FOURTH GRADE
CONTENT STANDARDS

Parent Handbook

Sacramento Diocese
of
Catholic Schools

Content Standards for

FOURTH GRADE

Why Content Standards?

With the adoption of content standards, California is stating–explicitly–the content that students need to acquire at each grade level from Kindergarten through grade twelve. With student mastery of this content, schools will be equal to those in the best educational systems in other states and nations.

How to Improve Student Performance?

Strong performance on standardized tests is an increasingly important part of life for all students. Access to higher education, most specialized employment licenses, and many public and private occupational opportunities depend on acceptable performance of one form or another on standardized tests.

The goal is to focus instruction on Standards, coordinate instruction between classrooms, and use common student assessments. These must emphasize both the content and assessment format students may face in the future in order to significantly increase student learning and student achievement on formal and informal assessments.

Goals for your Child's Education

Research has proven that student learning and overall productivity increases with the implementation of a Standards-based educational system. Standards define the curriculum for each grade level, a curriculum that is coordinated from grade level to grade level and one that identifies the level of instruction appropriate for each grade. As teachers and parents understand the curriculum expectations at a specific grade level, they can provide the type of learning experiences that will allow the student successful achievement in all Standards.

How to Use this Parent Handbook

Use this handbook as a guide to your child's education in Fourth Grade by:

- Reading the Standards your child should learn during the year.
- Helping your child learn the different Standards by doing the suggested Home Activities and providing instruction when your child is having trouble with his/her homework.
- Tracking your child's progress during the year using the "Student Progress Chart" found in this document.
- Taking this Handbook to your child's parent/teacher conference. At this time, compare the teacher's Student Progress Chart with your own chart, and discuss the Standards that the child needs to master.

Parent Handbook Components

This document contains:

- Fourth Grade Standards for Religion, Language Arts, Mathematics, History–Social Science and Science
- Home Atmosphere Suggestions for improved student performance
- Home Activities for Language Arts, Mathematics, History–Social Science and Science
- Student Tracking Forms to show student progress throughout the year

RELIGION STANDARDS
Grade Four

THEME:

The focus is on morality. God's people are called throughout history to new life. This life is marked by personal response to God, through fidelity to the commandments, beatitudes, and acts of love and service.

OBJECTIVES:

A. To develop an understanding of the Christian way of life.
B. To assist the child in developing concepts of right and wrong within the context of Christian response to God's call.
C. To assist the child in an appreciation of the Sacraments of Reconciliation.

1.0 MESSAGE: God's relationship with God's people is based on unconditional love.

1.1 God

1.1.1 To appreciate God as loving Creator.
1.1.2 To realize that God is not the creator of evil and sin in the world.
1.1.3 To come to know Jesus as the sign of God's eternal, loving covenant with humanity.
1.1.4 To understand that the Holy Spirit is God's ever present force in human history.
1.1.5 To reinforce Jesus' peace and forgiveness.
1.1.6 To understand Jesus' death and resurrection.

1.2 Scripture

1.2.1 To learn the nature of covenant relationship through the study of creation, Noah, Abraham and Sarah, Exodus, and Sinai Covenant.
1.2.2 To guide students to an understanding of broken human covenants (the Fall, Cain and Abel, the Flood, Tower of Babel, Captivity).
1.2.3 To learn of God's constant call to reconciliation (Noah, Covenant, Moses, Sinai).
1.2.4 To understand Jesus as God's New Creation (New Covenant, Great Commandment).
1.2.5 To realize that Jesus gives us a new way of life (Beatitudes, Admonition to Love, Farewell Discourse).
1.2.6 To lead students to a Christian response in reconciliation (Lost Sheep, Sinful Woman).
1.2.7 To learn that the Bible is divided into chapter and verse.

1.3 Doctrine

1.3.1 To learn of the eternal mercy of God.
1.3.2 To learn that we are called to respond to God's unconditional love.
1.3.3 To learn that we are part of the Body of Christ.

2.0 WORSHIP: Liturgy and prayer are a response to the New Covenant.

2.1 Sacraments

2.1.1 To emphasize the Sacraments of Reconciliation and Eucharist.

2.2 Prayer

2.2.1 To know the following prayers: (1); Sign of the Cross; (2) Grace before and after meals; (3) Lord's Prayer; (4) Act of Contrition; (5) Hail Mary; (6) Creed; (7) Doxology (Glory to the Father.)

2.2.2 To learn the Prayer of St. Francis.

2.2.3 To learn the Acts of Faith, Hope, and Love.

2.2.4 To learn the Prayer of the Holy Spirit.

2.2.5 To compose simple prayers and petitions.

2.2.6 To have the opportunity to participate in a variety of prayer forms such as spontaneous prayer, guided meditation, gestures, song, and dance.

