

## Kindergarten–Texas Essential Knowledge and Skills (TEKS)

### Kindergarten English Language Arts & Reading TEKS

In Kindergarten language arts, your child will learn:

#### LISTENING/SPEAKING

Students:

- listen to information, rhymes, songs, conversations, and stories
- listen and talk about experiences, customs, and cultures
- make announcements, give directions, and make introductions
- act out plays, poems, and stories clearly request, retell, and/or describe stories and experiences
- listen responsively to contemporary and classic stories and other texts read aloud

#### READING

Students:

- recognize that print represents spoken language and conveys meaning, such as their own name, and signs such as Exit and Danger
- recognize upper and lower case letters in print and understand that print represents language
- manipulate sounds in spoken words (phonemic awareness)
- decode simple words using letter-sound knowledge
- identify words that name persons, places or things, and words that name actions
- learn new vocabulary words through selections read aloud
- retell or act out important events in a story
- gather important information and ask relevant questions

#### WRITING

Students:

- write their own name and each letter of the alphabet
- write messages using their knowledge of letters and sounds
- record or dictate questions, ideas, stories
- write labels, notes, and captions for illustrations, possessions, charts, and centers

**Before entering kindergarten, students should be able to:**

Speak and share ideas in complete sentences.

Listen to and talk about stories that were read to them.

Play with rhyme, rhythm, and repetition in poems, songs and stories (examples: Dr. Seuss books, Mother Goose rhymes, etc.)

Think about their experiences with letters and recognize some letters of the alphabet (examples: letters in names, street signs, store names, singing the alphabet, etc.)

Recognize their first names in print.

Make marks and pictures that look like writing.

## Kindergarten–Texas Essential Knowledge and Skills (TEKS)

### Kindergarten Mathematics TEKS

In Kindergarten mathematics, your child will learn:

#### NUMBER, OPERATION, AND QUANTITATIVE REASONING

Students:

- use words and numbers to describe relative sizes of objects
- describe position in a sequence of events
- name ordinal positions (first, second, etc.)
- separate a whole into equal parts
- explain half of a whole
- model addition and subtraction

#### PATTERNS, RELATIONSHIPS, AND ALGEBRAIC THINKING

Students:

- identify, extend, and create patterns
- use patterns to predict what comes next
- count to 100 by ones

#### GEOMETRY AND SPATIAL REASONING

Students:

- describe one object in relation to another using informal language
- place objects in a given position
- describe and identify objects
- compare and sort objects
- describe and compare solids
- recognize shapes
- describe, identify, and compare shapes

#### MEASUREMENT

Students:

- compare and order objects by length, capacity, or weight
- identify objects greater than, less than or equal to a given object
- compare temperatures
- compare times
- sequence events
- read a calendar using days, weeks, and months

#### PROBABILITY AND STATISTICS

Students:

- construct real and picture graphs
- use graphs to answer questions

#### PROBLEM SOLVING

Students:

- identify mathematics in everyday situations
- use a problem-solving model with guidance
- select or develop an appropriate problem-solving strategy

## Kindergarten–Texas Essential Knowledge and Skills (TEKS)

### Kindergarten Social Studies TEKS

In Kindergarten social studies, your child will learn:

#### **HISTORY**

Students:

- learn about patriotic holidays
- identify contributions of people, such as George Washington
- place events in chronological order

#### **GEOGRAPHY**

Students:

- locate and describe the relative location of places
- identify physical and human characteristics of places

#### **ECONOMICS**

Students:

- identify basic human needs and explain how they can be met
- identify jobs and why people have them

#### **GOVERNMENT**

Students:

- identify rules and reasons for having them
- identify authority figures

#### **CITIZENSHIP**

Students:

- identify U.S. and Texas flags
- recite the Pledge of Allegiance

#### **CULTURE**

Students:

- identify similarities and differences among people
- identify family and community customs

#### **SCIENCE, TECHNOLOGY, AND SOCIETY**

Students:

identify examples of technology and describe how they meet people's needs

#### **SOCIAL STUDIES SKILLS**

Students:

- obtain information from a variety of oral and visual sources
- sequence and categorize information  
identify main ideas
- express ideas orally and visually
- use problem-solving and decision-making processes

## Kindergarten–Texas Essential Knowledge and Skills (TEKS)

### Kindergarten Science TEKS

In Kindergarten science, your child will learn:

#### **SAFETY**

Students:

- demonstrate safe science practices in the classroom and field
- use and conserve resources

#### **SCIENTIFIC INQUIRY AND CRITICAL THINKING**

Students:

- use their senses and common tools such as hand lenses, balances,
- cups, and bowls to make observations and collect information by
- asking questions, gathering information, communicating findings,
- and making informed decisions
- use computers and information technology tools to support their investigations

#### **PATTERNS, SYSTEMS, AND CYCLES**

Students:

- describe patterns including seasons, growth, day and night, and
- predict what happens next, using charts and graphs
- learn how systems have basic properties that can be described in
- terms of parts, such as those in toys, vehicles, and construction sets
- understand structures, interactions, and processes found in systems that, when put together , can do things they cannot do by themselves

#### **CHANGE**

Students:

- observe, describe, and record changes in systems, cycles, and models
- record changes in size, mass, color , position, quantity, time,
- temperature, sound, and movement by observing weather changes and life cycles of organisms in their natural environment

#### **LIVING ORGANISMS AND NON-LIVING OBJECTS**

Students:

- identify organisms and objects and their parts
- explore the basic needs of living organisms and give examples of their dependence on each other
- identify how the Earth provides resources for life

#### **UNDERSTANDING THE NATURAL WORLD**

Students:

observe and describe properties of rocks, soil, and water

## First Grade Texas Essential Knowledge and Skills (TEKS)

### First Grade English Language Arts & Reading TEKS

In first grade language arts, your child will learn:

#### LISTENING/SPEAKING

Students:

- listen to gather information, solve problems, and enjoy and appreciate literature
- present dramatic interpretations of experiences, stories, poems, and plays
- participate in group discussions
- make announcements, give directions, and make introductions appropriately

#### READING

Students:

- recognize the conventions of print (e.g., understand that print
- moves left to right, involves upper and lowercase letters, and represents spoken language
- manipulate sounds in spoken words (phonemic awareness) and
- understand that letters represent sounds (phonics)
- read and comprehend first-grade-level text fluently
- use graphs, charts, signs, and captions to acquire information
- find and connect ideas and themes in different books and other printed resources
- draw conclusions from information gathered
- self-select books and stories by drawing on personal interest, relying on knowledge of authors or types of texts

#### WRITING

Students:

- write their own name and each letter of the alphabet
- gain increasing control of penmanship and punctuation
- compose questions, ideas, and stories
- write for different purposes, such as composing lists, letters, stories, and poems
- engage in the writing process by generating ideas before writing and developing and polishing drafts
- record or dictate questions for investigations

#### Before entering first grade, students should be able to:

Listen carefully and follow one-or-two step instructions.

