

FIFTH GRADE

CONTENT STANDARDS FOR CALIFORNIA SCHOOLS

Parent Resource Book

**Designed to Improve
Student Performance
through Communication
and Partnership**

Adapted and Prepared by:

Tehama County Department of Education
and the Eighteen School Districts of
Tehama County, California

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Tehama County Department of Education (TCDE) is dedicated to supporting schools and districts as they work to improve student achievement and meet the needs of all learners. The Department provides services and resources to educators, parents, students, and the community. Please visit our website at www.tehamaschools.org for a complete listing of Department offerings. The following programs offer resources that may be especially valuable for parents:

Early Childhood Education Programs

TCDE Early Childhood Education Programs provide leadership and assistance to ensure quality experiences for children ages 0 to 5 years. The goal for these programs is to give young children the tools they need to enter school with a foundation of knowledge and skills that will allow them to be successful throughout their school experience.

Contact: Paula Brown-Almond, Programs Director (530) 528-7343

Student Support Services

TCDE Student Support Services provide residents of Tehama County, health and human service agencies, and schools research, materials, and/or technical assistance in the areas of substance abuse and violence prevention, health education, school safety and crisis planning, as well as resiliency and youth development.

Contact: Amy Henderson, Programs Director (530)528-7357

Safe Education and Recreation for Rural Families - SERRF

SERRF provides a safe, healthy, enriching environment for school children during the after school hours. Homework tutoring, academic enrichment, recreation, social skills development, and prevention activities are all a part of the SERRF Program.

Contact: Karla Stroman, Program Director (530) 528-7392

Special Programs

TCDE provides a wide range of services for children and young adults with special needs. These specialized programs and services are operated at the request of the county school districts, but it is the Individualized Education Plan Team who makes decisions about the type of placement or services a student may be provided.

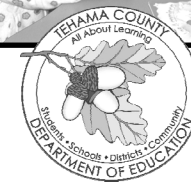
Contact: Heidi Schueller, Assistant Superintendent of Special Programs and Services (530) 528-7248

Looking For More?

Visit the TCDE website for a wealth of additional information, website links, and other free educational resources...

www.tehamaschools.org

- * **Internet safety information** – teach your children safe browsing skills
- * **Early childhood education** – programs & resources
- * **After school activities** – SERRF program, school finder, sponsored events
- * **Free educational resources** – links to homework help, educational games and other free resources to make learning fun and enriching
- * **Information for parents** – school safety, emergency notifications
- * **School performance information** – learn about the schools in Tehama County



The Importance of Parent Involvement and Content Standards

California Content Standards identify what students should know and be able to do at each grade level. They identify what is to be learned. There are standards for the four core academic areas of English Language Arts, Mathematics, History/Social Science, and Science. There are also standards for English Language Development, Physical Education, Health Education, Career Technical Education and the Visual and Performing Arts.

The standards for the four core academic areas are included in this resource booklet as it is important for parents to know what students are expected to learn so learning can be reinforced at home. We know from research that “students with involved parents are more likely to earn higher grades and test scores and enroll in higher-level programs, be promoted, pass their classes, earn credits, attend school regularly, have better social skills, and graduate and go on to postsecondary education.”

Also included in this booklet are suggestions for setting up a home environment to optimize student learning and specific home activities in support of each of the four core areas of language arts, mathematics, history/social science, and science. We know that when parents talk to their children about school, expect them to do well, make sure that out-of-school activities are constructive, and help them plan for college, their children perform better in school.

Unleash the power of this booklet. Become familiar with the standards so you know what your child is expected to learn. Follow the five suggestions for setting up an environment to increase student learning. Engage in the suggested activities to support learning. Have fun learning together!

- At home, invite your child set up experiments showing two different ways to purify water. First put some ingredients, such as salt, sugar, food coloring in the water. Next, use a method to purify the water. When finished, look at and taste the water (e.g., Purify water by catching the steam from boiling water, pouring it through a mixture of sand and charcoal, etc.).
- Together get a glass of ice water and set it on the counter. Watch the glass to see what happens on the outside. Talk about where this water came from. Relate this to the water cycle.

Energy from the Sun Heats the Earth Unevenly

- Each evening, watch the local weather report and invite your child to discuss reasons for the changes in the weather.
- On the Internet, check the temperature in various locations of the world going to **www.weather.com**. Repeat the activity every day for a week and record the temperatures. Invite your child make conclusions from what he/she learned.