2.3 Liturgy

2.3.1` To understand Liturgy of the Word as God's call and our response.

2.3.2 To reinforce Eucharist as a sign of God's eternal covenant.

2.3.3 To have opportunities to plan a class liturgy.
2.3.4 To have opportunities to plan and participate in a liturgy of Reconciliation.
2.3.5 To reinforce the prayers of the Eucharistic liturgy.

2.4 Liturgical Year

2.4.1 To appreciate the Church's cycle of readings through daily readings.
2.4.2 To celebrate the seasons and solemnities of the Church year:

Advent	Passover	Christmas	
Easter	Epiphany	Ascension Thursday	Pentecost
Lent	Ash Wednesday		
Corpus Christi	Holy Week	Passion Sunday	Ordinary Time

2.5 Feast Days

2.51 To celebrate in liturgy and environment the Holy Days of Obligation which fall during the school year.
2.52 To celebrate the feast days of Mary and various saints.

2.6 Traditions

2.6.1 To further understand rituals and traditions of the Catholic Church, especially those related to Hebrew Scripture covenants.
2.6.2 To recognize patron saints as personal models of faith.
2.6.3 To experience a variety of Marian devotions.

3.0 <u>MORALITY</u>: There are laws, rules, and guidelines for behavior.

3.1 To learn of the importance of Christian healing and compassion.
3.2 To learn that God gave us feelings for a good purpose.
3.3 To learn about how to choose to act on our feelings.
3.4 To learn appropriate expressions for emotions.
3.5 To reinforce the Sacrament of Reconciliation for forgiveness in wrong choices.
3.6 To learn that the commandments help us to grow with God and others.
3.7 To learn that it is not fair to be unkind to others because of their race, sex, religion or handicap**.**

4.0 <u>CATHOLIC SOCIAL TEACHING</u>: Our call and responsibility is to serve others.

4.1 Justice

4.1.1 To understand that we are all called to be God's stewards over creation.
4.1.2 To become aware of our stewardship through various appropriate environmental activities.
4.1.3 To know that as followers of Jesus we are called to work for what is right and just.

4.2 Peace

4.2.1 To reinforce through action the Spiritual and Corporal Works of Mercy.
4.2.2 To learn about individual Christian role models who have dedicated their lives in service to God within the Church and society.
4.2.3 To practice conflict resolution skills.

4.3 Local Needs

4.3.1 To reinforce love in action by participation in local and global service.

5.0 <u>COMMUNITY</u>: The Church community plays an active role in local, national,

and global activities.

5.1 Models of Church

5.1.1 To understand that the Church is called to be a sign of reconciliation to the world.

5.1.2 To understand that Jesus' love is manifested in the Eucharist - His gift to us.

5.1.3 To recognize that the Church is a sign of the New Covenant.

5.1.4 To recognize that the Church acts as servant and as communion with God.

5.2 Church History

5.2.1 To learn that Christian response is love in action.

5.2.2 To learn that Christians are a people of reconciliation.

5.2.3 To learn and appreciate our place in the communion of saints.

5.2.4 To understand the saints as Christian role models.

5.2.5 To appreciate Mary as the greatest of all saints.

6.0 <u>FAMILY LIFE</u>: Understanding how human life begins and matures.

6.1 Human Dignity

6.1.1 To understand the importance of family relationships.

6.1.2 To be able to understand the guidelines for decision making.

6.1.3 To realize that the human body is made up of many systems.

6.1.4 To learn and appreciate the human life cycle.

6.1.5 To appreciate our responsibility to care for our health.

6.1.6 To understand personal ownership over one's body and the right to say "no".

6.1.7 To understand that it is natural to have special feelings for people we like.

7.0 <u>TERMINOLOGY:</u>

absolution	compassion
Annunciation	conversion
Ascension	covenant
Beatitudes	Corporal Works of Mercy
commandments	examination of conscience
grace	reconciliation
gifts of the Spirit	new covenant
hospitality	sabbath
mercy	sacramentals
ministry	sin
prophets	Spiritual Works of Mercy

8.0 <u>SCRIPTURE REFERENCES</u> to be used to develop the themes of the religion standards.