Write their first and last name using upper and lower case form.

Recognize all the letters in the alphabet, both capital and lower case form.

Begin to read and write by learning to match letters with their sounds.

Separate one-syllable words into beginning, middle and ending sounds.

Name and make rhyming words.

Read kindergarten high frequency words alone.

Retell a story or act out a story.

# First Grade Texas Essential Knowledge and Skills (TEKS)

## First Grade Mathematics TEKS

In first grade mathematics, your child will learn:

### NUMBER, OPERATION, AND QUANTITATIVE REASONING.

Students:

- compare and order whole numbers up to 99
- create sets of tens and ones using concrete objects
- describe values of coins and their relationships
- read and write numbers to 99
- separate a whole into parts and describe the parts of a set
- describe the parts of a set of objects
- model and write addition and subtraction sentences
- learn and apply addition facts

### PATTERNS, RELATIONSHIPS, AND ALGEBRAIC THINKING

Students:

- find patterns such as odd and even
- use place value to compare and order whole numbers
- identify fact families for addition and subtraction
- identify, describe, and extend patterns to solve problems
- skip count by twos, fives, and tens

### GEOMETRY AND SPATIAL REASONING

Students:

- sort objects by attributes using informal language
- identify shapes and solids
- combine shapes to make a new shape

### MEASUREMENT

Students:

- estimate and measure using nonstandard units
- relate the unit to size of object
- recognize reasonable temperatures
- describe time on a clock (hours, half hours)
- order events by length of time

### PROBABILITY AND STATISTICS

Students:

- collect and sort data
- construct graphs (real, picture, and bar)
- draw conclusions from graphs
- identify events as certain or impossible

### PROBLEM SOLVING

Students:

- identify mathematics in everyday situations
- use a problem-solving model, with guidance as needed

## First Grade Texas Essential Knowledge and Skills (TEKS)

### First Grade Social Studies TEKS

In first grade social studies, your child will learn:

#### HISTORY

Students:

- identify contributions of people, such as Sam Houston and Thomas Edison
- describe the origins of holidays, such as Veterans Day
- identify anthems and mottoes of the state and nation
- distinguish among past, present, and future

#### GEOGRAPHY

Students:

- locate places using cardinal directions
- create and use simple maps
- locate community, state, and nation on maps and globes
- describe physical and human characteristics of places
- identify natural resources and how they are used

#### ECONOMICS

Students:

- identify examples of goods and services, ways people exchange them, and the role of markets in the exchange
- identify reasons for making economic choices
- describe how specialized jobs contribute to production of goods and services

#### GOVERNMENT

Students:

- explain the need for and give examples of rules and laws
- identify and describe the roles of leaders in the community, state, and nation

#### CITIZENSHIP

Students:

- identify characteristics of good citizenship and identify historic
- figures and ordinary people who exemplify good citizenship
- explain patriotic symbols, such as the Liberty Bell
- recite and explain the Pledge of Allegiance and Pledge to the Texas Flag

#### CULTURE

Students:

- describe ways that families meet basic human needs
- retell stories from folktales and legends

#### SCIENCE, TECHNOLOGY, AND SOCIETY

Students:

describe how technology has changed, how families live and how people work

#### SOCIAL STUDIES SKILLS

Students:

- sequence and categorize information
- identify main ideas
- express ideas orally and visually
- use problem-solving and decision-making processes

## First Grade Texas Essential Knowledge and Skills (TEKS)

### First Grade Science TEKS

In first grade science, your child will learn:

#### SCIENTIFIC INVESTIGATIONS

Students:

- demonstrate safe practices during classroom and field investigations
- learn how to use and conserve resources

#### SCIENTIFIC INQUIRY AND CRITICAL THINKING

Students:

- ask questions about organisms, objects, and events
- construct reasonable explanations using information
- explain a problem in their own words and propose a solution
- use tools, including hand lenses, clocks, computers, thermometers, and balances

#### PROPERTIES, PATTERNS, AND SYSTEMS

Students:

- identify , predict, and create patterns, including those in charts, graphs, and numbers
- know that systems have parts and are composed of organisms and objects
- observe and describe the parts of plants and animals
- manipulate objects so that the parts are separated from the whole, which may result in the part or the whole not working

#### CHANGE

Students:

- measure changes in size, mass, color , position, quantity, sound, and movement
- observe and record weather changes from day to day and over seasons
- observe stages in the life cycle of organisms in their natural environment

#### LIVING ORGANISMS AND NONLIVING OBJECTS

Students:

group and compare living organisms and nonliving objects

#### BASIC NEEDS OF ORGANISMS

Students:

- identify characteristics of organisms that allow their basic needs to be met
- compare the ways living organisms depend on each other

#### PROCESSES OF THE NATURAL WORLD

Students:

- describe natural sources of water, including streams, lakes, and oceans
- observe and describe differences in rocks and soil samples
- identify how rocks, soil, and water are used and how they can be recycled

## Second Grade Texas Essential Knowledge and Skills (TEKS)

### Second Grade English Language Arts & Reading TEKS

In second grade language arts, your child will learn:

#### LISTENING/SPEAKING

Students:

- listen responsively to stories and other texts read aloud
- choose and adapt spoken language according to the audience, purpose, and occasion
- identify rhymes, repeated sounds or instances of onomatopoeia
- compare stories and other literature that reflect different regions, customs, and cultures
- ask and answer relevant questions
- make contributions to small or large group discussions
- gain increasing control of grammar, such as subject-verb agreement, complete sentences and correct tense usage

#### READING

Students:

- decode using all letter sound correspondences
- use knowledge of syntax (word order) and semantics (word meaning) to identify unfamiliar words
- read and comprehend a variety of second-grade-level texts fluently
- learn new vocabulary words through wide reading
- make and explain important inferences in a story
- gather important information using resources and references
- read silently for increasing periods of time

#### WRITING

Students:

- write to record ideas and reflections for a variety of audiences
- use more complex capitalization, punctuation, and spelling
- compose complete sentences in written texts and use appropriate end punctuation
- engage in the writing process by generating ideas and developing and polishing final copies of compositions
- identify the most effective features of a piece of writing using criteria generated by the teacher and class
- take simple notes from relevant sources, such as classroom guests, information books, and media sources

#### Before entering second grade, students should be able to:

Listen attentively and respond appropriately to directions and questions.

