.6.7C Newton's Third Law of Motion Station Lab - Output Stations	TEKS.6.7C Newton's Third Law Inquiry Lab	TEKS.6.7C Newton's Third Law of Motion Presentation and Paper INB TEKS.6.7C Newton's Third Law WIKI Ticket	TEKS.6.7C Newton's Third Law Science Reading Comprehension Passage
Day 16				
TEKS.6.7C Newton's Third Law of Motion Assessment				

Unit 4: Energy

Content Standards:

- TEKS.6.8A - compare and contrast gravitational, elastic, and chemical potential energies with kinetic energy
- TEKS.6.8B - describe how energy is conserved through transfers and transformations in systems such as electrical circuits, food webs, amusement park rides, or photosynthesis

Suggested Recurring Themes:

- TEKS.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

Suggested Science and Engineering Practices:

- TEKS.6.2D - evaluate experimental and engineering designs
- TEKS.6.3A - develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories

Key Vocabulary

- energy
- kinetic energy
- potential energy
- gravitational potential energy
- elastic potential energy
- chemical potential energy
- energy transformation
- law of conservation of energy
- photosynthesis

Unit 4: Energy

The unit plan below is a suggestion. Each day is based on a typical 45-minute class period.

Day 1	Day 2	Day 3	Day 4	Day 5
TEKS.6.8A Compare & Contrast Energies Engagement TEKS.6.8A Compare & Contrast Energies Station Lab - Input Stations	TEKS.6.8A Compare & Contrast Energies Station Lab - Output Stations	TEKS.6.8A Compare & Contrast Energies Presentation and Paper INB TEKS.6.8A Potential & Kinetic Energy WIKI Ticket	TEKS.6.8A Compare & Contrast Energies Student Choice	TEKS.6.8A Compare & Contrast Energies Student Choice
Day 6	Day 7	Day 8	Day 9	Day 10
TEKS.6.8A Compare & Contrast Energies Student Choice	TEKS.6.8A Compare & Contrast Energies Assessment TEKS.6.8B Energy Transformations Amazing Anchors Part 1	TEKS.6.8B Energy Transformations Inquiry Lab	TEKS.6.8B Energy Transformations Inquiry Lab	TEKS.6.8B Energy Transformations in Systems Presentation and Paper INB
Day 11	Day 12	Day 13		
TEKS.6.8B Energy Transformations in Systems Presentation and Paper INB TEKS.6.8B Energy Transformations WIKI Ticket	TEKS.6.8B Energy Transformations Science Reading Comprehension Passage TEKS.6.8B Energy Transformations Amazing Anchors Part 2	TEKS.6.8B Energy Transformations Assessment		

Unit 5: Waves

Content Standards:

- TEKS.6.8C - explain how energy is transferred through transverse and longitudinal waves

Suggested Recurring Themes:

- TEKS.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

Suggested Science and Engineering Practices:

- TEKS.6.1G - develop and use models to represent phenomena, systems, processes, or solutions to engineering problems
- TEKS.6.2C - use mathematical calculations to assess quantitative relationships in data

Key Vocabulary

- | | |
|----------------------|---------------|
| • wave | • trough |
| • energy | • amplitude |
| • medium | • wavelength |
| • longitudinal waves | • compression |
| • transverse waves | • rarefaction |
| • crest | • frequency |

Unit 5: Waves

The unit plan below is a suggestion. Each day is based on a typical 45-minute class period.

Day 1	Day 2	Day 3	Day 4	Day 5
TEKS.6.8C Waves & Energy Amazing Anchors Part 1 TEKS.6.8C - Energy of Waves Station Lab - Input Stations	TEKS.6.8C Energy of Waves Station Lab - Output Stations	TEKS.6.8C Waves & Energy Inquiry Lab	TEKS.6.8C Energy of Waves Presentation and Paper INB	TEKS.6.8C Energy of Waves Presentation and Paper INB TEKS.6.8C Waves & Energy WIKI Ticket
Day 6	Day 7			
TEKS.6.8C Waves & Energy Writing Prompt TEKS.6.8C Energy of Waves Amazing Anchors Part 2	TEKS.6.8C Energy of Waves Assessment			

Unit 6: Seasons & Tides

Content Standards:

- TEKS.6.9A - model and illustrate how the tilted Earth revolves around the Sun, causing changes in seasons
- TEKS.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

Suggested Recurring Themes:

- TEKS.6.5A - identify and apply patterns to understand and connect scientific phenomena or to design solutions

Suggested Science and Engineering Practices:

- TEKS.6.1A - ask questions and define problems based on observations or information from text, phenomena, models, or investigations
- TEKS.6.1G - develop and use models to represent phenomena, systems, processes, or solutions to engineering problems

Key Vocabulary

- | | |
|------------|---------------|
| • seasons | • tides |
| • revolves | • low tide |
| • tilt | • high tide |
| • equinox | • neap tide |
| • solstice | • spring tide |

Unit 6: Seasons & Tides

The unit plan below is a suggestion. Each day is based on a typical 45-minute class period.