Genesis 1-2	Creation story
Genesis 3	First sin
Genesis 4: 1-16	Cain and Abel
Genesis 9: 1-17	Covenant with Noah
Genesis 15	Covenant with Abram (Abraham)
Exodus 20: 1-17	The Ten Commandments

Exodus 24: 1-11	God seals the covenant with Israel
Deuteronomy 26: 16-19	Moses speaks about the covenant
Jeremiah 31: 31-34	Promise of a new covenant
Psalm 119: 1-8	Prayer to God the lawgiver
John 13: 43-35	The New Covenant
Matthew 5: 1-12	Sermon on the Mount/Beatitudes
Luke 15: 11-31	The Prodigal Son
1 John 4: 19-21	God's love and Christian life
1 Corinthians 12: 4-11	Spiritual gifts
2 Corinthians 6: 16-18	Temples of God

LANGUAGE ARTS STANDARDS

Grade Four

Reading

1.0 Word Analysis, Fluency, and Systematic Vocabulary Development

Students understand the basic features of reading. They select letter patterns and know how to translate them into spoken language by using phonics, syllabication, and word parts. They apply this knowledge to achieve fluent oral and silent reading.

By the end of fourth grade, your child will:

1.1 Read narrative and expository text aloud with grade-appropriate fluency and accuracy and with appropriate pacing, intonation, and expression.

1.2 Apply knowledge of word origins, derivations, synonyms, antonyms, and idioms to determine the meaning of words and phrases.

1.3 Use knowledge of root words to determine the meaning of unknown words within a passage.

1.4 Know common roots and affixes derived from Greek and Latin and use this knowledge to analyze the meaning of complex words (e.g., international).

1.5 Use a thesaurus to determine related words and concepts.

1.6 Distinguish and interpret words with multiple meanings.

2.0 Reading Comprehension

Students read and understand grade-level-appropriate material, including grade-level Bibles. They draw upon a variety of comprehension strategies as needed (e.g., generating and responding to essential questions, making predictions, comparing information from several sources). In addition to their regular school reading, students read one-half million words annually, including a good representation of grade-level-appropriate narrative and expository text (e.g., classic and contemporary literature, magazines, newspapers, online information).

By the end of fourth grade, your child will:

2.1 Identify structural patterns found in informational text (e.g., compare and contrast, cause and effect, sequential or chronological order, proposition and support) to strengthen comprehension.
2.2 Use appropriate strategies when reading for different purposes (e.g., full comprehension, location of information, personal enjoyment).
2.3 Make and confirm predictions about text by using prior knowledge and ideas presented in the text itself, including illustrations, titles, topic sentences, important words, and foreshadowing clues.
2.4 Evaluate new information and hypotheses by testing them against known information and ideas.
2.5 Compare and contrast information on the same topic after reading several passages or articles.
2.6 Distinguish between cause and effect and between fact and opinion in expository text.
2.7 Follow multiple-step instructions in a basic technical manual (e.g., how to use computer commands or video games).

3.0 Literary Response and Analysis

Students read and respond to a wide variety of significant works of children's literature and the Bible. They distinguish between the structural features of the text and the literary terms or elements (e.g., theme, plot, setting, characters).

By the end of fourth grade, your child will

3.1 Describe the structural differences of various imaginative forms of literature, including fantasies, fables, myths, legends, and fairy tales.
3.2 Identify the main events of the plot, their causes, and the influence of each event on future actions.
3.3 Use knowledge of the situation and setting and of a character's traits and motivations to determine the causes for that character's actions.
3.4 Compare and contrast tales from different cultures by tracing the exploits of one character type and develop theories to account for similar tales in diverse cultures (e.g., trickster tales).
3.5 Define figurative language (e.g., simile, metaphor, hyperbole, personification) and identify its use in literary works.

Writing

1.0 Writing Strategies

Students write clear, coherent sentences and paragraphs that develop a central idea. Their writing shows they consider the audience and purpose. Students progress through the stages of the writing process (e.g., prewriting, drafting, revising, editing successive versions).

By the end of fourth grade, your child will

1.1 Select a focus, an organizational structure, and a point of view based upon purpose, audience, length, and format requirements.

1.2 Create multiple-paragraph compositions:
   a. Provide an introductory paragraph.
   b. Establish and support a central idea with a topic sentence at or near the beginning of the first paragraph.
   c. Include supporting paragraphs with simple facts, details, and explanations.
   d. Conclude with a paragraph that summarizes the points.
   e. Use correct indention.

1.3 Use traditional structures for conveying information (e.g., chronological order, cause and effect, similarity and difference, and posing and answering a question).

1.4 Write fluidly and legibly in cursive or joined italic.

1.5 Quote or paraphrase information sources, citing them appropriately.

1.6 Locate information in reference texts by using organizational features (e.g., prefaces, appendixes).

1.7 Use various reference materials (e.g., dictionary, thesaurus, card catalog, encyclopedia, online information) as an aid to writing.