Use a wide variety of words to describe ideas, feelings, and experiences.

Read aloud with accuracy, comprehensions, and fluency on first grade materials.

Understand and identify main characters, setting, events, problem, and solution in stories.

Spell 100 high-frequency words.

Write friendly letters, personal stories, poems, and short stories.

Write in complete sentences with correct use of beginning capitalization and ending punctuation.

## Second Grade Texas Essential Knowledge and Skills (TEKS)

### Second Grade Mathematics TEKS

In second grade mathematics, your child will learn:

#### NUMBER, OPERATION, AND QUANTITATIVE REASONING

Students:

- use number models to represent, compare, and order whole numbers
- read numbers less than 1,000
- name fractional parts of a whole or set of objects
- recall and apply basic addition facts
- add and subtract with two-digit numbers
- determine the value of a collection of coins
- model multiplication and division

#### PATTERNS, RELATIONSHIPS, AND ALGEBRAIC THINKING

Students:

- find patterns in the 100s chart
- use place value to compare and order numbers
- use patterns to remember addition facts
- solve subtraction problems using fact families
- generate ordered pairs from a real-life situation
- identify and extend a list of ordered pairs
- solve problems using patterns

#### GEOMETRY AND SPATIAL REASONING

Students:

- identify attributes of shapes and solids
- compare shapes and solids using attributes
- cut geometric shapes apart and identify the new shapes made
- locate and name whole numbers on a number line

#### MEASUREMENT

Students:

- identify models for standard units of length, capacity, and weight
- measure using standard units
- describe length of an activity
- read a thermometer to gather data
- describe time on a clock (hours, minutes)

#### PROBABILITY AND STATISTICS

Students:

- construct picture and bar graphs
- draw conclusions and answer questions from graphs
- describe an event as more likely or less likely

#### PROBLEM SOLVING

Students:

- identify the mathematics in everyday situations
- use a problem-solving model
- select or develop an appropriate problem-solving strategy
- use tools such as real objects, manipulatives, and technology to solve problems
- relate informal language to mathematical language and symbols
- reason and support their thinking using objects, words, pictures, numbers, and technology

## Second Grade Texas Essential Knowledge and Skills (TEKS)

### Second Grade Social Studies TEKS

In second grade social studies, your child will learn:

#### **HISTORY**

Students:

- explain the significance of celebrations, such as Independence Day, and landmarks, such as state and national capitol buildings
- describe and measure calendar time
- create and interpret timelines
- name several sources of information about a given event
- compare various interpretations of the same time period
- identify contributions of people, such as Henrietta King and Robert Fulton

#### **GEOGRAPHY**

Students:

- use symbols, find locations, and determine directions on maps and globes
- draw maps to show places and routes
- identify major landforms and bodies of water on maps and globes
- compare information from different sources about places and regions
- identify relationships between people and their physical environment
- identify ways people can conserve and replenish natural resources

#### **ECONOMICS**

Students:

- explain how work provides income
- explain choices people have in a free enterprise system
- identify roles of producers and consumers

#### **GOVERNMENT**

Students:

- identify functions of government
- identify governmental services in the community
- compare roles of public officials and identify ways they are selected

#### **CITIZENSHIP**

Students:

- identify characteristics of good citizenship and identify historic figures and ordinary people who exemplify good citizenship
- identify patriotic songs and symbols

#### **CULTURE**

Students:

identify stories, statues, and other examples of local cultural heritage

#### **SCIENCE, TECHNOLOGY, AND SOCIETY**

Students:

describe how science and technology have changed ways people meet basic needs and have changed communication, transportation, and recreation

#### **SOCIAL STUDIES SKILLS**

Students:

- obtain information from a variety of sources
- use tables of contents and glossaries to locate information
- sequence and categorize information
- identify main ideas, make predictions, and compare and contrast
- express ideas orally and create written and visual material
- use problem-solving and decision-making processes

## Second Grade Texas Essential Knowledge and Skills (TEKS)

### Second Grade Science TEKS

In second grade science, your child will learn:

#### SCIENTIFIC INVESTIGATION

Students:

- conduct classroom and field investigations using safe practices
- learn how to use and conserve resources

#### SCIENTIFIC INQUIRY AND CRITICAL THINKING

Students:

- ask questions about organisms, objects, and events
- plan and conduct simple descriptive investigations
- compare results of investigations with what students know about the world
- explain a problem and identify a task and solution related to the problem

#### TOOLS AND MODELS

Students:

- collect information using tools including rulers, meter sticks, measuring cups, clocks, hand lenses, computers, thermometers, and balances
- measure and compare organisms and objects

#### PROPERTIES AND PATTERNS

Students:

- classify organisms, objects, and events based on properties and patterns
- identify, predict, replicate, and create patterns

#### SYSTEMS

Students:

- know that systems have parts and are composed of organisms and objects
- identify parts that, when put together, can do things they cannot do by themselves

#### CHANGE

Students:

- observe, measure, and analyze changes, including weather, the night sky, and seasons
- identify, predict, and test uses of heat to cause change

#### LIVING ORGANISMS AND NONLIVING OBJECTS

Students:

identify characteristics of living organisms and non-living objects

#### BASIC NEEDS OF ORGANISMS

Students:

- identify external characteristics of plants and animals that allow their needs to be met
- compare the ways organisms depend on each other and on their environments

#### PROCESSES OF THE NATURAL WORLD

Students:

- describe the water cycle
- identify uses of natural resources

## Third Grade Texas Essential Knowledge and Skills (TEKS)

### Third Grade English Language Arts & Reading TEKS

In third grade language arts, your child will learn:

#### LISTENING/SPEAKING

Students:

- listen to solve problems, gather information or appreciate stories
- listen to identify the musical elements of literary language, such as rhymes repeated sounds or instances of onomatopoeia

#### READING

Students:

- use knowledge of decoding and structural cues such as prefixes, suffixes, and derivational endings to identify words read and comprehend a variety of third-grade-level texts
- read for enjoyment, to solve problems, to gather information, and to extend vocabulary
- make and explain important inferences in a story
- demonstrate knowledge of synonyms, antonyms, and multi-meaning words
- gather important information using resources and references
- analyze the literary elements of narrative text
- read orally from familiar texts with accuracy, expression, appropriate phrasing, and attention to punctuation
- read silently for increasing periods of time

#### WRITING

Students:

- write to record ideas and reflections for a variety of audiences
- use increasingly complex capitalization, punctuation, and spelling
- develop, revise, and edit writing and compositions using established criteria
- write for varied purposes, including to achieve a sense of audience,
- make precise word choices, and create vivid images
- use available technology for word processing, spell checking, and printing
- compile notes into reports, outlines, and summaries

#### **Before entering third grade, students should be able to:**

Listen and respond properly to directions, questions, stories, poems, and presentations.

