4th 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 1: Matter (8 days)

• TEKS.4.6A - Describing Physical Properties

Unit 2: Mixtures & Solutions (15 days)

- TEKS.4.6B Comparing Mixtures & Solutions
- TEKS.4.6C Matter Conservation in Mixtures

Unit 3: Force & Motion (8 days)

TEKS.4.7 - Investigate Patterns of Forces

Unit 4: Energy & Circuits (22 days)

- TEKS.4.8A Investigating Energy Transfer
- TEKS.4.8B Identify Conductors & Insulators
- TEKS.4.8C Electricity in Closed Circuits

Unit 5: Space (15 days)

- TEKS.4.9A Patterns of Change in Seasons
- TEKS.4.9B Patterns of Change in the Moon

Unit 6: Weather (15 days)

- · TEKS.4.10A Illustrating the Water Cycle
- TEKS.4.10C Differentiate Weather & Climate

Unit 7: Changes to Earth's Surface (8 days)

• TEKS.4.10B - Model Slow Changes to Earth

Unit 8: Earth's Natural Resources (22 days)

- TEKS.4.11A Compare Earth's Resources
- TEKS.4.11B Impact of Energy Resources
- TEKS.4.11C Rocks & Earth's Resources

Unit 9: Ecosystems (15 days)

- TEKS.4.12A Producers & Cycling of Matter
- TEKS.4.12B Matter & Energy in Food Webs

Unit 10: Fossils (7 days)

TEKS.4.12C - Fossil Evidence of Environments

Unit 11: Structures, Functions, & Traits (15 days)

- TEKS.4.13A Structures & Functions of Plants
- TEKS.4.13B Inherited & Acquired Traits

Unit 1: Matter

Content Standards:

 TEKS.4.6A - classify and describe matter using observable physical properties, including temperature, mass, magnetism, relative density (the ability to sink or float in water), and physical state (solid, liquid, gas)

Suggested Recurring Themes:

 TEKS.4.5E - investigate how energy flows and matter cycles through systems and how matter is conserved

Suggested Science and Engineering Practices:

 TEKS.4.1A - ask questions and define problems based on observations or information from text, phenomena, models, or investigations

- matter
- physical properties
- mass
- magnetism
- · physical state
- volume

- relative density
- solid
- temperature
- liquid
- gas

Unit 1: Matter

Suggested Days: 15

Unit 2: Mixtures & Solutions

Content Standards:

- TEKS.4.6B investigate and compare a variety of mixtures, including solutions that are composed of liquids in liquids and solids in liquids; and
- TEKS.4.6C demonstrate that matter is conserved when mixtures such as soil and water or oil and water are formed

Suggested Recurring Themes:

- TEKS.4.5E investigate how energy flows and matter cycles through systems and how matter is conserved
- TEKS.4.5G explain how factors or conditions impact stability and change in objects, organisms, and systems

Suggested Science and Engineering Practices:

- TEKS.4.3A develop explanations and propose solutions supported by data and models
- TEKS.4.3B communicate explanations and solutions individually and collaboratively in a variety of settings and formats

- matter
- substance
- physical properties
- mixture

- solution
- · dissolve
- conserved
- evaporates



Unit 2: Mixtures & Solutions

| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|--|--|--|--|---|
| TEKS.4.6B Comparing Mixtures & Solutions Engagement | TEKS.4.6B Comparing Mixtures & Solutions Station Lab - Input Stations | TEKS.4.6B Comparing Mixtures & Solutions Station Lab - Output Stations | TEKS.4.6B Comparing Mixtures & Solutions Presentation and Paper INB | TEKS.4.6B Comparing Mixtures & Solutions Presentation and Paper INB TEKS.4.6B Mixtures & Solutions WIKI Ticket |
| Day 6 | Day 7 | Day 8 | Day 9 | Day 10 |
| TEKS.4.6B Mixtures & Solutions Writing Prompt | TEKS.4.6B Comparing Mixtures & Solutions Assessment | TEKS.4.6C Matter Conservation in Mixtures Engagement | TEKS.4.6C Matter Conservation in Mixtures Station Lab - Input Stations | TEKS.4.6C Matter Conservation in Mixtures Station Lab - Output Stations |
| Day 11 | Day 12 | Day 13 | Day 14 | Day 15 |
| TEKS.4.6C Matter Conservation in Mixtures Presentation and Paper INB | TEKS.4.6C Matter Conservation in Mixtures Presentation and Paper INB TEKS.4.6C Conservation of Mass WIKI Ticket | TEKS.4.6C Matter Conservation in Mixtures Student Choice | TEKS.4.6C Matter Conservation in Mixtures Student Choice | TEKS.4.6C Matter Conservation in Mixtures Assessment |