Solar System Consists of Planets & Other Bodies that Orbit the Sun

- Using a telescope or binoculars, look at the moon when it is a quarter full or less (Note: A full moon is too bright to look at using these devices). Invite your child to discuss what he/she saw.
- Sit outside at night and discuss the stars and planets, discussing why the planets look different than the stars.
- Watch for artificial satellites and discuss their probable functions.
- Roll a steel ball close to a magnet and see how the steel ball changes its path. Vary the distance between the ball and the magnet. Relate this to the gravitational pull of the sun on the earth and other planets.

Investigation and Experimentation

Scientific Progress is Made by Asking Meaningful Questions and Conducting Investigations

Help your child to:

1. Use a thermometer to measure the temperature at a specific time during the day. Record the results.
2. Use measuring devices to measure ingredients for baking. Record the results. Using the information collected from the items above, invite your child make predictions about the temperature and/or ingredients for baking.

Environment for Student Learning

We encourage all parents to set up an environment to increase student learning:

1. **Strive to establish an encouraging family atmosphere by:**
 - Acknowledging and supporting your child's efforts.
 - Reinforcing positive behavior.
 - Providing opportunities for service to others.
2. **Be involved in your child's education by:**
 - Providing help, resources, and encouragement.
 - Showing interest and supporting your child's work.
 - Upholding the school's expectations.
 - Supporting and participating in school service opportunities.
3. **Set up an atmosphere conducive to learning by:**
 - Scheduling a regular, daily time where all family members are studying.
 - Making sure the house is quiet during this study time.
 - Establishing a location for completing homework that has appropriate lighting and supplies (e.g., paper, pencils, glue, crayons, resources).
 - Assigning a special place to keep school materials.
 - Reviewing the child's homework before it is handed in.
 - Establishing a consistent bedtime.
4. **Strengthen communication with your child by:**
 - Spending quality time with your child.
 - Sharing resources from your community with your child (e.g., parks, libraries, special buildings).
 - Establishing and enforcing reasonable consequences for misbehavior.
5. **Be involved in your child's school community by:**
 - Attending parent/teacher conferences.
 - Contacting your child's teacher when questions arise.
 - Spending time in your child's classroom.
 - Attending school functions.

Home Activities for Science

Physical Sciences

- **Elements and Their Combinations Account for all the Varied Types of Matter**
- Together, find examples of materials that are elements (e.g., aluminum, iron, nickel, silver, gold) and discuss their physical properties.
- Have your child compare one balloon filled with helium to one filled with air. Have them tell how the physical properties of the two balloons are similar and different.
- Complete the following experiment together. Take a glass of water and taste the water. Now add salt and stir. Notice the water looks the same as it did before but now it tastes salty. Let the water evaporate. Discuss what is left. Together, discuss the idea of mixtures and compounds, saying what was done to make and separate a mixture.

Life Sciences

Plants and animals have Structures for Respiration, Digestion, Waste Disposal, and Transport of Materials

- Together put a celery stock, with its leaves, in a glass of colored water. Observe, over a period of time the parts that become colored. Talk about why this occurred.
- Together cover a plant with a clear plastic bag. See what collects on the inside of the bag. Talk about the experiment and the fact that plants take in carbon dioxide and give off oxygen.
- Together cover a portion of their arm with a plastic wrap. After an hour, remove the plastic wrap. Have your child feel his/her skin and the inside of the plastic wrap. Discuss respiration.
- Together discuss the different steps of digestion, including the role of the teeth.

Earth Sciences

Water on Earth moves Through the Processes of Evaporation and Condensation

- Together tour a water recycling plant to learn about methods for purifying water.

- g. Record data by using appropriate graphic representations (including charts, graphs, and labeled diagrams) and make inferences based on those data.
- h. Draw conclusions from scientific evidence and indicate whether further information is needed to support a specific conclusion.
- i. Write a report of an investigation that includes conducting tests, collecting data or examining evidence, and drawing conclusions.

State Standards for English Language Arts

Reading

1.0 Word Analysis, Fluency, and Systematic Vocabulary Development

- 1.1 Read text aloud with grade-appropriate fluency and accuracy.
- 1.2 Use word origins to determine the meaning of unknown words.
- 1.3 Understand and explain frequently used synonyms, antonyms, and homographs.
- 1.4 Use abstract, derived roots, and affixes from Greek and Latin to analyze the meaning of complex words.
- 1.5 Understand and explain the figurative and metaphorical use of words in context.