Day 1	Day 2	Day 3	Day 4	Day 5
TEKS.6.9A Seasons Amazing Anchors Part 1 TEKS.6.9A Model Earth's Tilt & Seasons Station Lab - Input Stations	TEKS.6.9A Model Earth's Tilt & Seasons Station Lab - Output Stations	TEKS.6.9A Seasons Inquiry Lab	TEKS.6.9A Model Earth's Tilt & Seasons Presentation and Paper INB TEKS.6.9A Seasons WIKI Ticket	TEKS.6.9A Model Earth's Tilt & Seasons Writing Prompt TEKS.6.9A Seasons Amazing Anchors Part 2
Day 6	Day 7	Day 8	Day 9	Day 10
TEKS.6.9A Model Earth's Tilt & Seasons Assessment TEKS.6.9B Tides Amazing Anchors Part 1	TEKS.6.9B Tides Inquiry Lab	TEKS.6.9B Predicting Tides Presentation and Paper INB TEKS.6.9B Predicting Tides WIKI Ticket	TEKS.6.9B Tides Science Reading Comprehension Passage	TEKS.6.9B Predicting Tides Student Choice
Day 11	Day 12	Day 13		
TEKS.6.9B Predicting Tides Student Choice	TEKS.6.9B Predicting Tides Student Choice TEKS.6.9B Tides Amazing Anchors Part 2	TEKS.6.9B Predicting Tides Assessment		

Unit 7: Earth Science

Content Standards:

- TEKS.6.10A - differentiate between the biosphere, hydrosphere, atmosphere, and geosphere and identify components of each system
- TEKS.6.10B - model and describe the layers of Earth, including the inner core, outer core, mantle, and crust
- TEKS.6.10C - describe how metamorphic, igneous, and sedimentary rocks form and change through geologic processes in the rock cycle

Suggested Recurring Themes:

- TEKS.6.5A - identify and apply patterns to understand and connect scientific phenomena or to design solutions
- TEKS.6.5D - examine and model the parts of a system and their interdependence in the function of the system

Suggested Science and Engineering Practices:

- TEKS.6.1G - develop and use models to represent phenomena, systems, processes, or solutions to engineering problems
- TEKS.6.3C - engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence
- TEKS.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
- TEKS.6.4B - make informed decisions by evaluating evidence from multiple appropriate sources to assess the credibility, accuracy, cost-effectiveness, and methods used
- TEKS.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

Key Vocabulary

- | | |
|---------------|--------------------|
| • biosphere | • metamorphic rock |
| • hydrosphere | • igneous rock |
| • atmosphere | • sedimentary rock |
| • geosphere | • rock cycle |
| • crust | • erosion |
| • mantle | • weathering |
| • inner core | • deposition |
| • outer core | |

Unit 7: Earth Science

The unit plan below is a suggestion. Each day is based on a typical 45-minute class period.

Day 1	Day 2	Day 3	Day 4	Day 5
TEKS.6.10A Differentiate Between Earth's Spheres Engagement TEKS.6.10A Differentiate Between Earth's Spheres Station Lab - Input Stations	TEKS.6.10A Differentiate Between Earth's Spheres Station Lab - Output Stations	TEKS.6.10A Differentiate Between Earth's Spheres Presentation and Paper INB	TEKS.6.10A Earth's Spheres Writing Prompt	TEKS.6.10A Differentiate Between Earth's Spheres Assessment TEKS.6.10B Earth's Layers Amazing Anchors Part 1
Day 6	Day 7	Day 8	Day 9	Day 10
TEKS.6.10B Earth's Layers Inquiry Lab	TEKS.6.10B Modeling Layers of Earth Presentation and Paper INB	TEKS.6.10B Modeling Layers of Earth Presentation and Paper INB TEKS.6.10B Earth's Layers WIKI Ticket	TEKS.6.10B Earth's Layers Science Reading Comprehension Passage TEKS.6.10B Earth's Layers Amazing Anchors Part 2	TEKS.6.10B Modeling Layers of Earth Assessment TEKS.6.10C Processes in Rock Cycle Engagement
Day 11	Day 12	Day 13	Day 14	Day 15
TEKS.6.10C Rock Cycle Inquiry Lab	TEKS.6.10C Processes in Rock Cycle Presentation and Paper INB	TEKS.6.10C Processes in Rock Cycle Presentation and Paper INB TEKS.6.10C Rock Cycle WIKI Ticket	TEKS.6.10C Rock Cycle Escape Room	TEKS.6.10C Processes in Rock Cycle Assessment

