

# Fourth Grade Curriculum

## Reading

- Extend vocabulary through systematic word study
- Use a thesaurus, dictionary, and/or software to clarify meanings and usage
- Analyze character traits
- Interpret details of character motives and feelings
- Interpret story message
- Predict outcomes
- Draw conclusions
- Identify cause and effect
- Identify and explain inferences
- Generate outlines, timelines, and graphics to represent text information
- Acquire information from nonfiction resources
- Paraphrase and summarize text
- Identify and compare and contrast story elements
- Use a variety of strategies when understanding breaks down, such as re-reading, asking questions, and searching for clues
- Identify the author's purpose
- Make connections and raise questions after reading selections
- Analyze the characteristics of various types of texts and genres
- Adjust reading rate according to the purpose for reading
- Read silently for increasing periods of time

## Listening/Speaking

- Listen to gain information and supporting evidence
- Interpret a speaker's message (verbal and nonverbal) for purpose and perspective
- Monitor understanding of the spoken message and seek clarification as needed
- Analyze a speaker's message for content, persuasive technique, and tone
- Distinguish between a speaker's opinion and verifiable fact
- Analyze a story and discuss story elements after hearing it read aloud

## Writing

- Write to express, discover, record, develop, and reflect on ideas and problem solve
- Write for a variety of audiences
- Write for a variety of purposes, such as lists, letters, stories, poems, book reports, journals, and instructions
- Practice narrative, expository, and persuasive writing
- Generate ideas for compositions
- Develop, revise, and edit compositions using established criteria
- Use increasingly complex capitalization, punctuation, and spelling
- Use singular and plural nouns, pronouns, subject/verb agreement, verb tenses, and singular and plural possessives correctly
- Edit a paragraph for cohesiveness, theme, and sequence of ideas
- Edit drafts for spelling, grammar, punctuation, capitalization, and usage
- Use resources such as a dictionary to edit written words
- Evaluate compositions using assigned and established criteria
- Identify the most effective features of a piece of writing using criteria generated by the teacher and class
- Refine selected drafts to publish for specific audiences
- Compile notes into outlines, reports, and summaries

Choose more precise words to create vivid images  
Transfer knowledge of prefixes, suffixes, and their definitions to the spelling of words  
Use graphic organizers  
Identify the genre in a given passage  
Use available technology for word processing, spell checking, and printing  
Use writing as a tool for research  
Compile a portfolio of writing samples  
Apply alphabetization skills to use guide words

## **Math**

### Number, Operation, Quantitative Reasoning

Read, write, compare, and order whole numbers and decimals  
Determine the value of a collection of coins and bills  
Name fractional parts of a whole or a set  
Construct models of equivalent fractions  
Compare and order fractions  
Add and subtract whole numbers, decimals, fractions, and mixed numbers  
Multiply and divide whole numbers and decimals  
Round numbers to a given place  
Estimate whole number and decimal sums and differences  
Estimate whole number products and quotients

### Patterns, Functions, Algebraic Thinking

Use patterns to make predictions and solve problems  
Identify and create rules for patterns  
Use order of operations

### Geometry and Spatial Reasoning

Identify, describe, and classify 2D and 3D shapes  
Identify and describe congruent shapes  
Identify and describe reflections, translations, and rotations

### Measurement

Estimate and measure length using metric and customary units  
Find the perimeter, area and/or volume of a shape  
Explain the difference between mass and weight  
Measure temperature to solve problems  
Apply measurement concepts by solving problems using elapsed time  
Perform simple conversions within the same measurement system, metric and customary

### Probability and Statistics

Make generalizations based on given data  
Describe data using mean, median, mode, and range

### Problem Solving

Identify math in everyday situations  
Use problem solving strategies  
Justify reasonableness  
Use tools such as real objects, manipulatives, and technology to solve problems

## **Social Studies**

### History

Compare similarities and differences of Native American groups in Texas and the Western Hemisphere before European exploration  
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 19<sup>th</sup> century  
Describe important issues, events, and individuals of the 20<sup>th</sup> and 21<sup>st</sup> century in Texas

Describe the impact of science and technology on life in Texas

## Geography

Use geographic tools to collect, analyze, and interpret data

Describe political, economic, and physical regions in Texas and the Western Hemisphere

Describe landforms, vegetation, and climate of Texas

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

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/Citizenship

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

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

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

Explain the relationship between the arts and the times during which they were created

## Social Studies Skills

Apply critical thinking skills

Communicate effectively

Use problem-solving and decision-making processes

Use computer technology to find information, disseminate materials, and create presentations on a given topic

## **Science**

### Change

Identify patterns of change such as in weather, metamorphosis, and objects in the sky

Illustrate that certain characteristics of an object can remain constant even when the object is like a spinning top, translated like a skater moving in a straight line, or reflected on a smooth surface

Use reflections to verify that a natural object has symmetry

Draw conclusions about "what happened before" using fossils or charts and tables

### Living Organisms and Nonliving Objects

Identify characteristics that allow members within a species to survive and reproduce

Distinguish between inherited traits and learned characteristics

Identify and provide examples of inherited traits and learned characteristics

### Processes of the Natural World

Test properties of soils to determine texture, capacity to retain water, and ability to support life

Summarize the effects of the oceans on land

Identify the sun as the major source of energy for the earth

Explain the role of the sun in the growth of plants, the creation of winds, and the water cycle

Interpret how landforms are the result of a combination of constructive and destructive forces such as deposition of sediment and weathering

Identify and observe actions that require time for changes to be measurable, including growth, erosion, dissolving, weathering, and flow

### Adaptations

Compare adaptive characteristics of various species

Identify the kinds of species that lived in the past and compare them to existing species

Explore and predict adaptations

### Scientific Investigation and Research

Demonstrate safe, environmentally-appropriate and ethical practices during field and laboratory investigations

Make wise choices in the use and conservation of resources and the disposal or recycling of materials

### Scientific Inquiry and Critical Thinking

Plan and implement descriptive investigations including asking well-defined questions, formulating testable hypotheses, and selecting and using equipment and technology

Collect information by observing and measuring

Analyze and interpret information to construct reasonable explanations from direct and indirect evidence

Communicate conclusions supported by data

Construct graphs, tables, maps, models, and charts to organize, examine, and evaluate information

Analyze, review, and critique scientific explanations including hypotheses and theories as to their strengths and weaknesses using scientific evidence and information

Draw inferences based on information related to promotional materials for products and services

Represent the natural world using models and identify limitations such as a terrarium and aquarium

Collect and analyze information using tools including calculators, microscopes, cameras, safety goggles, sound recorders, computers, thermometers, hand lenses, meter sticks, rulers

Demonstrate that repeat investigations may increase the reliability of results

Represent the natural world using models and identify their limitations

### Properties, Patterns, and Systems

Identify and describe the roles of some organisms in living systems

Predict and draw conclusions about what happens when part of a system is removed

### Physical Science

Observe and record changes in the states of matter caused by the addition or reduction of heat

Conduct tests, compare data and draw conclusions about physical properties of matter including states of matter, conduction, density, and buoyancy