

# THIRD 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](http://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.

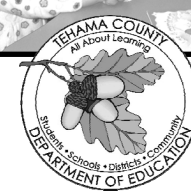
Contact: Heidi Schueller, Assistant Superintendent of Special Programs and Services (530) 528-7248

## **Looking For More?**

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

**[www.tehamaschools.org](http://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



## Earth Sciences

### **Objects in the Sky Move in Regular and Predictable Patterns**

- With your child, look at the night sky, looking for different star patterns. Then have your child look for these same star patterns one week later to see if they are in the same place or have moved. Discuss with your child what he/she observed.
- Place a stick in the ground to measure the sun's shadow. Record the distance of the shadow each month for one year. Discuss why the shadow gets longer or shorter.
- Use a telescope or binoculars to look at the night sky, noting the number of stars that can be seen using these devices.
- Talk with your child about the three forms of matter: solid, liquid, and gas.

### Investigation and Experimentation

#### **Scientific Progress is Made by Asking Meaningful Questions and Conducting Investigations**

- Encourage your child use a:
  1. Thermometer to measure the temperature of air and water.
  2. Yard stick to measure the size of two rooms in the house.
  3. Clock to measure the time it takes to complete something.
  4. Tape measure to measure wood for a project.
  5. Measuring cup to measure ingredients for baking.
- Using the clock, help your child record the time it takes to complete different things (e.g., brushing your teeth, washing dishes, making the bed, running one block, riding the bike around the block, etc.). Next, help your child record this data in an organized manner.

# 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!

## 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

#### **Energy and Matter have Multiple Forms**

- Encourage your child to place a thermometer in the sun and one in the shade. After an hour, have your child read the different temperatures. Talk about the sun's heat as a source of energy.
- Encourage your child to grow two plants. After the plants have leaves, place one plant in a closet, out of the sun, and the other in the sun. Observe the differences. Talk about the sun's effect on plants.
- Talk with your child about atoms and that all matter is made up of atoms. Get a book from the library and read with your child information about atoms.

#### **Light has a Source and Travels in a Direction**

- As a family, use a flashlight and have each member of the family make different "shadow creatures" on the wall. Name the item made.
- We know that light travels in a straight line. Therefore, see if your child can reflect light around corners using mirrors.

### Life Sciences

#### **Adaptations may Improve an Organism's Chance for Survival**

- Encourage your child to care for some plants, learning that a plant needs food, the proper amount of water, and sun light.
- Encourage your child to raise a small animal in a cage (e.g., rat, hamster). After a few weeks or months, have your child change the animal's habitat and watch the animal's reaction. Talk about the new habitat and how the animal adjusted.
- With your child, look in books and/or the internet to discover some of the diverse forms of life in the oceans, deserts, tundra, forests, grasslands, and wetlands.

- b. Differentiate evidence from opinion and know that scientists do not rely on claims or conclusions unless they are backed by observations that can be confirmed.
- c. Use numerical data in describing and comparing objects, events, and measurements.
- d. Predict the outcome of a simple investigation and compare the result with the prediction.
- e. Collect data in an investigation and analyze those data to develop a logical conclusion.

## **State Standards for English Language Arts**

### **Reading**

#### **1.0 Word Analysis, Fluency, and Systematic Vocabulary Development**

- 1.1 Use and understand complex word families when reading to decode unfamiliar words.
- 1.2 Decode regular words with more than one syllable.
- 1.3 Read aloud Third Grade text accurately and with appropriate pacing, intonation, and expression.
- 1.4 Use knowledge of antonyms, synonyms, homophones, and homographs to determine the meaning of words.
- 1.5 Demonstrate their knowledge of relationships among grade appropriate words such as dog/mammal/animal/living things.
- 1.6 Use a sentence and word context to find the meaning of unknown words.
- 1.7 Use a dictionary to learn meanings and other features of unknown words.
- 1.8 Use knowledge of prefixes (e.g., un-, re-, pre-, bi-) and suffixes (e.g., -er, -est, -ful) to find the meaning of words.

#### **2.0 Reading Comprehension**

- 2.1 Use titles, tables of contents, chapter headings, glossaries, and indexes to locate information in text.
- 2.2 Ask questions and support answers by connecting their prior knowledge with information found or inferred from text.
- 2.3 Demonstrate comprehension skills by finding answers to questions in text.
- 2.4 Recall major points in text and make/modify predictions about forthcoming information.
- 2.5 Recall the main idea and supporting details of text.
- 2.6 Locate information from text including problems and solutions.
- 2.7 Follow simple multi-step written instructions (e.g., how to assemble a product or play a game).