1.8 Understand the organization of almanacs, newspapers, and periodicals and how to use those print materials.

1.9 Demonstrate basic keyboarding skills and familiarity with computer terminology (e.g., cursor, software, memory, disk drive, hard drive).

1.10 Edit and revise selected drafts in improve coherence and progression by adding, deleting, consolidating, and rearranging text.

2.0 Writing Applications (Genres and Their Characteristics)

Students write compositions that describe and explain familiar objects, events, and Christian experiences. Student writing demonstrates a command of standard American English and the drafting, research, and organizational strategies outlined in Writing Standard 1.0.

Using the writing strategies of grade four outlined in Writing Standard 1.0, students:

2.1 Write narratives:
   a. Relate ideas, observations, or recollections of an event or experience.
   b. Provide a context to enable the reader to imagine the world of the event or experience.
   c. Use concrete sensory details.
   d. Provide insight into why the selected event or experience is memorable.

2.2 Write responses to literature and the Bible:
   a. Demonstrate an understanding of the literary work.
   b. Support judgments through references to both the text and prior knowledge.
2.3 Write information reports:
   a. Frame a central question about an issue or situation.
   b. Include facts and details for focus.
   c. Draw from more than one source of information (e.g., speakers, books, newspapers, other media sources).
2.4 Write summaries that contain the main ideas of the reading selection and the most significant details.
2.5 Write a Church petition.

Written and Oral English Language Conventions

The standard for written and oral English language conventions have been placed between those for writing and for listening and speaking because these conventions are essential to both sets of skills.

1.0 Written and Oral English Language Conventions

Students write and speak with a command of Standard English conventions appropriate to this grade level.

1.1 Use simple and compound sentences in writing and speaking.
1.2 Combine short, related sentences with appositives, participial phrases, adjectives, adverbs, and prepositional phrases.
1.3 Identify and use regular and irregular verbs, adverbs, prepositions, and coordinating conjunctions in writing and speaking.
1.4 Use parentheses, commas in direct quotations, and apostrophes in the possessive case of nouns and in contractions.
1.5 Use underlining, quotation marks, or italics to identify titles of documents.
1.6 Capitalize names of magazines, newspapers, works of art, musical compositions, organizations, and the first word in quotations when appropriate.
1.7 Spell correctly roots, inflections, suffixes and prefixes, and syllable constructions.

Listening and Speaking

1.0 Listening and Speaking Strategies

Students listen critically and respond appropriately to oral communication. They speak in a manner that guides the listener to understand important ideas by using proper phrasing, pitch, and modulation.

1.1 Ask thoughtful questions and respond to relevant questions with appropriate elaboration in oral settings.
1.2 Summarize major ideas and supporting evidence presented in spoken messages and formal presentations.
1.3 Identify how language usages (e.g., sayings, expressions) reflect regions and cultures.
1.4 Give precise directions and instructions.
1.5 Present effective introductions and conclusions that guide and inform the listener's understanding of important ideas and evidence.
1.6 Use traditional structures for conveying information (e.g., cause and effect, similarity and difference, and posing and answering a question).
1.7 Emphasize points in ways that help the listener or viewer to follow important ideas and concepts.
1.8 Use details, examples, anecdotes, or experiences to explain or clarify information.
1.9 Use volume, pitch, phrasing, pace, modulation, and gestures appropriately to enhance meaning.
1.10 Evaluate the role of the media in focusing attention on events and in forming opinions on issues.
1.11 Weigh media against religious standards taught.

2.0 Speaking Applications (Genres and Their Characteristics)

Students deliver brief recitations and oral presentations about familiar experiences or interests that are organized around a coherent thesis statement. Student speaking demonstrates a command of standard American English and the organizational and delivery strategies outlined in Listening and Speaking Standard 1.0.

Using the speaking strategies of grade four, outlined in Listening and Speaking Standard 1.0, students:

2.1 Make narrative presentations:
   a. Relate ideas, observations, or recollections about an event or experience.
   b. Provide a context that enables the listener to imagine the circumstances of the event or experience.
   c. Provide insight into why the selected event or experience is memorable.
2.2 Make informational presentations:
   a. Frame a key question.
   b. Include facts and details that help listeners to focus.
   c. Incorporate more than one source of information (e.g., speakers, books, newspapers, television or radio reports).

2.3 Deliver oral summaries of articles and books that contain the main ideas of the event or article and the most significant details.
2.4 Recite brief poems (i.e., two or three stanzas), soliloquies, or dramatic dialogues, using clear diction, tempo, volume, and phrasing.
2.5 Read in Mass or present a Mass reading in class.