2.0 Reading Comprehension

- 2.1 Understand how text features (e.g., format, graphics sequence, illustrations, charts) make information accessible/usable.
- 2.2 Analyze text that is organized in sequential or chronological order.
- 2.3 Identify main ideas and concepts presented in text; identifying and assessing evidence that supports those ideas.
- 2.4 Draw inferences, conclusions, or generalizations about text, and supporting them with textual evidence and prior knowledge.
- 2.5 Distinguish facts, supported inferences, and opinions in text.

3.0 Literary Response and Analysis

- 3.1 Identify and analyze the characteristics of poetry, drama, fiction, and nonfiction, explaining the appropriateness of the literary forms chosen by an author for a specific purpose.
- 3.2 Identify the main problem or conflict of the plot and how it is resolved.
- 3.3 Contrast the actions, motives (e.g., loyalty, selfishness), and appearances of the characters, and discuss the importance of the contrast to the plot.
- 3.4 Understand that theme refers to the meaning or moral of selection and recognize themes in sample works.

- 3.5 Describe the function and effect of common literary devices (e.g., imagery, metaphor, symbolism).
- 3.6 Evaluate the meaning of archetypal patterns and symbols found in myth and tradition using literature from different eras and cultures.
- 3.7 Evaluate the author's use of various techniques (e.g., logic and credibility of plots and settings) to influence the reader's perspectives.

Writing

1.0 Writing Strategies

- 1.1 Create multiple-paragraph narrative compositions that establish/develop a situation or plot, describe the setting, and present an ending.
- 1.2 Create multiple-paragraph expository compositions that establish a topic, provide details, and offer a concluding paragraph.
- 1.3 Use organizational features of printed text (e.g., citations, end notes, bibliographic references) to locate relevant information.
- 1.4 Create simple documents using electronic media.
- 1.5 Use a thesaurus to identify alternative word choices and meanings.
- 1.6 Edit and revise manuscripts to improve the meaning and focus of the writing.

2.0 Writing Applications

- 2.1 Write narratives.
- 2.2 Write responses to literature.
- 2.3 Write research reports about important ideas, issues, or events.
- 2.4 Write persuasive letters or compositions.

Written and Oral English Language Conventions

1.0 Written and Oral English Language Conventions

- 1.1 Use prepositional phrases, appositive, and independent/dependent clauses. Use transitions and conjunctions to connect ideas.
- 1.2 Use verbs that are often misused (e.g., lie/lay, sit/set, rise/raise) modifiers, and pronouns.
- 1.3 Use colons and quotation marks correctly.
- 1.4 Use capitalization correctly.
- 1.5 Spell roots, suffixes, prefixes, contractions, and syllable constructions correctly.

- d. Know how to use weather maps and data to predict local weather and know that weather forecasts depend on many variables.
- e. Know that the Earth's atmosphere exerts a pressure that decreases with distance above Earth's surface and that at any point it exerts this pressure equally in all directions.

5. The solar system consists of planets and other bodies that orbit the Sun in predictable paths. As a basis for understanding this concept:

- a. Know that the Sun, an average star, is the central and largest body in the solar system and is composed primarily of hydrogen and helium.
- b. Know that the solar system includes the planet Earth, the Moon, the Sun, eight other planets and their satellites, and smaller objects, such as asteroids and comets.
- c. Know that the path of a planet around the Sun is due to the gravitational attraction between the Sun and the planet.

Investigation and Experimentation

6. Scientific progress is made by asking meaningful questions and conducting careful investigations.

- a. Classify objects (e.g., rocks, plants, leaves) in accordance with appropriate criteria.
- b. Develop a testable question.
- c. Plan and conduct a simple investigation based on a student-developed question and write instructions others can follow to carry out the procedure.
- d. Identify the dependent and controlled variables in an investigation.
- e. Identify a single independent variable in a scientific investigation and explain how this variable can be used to collect information to answer a question about the results of the experiment.
- f. Select appropriate tools (e.g., thermometers, meter sticks, balances, and graduated cylinders) and make quantitative observations.

- c. Know the sequential steps of digestion and the roles of teeth and the mouth, esophagus, stomach, small intestine, large intestine, and colon in the function of the digestive system.
- d. Know the role of the kidney in removing cellular waste from blood and converting it into urine, which is stored in the bladder.
- e. Know how sugar, water, and minerals are transported in a vascular plant.
- f. Know that plants use carbon dioxide (CO₂) and energy from sunlight to build molecules of sugar and release oxygen.
- g. Know that plant and animal cells break down sugar to obtain energy, a process resulting in carbon dioxide (CO₂) and water (respiration).