#### **3.0 Literary Response and Analysis**

- 3.1 Distinguish common forms of literature such as poetry, drama, fiction, and nonfiction.
- 3.2 Comprehend basic plots of classic fairy tales, myths, folk tales, legends, and fables from around the world.

- 3.3 Determine what characters are like by what they say or do and how the author or illustrator portrays them.
- 3.4 Determine the underlying theme or author's message in text.
- 3.5 Recognize similarities of sounds in words and rhythmic patterns (e.g., alliteration and onomatopoeia) in text.
- 3.6 Identify the speaker or narrator in a selection.

### **Writing**

- 1.1 Create a single paragraph.
- 1.2 Write legibly in cursive or joined italic.
- 1.3 Understand the structure and organization of reference materials (e.g., dictionary, thesaurus).
- 1.4 Revise written documents to improve coherence and logical progression.

### **2.0 Writing Applications**

- 2.1 Write narratives.
- 2.2 Write descriptions that use concrete sensory details to present and support unified impressions of people, places, things, or experiences.
- 2.3 Write personal and formal letters.

### **Written and Oral English Language Conventions**

#### **1.0 Written and Oral English Language Conventions**

- 1.1 Use complete and correct declarative, interrogative, imperative, and exclamatory sentences.
- 1.2 Identify agreement between the subject and verb in a sentence.
- 1.3 Use past, present, and future verb tenses correctly.
- 1.4 Use subjects and verbs correctly in speaking and writing.
- 1.5 Punctuate dates, city and state, and titles of books correctly.
- 1.6 Use commas in dates, locations, addresses, and for items in a series.
- 1.7 Capitalize proper nouns correctly (e.g., geographical names, holidays, historical periods, special events).
- 1.8 Spell one-syllable words correctly.
- 1.9 Arrange words in alphabetical order.

- b. Know examples of diverse life forms in different environments, such as oceans, deserts, tundra, forests, grasslands, and wetlands.
- c. Know that living things cause changes in the environment in which they live: some of these changes are detrimental to the organism or other organisms, and some are beneficial.
- d. Know that when the environment changes, some plants and animals survive and reproduce; others die or move to new locations.
- e. Know that some kinds of organisms that once lived on Earth have completely disappeared and that some of those resembled others that are alive today.

### **Earth Sciences**

#### **4. Objects in the sky move in regular and predictable patterns.**

- a. Know the patterns of stars stay the same, although they appear to move across the sky nightly, and different stars can be seen in different seasons.
- b. Know the way in which the Moon's appearance changes during the four-week lunar cycle.
- c. Know that telescopes magnify the appearance of some distant objects in the sky, including the Moon and the planets. The number of stars that can be seen through telescopes is dramatically greater than the number that can be seen by the unaided eye.
- d. Know that the Earth is one of several planets that orbit the Sun and that the Moon orbits Earth.
- e. Know that the position of the Sun in the sky changes during the course of the day and from season to season.

### **Investigation and Experimentation**

#### **5. Scientific progress is made by asking meaningful questions and conducting careful investigations.**

- a. Repeat observations to improve accuracy and know that the results of similar scientific investigations seldom turn out exactly the same because of differences in the things being investigated, methods being used, or uncertainty in the observation.

## State Standards for Science

### Physical Sciences

1. **Energy and matter have multiple forms and can be changed from one form to another.**
  - a. Know that energy comes from the Sun to Earth in the form of light.
  - b. Know that sources of stored energy take many forms, such as food, fuel, and batteries.
  - c. Know that machines and living things convert stored energy to motion and heat.
  - d. Know that energy can be carried from one place to another by waves, such as water waves and sound waves, by electric current, and by moving objects.
  - e. Know that matter has three forms: solid, liquid, and gas.
  - f. Know that evaporation and melting are changes that occur when the objects are heated.
  - g. Know that when two or more substances are combined, a new substance may be formed with properties that are different from those of the original materials.
  - h. Know that all matter is made of small particles called atoms, too small to see with the naked eye.
  - i. Know that people once thought that earth, wind, fire, and water were the basic elements that made up all matter. Science experiments show that there are more than 100 different types of atoms, which are presented on the periodic table of the elements.
2. **Light has a source and travels in a direction.**
  - a. Know that sunlight can be blocked to create shadows.
  - b. Know that light is reflected from mirrors and other surfaces.
  - c. Know the color of light striking an object affects the way the object is seen.
  - d. Know that an object is seen when light traveling from the object enters the eye.