Read high-frequency words easily, and apply a variety of strategies such as decoding, context clues, and word parts to read words of multi-syllable words.

Show understanding of stories by putting story events in order and recalling and locating details.

Use prewriting, composing, and revising strategies to develop friendly letters, how-to paragraphs, stories, poems, and simple research reports.

Spell words correctly from high frequency list.

Edit sentences within the writing process for capitalization (proper nouns, first letters in sentences, and "I").

Edit sentences within the writing process for punctuation (abbreviations; ends of sentences; commas for date, city/state, greeting and closing of a letter, and apostrophes in contractions).

Write in complete sentences, and revise to add, take away, make ideas clear, and change for clarity and interest.

Write legibly with appropriate letter formation and spacing.

## Third Grade Texas Essential Knowledge and Skills (TEKS)

### Third Grade Mathematics TEKS

In third grade mathematics, your child will learn:

#### NUMBER, OPERATION, AND QUANTITATIVE REASONING

Students:

- use place value to read, write, and describe numbers
- compare and order whole numbers less than 10,000
- determine value of a collection of coins and bills
- construct fractional models and compare fractions
- name fractional parts of a whole or set using symbols
- construct models of equivalent fractions
- model addition and subtraction
- add and subtract with numbers less than 1,000
- learn and apply multiplication facts
- multiply using a one-digit multiplier
- use models for division and record the solutions
- round numbers to tens or hundreds
- estimate sums and differences

#### PATTERNS, RELATIONSHIPS, AND ALGEBRAIC THINKING

Students:

- make predictions and solve problems using patterns
- identify patterns in multiplication facts
- identify fact families for multiplication and division
- generate tables of ordered pairs
- identify and extend patterns of ordered pairs

#### GEOMETRY AND SPATIAL REASONING

Students:

- name, describe, and compare shapes and solids
- identify congruent shapes
- create and identify lines of symmetry
- locate and name whole numbers and fractions on a number line

#### MEASUREMENT

Students:

- estimate and measure length using metric and customary units
- find the perimeter of a figure
- determine area using concrete models
- tell and write time on digital and traditional clocks
- measure length, area, temperature, and time to solve problems

#### PROBABILITY AND STATISTICS

Students:

- collect, organize, record, and display data in picture and bar graphs
- interpret information from graphs
- describe events as more likely, less likely or equally likely

#### PROBLEM SOLVING

Students:

- identify the mathematics in everyday situations
- use a problem-solving model
- use tools, such as real objects, manipulatives, and technology to solve problems
- explain and record observations
- relate informal language to mathematical language and symbols
- make generalizations from patterns
- justify why an answer is reasonable and explain the solution process

## Third Grade Texas Essential Knowledge and Skills (TEKS)

### Third Grade Social Studies TEKS

In third grade social studies, your child will learn:

#### HISTORY

Students:

- identify reasons people formed communities and describe how individuals, events, and ideas have shaped communities over time
- compare ways people in communities meet their needs, in the past and present
- create and interpret timelines and describe historical times in terms of years, decades, and centuries

#### GEOGRAPHY

Students:

- compare how people in different communities adapt to or modify variations in the physical environment
- use cardinal and intermediate directions, scale, compass rose, grid, and symbols to locate places and interpret maps and globes

#### ECONOMICS

Students:

- identify ways of earning, spending, and saving money
- define scarcity and give examples of its impact on goods and services and on interdependence within and among communities
- explain how supply and demand affects price and how cost of production and selling price affect profits

#### GOVERNMENT

Students:

- describe the basic structure of local government, identify local government officials, and explain how they are chosen
- identify services commonly provided by local governments and explain how they are financed

#### CITIZENSHIP

Students:

- identify characteristics of good citizenship and identify people who exemplify good citizenship
- explain the importance of civic participation and identify examples of actions people can take to improve the community
- identify examples of organizations that serve the common good

#### CULTURE

Students:

- explain the significance of ethnic and/or cultural celebrations in the state, nation, and world
- retell the heroic deeds of real and fictional heroes who have helped to shape the culture of communities
- identify selected writers and artists whose works exemplify the cultural heritage of communities around the world

#### SCIENCE, TECHNOLOGY, AND SOCIETY

Students:

- identify scientists and inventors who have created new technology
- explain the impact of new technology on communities around the world

#### SOCIAL STUDIES SKILLS

Students:

- apply critical-thinking skills, communicate effectively, and use problem-solving and decision-making processes rhymes, repeated sounds or instances of onomatopoeia
- gain increasing control of grammar, such as subject-verb agreement, complete sentences, and correct tense usage
- compare language and oral traditions (family stories) that reflect customs, regions, and cultures

## Third Grade Texas Essential Knowledge and Skills (TEKS)

### Third Grade Science TEKS

In third grade science, your child will learn:

#### SCIENTIFIC INVESTIGATIONS IN THE FIELD AND LABORATORY

Students:

- conduct safe, environmentally appropriate, and ethical investigations
- make wise choices in use, conservation, disposal or recycling of materials

#### SCIENTIFIC INQUIRY AND CRITICAL THINKING

Students:

- formulate testable hypotheses and construct reasonable explanations from evidence
- construct simple graphs, tables, maps, models, and charts to organize information
- analyze scientific explanations as to their strengths and weaknesses, using scientific evidence
- evaluate the impact of research on scientific thought, society, and the environment
- study the history of science and contributions of scientists

#### TOOLS AND MODELS

Students:

- use tools, including calculators, safety goggles, microscopes,
- sound recorders, clocks, computers, hand-lenses, thermometers, meter sticks, magnets, balances, and compasses
- demonstrate that repeated investigations may increase reliability

#### SYSTEMS

Students:

observe a simple system and describe the role of various parts

#### FORCES CAUSE CHANGE

Students:

- measure changes in an object's position when a force is applied
- know Earth's surface can be changed by forces

#### PHYSICAL PROPERTIES

Students:

- gather data about temperature, magnetism, and hardness
- identify matter as liquids, solids, and gases

#### NEEDS OF LIVING ORGANISMS.

Students:

- know that organisms need food, water, light, air, and habitat
- observe organisms with similar needs that compete for resources
- describe environmental changes
- describe how organisms modify their environment

#### ADAPTATIONS

Students:

analyze how adaptive characteristics help individuals survive

#### INHERITED TRAITS AND LEARNED CHARACTERISTICS.

Students:

identify some inherited traits of plants and animals

#### PROCESSES OF THE NATURAL WORLD

Students:

- classify earth materials in local area as renewable, nonrenewable or inexhaustible
- identify properties of soils, such as color and texture
- identify the position of planets in relation to the Sun

## Fourth Grade Texas Essential Knowledge and Skills (TEKS)

### Fourth Grade English Language Arts & Reading TEKS

In fourth grade language arts, your child will learn:

#### LISTENING/SPEAKING

Students:

- listen to gain information and supporting evidence
- monitor their understanding of a spoken message and appropriately seek clarification
- interpret speaker's messages (both verbal and nonverbal), purposes and perspectives
- monitor their own understanding of the spoken message and seek clarification as needed

#### READING

Students:

- read and comprehend a variety of fourth-grade-level texts
- adjust reading rate according to the purpose for reading
- monitor their own comprehension and reread, use reference aids, search for clues, and ask questions when understanding breaks down
- use multiple reference aids, including software, to clarify and seek information
- study word meanings across content areas and through current events
- respond to readings and ideas through journal writing, discussion, and media
- paraphrase and summarize text
- represent text information by generating outlines, timelines, and graphics
- offer observations, make connections, react, speculate, interpret, and raise questions after reading

#### WRITING

Students:

- capitalize, use punctuation, and spell correctly in "published" pieces of writing
- evaluate written compositions using assigned and established criteria
- conduct research and raise new questions for further investigation
- write to express, discover, record, develop, reflect on ideas, and problem solve
- compose journals, letters, reviews, poems, narratives, and instructions

#### VIEWING/REPRESENTING

Students:

- understand and interpret visual messages and media
- analyze and critique media
- produce visual images, messages, and meanings that communicate effectively

#### Before entering fourth grade, students should be able to:

Listen and respond attentively to multiple-step oral directions, questions, speakers, and presentations.  
Use correct grammar when speaking.  
Read silently and independently daily.  
Show understanding of the content of third grade reading materials.  
Use proper cursive letter formation and spacing.  
Write paragraphs that are grammatically correct, well developed and correctly structured.  
Write stories, instructions, expository (non-fiction), letters, and poems.  
Spell third grade-level high frequency words accurately in written assignments.  
Apply correct capitalization while editing friendly letters, titles, and proper nouns.  
Apply correct punctuation while editing commas in a series, apostrophes in singular possessives, contractions.

## Fourth Grade Texas Essential Knowledge and Skills (TEKS)

### Fourth Grade Mathematics TEKS

In fourth grade mathematics, your child will learn:

#### NUMBER, OPERATION, AND QUANTITATIVE REASONING

Students:

- read, write, compare, and order whole numbers through millions
- read, write, compare, and order decimals through hundredths
- model fractions greater than one generate equivalent fractions using models
- compare and order fractions using concrete and picture models
- relate fractions and decimals for tenths and hundredths
- add and subtract whole numbers and decimals to hundredths
- model factors and products
- represent multiplication and division
- recall and apply multiplication facts
- multiply with two-digit multipliers
- divide with a one-digit divisor
- use addition and subtraction to solve problems
- round to ten, hundred, or thousand
- estimate products and quotients

#### PATTERNS, RELATIONSHIPS, AND ALGEBRAIC THINKING.

Students:

- use patterns to remember multiplication facts
- solve division problems using fact families
- use patterns to multiply by 10 and 100
- describe the relationship between two sets of data

#### GEOMETRY AND SPATIAL REASONING

Students:

- use formal language for angles
- identify parallel and perpendicular lines
- describe shapes and solids with vertices, edges, and faces
- demonstrate translations, reflections, and rotations
- verify congruence and symmetry
- locate and name whole numbers, fractions, and decimals on number line

#### MEASUREMENT

Students:

- estimate and measure weight and capacity
- measure length, perimeter, time, temperature, and area

#### PROBABILITY AND STATISTICS

Students:

- interpret bar graphs
- list possible outcomes of a probability experiment
- use a pair of numbers to describe the probability of an event

#### PROBLEM SOLVING

Students:

- identify the mathematics in everyday situations
- use a problem-solving model
- select or develop an appropriate problem-solving strategy
- explain and record observations
- relate informal language to mathematical language and symbols
- make generalizations from patterns

## Fourth Grade Texas Essential Knowledge and Skills (TEKS)

### Fourth Grade Social Studies TEKS

In fourth grade social studies, your child will learn:

#### **HISTORY**

Students:

- compare similarities and differences of Native American groups in Texas and the Western Hemisphere before European exploration
- explain causes and effects of European exploration and colonization of Texas and the Western Hemisphere
- explain causes and effects of the Texas Revolution, the Republic of Texas, and the annexation of Texas to the United States
- describe political, economic, and social changes in Texas during the last half of the 19th century
- describe important issues, events, and individuals of the 20th century in Texas

#### **GEOGRAPHY**

Students:

- use geographic tools to collect, analyze, and interpret data
- describe political, economic, and physical regions in Texas and the Western Hemisphere
- explain the location and patterns of settlement and the geographic factors that influence where people live in Texas
- describe how people in Texas adapt to and modify their environment

#### **ECONOMICS**

Students:

- explain basic patterns of work and economic activities of early societies in Texas
- describe the characteristics and benefits of the free enterprise system in Texas
- identify how Texas, the United States, and the world are economically interdependent

#### **GOVERNMENT**

Students:

- compare how people organized governments in different ways during the early development of Texas
- identify important ideas in historic documents, such as the Texas Declaration of Independence
- explain the basic functions of the three branches of state government