Unit 3: Force & Motion

Content Standards:

• TEKS.4.7 - plan and conduct descriptive investigations to explore the patterns of forces such as gravity, friction, or magnetism in contact or at a distance on an object

Suggested Recurring Themes:

 TEKS.4.5B - identify and use patterns to explain scientific phenomena or to design solutions

Suggested Science and Engineering Practices:

• TEKS.4.1B - use scientific practices to plan and conduct descriptive investigations and use engineering practices to design solutions to problems

- force
- push
- pull
- gravity
- friction

- magnetism
- motion
- inference
- observation

Unit 3: Force & Motion

| Day 1 | Day 2 | Day 3 | |
|---|--|---|--|
| TEKS.4.7 Investigate Patterns of Forces Engagement | TEKS.4.7 Investigate Patterns of Forces Station Lab - Input Stations | TEKS.4.7 Investigate Patterns of Forces Station Lab - Output Stations | |
| | | | |
| Day 6 | Day 7 | Day 8 | |
| TEKS.4.7 Investigate Patterns of Forces Student Choice | TEKS.4.7 Investigate Patterns of Forces Student Choice | TEKS.4.7 Investigate Patterns of Forces Assessment | |

Unit 4: Energy & Circuits

Content Standards:

- TEKS.4.8A investigate and identify the transfer of energy by objects in motion, waves in water, and sound
- TEKS.4.8B identify conductors and insulators of thermal and electrical energy
- TEKS.4.8C demonstrate and describe how electrical energy travels in a closed path that can produce light and thermal energy

Suggested Recurring Themes:

- TEKS.4.5E investigate how energy flows and matter cycles through systems and how matter is conserved
- TEKS.4.5F explain the relationship between the structure and function of objects, organisms, and systems

Suggested Science and Engineering Practices:

- TEKS.4.2B analyze data by identifying any significant features, patterns, or sources of error
- TEKS.4.3A develop explanations and propose solutions supported by data and models
- TEKS.4.4A explain how scientific discoveries and innovative solutions to problems impact science and society

- energy transformation
- wave
- particles
- vibration
- sound
- medium
- amplitude
- compressions

- thermal energy
- electrical energy
- insulator
- conductor
- closed circuit
- open circuit
- energy source

Suggested Days: 22



| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|--|---|--|--|---|
| TEKS.4.8A Investigating Energy Transfer Engagement | TEKS.4.8A Investigating Energy Transfer Station Lab - Input Stations | TEKS.4.8A Investigating Energy Transfer Station Lab - Output Stations | TEKS.4.8A Investigating Energy Transfer Presentation and Paper INB | TEKS.4.8A Investigating Energy Transfer Presentation and Paper INB |
| Day 6 | Day 7 | Day 8 | Day 9 | Day 10 |
| TEKS.4.8A Investigating Energy Transfer Student Choice | TEKS.4.8A Investigating Energy Transfer Student Choice | TEKS.4.8A Investigating Energy Transfer Assessment | TEKS.4.8B Identify Conductors & Insulators Engagement | TEKS.4.8B Identify Conductors & Insulators Station Lab - Input Stations |
| Day 11 | Day 12 | Day 13 | Day 14 | Day 15 |
| TEKS.4.8B Identify Conductors & Insulators Station Lab - Output Stations | TEKS.4.8B Identify Conductors & Insulators Presentation and Paper INB | TEKS.4.8B Identify Conductors & Insulators Presentation and Paper INB TEKS.4.8B Conductors & Insulators WIKI Ticket | TEKS.4.8B Conductors & Insulators Writing Prompt | TEKS.4.8B Identify Conductors & Insulators Assessment |

Unit 4: Energy & Circuits

| Day 16 | Day 17 | Day 18 | Day 19 | Day 20 |
|--|---|--|---|--|
| TEKS.4.8C Electricity in Closed Circuits Engagement | TEKS.4.8C Electricity in Closed Circuits Station Lab - Input Stations | TEKS.4.8C Electricity in Closed Circuits Station Lab - Output Stations | TEKS.4.8C Electricity in Closed Circuits Presentation and Paper INB | TEKS.4.8C Electricity in Closed Circuits Presentation and Paper INB TEKS.4.8C Electrical Circuits WIKI Ticket |
| Day 21 | Day 22 | | | |
| TEKS.4.8C Electrical Circuits Writing Prompt | TEKS.4.8C Electricity in Closed Circuits Assessment | | | |

Unit 5: Space

Content Standards:

- TEKS.4.9A collect and analyze data to identify sequences and predict patterns of change in seasons such as change in temperature and length of daylight; and
- TEKS.4.9B collect and analyze data to identify sequences and predict patterns of change in the observable appearance of the Moon from Earth

Suggested Recurring Themes:

- TEKS.4.5A identify and use patterns to explain scientific phenomena or to design solutions
- TEKS.4.5B identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems

Suggested Science and Engineering Practices:

- TEKS.4.1G develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem
- TEKS.4.2B analyze data by identifying any significant features, patterns, or sources of error

- sequence
- pattern
- seasons
- predict
- temperature
- precipitation
- lunar cycle

- revolution
- cycle
- · new moon
- · full moon
- first quarter
- third quarter



| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|--|--|---|--|---|
| TEKS.4.9A Patterns of Change in Seasons Engagement | TEKS.4.9A Patterns of Change in Seasons Station Lab - Input Stations | TEKS.4.9A Patterns of Change in Seasons Station Lab - Output Stations | TEKS.4.9A Patterns of Change in Seasons Presentation and Paper INB | TEKS.4.9A Patterns of Change in Seasons Presentation and Paper INB TEKS.4.9A Patterns of Change in Seasons & Shadows WIKI Ticket |
| Day 6 | Day 7 | Day 8 | Day 9 | Day 10 |
| TEKS.4.9A Patterns of Change in Seasons Student Choice | TEKS.4.9A Patterns of Change in Seasons Student Choice | TEKS.4.9A Patterns of Change in Seasons Assessment | TEKS.4.9B Patterns of Change in the Moon Engagement | TEKS.4.9B Patterns of Change in the Moon Station Lab - Input Stations |
| Day 11 | Day 12 | Day 13 | Day 14 | Day 15 |
| TEKS.4.9B Patterns of Change in the Moon Station Lab - Output Stations | TEKS.4.9B Patterns of Change in the Moon Presentation and Paper INB | TEKS.4.9B Patterns of Change in the Moon Presentation and Paper INB TEKS.4.9B Patterns of Change in the Moon WIKI Ticket | TEKS.4.9B Patterns of Change Writing Prompt | TEKS.4.9B Patterns of Change in the Moon Assessment |

Unit 6: Weather

Content Standards:

- TEKS.4.10A describe and illustrate the continuous movement of water above and on the surface of Earth through the water cycle and explain the role of the Sun as a major source of energy in this process
- TEKS.4.10C differentiate between weather and climate

Suggested Recurring Themes:

- TEKS.4.5D examine and model the parts of a system and their interdependence in the function of the system
- TEKS.4.5G explain how factors or conditions impact stability and change in objects, organisms, and systems

Suggested Science and Engineering Practices:

- TEKS.4.1G develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem
- TEKS.4.2B analyze data by identifying any significant features, patterns, or sources of error

- water cycle
- evaporation
- condensation
- solar energy
- precipitation
- runoff
- accumulation

- weather
- climate
- thermometer
- precipitation
- cloud cover
- wind speed
- wind direction



| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|---|--|---|---|---|
| TEKS.4.10A Illustrating the Water Cycle Engagement | TEKS.4.10A Illustrating the Water Cycle Station Lab - Input Stations | TEKS.4.10A Illustrating the Water Cycle Station Lab - Output Stations | TEKS.4.10A Illustrating the Water Cycle Presentation and Paper INB | TEKS.4.10A Illustrating the Water Cycle Presentation and Paper INB TEKS.4.10A Water Cycle & Sun's Energy WIKI Ticket |
| Day 6 | Day 7 | Day 8 | Day 9 | Day 10 |
| TEKS.4.10A Water Cycle & Sun's Energy Writing Prompt | TEKS.4.10A Illustrating the Water Cycle Assessment | TEKS.4.6C Matter Conservation in Mixtures Engagement | TEKS.4.10C Differentiate Weather & Climate Station Lab - Input Stations | TEKS.4.10C Differentiate Weather & Climate Station Lab - Output Stations |
| Day 11 | Day 12 | Day 13 | Day 14 | Day 15 |
| TEKS.4.10C Differentiate Weather & Climate Presentation and Paper INB | TEKS.4.10C Differentiate Weather & Climate Presentation and Paper INB TEKS.4.10C Weather & Climate WIKI Ticket | TEKS.4.10C Differentiate Weather & Climate Student Choice | TEKS.4.10C Differentiate Weather & Climate Student Choice | TEKS.4.10C Differentiate Weather & Climate Assessment |

Unit 7: Changes to Earth's Surface

Content Standards:

 TEKS.4.10B - model and describe slow changes to Earth's surface caused by weathering, erosion, and deposition from water, wind, and ice

Suggested Recurring Themes:

 TEKS.4.5C - use scale, proportion, and quantity to describe, compare, or model different systems

Suggested Science and Engineering Practices:

 TEKS.4.1G - develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem

- landform
- · weathering
- sediment

- erosion
- deposition



Unit 8: Earth's Natural Resources

Content Standards:

- TEKS.4.11A identify and explain advantages and disadvantages of using Earth's renewable and nonrenewable natural resources such as wind, water, sunlight, plants, animals, coal, oil, and natural gas;
- TEKS.4.11B explain the critical role of energy resources to modern life and how conservation, disposal, and recycling of natural resources impact the environment; and
- TEKS.4.11C determine the physical properties of rocks that allow Earth's natural resources to be stored there

Suggested Recurring Themes:

• TEKS.4.5B - identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems

Suggested Science and Engineering Practices:

- TEKS.4.1A ask questions and define problems based on observations or information from text, phenomena, models, or investigations
- TEKS.4.3A develop explanations and propose solutions supported by data and models

- renewable resources
- nonrenewable resources
- fossil fuels
- energy resources
- conservation
- disposal

- recycling
- natural resources
- environment
- porosity
- permeability

Suggested Days: 22



| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|--|---|--|--|--|
| TEKS.4.11A Compare Earth's Resources Engagement | TEKS.4.11A Compare Earth's Resources Station Lab - Input Stations | TEKS.4.11A Compare Earth's Resources Station Lab - Output Stations | TEKS.4.11A Compare Earth's Resources Presentation and Paper INB | TEKS.4.11A Compare Earth's Resources Presentation and Paper INB TEKS.4.11A Renewable & Nonrenewable Resources WIKI Ticket |
| Day 6 | Day 7 | Day 8 | Day 9 | Day 10 |
| TEKS.4.11A Renewable & Nonrenewable Resources Writing Prompt | TEKS.4.11A Compare Earth's Resources Assessment | TEKS.4.11B Impact of Energy Resources Engagement | TEKS.4.11B Impact of Energy Resources Station Lab - Input Stations | TEKS.4.11B Impact of Energy Resources Station Lab - Output Stations |
| Day 11 | Day 12 | Day 13 | Day 14 | Day 15 |
| TEKS.4.11B Impact of Energy Resources Presentation and Paper INB | TEKS.4.11B Impact of Energy Resources Presentation and Paper INB | TEKS.4.11B Impact of Energy Resources Student Choice | TEKS.4.11B Impact of Energy Resources Student Choice | TEKS.4.11B Impact of Energy Resources Student Choice |

Unit 8: Earth's Natural Resources

| Day 16 | Day 17 | Day 18 | Day 19 | Day 20 |
|---|--|---|--|---|
| TEKS.4.11B Impact of Energy Resources Assessment | TEKS.4.8C Electricity in Closed Circuits Engagement | TEKS.4.8C Electricity in Closed Circuits Station Lab - Input Stations | TEKS.4.8C Electricity in Closed Circuits Station Lab - Output Stations | TEKS.4.8C Electricity in Closed Circuits Presentation and Paper INB |
| Day 21 | Day 22 | | | ļ. |
| TEKS.4.8C Electricity in Closed Circuits Presentation and Paper INB | TEKS.4.8C Electricity in Closed Circuits Assessment | | | |

Unit 9: Ecosystems

Content Standards:

- TEKS.4.12A investigate and explain how most producers can make their own food using sunlight, water, and carbon dioxide through the cycling of matter
- TEKS.4.12B describe the cycling of matter and flow of energy through food webs, including the roles of the Sun, producers, consumers, and decomposers

Suggested Recurring Themes:

- TEKS.4.5A identify and use patterns to explain scientific phenomena or to design solutions
- TEKS.4.5D examine and model the parts of a system and their interdependence in the function of the system

Suggested Science and Engineering Practices:

- TEKS.4.1A ask questions and define problems based on observations or information from text, phenomena, models, or investigations
- TEKS.4.1B plan and carry out investigations