MATHEMATICS STANDARDS

Grade Four

Number Sense

1.0 Place Value

By the end of Fourth Grade, your child will:

1.1 Read and write whole numbers to millions.
1.2 Order and compare whole numbers and decimals to two decimal places.
1.3 Round whole numbers through the millions.
1.4 Decide/explain when a rounded solution is appropriate.
1.5 Explain different interpretations of fractions (e.g., parts of a whole, parts of a set, and division of whole numbers).
1.6 Write tenths and hundredths in decimal and fraction notations and know the fraction and decimal equivalents for halves and fourths (e.g., 1/2 = 0.5 or .50; 7/4 = 1 3/4 = 1.75).
1.7 Write the fraction represented by a drawing of parts of a figure; represent a given fraction by using drawings; and relate a fraction to a simple decimal on a number line.
1.8 Use concepts of negative numbers.
1.9 Identify, on a number line, the relative position of positive fractions, positive mixed numbers, and positive decimals to two decimal places.

2.0 Computation - Decimals

By the end of Fourth Grade, your child will:

2.1 Estimate and compute the sum or difference of whole numbers and positive decimals to two places.
2.2 Round two-place decimals to one decimal or the nearest whole number and judge the reasonableness of the rounded answer.

3.0 Computation - Whole Numbers

By the end of Fourth Grade, your child will:

3.1 Solve addition and subtraction problems with multidigit numbers.

3.2 Demonstrate an understanding of, and the ability to use, standard algorithms for multiplying a multidigit number by a two-digit number and for dividing a multidigit number by a one-digit number; use relationships between them to simplify computations and to check results.
3.3 Solve problems involving multiplication of multidigit numbers by two-digit numbers.
3.4 Solve problems involving division of multidigit numbers by one-digit numbers.

4.0 Factoring

By the end of Fourth Grade, your child will:

4.1 Understand that many whole numbers break down in different ways (e.g., 12 = 4 x 3 = 2 x 6 = 2 x 2 x 3).

4.2 Know that numbers such as 2, 3, 5, 7, and 11 do not have any factors except 1 and themselves and that such numbers are called prime numbers.

Algebra and Functions

1.0 Number Sentences

By the end of Fourth Grade, your child will:

1.1 Use letters, boxes, or other symbols to stand for any number in simple expressions or equations (e.g., demonstrating an understanding and the use of the concept of a variable).

1.2 Interpret and evaluate mathematical expressions that now use parentheses.

1.3 Use parentheses to indicate which operation to perform first when writing expressions containing more than two terms and different operations.

1.4 Use and interpret formulas (e.g., area = length x width or A = *lw)* to answer questions about quantities and their relationships.

1.5 Understand that an equation such as $y = 3x + 5$ is a prescription for determining a second number when a first number is given.

2.0 Manipulate Equations

By the end of Fourth Grade, your child will:

2.1 Know equals added to equals are equal.

2.2 Know equals multiplied by equals are equal.

Measurement and Geometry

1.0 Area and Perimeter

By the end of Fourth Grade, your child will:

1.1 Measure the area of rectangular shapes by using appropriate units, such as square centimeter (cm2), square meter (m2), square inch (in2), square yard (yd2), or square mile (mi2).

1.2 Recognize that rectangles that have the same area can have different perimeters.

1.3 Understand that rectangles that have the same perimeter can have different areas.

1.4 Understand and use formulas to solve problems involving perimeters and areas of rectangles and squares. Use those formulas to find the areas of more complex figures by dividing the figures into basic shapes.

2.0 Coordinate Grids

By the end of Fourth Grade, your child will:

2.1 Draw the points corresponding to linear relationships on graph paper (e.g., draw 10 points on the graph of the equation $y = 3x$ and connect them by using a straight line).

2.2 Understand that the length of a horizontal line segment equals the difference of the *x*-coordinates.

2.3 Understand that the length of a vertical line segment equals the difference of the *y*-coordinates.

3.0 Geometry

By the end of Fourth Grade, your child will:

3.1 Identify lines that are parallel and perpendicular.
3.2 Identify the radius and diameter of a circle.
3.3 Identify congruent figures.

3.4 Identify figures that have bilateral and rotational symmetry.
3.5 Know the definitions of a right angle, an acute angle, and an obtuse angle. Understand that 90 , 180 , 270 , and 360 are associated, respectively, with 1/4, 1/2, 3/4, and full turns.
3.6 Visualize, describe, and make models of geometric solids (e.g., prisms, pyramids) in terms of the number and shape of faces, edges, and vertices; interpret two-dimensional representations of three-dimensional objects; and draw patterns (of faces) for a solid that, when cut and folded, will make a model of the solid.
3.7 Know the definitions of different triangles (e.g., equilateral, isosceles, scalene) and identify their attributes.
3.8 Know the definition of different quadrilaterals (e.g., rhombus, square, rectangle, parallelogram, trapezoid).