### Life Sciences

3. **Adaptations in physical structure or behavior may improve an organism's chance for survival.**
  - a. Know that plants and animals have structures that serve different functions in growth, survival, and reproduction.

### Listening and Speaking

#### **1.0 Listening and Speaking Strategies**

- 1.1 Determine the purpose or purposes for listening (e.g., to obtain information, report to class).
- 1.2 Ask for clarification & explanation of stories & ideas.
- 1.3 Paraphrase information that has been shared orally by others.
- 1.4 Give & follow three- and four-step oral directions.
- 1.5 Organize presentations that maintain a clear focus.
- 1.6 Speak clearly & at an appropriate pace for the type of communication (e.g., informal discussion, report to class).

#### **2.0 Speaking Applications**

- 2.1 Make brief narrative presentations.
- 2.2 Plan and present dramatic interpretations of experiences, stories, poems, or plays with clear diction, pitch, tempo, and tone.
- 2.3 Make presentations that use sensory details that set forth unified impressions of people, places, things, or experiences.

## Activities for Language Arts

### Reading

- Have your child read aloud each night.
- Visit a library/book store together.
- Read to your child.
- Read in front of your child, modeling the importance of reading.

### Reading Comprehension

- Have family discussions about things read, including book reviews, discussions about various characters in a story, etc.
- Invite your child to follow a set of directions such as a recipe, assembling something, building a model, scavenger hunt, etc.
- After reading a story, invite your child to: (1) tell the story in order, 2) tell you a different ending to the story and tell why this ending is possible, and (3) read only half of another story and have your child make up the ending.

### **Writing**

- In a journal, invite your child write a minimum of two sentences about important or daily events.
- Encourage your child to write thank you notes for presents received, good deeds, etc.
- Encourage your child to write letters to a pen pal.
- Encourage your child to write down phone messages.
- Encourage your child to write and answer email messages.

### **Written and Oral English Language Conventions**

- Play word games together such as Scrabble, Probe, Scattergories, Pictionary, etc.
- Look at a newspaper together and highlight nouns and verbs.
- Encourage your child to make up a story and tell it to the rest of the family.
- Model proper language usage.

### **Listening and Speaking**

- Invite your child to give oral directions to another member of the family.
- Invite your child to recite a poem.
- Encourage your child to discuss the days events at school.
- Sing a song with your child and/or sing along with a tape/ CD.

- To practice making change, give your child some money to purchase an item from the store. At home, together review the total price and the amount given to the store clerk. Count the correct change together.
- Allow your child to earn money by doing chores around the house. Help him/her learn that working on a job results in a paycheck.
- Look at an old local newspaper and notice the prices of different items 20 years ago, 50 years ago, 75 years ago. Talk with your child about why prices have changed.

## **Home Activities for History–Social Science**

### **Physical and Human Geography**

- Take a family trip, crossing county lines, and discuss the topographical and environmental differences including the differences when in the mountains, the foothills, along the valley floor, and by a river.
- When traveling, point out how humans have modified the land for their benefit (e.g., building a dam for water storage and generating power).

### **American Indian Nations in the Local Region**

- Read a story, with your child, about the American Indians who lived in your county, learning how the Indians built their homes, raised their food, etc.
- Using the information learned, help your child build a model of an Indian home or other structure.

### **Local Historical Events and How a Settlement left its Mark on the Land**

- Engage in conversation with your child about how life has changed in the county during his/her life span.
- As a family, visit different historical sites in the county. Learn about each site. Encourage your child to make a poster encouraging others to visit that historical site.

### **Rules and Laws and the Basic Structure of the U.S. Government**

- With your child, make a chart showing how an idea is developed, revised, and then moved through the governmental structure before becoming a law.
- Look on the Internet and find the variety of bills that are voted on by Congress in one day, one week, one month.
- With your child, watch CSPAN, observing the Senate in action as Senators vote on a bill. Discuss observations with your child.

### **Economic Reasoning and the Economy of the Local Region**

- Help your child learn how to count the correct amount of change when purchasing an object.