Earth Sciences

3. Water on Earth moves between the oceans and land through the processes of evaporation and condensation.

- a. Know that most of Earth's water is present as salt water in the oceans, which cover most of Earth's surface.
- b. Know when liquid water evaporates, it turns into water vapor in the air and can reappear as a liquid when cooled or as a solid if cooled below the freezing point of water.
- c. Know water vapor in the air moves from one place to another and can form fog or clouds, which are tiny droplets of water or ice, and can fall to Earth as rain, hail, sleet, or snow.
- d. Know that the amount of fresh water located in rivers, lakes, underground sources, and glaciers is limited and that its availability can be extended by recycling and decreasing the use of water.
- e. Know the origin of the water used by their local communities.

4. Energy from the Sun heats Earth unevenly, causing air movements that result in changing weather patterns.

- a. Know that uneven heating of Earth causes air movements (convection currents).
- b. Know the influence that the ocean has on the weather and the role that the water cycle plays in weather patterns.
- c. Know the causes and effects of different types of severe weather.

Listening and Speaking

1.0 Listening and Speaking Strategies

- 1.1 Ask questions that seek information not already discussed.
- 1.2 Interpret speaker's verbal and nonverbal messages, purposes, and perspectives.
- 1.3 Make inferences or draw conclusions based on an oral report.
- 1.4 Select a focus, organizational structure, and point of view for an oral presentation.
- 1.5 Clarify and support spoken ideas with evidence and examples.
- 1.6 Engage the audience with appropriate verbal cues, facial expressions, and gestures.
- 1.7 Identify, analyze, and critique persuasive techniques (e.g., promises, dares, flattery, generalizations). Identify logical fallacies used in oral presentations and media messages.
- 1.8 Analyze media as sources for information, entertainment, persuasion, interpretation of events, and transmission of culture.

2.0 Speaking Applications

- 2.1 Deliver narrative presentations.
- 2.2 Deliver informational presentations about an important idea, issue, or event.
- 2.3 Deliver oral responses to literature.

Activities for Language Arts

Reading

- Listen to your child read.
- Visit the library and/or bookstore together and select comfortable reading level and age appropriate materials for your child.
- Subscribe to magazines of interest for different members of the family.
- Schedule a family reading time.
- Have your child read independently every night.
- Provide a variety of reference materials
- (e.g., atlas, almanac, dictionary, thesaurus).

Reading Comprehension

- Engage in family discussions about things read, including book reviews, various characters in a story, etc.
- Encourage your child to read and follow directions for games, recipes, etc.
- After reading a story, ask your child questions about the story that relate to the main idea, story details, sequence of events, different possible story endings, and the author's message.
- Share newspaper articles and discuss the events together.

Writing

- Encourage your child to keep a diary and/or vacation journal.
- Encourage your child write letters and thank you notes.
- Encourage your child to write to a pen pal.
- Invite your child send E-mail messages.
- Invite your child use a computer for writing, using various fonts, styles, margins, etc.
- Invite your child write shopping lists.

Written and Oral English Language Conventions

- Play word games such as Scrabble, Probe, Scattergories, Pictionary with your child.
- Look at newspaper articles and together highlight pronouns, adverbs, and adjectives.
- Gently edit together the letters your child has written looking for correct punctuation, capitalization, and sentence structure. Celebrate your child's writing.
- Model and expect correct language usage.

Listening and Speaking

- Plan time (e.g., during a trip, dinner) for family discussions.
- Establish a time for family communication (e.g., dinner time).
- Model and expect correct language usage.

State Standards for Science

Physical Sciences

1. Elements and their combinations account for all the varied types of matter in the world.

- a. Know that during chemical reactions the atoms in the reactants rearrange to form products with different properties.
- b. Know that all matter is made of atoms, which may combine to form molecules.
- c. Know that metals have properties in common, such as high electrical and thermal conductivity. Some metals, such as aluminum (Al), iron (Fe), nickel (Ni), copper (Cu), silver (Ag), and gold (Au), are pure elements; others, such as steel and brass, are composed of a combination of elemental metals.
- d. Know that each element is made of one kind of atom and that the elements are organized in the periodic table by their chemical properties.
- e. Know that scientists have developed instruments that can create discrete images of atoms and molecules that show that the atoms and molecules often occur in well-ordered arrays.
- f. Know the differences in chemical and physical properties of substances are used to separate mixtures and identify compounds.
- g. Know the properties of solid, liquid, and gaseous substances, such as sugar (C₆H₁₂O₆), water (H₂O), helium (He), oxygen (O₂), nitrogen (N₂), and carbon dioxide (CO₂).
- h. Know how living organisms and most materials are composed of just a few elements.
- i. Students know the common properties of salts, such as sodium chloride (NaCl).