Statistics, Data Analysis, and Probability

1.0 Data Analysis

By the end of Fourth Grade, your child will:

1.1 Formulate survey questions; systematically collecting and representing data on a number line; and coordinating graphs, tables, and charts.
1.2 Identify the mode(s) for sets of categorical data and the mode(s), median, and any apparent outliners for numerical data sets.
1.3 Interpret one- and two-variable data graphs to answer questions about a situation.

2.0 Making Predictions

By the end of Fourth Grade, your child will:

2.1 Represent all possible outcomes for a simple probability situation in an organized way (e.g., tables, grids, tree diagrams).
2.2 Express outcomes of experimental probability situations verbally and numerically (e.g., 3 out of 4; 3/4).

Mathematical Reasoning

1.0 Make Decisions about a Problem

By the end of Fourth Grade, your child will:

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

By the end of Fourth Grade, your child will:

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 give 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 Generalizations

By the end of Fourth Grade, your child will:

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 applying them in other circumstances.

HISTORY/SOCIAL SCIENCE STANDARDS

Grade Four

California: A Changing State

Students learn the story of their home state, unique in American history in terms of its vast and varied geography, its many waves of immigration beginning with pre-Columbian societies, its continuous diversity, economic energy, and rapid growth. In addition to the specific treatment of milestones in California history, students examine the state in the context of the rest of the nation, with an emphasis on the U.S. Constitution and the relationship between state and federal government.

4.1 Students demonstrate an understanding of the physical and human geographical features that define places and regions in California by:

1. Explaining and using the coordinate grid system of latitude and longitude to determine absolute locations of places in California and on Earth.
2. Distinguishing between the two poles; the equator and the prime meridian; the tropics; and the hemispheres using coordinates to plot locations.
3. Identifying the state capital and describing the basic regions of California, including how their characteristics and physical environment affect human activity (e.g., water, landforms, vegetation, climate).
4. Identifying the location of and explaining the reasons of the growth of towns in relation to the Pacific Ocean, rivers, valleys, and mountain passes.
5. Using maps, charts, and pictures to describe how communities in California vary

in land use, vegetation, wildlife, climate, population density, architecture, services, and transportation.

4.2 Students describe the major social and political interactions among the people of California from the pre-Columbian societies to the Spanish mission and Mexican rancho periods, in terms of:

1. The major nations of California Indians, their geographic distribution, economic activities, legends, and religious beliefs; and how they depended upon, adapted to and modified the physical environment by cultivation of land and sea resources.
2. The early routes (by ship and land) to, and European settlements in, California with a focus on the exploration of the North Pacific, noting the physical barriers of mountains, deserts, ocean currents, and wind patterns (e.g., Captain Cook, Valdez, Vitus Bering, Juan Cabrillo).
3. The Spanish exploration and colonization of California, including the relationships among soldiers, missionaries, and Indians (e.g., biographies of Juan Crespi, Junipero Serra, Gaspar de Portola).
4. The mapping, geographic basis of, and economic factors in the placement and function of the Spanish missions; how the mission system expanded the influence of Spain and Catholicism throughout New Spain and Latin America.
5. The daily lives of the people, native, and non-native, who occupied the presidios, missions, ranchos, and pueblos.
6. The role of the Franciscan on the change of California from a hunter-gatherer economy to an agricultural economy.
7. The effects of the Mexican War for Independence on Alta California, including the territorial boundaries of North America.
8. Discuss the period of Mexican rule in California and its attributes, including land grants, secularization of the missions, and the rise of the rancho economy.

4.3 Students explain the economic, social, and political life of California from the establishment of the Bear Flag Republic through the Mexican American War, the Gold Rush, and California statehood, in terms of:

1. The location of Mexican settlements in California and other settlements including Ft. Ross and Sutter's Fort.
2. Comparisons of how any why people traveled to California and the routs they traveled (e.g., biographies and legends of James Beckwourth, Jedediah Smith, John C. Fremont, Juan Carbrillo).
3. The effect of the Gold Rush on settlements, daily life, politics, and the physical environment (e.g., biographies of John Sutter, Mariano Guadalupe Vallejo, Phoebe Apperson Hearst).
4. The lives of frontier women (e.g., biographies of Bernarda Ruiz, Biddy Mason).
5. How California became a state and how its new government differed from those during the Spanish and Mexican periods.
6. The immigration and migration to California between 1850 and 1900; its diverse composition, the countries of origin and their relative locations, and the conflicts and accords among diverse groups (e.g., the 1882 Exclusion Act).