#### **CITIZENSHIP**

Students:

- explain important customs, symbols, and celebrations of Texas
- explain the role of the individual in state and local elections
- identify leaders in state and local government and tell how to contact them

#### **CULTURE**

Students:

identify the contributions of people of various racial, ethnic, and religious groups to Texas

#### **SCIENCE, TECHNOLOGY, AND SOCIETY**

Students:

describe the impact of science and technology on life in Texas

#### **SOCIAL STUDIES SKILLS**

Students:

apply critical-thinking skills, communicate effectively, and use problem-solving and decision-making processes

## Fourth Grade Texas Essential Knowledge and Skills (TEKS)

### Fourth Grade Science TEKS

In fourth grade science, your child will learn:

#### FIELD AND LABORATORY INVESTIGATIONS

Students:

- demonstrate safe, environmentally appropriate, and ethical practices
- learn to use and conserve, dispose and recycle resources

#### SCIENTIFIC INQUIRY

Students:

- plan and implement descriptive and simple investigations, ask well-defined questions, formulate hypotheses, select and use appropriate equipment and technology, collect, analyze and interpret information, observe and measure, and communicate valid conclusions
- construct graphs, tables, maps, charts to organize, examine, and evaluate information

#### CRITICAL THINKING, PROBLEM SOLVING, AND DECISION MAKING SKILLS.

Students:

- analyze, review, and critique scientific explanations/hypotheses/ theories, including strengths and weaknesses, and draw inferences on promotional materials for products and services
- evaluate research on scientific thought, society, and the environment
- connect science concepts with history of science and contributions of scientists

#### TOOLS AND MODELS

Students:

- collect information, measure, and compare using tools, including safety goggles, microscopes, sound recorders, computers, hand-lenses, thermometers, meter sticks, balances, and compasses
- represent the natural world using models and analyze their limitations
- demonstrate that repeated investigations may increase the reliability of results

#### SYSTEMS, CYCLES, PATTERNS, AND CHANGE

Students:

- identify and describe roles of organisms in living systems and parts in nonliving objects and predict and draw conclusions when part of a system is removed
- identify patterns of change and use reflection to verify symmetry

#### MATTER AND PHYSICAL PROPERTIES

Students:

observe and record changes in states of matter caused by heat and conduct tests, compare data, and draw conclusions about physical properties of matter-states, conduction, density, and buoyancy

#### ADAPTATIONS

Students:

- identify characteristics that allow survival and reproduction of species
- compare adaptive characteristics of species and identify and compare species that lived in the past to existing species
- distinguish inherited and learned characteristics providing examples

#### PAST, PRESENT, AND FUTURE EVENTS

Students:

identify and observe effects of events that require time for change to become noticeable

#### PROCESSES OF THE NATURAL WORLD

Students:

test properties of soils, effects of oceans on land, and the sun as our major source of energy

## Fifth Grade Texas Essential Knowledge and Skills (TEKS)

### Fifth Grade English Language Arts & Reading TEKS

In fifth grade language arts, your child will learn:

#### LISTENING/SPEAKING

Students:

- analyze a speaker's message for content, persuasive technique, and tone
- distinguish between a speaker's opinion and verifiable fact
- listen to proficient models of oral reading of classic and contemporary works
- identify how language, such as labels and sayings, reflects regions and cultures

#### READING

Students:

- read and comprehend a variety of fifth-grade-level texts
- draw inferences from text and support these conclusions and generalizations with evidence from the text
- offer observations, make connections, react, speculate, interpret, and raise questions in response to text
- generate relevant research using multiple sources of information
- demonstrate characteristics of fluent and effective reading
- use a thesaurus, synonym finder, dictionary, and software to clarify meanings and usage
- support responses to readings by referring to relevant aspects of the text and their own experiences

#### WRITING

Students:

- compose original texts applying the conventions of capitalization, punctuation, grammar, and correct spelling
- compose, organize, and revise letters, essays, records, and research papers
- use suspense, dialogue, and figurative language in original compositions
- write to persuade, argue, and request
- engage in the writing process and refine selected drafts to publish for general and specific audiences

#### VIEWING/REPRESENTING

Students:

- describe, interpret, and use visual media to compare ideas and points of view
- analyze, critique, and contrast the messages found in visual media
- produce class newspapers, multimedia reports, and/or short films

#### Before entering fifth grade, students should be able to:

Follow complex directions.  
Read silently for at least 30 minutes a day.  
Read and comprehend material written on grade level.  
Write legibly with correct grammar, punctuation, and capitalization.  
Use many reference tools.  
Write a well-constructed, well-developed piece of writing that has multiple paragraphs that feature varying sentence types and correct English usage that is tied to the entire composition.  
Write to inform, persuade, and entertain.  
Identify and explain the persuasive techniques used in messages found in a variety of media (television, radio, and magazines).  
Make oral presentations with suitable visual-aid materials.

## Fifth Grade Texas Essential Knowledge and Skills (TEKS)

### Fifth Grade Mathematics TEKS

In fifth grade mathematics, your child will learn:

#### **NUMBERS, OPERATIONS, AND QUANTITATIVE REASONING.**

Students:

- read, write, compare, and order whole numbers through billions
- read, write, compare, and order decimals through thousandths
- generate equivalent fractions
- compare fractions in a variety of ways
- relate decimals to fractions using models to the thousandths
- add, subtract, multiply, and divide whole numbers
- add and subtract decimals
- identify prime and common factors
- model adding and subtracting fractions like denominators
- round whole numbers and decimals to tenths
- estimate to solve problems

#### **PATTERNS, RELATIONSHIPS, AND ALGEBRAIC THINKING**

Students:

- determine all possible combinations
- use patterns to make generalizations
- identify prime and composite numbers
- select and use diagrams and number sentences

#### **GEOMETRY AND SPATIAL REASONING**

Students:

- identify critical attributes of geometric figures or solids
- use critical attributes to define shapes and solids sketch translations, rotations, and reflections
- describe transformations that relate congruent figures
- graph ordered pairs of whole numbers

#### **MEASUREMENT**

Students:

- measure volume using concrete models
- estimate volume in cubic units
- measure length, perimeter, weight, capacity, time, temperature, and area to solve problems and describe equivalent measures

#### **PROBABILITY AND STATISTICS**

Students:

- construct line graphs
- describe characteristics of a set of data
- graph data using the appropriate representation
- use fractions to describe results of an experiment
- use results to make predictions

#### **PROBLEM SOLVING**

Students:

- identify the mathematics in everyday situations
- use a problem-solving model that incorporates understanding the
- problem, making and carrying out the plan, and evaluating the solution for reasonableness
- select or develop an appropriate problem-solving strategy
- explain and record observations
- relate informal language to mathematical language and symbols
- make generalizations from patterns
- justify why an answer is reasonable and explain the solution process

## Fifth Grade Texas Essential Knowledge and Skills (TEKS)

### Fifth Grade Social Studies TEKS

In fifth grade social studies, your child will learn:

#### HISTORY

Students:

- explain causes and effects of European colonization
- summarize how conflict between the American colonies and Great Britain led to American independence
- describe events that led to the creation of the U.S. Constitution
- identify important social changes of the 19th century, including the Industrial Revolution, westward expansion, and the Civil War
- describe important issues, events, and individuals of the 20th century

#### GEOGRAPHY

Students:

- use geographic tools to collect, analyze, and interpret data
- describe political, economic, and physical regions in the United States
- explain the location and patterns of settlement and the geographic factors that influence where people live in the United States
- describe how people in the United States adapt to and modify their environment

#### ECONOMICS

Students:

- explain basic economic patterns of early societies in the United States
- identify economic motivations for exploration and colonization
- describe the characteristics and benefits of the free enterprise system in the United States
- explain patterns of work and economic activities in Texas

#### GOVERNMENT

Students:

- identify examples of representative government in the American colonies
- identify important ideas in the Declaration of Independence and the U.S. Constitution
- describe the framework of government created by the U.S. Constitution

#### CITIZENSHIP

Students:

- explain important customs, symbols, and celebrations that represent American beliefs
- explain the importance of individual participation in the democratic process
- identify leaders of the national government
- summarize fundamental rights of American citizens

#### CULTURE

Students:

- explain the relationship between the arts and the times during which they were created
- identify the contributions of people of various racial, ethnic, and religious groups to the United States

#### SCIENCE, TECHNOLOGY, AND SOCIETY

Students:

describe the impact of science and technology on life in the United States

#### SOCIAL STUDIES SKILLS

Students:

apply critical-thinking skills, communicate effectively, and use problem-solving and decision-making processes

## Fifth Grade Texas Essential Knowledge and Skills (TEKS)

### Fifth Grade Science TEKS

In fifth grade science, your child will learn:

#### FIELD AND LABORATORY INVESTIGATIONS

Students:

- demonstrate safe, environmentally appropriate, and ethical practices
- learn to use and conserve, dispose and recycle resources

#### SCIENTIFIC INQUIRY

Students:

- plan and implement investigations, ask well-defined questions, formulate hypotheses, select and use equipment, collect, analyze and interpret information, observe and measure, and communicate valid conclusions
- construct graphs, maps, charts to organize and evaluate information

#### CRITICAL THINKING, PROBLEM SOLVING, AND DECISION-MAKING SKILLS

Students:

- analyze scientific explanations as to strengths and weaknesses
- draw inferences on promotional materials
- represent the natural world using models
- evaluate research on scientific thought, society, and the environment
- connect concepts with history of science and contributions of scientists

#### TOOLS AND MODELS

Students:

- use scientific methods and tools, including sound recorders, computers, hand lenses, thermometers, compasses, balances, magnets, meter sticks, collecting nets, and safety goggles to collect information
- show that repeated investigations may increase reliability of results

#### SYSTEMS, CYCLES, AND CHANGE

Students:

- describe cycles, structures, interactions,

and processes found in systems and life cycles

- identify events and describe changes that occur on a regular basis and the significance of water, carbon, and nitrogen cycles

#### MATTER AND ENERGY

Students:

- investigate physical states of matter
- describe light, sound, heat, and electricity as forms of energy
- demonstrate how some mixtures and solutions maintain physical properties of their ingredients
- differentiate forms of energy including light, heat, electrical, and solar

#### ADAPTATION

Students:

- explore and predict adaptations
- describe an organism's niche within an ecosystem
- examine traits that are inherited by offspring from their parents
- study examples of learned characteristics

#### PAST AND FUTURE EVENTS

Students:

see that growth, erosion, and dissolving are examples of past events that have affected present events

#### PROCESSES OF THE NATURAL WORLD—EARTH MATERIALS AND OBJECTS IN THE SKY

Students:

- interpret how landforms develop
- describe processes responsible for coal, gas, and minerals
- compare physical characteristics of the Earth and Moon
- identify gravity as a force that keeps planets and the Moon in orbits

## Sixth Grade Texas Essential Knowledge and Skills (TEKS)

### Sixth Grade Mathematics TEKS

In sixth grade mathematics, students focus on using ratios to describe proportional relationships with number, geometry, measurement, and probability. Students also focus on adding and subtracting decimals and fractions. Students use a variety of mathematical processes and tools to develop conceptual understanding and solve problems as they do mathematics.

In sixth grade mathematics, your child will learn:

#### **NUMBER, OPERATION, AND QUANTITATIVE REASONING**

Students:

- compare and order positive fractions, decimals, and whole numbers
- generate equivalent forms of whole numbers, fractions, and decimals
- use integers to describe real-life situations
- write the prime factorization of numbers using exponents
- identify factors and multiples, including common factors and multiples
- model addition and subtraction situations involving fractions with objects, pictures, words, and numbers
- add and subtract to solve problems using decimals and fractions
- multiply and divide whole numbers to solve problems, including situations involving equivalent ratios and rates
- estimate and round to produce reasonable results where exact answers are not required in problem situations

#### **PATTERNS, RELATIONSHIPS, AND ALGEBRAIC THINKING**

Students:

- use ratios to describe proportional situations and make predictions in proportional situations
- represent ratios and percents with physical models, fractions, and decimals
- use tables and symbols to describe and represent proportional and other relationships (measurement conversions, sequences, perimeter, area, etc.)