Life Sciences

2. Plants and animals have structures for respiration, digestion, waste disposal, and transport of materials.

- a. Know that many multicellular organisms have specialized structures to support the transport of materials.
- b. Know how blood circulates through the heart chambers, lungs, and body and how carbon dioxide (CO₂) and oxygen (O₂) are exchanged in the lungs and tissues.

Colonization, Immigration, and Settlement of the American People from 1789 to the mid-1800s

- During vacations visit sites in the United States of historical interest.
- Have your child help plan a vacation, by marking the route on a map, identifying the places of interest to see, locating the places to stay overnight, etc.
- Watch and discuss together historical documentaries about United States History.

Location of States and Capitals

- Place a blank map of the United States on a wall. Invite your child to write in the names of the states and to memorize the names of each state.
- Purchase a puzzle of the United States and together with your child put the puzzle together, saying the name of each state as it is put in the puzzle.
- Build a concentration game using two colors of 3" x 3" cards. On each of one colored card, past the outline of a state. On each card of the other color, write the name of a state. Play concentration together. When playing, the player turns over one card of one color and another card of a different color. If the name of the state matches the drawing, that player gets another turn.
- Use the same concentration cards and help your child match the names of the states with their shapes. (e.g., Put the cards with the shape of the state in rows. Next, have your child match the name card with the shape of the state card.)
- Using the blank map, mentioned in the first activity, write the names of the capitals for each state.
- Make a second concentration game together. This time put the name of the state on one colored card and the name of the capital on the other. Play concentration together.

State Standards for Mathematics

Number Sense

1.0 Relative Magnitude of Numbers

- 1.1 Estimate, round, and manipulate very large (e.g., millions) and very small (e.g., thousandths) numbers.
- 1.2 Interpret percents as a part of a hundred; find decimal and percent equivalents for common fractions and explain why they represent the same value; compute a given percent of a whole number.
- 1.3 Understand and compute positive integer powers of nonnegative integers; compute examples as repeated multiplication.
- 1.4 Determine the prime factors of all numbers through 50 and write the numbers as the product of their prime factors by using exponents to show multiples of a factor (e.g., $24 = 2 \times 2 \times 2 \times 3 = 2^3 \times 3$).
- 1.5 Identify and represent on a number line decimals, fractions, mixed numbers, and positive and negative integers.

2.0 Computation

- 2.1 Add, subtract, multiply, and divide with decimals; add with negative integers; subtract positive integers from negative integers; and verify the reasonableness of the results.
- 2.2 Demonstrate proficiency with division, including division with positive decimals and long division with multidigit divisors.
- 2.3 Solve simple problems, including ones arising in concrete situations, involving the addition and subtraction of fractions and mixed numbers (like and unlike denominators of 20 or less), and express answers in the simplest form.
- 2.4 Understand the concept of multiplication and division of fractions.
- 2.5 Compute and perform simple multiplication and division of fractions, and apply these procedures to solving problems.

Algebra and Functions

1.0 Simple Expressions

- 1.1 Use information taken from a graph or equation to answer questions about a problem situation.
- 1.2 Use a letter to represent an unknown number; write and evaluate simple algebraic expressions in one variable by substitution.
- 1.3 Know and use the distributive property in equations and expressions with variables.

- 1.4 Identify and graph ordered pairs in the four quadrants of the coordinate plane.
- 1.5 Solve problems involving linear functions with integer values; write the equation; and graph the resulting ordered pairs of integers on a grid.

Measurement and Geometry

1.0 Area and Volume

- 1.1 Derive and use the formula for the area of a triangle and of a parallelogram by comparing it with the formula for the area of a rectangle (i.e., two of the same triangles make a parallelogram with twice the area; a parallelogram is compared with a rectangle of the same area by cutting and pasting a right triangle on the parallelogram).
- 1.2 Construct a cube and rectangular box from two-dimensional patterns and use these patterns to compute the surface area for these objects.
- 1.3 Understand the concept of volume and use the appropriate units in common measuring systems (i.e., cubic centimeter [cm^3], cubic meter [m^3], cubic inch [in^3], and cubic yard [yd^3]) to compute the volume of rectangular solids.
- 1.4 Differentiate between, and use appropriate units of measures for, two- and three-dimensional objects (i.e., find the perimeter, area, volume).