4.4 Students explain how California became an industrial power by tracing the transformation of the California economy and its political and cultural development since 1850's, in terms of:

1. The story and lasting influence of the Pony Express, Overland Mail Service, Western Union, and the building of the Transcontinental Railroad.
2. How the Gold Rush transformed the economy of California, including the type of products produced and consumed, changes in towns (e.g., Sacramento, San Fransico) and economic conflicts between diverse groups of people.
3. Rapid American immigration, settlement, and the growth of towns and cities.
4. The effects of the Great Depression and the Dust Bowl on California.

5. The development and location of new industries since the turn of the century, such as aerospace, electronics, large scale commercial agriculture and irrigation projects, the oil and automobile industries, communications and defense, and important trade links with the Pacific Basin.
6. California's water system and how it evolved over time into a network of dams, aqueducts and reservoirs.
7. The history and development of California's public education system, including universities and community colleges.
8. The impact of 20th century Californians on the nation's artistic, cultural and development, including the rise of the entertainment industry (e.g., biographies of John Steirnbeck, Dorothea Lange, Ansel Adams, Walt Disney).

4.5 Students understand the structure, functions, and powers of the United States local, state, and federal governments as described in the U.S. Constitution, in terms of:

1. What the U.S. Constitution is and why it is important (i.e., a written document that defines the structure and purpose of the U.S. government; describes the shared powers of federal, state, and local governments).
2. The purpose of the state constitution, its key principles, and its relationship to the U.S. Constitution (with emphasis on California's constitution).
3. The similarities (e.g., written documents, rule of law, consent of the governed, three separate branches) and differences (e.g., scope of jurisdiction, limits on government powers, use of military) among federal, state and local governments.
4. The structure and function of state governments, including the roles and responsibilities of their elected officials.
5. The components of California's governance structure (i.e., cities and towns, Indian rancherias and reservations, counties, school districts).

SCIENCE STANDARDS

Fourth Grade

Physical Sciences

1.0 Electricity and magnetism are related effects that have many useful applications in everyday life. As a basis for understanding this concept, students know:

1.1 how to design and build simple series and parallel circuit components such as wires, batteries, and bulbs.

1.2 how to build a simple compass and use it to detect magnetic effects, including Earth's magnetic field.

1.3 that all electric currents produce magnetic fields and how to build a simple electromagnet.

1.4 the role of electromagnets in the construction of electric motors, electric generators, and simple devices such as doorbells and earphones.

1.5 electrically charged objects attract or repel each other; electricity is a force.

1.6 magnets have two poles labeled north and south, and like poles repel each other while unlike poles attract each other; magnetism is a force.

1.7 electrical energy can be converted to heat, light, and motion.
1.8 know the basic elements of gravity and friction.
1.9 understand the characteristics and uses of the six simple machines—plane and wedge, screw, pulley, lever, wheel and axle; identify simple machines with complex machines, and be able to combine simple machines to make complex machines.
1.10 understand the characteristics of light and sound and sources of light.
1.11 know how reflection, absorption, and transmission of light affects an object's appearance.
1.12 know how flat and curved mirrors affect light, and how objects refract light.
1.13 know how light waves are different from sound waves, and how light waves and sound waves travel.

Life Sciences

1.0 All organisms that God created need energy and matter to live and grow. As a basis for understanding this concept, students know:

1.1 plants are the primary source of matter and energy entering most food chains.
1.2 producers and consumers (herbivores, carnivores, omnivores, and decomposers) are related in food chains and food webs, and may compete with each other for resources in an ecosystem.
1.3 decomposers, including many fungi, insects, and micro-organisms recycle matter from dead plants and animals.

2.0 Living things depend on one another and their environment for survival. As a basis for understanding this concept, students know:

2.1 ecosystems can be characterized in terms of their living and nonliving components.
2.2 for any particular environment (ocean and land food chains), some kind of plants and animals survive well, some survive less well, and some cannot survive at all.
2.3 many plants depend on animals for pollination and seed dispersal, while animals depend on plants for food and shelter.
2.4 most micro-organisms do not cause disease and many are beneficial.
2.5 be appreciative of the complexities and differences of all God's living creations.

Earth Sciences

1.0 The properties of rocks and minerals reflect the processes that formed them. As a basis for understanding this concept, students know:

1.1 how to differentiate among igneous, sedimentary, and metamorphic rocks by their properties and methods of formation (the rock cycle).
1.2 how to identify common rock-forming minerals (including quartz, calcite, feldspar, mica, and hornblende) and ore minerals using a table of diagnostic properties.
1.3 understand the Earth's surface and changes which affect it.
1.4 know the layers which form the Earth's crust, and the characteristics of

each layer.