## **State Standards for Mathematics**

### **Number Sense**

#### **1.0 Place Value**

- 1.1 Count, read, and write whole numbers to 10,000.
- 1.2 Compare and order whole numbers to 10,000.
- 1.3 Identify the place value for each digit in numbers to 10,000.
- 1.4 Round off numbers to 10,000 to the nearest ten, hundred, and thousand.
- 1.5 Use expanded notation to represent numbers (e.g.,  $3,206 = 3,000 + 200 + 6$ ).

#### **2.0 Computation**

- 2.1 Find the sum or difference of two whole numbers between 0 and 10,000.
- 2.2 Memorize multiplication tables from 1 to 10.
- 2.3 Use the inverse relationship of multiplication and division to compute and check results.
- 2.4 Solve multiplication problems when multiplying by one-digit numbers.
- 2.5 Solve division problems when dividing by a one-digit number with no remainder.
- 2.6 Understand the special properties of 0 and 1 in multiplication and division.
- 2.7 Determine the unit cost when given the total cost and number of units.
- 2.8 Solve problems that require two or more of the skills mentioned above.

#### **3.0 Fractions and Decimals**

- 3.1 Compare equivalent fractions using drawings or concrete materials.
- 3.2 Add and subtract simple fractions.
- 3.3 Solve problems involving addition, subtraction, multiplication, and division of money amounts.
- 3.4 Understand that fractions and decimals are two different representations of the same concept (e.g., 50 cents is  $\frac{1}{2}$  of a dollar).

## **Algebra and Functions**

### **1.0 Number Sentences**

- 1.1 Represent relationships of quantities in the form of mathematical expressions, equations, or inequalities.
- 1.2 Solve problems involving numeric equations or inequalities.
- 1.3 Select the appropriate operation to make an expression true (e.g.,  $4 \times 3 = 12$ ).
- 1.4 Express simple unit conversions in symbolic form (e.g., in. = \_\_\_ feet x 12).
- 1.5 Recognize and use the commutative and associative properties of multiplication (e.g., if  $5 \times 7 \times 3 = 105$ , then what is  $7 \times 3 \times 5$ ?).

### **2.0 Functional Relationships**

- 2.1 Solve simple problems involving a functional relationship between two quantities (e.g., find the total cost of multiple items given the cost per unit).
- 2.2 Extend and recognize a linear pattern.

## **Measurement and Geometry**

### **1.0 Measurement**

- 1.1 Choose the appropriate tools and units (metric and U.S.) and estimating and measuring the length, liquid volume, and weight/mass of given objects.
- 1.2 Estimate or determine the area and volume of solid figures by covering them with squares or by counting the number of cubes that would fill them.
- 1.3 Find the perimeter of a polygon with integer sides.
- 1.4 Carry out simple unit conversions within a system of measurement (e.g., centimeters and meters, hours and minutes).

### **2.0 Geometry**

- 2.1 Identify, describe, and classify polygons.
- 2.2 Identify attributes of triangles (e.g., two equal sides for the isosceles triangle).
- 2.3 Identify attributes of quadrilaterals (e.g., parallel sides for the parallelogram, right angles for the rectangle).
- 2.4 Identify right angles in geometric figures or in appropriate objects and determine whether other angles are greater or less than a right angle.
- 2.5 Identify, describe, and classify common three-dimensional geometric objects (e.g., cube, rectangular solid, sphere, prism, pyramid, cone, cylinder).

3. Trace why their community was established, how individuals and families contributed to its founding and development, and how the community has changed over time, drawing on maps, photographs, oral histories, letters, newspapers, and other primary sources.

### **3.4 Students understand the role of rules and laws in our daily lives and the basic structure of the U.S. government.**

1. Determine the reasons for rules, laws, and the U.S. Constitution; the role of citizenship in the promotion of rules and laws; and the consequences for people who violate rules and laws.
2. Discuss the importance of public virtue and the role of citizens, including how to participate in a classroom, in the community, and in civic life.
3. Know the histories of important local and national landmarks, symbols, and essential documents that create a sense of community among citizens and exemplify cherished ideals (e.g., the U.S. flag, the bald eagle, the Statue of Liberty, the U.S. Constitution, the Declaration of Independence, the U.S. Capitol).
4. Understand the three branches of government, with an emphasis on local government.
5. Describe the ways in which California, the other states, and sovereign American Indian tribes contribute to the making of our nation and participate in the federal system of government.
6. Describe the lives of American heroes who took risks to secure our freedoms (e.g., Anne Hutchinson, Benjamin Franklin, Thomas Jefferson, Abraham Lincoln, Frederick Douglass, Harriet Tubman, Martin Luther King, Jr.).