2.0 Geometry

- 2.1 Measure, identify, and draw angles, perpendicular and parallel lines, rectangles, and triangles by using appropriate tools (e.g., straightedge, ruler, compass, protractor, drawing software).
- 2.2 Know that the sum of the angles of any triangle is 180° and the sum of the angles of any quadrilateral is 360° and use this information to solve problems.
- 2.3 Visualize and draw two-dimensional views of three-dimensional objects made from rectangular solids.

Statistics, Data Analysis, and Probability

1.0 Data

- 1.1 Know the concepts of mean, median, and mode; computing and comparing simple examples to show that they may differ.
- 1.2 Organize and display single-variable data in appropriate graphs and representations (e.g., histogram, circle graphs)

Home Activities for History–Social Science

Pre-Columbian Settlements

- When traveling with your child, talk about the location of different cities and why the location is ideal or undesirable for a city (e.g., climate, close to water, easy to build houses, etc.)

Early Explorers and Early Explorations of the Americas

- Talk about the distance Christopher Columbus sailed to reach the new world. Get a map of the Atlantic Ocean, and using the legend, find the answer.
- Research tells us that the size of the ship, sailed by Christopher Columbus, was about the same size as an average house. Talk with your child about living on a boat, that small, for months. For fun, spend one day, as a family, inside your house. Talk about how it feels to live in a confined area for a length of time.

Conflict that Existed Among the American Indians and New Settlers

- Read stories or see documentary films about the American Indians. Discuss the treatment of Indians.
- Talk about how the Indians might have felt about a broken treaty. Compare this with the feeling people have when a person breaks a promise.

Causes, Course and Consequences of the American Revolution

- On the Internet, do a search for the American Revolution. Look for pictures of the war, letters written by soldiers, articles about the war, etc. Review this information together.
- As a family talk about why nations go to war. Relate this to children and adults fighting and to crime. Discuss ways of solving problems that do not include violence. As a family, practice solving conflicts without violence.

People and Events Associated with the Development of the U.S. Constitution

- Discuss the different branches of our democratic government and their respective power.
- During an election, talk together about the process and responsibility of voting and why it is important to vote. Show your child the voting materials received through the mail and discuss the different issues.

5.8 Students trace the colonization, immigration, and settlement patterns of the American people from 1789 to the mid-1800s, with emphasis on the role of economic incentives, effects of the physical and political geography, and transportation systems.

1. Discuss the waves of immigrants from Europe between 1789 and 1850 and their modes of transportation into the Ohio and Mississippi Valleys and through the Cumberland Gap (e.g., overland wagons, canals, flatboats, steamboats).
2. Name the states and territories that existed in 1850 and identify their locations and major geographical features (e.g., mountain ranges, principal rivers, dominant plant regions).
3. Demonstrate knowledge of the explorations of the trans-Mississippi West following the Louisiana Purchase (e.g., Meriwether Lewis and William Clark, Zebulon Pike, John Fremont).
4. Discuss the experiences of settlers on the overland trails to the West (e.g., location of the routes; purpose of the journeys; the influence of the terrain, rivers, vegetation, and climate; life in the territories at the end of these trails).
5. Describe the continued migration of Mexican settlers into Mexican territories of the West and Southwest.
6. Relate how and when California, Texas, Oregon, and other western lands became part of the United States, including the significance of the Texas War for Independence and the Mexican-American War.

5.9 Students know the location of the current 50 states and the names of their capitals.

and explain which types of graphs are appropriate for various data sets.

- 1.3 Use fractions and percentages to compare data sets of different sizes.
- 1.4 Identify ordered pairs of data from a graph and interpret the meaning of the data in terms of the situation depicted by the graph.
- 1.5 Know how to write ordered pairs correctly; for example, (x,y) .

Mathematical Reasoning

1.0 Making Decisions about a Problem

- 1.1 Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, sequencing and prioritizing information, and observing patterns.
- 1.2 Determine when and how to break a problem into simpler parts.

2.0 Solve Problems and Justify Reasoning

- 2.1 Use estimation to verify the reasonableness of calculated results.
- 2.2 Apply strategies and results from simpler problems to more complex problems.
- 2.3 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models to explain mathematical reasoning.
- 2.4 Express the solution clearly and logically by using the appropriate mathematical notation and terms, and clear language; supporting solutions with evidence in both verbal and symbolic work.
- 2.5 Indicate the relative advantages of exact and approximate solutions to problems and giving answers to a specified degree of accuracy.
- 2.6 Make precise calculations and check the validity of the results from the context of the problem.

3.0 Make Connections

- 3.1 Evaluate the reasonableness of the solution in the context of the original situation.
- 3.2 Note the method of deriving the solution and demonstrate a conceptual understanding of the derivation by solving similar problems.
- 3.3 Develop generalizations of the results obtained and apply them in other circumstances.