- use patterns found in a table of data to develop formulas to represent relationships involving perimeter, area, and volume
- use letters to represent unknowns in forming equations from a problem situation

#### **GEOMETRY AND SPATIAL REASONING**

Students:

- use angle measurements to classify angles as acute, obtuse, or right
- identify relationships using angles in triangles and quadrilaterals (patterns of angle-sum measurements)
- describe the relationship between radius, diameter, and circumference of a circle
- locate and identify points on a coordinate graph using ordered pairs of positive fractions, decimals, and whole numbers

#### **MEASUREMENT**

Students:

- estimate measurements and evaluate reasonableness of results
- select and use appropriate units, tools, or formulas to measure and to solve problems involving length, perimeter, circumference, area, time, temperature, capacity, weight, and angles
- convert measures within the same measurement system (customary or metric)

## Sixth Grade Texas Essential Knowledge and Skills (TEKS)

### Sixth Grade Mathematics TEKS (continued)

In sixth grade mathematics, students focus on using ratios to describe proportional relationships with number, geometry, measurement, and probability. Students also focus on adding and subtracting decimals and fractions. Students use a variety of mathematical processes and tools to develop conceptual understanding and solve problems as they do mathematics.

In sixth grade mathematics, your child will learn:

#### PROBABILITY AND STATISTICS

Students:

- find all possible outcomes using lists, tree diagrams, and combinations
- find probabilities of a simple event occurring and not occurring (complement)
- draw and compare different graphical representations of the same data (circle graphs, bar graphs, line graphs, etc.).
- use median, mode, and range to describe a set of data
- solve problems by collecting, organizing, displaying, and interpreting data
- communicate mathematical ideas using language, efficient tools, appropriate units of measure, and models (graphical, numerical, physical, and algebraic)
- evaluate the effectiveness of different representations to communicate ideas
- make conjectures from patterns or sets of examples and non-examples
- validate conclusions using mathematical properties and relationships

#### UNDERLYING PROCESSES AND MATHEMATICAL TOOLS

Students:

- identify and apply mathematics to everyday experiences in and outside of school
- use a problem-solving model that includes understanding the problem, making a plan, carrying out the plan, and checking the solution for reasonableness
- select or develop problem-solving strategies such as drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve problems
- select tools such as real objects, manipulatives, paper/pencil, and technology to solve problems
- use techniques such as mental math, estimation, and number sense to solve problems

## Sixth Grade Texas Essential Knowledge and Skills (TEKS)

### Sixth Grade Science TEKS

In students, science provides an integrated approach to life, earth-space, and physical sciences. All students participate in inquiry-based field and laboratory investigations. Science concepts and processes include: energy and matter; physical and chemical properties of matter; cells and their genetic material; systems and cycles (solar, living ecosystems, atmospheric and earth); and, a unit on Making Healthy Choices.

In sixth grade science, your child will learn:

#### PROCESS SKILLS

Students:

- demonstrate safe practices and environmentally appropriate field and laboratory investigations
- learn to use, conserve, dispose, and recycle resources and materials
- plan and implement investigations, including: asking well-defined questions; collecting information; making observations; formulating testable hypotheses; and, using equipment and technology
- collect (observe and measure), analyze and interpret information to construct explanations from direct and indirect evidence to communicate valid conclusions
- construct graphs, tables, maps, and charts to organize, examine and evaluate information
- analyze, review, and critique scientific explanations, hypotheses and theories as to strengths and weaknesses
- evaluate research on scientific thought, society and environment
- connect science concepts with history of science and contributions of scientists
- collect, analyze, and record information using scientific tools
- identify patterns in collected information using percent, average, range, and frequency

#### CONTENT LEARNING

Students:

- investigate three strands which include systems; properties, patterns, and models; and constancy and change

- the content is viewed from different perspectives in each strand

#### SYSTEMS; COMBINATION OF SYSTEMS

*(Strands: Systems; Patterns, Properties, and Models)*

Students:

- identify and describe systems resulting from combinations of two or more systems
- describe properties of systems that differ from properties of its parts

#### FORCE AND MOTION

*(Strands: Systems; Patterns, Properties, and Models; Constancy and Change)*

Students:

- identify and describe changes in position, direction, and speed of objects
- measure and graph changes in motion
- identify forces that shape Earth

#### PHYSICAL AND CHEMICAL PROPERTIES OF MATTER

*(Strands: Patterns, Properties, and Models)*

Students:

- demonstrate new substances can be made combining two or more substances, and compare properties of new substance to originals
- classify substances by physical and chemical properties

## Sixth Grade Texas Essential Knowledge and Skills (TEKS)

### Sixth Grade Science TEKS (continued)

In sixth grade, science provides an integrated approach to life, earth-space, and physical sciences. All students participate in inquiry-based field and laboratory investigations. Science concepts and processes include: energy and matter; physical and chemical properties of matter; cells and their genetic material; systems and cycles (solar, living ecosystems, atmospheric and earth); and, a unit on Making Healthy Choices.

In sixth grade science, your child will learn:

#### **LIVING SYSTEMS: STRUCTURES AND FUNCTIONS**

*(Strands: Systems; Constancy and Change)*

Students:

- differentiate between structure and function
- identify how structures complement functions
- determine that organisms are comprised of cells that carry on functions to sustain life

#### **MATTER & ENERGY: INTERACTIONS**

*(Strands: Systems; Constancy and Change)*

Students:

- define matter and energy
- explain and illustrate interactions between matter and energy in the water cycle and decay of biomass

#### **ENERGY AND THE ENVIRONMENT**

*(Strands: Systems; Constancy and Change)*

Students:

- identify energy transformations during production of energy
- compare methods for transforming energy in devices
- research and describe energy types from sources and determine if it is renewable, non-renewable, or inexhaustible

#### **SPECIES CHANGE THROUGH GENERATIONS**

*(Strands Systems; Constancy and Change)*

Students:

- identify changes in traits over several generations
- identify cells as structures containing genetic material
- interpret the role of genes in inheritance

#### **INTERNAL AND EXTERNAL STIMULI: ORGANISM RESPONSE**

*(Strands: Systems, Constancy and Change)*

Students:

- identify responses to internal stimuli and external stimuli
- identify components of ecosystems to which organisms may respond

#### **COMPONENTS OF OUR SOLAR SYSTEM**

*(Strands: Systems; Patterns, Properties, and Models; Constancy and Change)*

Students:

- identify characteristics of sun, planets, meteorites, comets, asteroids, and moons
- describe equipment and transportation needs for space travel

#### **EARTH SYSTEMS: STRUCTURES AND FUNCTIONS**

*(Strands: Systems; Constancy and Change)*

Students:

- summarize the rock cycle
- identify relationships between groundwater and surface water in a watershed
- describe components of the atmosphere and identify the role of atmospheric movement