### **3.5 Students demonstrate basic economic reasoning skills and an understanding of the economy of the local region.**

1. Describe the ways in which local producers have used and are using natural resources, human resources, and capital resources to produce goods and services in the past and the present.
2. Understand that some goods are made locally, some elsewhere in the United States, and some abroad.
3. Understand that individual economic choices involve trade-offs and the evaluation of benefits and costs.
4. Discuss the relationship of students' "work" in school and their personal human capital.

## **State Standards for History–Social Science**

### **Continuity and Change**

#### **3.1 Students describe the physical and human geography and use maps, tables, graphs, photographs, and charts to organize information about people, places, and environments in a spatial context.**

1. Identify geographical features in their local region (e.g., deserts, mountains, valleys, hills, coastal areas, oceans, lakes).
2. Trace the ways in which people have used the resources of the local region and modified the physical environment (e.g., a dam constructed upstream changed a river or coastline).

#### **3.2 Students describe the American Indian nations in their local region long ago and in the recent past.**

1. Describe national identities, religious beliefs, customs, and various folklore traditions.
2. Discuss the ways in which physical geography, including climate, influenced how the local Indian nations adapted to their natural environment (e.g., how they obtained food, clothing, tools).
3. Describe the economy and systems of government, particularly those with tribal constitutions, and their relationship to federal and state governments.
4. Discuss the interaction of new settlers with the already established Indians of the region.

#### **3.3 Students draw from historical and community resources to organize the sequence of local historical events and describe how each period of settlement left its mark on the land.**

1. Research the explorers who visited here, the newcomers who settled here, and the people who continue to come to the region, including their cultural and religious traditions and contributions.
2. Describe the economies established by settlers and their influence on the present-day economy, with emphasis on the importance of private property and entrepreneurship.

- 2.6 Identify common solid objects that are the components needed to make a more complex solid object.

### **Statistics, Data Analysis, and Probability**

#### **1.0 Data**

- 1.1 Identify whether common events are certain, likely, unlikely, or improbable.
- 1.2 Record the possible outcomes for a simple event (e.g., tossing a coin) and systematically keeping track of the outcomes when the event is repeated many times.
- 1.3 Summarize and display the results of probability experiments in a clear and organized way (e.g., using a bar graph).
- 1.4 Use the results of probability experiments to predict future events).

### **Mathematical Reasoning**

#### **1.0 Make 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, 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 (e.g., words, numbers, symbols) to explain mathematical reasoning.
- 2.4 Express the solution clearly and logically.
- 2.5 Indicate the relative advantages of exact and approximate solutions to problems.
- 2.6 Make precise calculations and check the validity of the results.

#### **3.0 Make Connections**

- 3.1 Evaluate the reasonableness of the solution.
- 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**

- Encourage your child to play card games and/or computer games that involve numbers.
- When shopping, have your child estimate the price of the grocery items by rounding off each price and adding.
- Help your child make a budget for his/her allowance.
- Provide your child opportunities to make change for more than \$1.00.

### **Algebra and Functions**

- Ask your child questions such as, "I have 3 coins in my hand. How many more coins do I need to have 12 coins?"
- With your child, play "Fill in the Blank" game saying, "3 plus what number is 9" or 7 subtract what number is 2?"

### **Measurement and Geometry**

- Encourage your child to help bake from a recipe. Talk about the different ways to measure ingredients and how to double a recipe.
- Create a growth chart of your child's height and weight for one year. Have your child read the different entries on the chart.
- Encourage your child to identify different shapes in nature, in the community, and in the kitchen.
- When grocery shopping, talk to your child about measures by reading the weight on cans, cereal boxes, etc.
- Encourage your child to practice telling time to the nearest minute using both a digital and analog clock.

### **Statistics, Data Analysis, and Probability**

- Have your child record the statistics (e.g., win/loss record, points scored) of his/her favorite team or player on a chart and draw conclusions from the information.
- Have your child keep track of the weather (e.g., high and low temperatures, wind speed) for one week and record the information on a table. Have the child interpret the table to another member of the family.
- Play dice games such as "Yahtzee" with your child and discuss the probability of winning.

### **Mathematical Reasoning**

- Have your child plan a party, including the guest list, order of activities, and cost for refreshments.
- Play games such as "Connect Four" and "Battleship" with your child.
- Plan a garden with your child, making a drawing of the location of each plant.
- Work jigsaw puzzles with your child and the rest of the family.