Unit 8: Energy Resources

Content Standards:

- TEKS.6.11A - research and describe why resource management is important in reducing global energy poverty, malnutrition, and air and water pollution
- TEKS.6.11B - explain how conservation, increased efficiency, and technology can help manage air, water, soil, and energy resources

Suggested Recurring Themes:

- TEKS.6.5B - identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems
- TEKS.6.5G - analyze and explain how factors or conditions impact stability and change in objects, organisms, and systems

Suggested Science and Engineering Practices:

- TEKS.6.1D - use appropriate tools
- TEKS.6.1G - develop and use models to represent phenomena, systems, processes, or solutions to engineering problems
- TEKS.6.2B - communicate explanations and solutions individually and collaboratively in a variety of settings and formats
- TEKS.6.3C - engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence

Key Vocabulary

- | | |
|-------------------------|-----------------------|
| • resource | • sustainable |
| • global energy poverty | • runoff |
| • malnutrition | • conservation |
| • air pollution | • renewable energy |
| • water pollution | • nonrenewable energy |
| • resource management | |

Unit 8: Energy Resources

The unit plan below is a suggestion. Each day is based on a typical 45-minute class period.

Day 1	Day 2	Day 3	Day 4	Day 5
TEKS.6.11A Resource Management Engagement TEKS.6.11A Resource Management Station Lab - Input Stations	TEKS.6.11A Resource Management Station Lab - Output Stations	TEKS.6.11A Resource Management Presentation and Paper INB	TEKS.6.11A Resource Management Presentation and Paper INB	TEKS.6.11A Resource Management Assessment
Day 6	Day 7	Day 8	Day 9	Day 10
TEKS.6.11B Managing Energy Resources Engagement TEKS.6.11B Managing Energy Resources Station Lab - Input Stations	TEKS.6.11B Managing Energy Resources Station Lab - Output Stations	TEKS.6.11B Managing Energy Resources Presentation and Paper INB	TEKS.6.11B Managing Energy Resources Presentation and Paper INB TEKS.6.11B Managing Energy Resources Student Choice Project	TEKS.6.11B Managing Energy Resources Student Choice Project
Day 11	Day 12			
TEKS.6.11B Managing Energy Resources Student Choice Project	TEKS.6.11B Managing Energy Resources Assessment			

Unit 9: Organisms

Content Standards:

- TEKS.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
- TEKS.6.13B - identify and compare the basic characteristics of organisms, including prokaryotic and eukaryotic, unicellular and multicellular, and autotrophic and heterotrophic

Suggested Recurring Themes:

- TEKS.6.5C - analyze how differences in scale, proportion, or quantity affect a system's structure or performance
- TEKS.6.5F - analyze and explain the complementary relationship between the structure and function of objects, organisms, and systems

Suggested Science and Engineering Practices:

- TEKS.6.1B - use scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems
- TEKS.6.2A - identify advantages and limitations of models such as their size, scale, properties, and materials
- TEKS.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
- TEKS.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

Key Vocabulary

- | | |
|---------------|-----------------|
| • cell theory | • unicellular |
| • cells | • multicellular |
| • prokaryotic | • autotroph |
| • eukaryotic | • heterotroph |
| • nucleus | |

Unit 9: Organisms

The unit plan below is a suggestion. Each day is based on a typical 45-minute class period.

Day 1	Day 2	Day 3	Day 4	Day 5
TEKS.6.13A Cell Theory Amazing Anchors Part 1 TEKS.6.13A Development of Cell Theory Station Lab - Input Stations	TEKS.6.13A Development of Cell Theory Station Lab - Output Stations	TEKS.6.13A Development of Cell Theory Presentation and Paper INB TEKS.6.13A Cell Theory WIKI Ticket	TEKS.6.13A Cell Theory Writing Prompt TEKS.6.13A Cell Theory Amazing Anchors Part 2	TEKS.6.13A Development of Cell Theory Assessment TEKS.6.13B Comparing Organisms Engagement
Day 6	Day 7	Day 8	Day 9	Day 10
TEKS.6.13B Prokaryotic & Eukaryotic Cells Inquiry Lab	TEKS.6.13B Comparing Organisms Presentation and Paper INB	TEKS.6.13B Comparing Organisms Presentation and Paper INB TEKS.6.13B Comparing Organisms WIKI Ticket	TEKS.6.13B Characteristics of Organisms Science Reading Comprehension Passage	TEKS.6.13B Comparing Organisms Assessment