Home Activities for Mathematics

Number Sense

- Invite your child to play number games, such as Domino's, and Racko.
- When shopping, encourage your child real and practical experiences such as weighing fruit, comparing prices, calculating discounts and figuring change.
- Encourage your child make a budget for his/her allowance, then have them keep track of their spending for a month and compare actual spending to their budget.
- Encourage your child plan a trip, including calculating the mileage and cost of gas.
- With your child, find large numbers in daily life (e.g., population signs, elevation signs, lottery) and encourage your child say them.
- Encourage your child to practice making change using large bills and coins.

Algebra and Functions

- Encourage your child to recognize patterns in nature and the world (e.g., leaf patterns, petals of a flower).
- Play "Fill in the Blank" game with your child saying, "4 times what number is 36," and "24 divided by what number is 8?"
- Help your child analyze the phone bill to see how much phone calls cost per minute.
- Model and encourage finding the price per pound, ounce, gram, etc. of items purchased at the grocery store.

Measurement and Geometry

- Together, with your child, plan home improvement projects such as measuring for a book case, finding the area of a room when purchasing floor covering, measuring for new curtains, etc.
- Encourage your child to acquire hobbies that involve measurement (e.g., sewing, cooking, building models, wood working).
- Encourage your child measure various objects using both metric and standard units (e.g., yard and meter for length, quarts and liters for volume).
- When cooking, model and then encourage your child to change the recipe by doubling or halving the amount of each ingredient.

5. Explain how state constitutions that were established after 1776 embodied the ideals of the American Revolution and helped serve as models for the U.S. Constitution.
6. Demonstrate knowledge of the significance of land policies developed under the Continental Congress (e.g., sale of western lands, the Northwest Ordinance of 1787) and those policies' impact on American Indians' land.
7. Understand how the ideals set forth in the Declaration of Independence changed the way people viewed slavery.

5.7 Students describe the people and events associated with the development of the U.S. Constitution and analyze the Constitution's significance as the foundation of the American republic.

1. List the shortcomings of the Articles of Confederation as set forth by their critics.
2. Explain the significance of the new Constitution of 1787, including the struggles over its ratification and the reasons for the addition of the Bill of Rights.
3. Understand the fundamental principles of American constitutional democracy, including how the government derives its power from the people and the primacy of individual liberty.
4. Understand how the Constitution is designed to secure our liberty by both empowering and limiting central government and compare the powers granted to citizens, Congress, the President, and the Supreme Court with those reserved to the states.
5. Discuss the meaning of the American creed that calls on citizens to safeguard the liberty of individual Americans within a unified nation, to respect the rule of law, and to preserve the Constitution.
6. Know the songs that express American ideals (e.g., "America the Beautiful," "The Star Spangled Banner").

6. Describe the introduction of slavery into America, the responses of slave families to their condition, the ongoing struggle between proponents and opponents of slavery, and the gradual institutionalization of slavery in the South.
7. Explain the early democratic ideas and practices that emerged during the colonial period, including the significance of representative assemblies and town meetings.

5.5 Students explain the causes of the American Revolution.

1. Understand how political, religious, and economic ideas and interests brought about the Revolution (e.g., resistance to imperial policy, the Stamp Act, the Townsend Acts, taxes on tea, Coercive Acts).
2. Know the significance of the first and second Continental Congresses and of the Committees of Correspondence.
3. Understand the people and events associated with the drafting and signing of the Declaration of Independence and the document's significance, including the key political concepts it embodies, the origins of those concepts, and its role in severing ties with Great Britain.
4. Describe the views, lives, and impact of key individuals during this period (e.g., King George III, Patrick Henry, Thomas Jefferson, George Washington, Benjamin Franklin, John Adams).

5.6 Students understand the course and consequences of the American Revolution.

1. Identify and map the major military battles, campaigns, and turning points of the Revolutionary War, the roles of the American and British leaders, and the Indian leaders' alliances on both sides.
2. Describe the contributions of France and other nations and of individuals to the outcome of the Revolution (e.g., Benjamin Franklin's negotiations with the French, the French navy, the Treaty of Paris, the Netherlands, Russia, the Marquis Marie Joseph de Lafayette, Tadeusz Kósciuszko, Baron Friedrich Wilhelm von Steuben).
3. Identify the different roles women played during the Revolution (e.g., Abigail Adams, Martha Washington, Molly Pitcher, Phillis Wheatley, Mercy Otis Warren).
4. Understand the personal impact and economic hardship of the war on families, problems of financing the war, wartime inflation, and laws against hoarding goods and materials and profiteering.