- ecosystem
- organism
- energy
- photosynthesis
- carbon dioxide

- producer
- consumer
- decomposer
- food web

Unit 9: Ecosystems

| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|--|---|--|---|---|
| TEKS.4.12A Producers & Cycling of Matter Engagement | TEKS.4.12A Producers & Cycling of Matter Station Lab - Input Stations | TEKS.4.12A Producers & Cycling of Matter Station Lab - Output Stations | TEKS.4.12A Producers & Cycling of Matter Presentation and Paper INB | TEKS.4.12A Producers & Cycling of Matter Presentation and Paper INB TEKS.4.12A Producers & Consumers WIKI Ticket |
| Day 6 | Day 7 | Day 8 | Day 9 | Day 10 |
| TEKS.4.12A Producers & Cycling of Matter Student Choice | TEKS.4.12A Producers & Cycling of Matter Student Choice | TEKS.4.12A Producers & Cycling of Matter Assessment | TEKS.4.12B Matter & Energy in Food Webs Engagement | TEKS.4.12B Matter & Energy in Food Webs Station Lab - Input Stations |
| Day 11 | Day 12 | Day 13 | Day 14 | Day 15 |
| TEKS.4.12B Matter & Energy in Food Webs Station Lab - Output Stations | TEKS.4.12B Matter & Energy in Food Webs Presentation and Paper INB | TEKS.4.12B Matter & Energy in Food Webs Presentation and Paper INB TEKS.4.12B Energy Flow in a Food Web WIKI Ticket | TEKS.4.12B Energy Flow in a Food Web Writing Prompt | TEKS.4.12B Matter & Energy in Food Webs Assessment |

Standards Suggested Days: 7



Content Standards:

 TEKS.4.12C - identify and describe past environments based on fossil evidence, including common Texas fossils

Suggested Recurring Themes:

 TEKS.4.5C - use scale, proportion, and quantity to describe, compare, or model different systems

Suggested Science and Engineering Practices:

 TEKS.4.3B - communicate explanations and solutions individually and collaboratively in a variety of settings and formats

Key Vocabulary

- environment
- fossils

amber

Unit 10: Fossils

| Day 1 | Day 2 | Day 3 | Day 4 | Da |
|--|---|--|---|---|
| TEKS.4.12C Fossil Evidence of Environments Engagement | TEKS.4.12C Fossil Evidence of Environments Station Lab - Input Stations | TEKS.4.12C Fossil Evidence of Environments Station Lab - Output Stations | TEKS.4.12C Fossil Evidence of Environments Presentation and Paper INB | TEKS.4.1 Evidence Environm Presentat Paper INE TEKS.4.1 Evidence Ticket |
| Day 6 | Day 7 | | L | 1 |
| TEKS.4.12C Fossil Evidence Writing Prompt | TEKS.4.12C Fossil Evidence of Environments Assessment | | | |

Unit 11: Structures, Functions, & Traits

Content Standards:

- TEKS.4.13A explore and explain how structures and functions of plants such as waxy leaves and deep roots enable them to survive in their environment; and
- TEKS.4.13B differentiate between inherited and acquired physical traits of organisms

Suggested Recurring Themes:

 TEKS.4.5F - explain the relationship between the structure and function of objects, organisms, and systems

Suggested Science and Engineering Practices:

- TEKS.4.1B use scientific practices to plan and conduct descriptive investigations and use engineering practices to design solutions to problems
- TEKS.4.1A ask questions and define problems based on observations or information from text, phenomena, models, or investigations

- organism
- structure
- function
- · inherit trait

- parent
- offspring
- · learned behavior



Unit 11: Structures, Functions, & Traits

| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|--|--|--|--|--|
| TEKS.4.13A Structures & Functions of Plants Engagement | TEKS.4.13A Structures & Functions of Plants Station Lab - Input Stations | TEKS.4.13A Structures & Functions of Plants Station Lab - Output Stations | TEKS.4.13A Structures & Functions of Plants Presentation and Paper INB | TEKS.4.13A Structures & Functions of Plants Presentation and Paper INB |
| Day 6 | Day 7 | Day 8 | Day 9 | Day 10 |
| TEKS.4.13A Structures & Functions of Plants Student Choice | TEKS.4.13A Structures & Functions of Plants Student Choice | TEKS.4.13A Structures & Functions of Plants Assessment | TEKS.4.13B Inherited & Acquired Traits Engagement | TEKS.4.13B Inherited & Acquired Traits Station Lab - Input Stations |
| Day 11 | Day 12 | Day 13 | Day 14 | Day 15 |
| TEKS.4.13B Inherited & Acquired Traits Station Lab - Output Stations | TEKS.4.13B Inherited & Acquired Traits Presentation and Paper INB | TEKS.4.13B Inherited & Acquired Traits Presentation and Paper INB TEKS.4.13B Exploring Traits WIKI Ticket | TEKS.4.13B Exploring Traits Writing Prompt | TEKS.4.13B Inherited & Acquired Traits Assessment |