Unit 10: Ecosystems

Content Standards:

- TEKS.6.12C - describe the hierarchical organization of organism, population, and community within an ecosystem
- TEKS.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
- TEKS.6.12B - describe and give examples of predatory, competitive, and symbiotic relationships between organisms, including mutualism, parasitism, and commensalism
- TEKS.6.13C - describe how variations within a population can be an advantage or disadvantage to the survival of a population as environments change

Suggested Recurring Themes:

- TEKS.6.5D - examine and model the parts of a system and their interdependence in the function of the system
- TEKS.6.5F - analyze and explain the complementary relationship between the structure and function of objects, organisms, and systems

Suggested Science and Engineering Practices:

- TEKS.6.3A - develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories
- TEKS.6.2C - use mathematical calculations to assess quantitative relationships in data
- TEKS.6.2B - analyze data by identifying any significant descriptive statistical features, patterns, sources of error, or limitations
- TEKS.6.2A - identify advantages and limitations of models such as their size, scale, properties, and materials

Key Vocabulary

- | | |
|--------------|----------------|
| • organism | • abiotic |
| • population | • mutualism |
| • community | • parasitism |
| • ecosystem | • commensalism |
| • population | • predator |
| • variation | • prey |
| • biotic | |

Unit 10: Ecosystems

The unit plan below is a suggestion. Each day is based on a typical 45-minute class period.

Day 1	Day 2	Day 3	Day 4	Day 5
TEKS.6.12C Organization of Ecosystems Amazing Anchors Part 1 TEKS.6.12C Organization of Ecosystems Inquiry Lab	TEKS.6.12C Organization of Ecosystems Inquiry Lab	TEKS.6.12C Organization of Ecosystems Amazing Anchors Part 2 TEKS.6.12C Organization of Ecosystems WIKI Ticket	TEKS.6.12A Competition for Resources Amazing Anchors Part 1 TEKS.6.12A Competition for Resources Inquiry Lab	TEKS.6.12A Competition for Resources Inquiry Lab
Day 6	Day 7	Day 8	Day 9	Day 10
TEKS.6.12A Biotic & Abiotic Competition Presentation and Paper INB	TEKS.6.12A Biotic & Abiotic Competition Presentation and Paper INB TEKS.6.12A Competition for Resources WIKI Ticket	TEKS.6.12E Biotic & Abiotic Factors Escape Room	TEKS.6.12A Competition for Resources Amazing Anchors Part 2 TEKS.6.12A Biotic & Abiotic Competition Assessment	TEKS.6.12B Ecological Relationships Engagement TEKS.6.12B Ecological Relationships Station Lab - Input Stations
Day 11	Day 12	Day 13	Day 14	Day 15
TEKS.6.12B Ecological Relationships Station Lab - Output Stations	TEKS.6.12B Ecological Relationships Presentation and Paper INB	TEKS.6.12B Ecological Relationships Presentation and Paper INB TEKS.6.12B Interactions in Ecosystems WIKI Ticket	TEKS.6.12B Interactions in Ecosystems Science Reading Comprehension Passage	TEKS.6.12B Ecological Relationships Assessment

Unit 10: Ecosystems

The unit plan below is a suggestion. Each day is based on a typical 45-minute class period.

Day 16	Day 17	Day 18	Day 19	Day 20
TEKS.6.13C Variation in Populations Amazing Anchors Part 1 TEKS.6.13C Variations & Survival Station Lab - Input Stations	TEKS.6.13C Variations & Survival Station Lab - Output Stations	TEKS.6.13C Variations & Survival Presentation and Paper INB	TEKS.6.13C Variations & Survival Presentation and Paper INB TEKS.6.13C Variation in Populations WIKI Ticket	TEKS.6.13C Variation in Populations Writing Prompt
Day 21				
TEKS.6.13C Variation in Populations Amazing Anchors Part 2 TEKS.6.13C Variations & Survival Assessment				

Unit 11: Engineering Design

The unit plan below is a suggestion. Each day is based on a typical 45-minute class period.

Day 1	Day 2	Day 3	Day 4	Day 5
Project Mystery Powder	Project Mystery Powder	Project Mystery Powder	Project Mystery Powder	Project Mystery Powder
Day 6	Day 7	Day 8	Day 9	Day 10
Project Thrills	Project Thrills	Project Thrills	Project Thrills	Project Thrills

Additional STEM Challenges include:

- [Project Wind and Sky](#)
- [Project Electric](#)
- [Project Big, Bigger, Biggest](#)
- [Project Last Dance](#)