Statistics, Data Analysis, and Probability

- Encourage your child keep track of sports statistical data for themselves, favorite sports team, or individual athletes.
- When working on a science project, invite your child collect, record and explain the data.
- Invite your child read periodicals and discuss the graphs/ charts.
- Play card or dice games with your child and mathematically determine the probability of winning, rolling certain numbers, or being dealt certain cards.
- Invite your child to collect data and calculate the average of real-life situations (e.g., amount of time each family member watches T.V.).
- Encourage your child create a growth chart and record his/ her height and weight for one year.

Mathematical Reasoning

- Together play games such as "Connect Four," "Battleship," and "Chess."
- Work together to solve puzzles (e.g., riddles, crossword).
- Include your child in weekly family discussions about the budget.
- Provide your child with responsibilities for caring for a portion of the budget.

State Standards for History–Social Science

United States History and Geography: Making a New Nation

5.1 Students describe the major pre-Columbian settlements, including the cliff dwellers and pueblo people of the desert Southwest, the American Indians of the Pacific Northwest, the nomadic nations of the Great Plains, and the woodland peoples east of the Mississippi River.

1. Describe how geography and climate influenced the way various nations lived and adjusted to the natural environment, including locations of villages, the distinct structures that they built, and how they obtained food, clothing, tools, and utensils.
2. Describe their varied customs and folklore traditions.
3. Explain their varied economies and systems of government.

5.2 Students trace the routes of early explorers and describe the early explorations of the Americas.

1. Describe the entrepreneurial characteristics of early explorers (e.g., Christopher Columbus, Francisco Vázquez de Coronado) and the technological developments that made sea exploration by latitude and longitude possible (e.g., compass, sextant, astrolabe, seaworthy ships, chronometers, gunpowder).
2. Explain the aims, obstacles, and accomplishments of the explorers, sponsors, and leaders of key European expeditions and the reasons Europeans chose to explore and colonize the world (e.g., the Spanish Reconquista, the Protestant Reformation, the Counter Reformation).
3. Trace the routes of the major land explorers of the United States, the distances traveled by explorers, and the Atlantic trade routes that linked Africa, the West Indies, the British colonies, and Europe.
4. Locate on maps of North and South America land claimed by Spain, France, England, Portugal, the Netherlands, Sweden, and Russia.

5.3 Students describe the cooperation and conflict that existed among the American Indians and between the Indian nations and the new settlers.

1. Describe the competition among the English, French, Spanish, Dutch, and Indian nations for control of North America.

2. Describe the cooperation that existed between the colonists and Indians during the 1600s and 1700s (e.g., in agriculture, the fur trade, military alliances, treaties, cultural interchanges).
3. Examine the conflicts before the Revolutionary War (e.g., the Pequot and King Philip's Wars in New England, the Powhatan Wars in Virginia, the French and Indian War).
4. Discuss the role of broken treaties and massacres and the factors that led to the Indians' defeat, including the resistance of Indian nations to encroachments and assimilation (e.g., the story of the Trail of Tears).
5. Describe the internecine Indian conflicts, including the competing claims for control of lands (e.g., actions of the Iroquois, Huron, Lakota [Sioux]).
6. Explain the influence and achievements of significant leaders of the time (e.g., John Marshall, Andrew Jackson, Chief Tecumseh, Chief Logan, Chief John Ross, Sequoyah).

5.4 Students understand the political, religious, social, and economic institutions that evolved in the colonial era.

1. Understand the influence of location and physical setting on the founding of the original 13 colonies, and identify on a map the locations of the colonies and of the American Indian nations already inhabiting these areas.
2. Identify the major individuals and groups responsible for the founding of the various colonies and the reasons for their founding (e.g., John Smith, Virginia; Roger Williams, Rhode Island; William Penn, Pennsylvania; Lord Baltimore, Maryland; William Bradford, Plymouth; John Winthrop, Massachusetts).
3. Describe the religious aspects of the earliest colonies (e.g., Puritanism in Massachusetts, Anglicanism in Virginia, Catholicism in Maryland, Quakerism in Pennsylvania).
4. Identify the significance and leaders of the First Great Awakening, which marked a shift in religious ideas, practices, and allegiances in the colonial period, the growth of religious toleration, and free exercise of religion.
5. Understand how the British colonial period created the basis for the development of political self-government and a free-market economic system and the differences between the British, Spanish, and French colonial systems.