1.5 be able to identify examples of various layers of the Earth's crust, and how the various layers were formed.

1.6 know how wind, water, time, and geological shifts affect the Earth's surface.

1.7 know how humans change the Earth's surface, and their appreciation for the resources God has provided for us all.

2.0 Waves, wind, water, and ice shape and reshape the Earth's land surface. As a basis for understanding this concept, students know:

2.1 some changes in the Earth are due to slow processes, such as erosion (weathering, transport, and deposition), and some changes are due to rapid processes, such as landslides, volcanic eruptions, and earth-quakes.

2.2 natural processes including freezing/thawing and growth of roots, cause rocks to break down into smaller pieces.

2.3 moving water erodes landforms, reshaping the land by taking it way in places and depositing it as pebbles, sand, silt, and mud in other places.

Investigation And Experimentation

1.0 Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept, and to address the content of the other three strands, students should develop their own questions and perform investigations. Students will:

1.1 differentiate observation from interpretation, and know that scientists' explanations come partly from what they observe and partly from how they interpret their observations.

1.2 measure and estimate weight, length, or volume of objects.

1.3 formulate predictions and justify predictions based on cause and effect relationships.

1.4 conduct multiple trials to test a prediction and draw conclusions about the relationships between results and predictions.

1.5 construct and interpret graphs from measurements.

1.6 follow a set of written instructions for a scientific investigation.

ATMOSPHERE AT HOME

We encourage all parents to consider the following ideas when setting up a home environment for increasing student learning:

1. Provide an appropriate work space that is:
- Quiet with appropriate lighting.
- Contains supplies such as paper, pencils, resources, etc.

2. Set up an atmosphere for studying by:
- Scheduling a regular, daily study time where all family members are studying.
- Making sure the house is quiet during study time.
- Working on establishing trust and accountability..

3. Be involved in your child's education by:
- Being a role model, setting values, and modeling good Christian values.
- Demonstrating a positive attitude.
- 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.

4. Strive to establish a Christian family atmosphere by:
- Encouraging your child to follow the teachings of Jesus in his/her dealing with others.
- Encouraging regular family prayer and the celebration of religious experiences.
- Modeling Christian values.
- Acknowledging and supporting your child's efforts.
- Reinforcing Christian behavior.
- Providing opportunities for service to others.

5. **Strengthen communication with your child by:**
    - Spending quality time with your child often.
    - Sharing resources from your community.
    - Establishing/enforcing reasonable consequences for behavior.

HOME ACTIVITIES FOR LANGUAGE ARTS

Reading

- Read to and with your child on a regular basis.
- Provide comfortable reading level and age appropriate materials for your child using the local library or local bookstore.
- Set an example by reading.
- Have your child read every night for about 30 minutes.

Reading Comprehension

- Have discussions about things family members have read, talking about the various characters in a story, the plot, setting, etc.
- After reading a story, ask your child questions about the story that relate to the main idea, story details, sequence of events, and different story endings.

Writing

- Have your child write about daily events in their journal.
- Have your child write letters on a regular basis.
- Have your child write and send E-mail messages to friends.
- Have your child use a computer for writing, using the spell check and editing procedures.

Written and Oral English Language Conventions

- Play word games such as Scrabble, Probe, Scatergories, Pictionary with your child.
- Look at a newspaper with your child and highlight nouns, verbs, adjectives, and adverbs.
- Edit the letters your child has written looking for correct punctuation, capitalization, and sentence structure.
- Model correct English when speaking.

Listening and Speaking

- Have your child give oral directions to another member of the family.
- Have your child recite a poem or prayer.
- Discuss daily events with your child.
- Have your child explain how to do different things, such as making cookies, building a model, playing a game, etc.
- Sing a song or tell a story into a tape recorder and listen to it.

HOME ACTIVITIES FOR MATHEMATICS

Number Sense

- Play number games with your child, such as dice, Domino's and Racko.
- Help your child practice addition, subtraction, and multiplication, facts using flash

cards.
- When shopping, give your child real and practical experiences such as weighing fruit, comparing prices, calculating discounts, figuring change, estimating the amount spent, etc.
- Have your child make a budget for his/her allowance, then have your child keep track of their spending for a month and compare their actual spending to their budget.
- Read aloud numbers over six digits.

Algebra and Functions
- Provide your child with sequential activities such as building a model, planning a trip, reading a recipe.
- Play the game "Fill in the Blank" with your child, saying; "4 times what number is 36" *or* 24 divided by what number is 8?"

Measurement and Geometry
- Work with your child in planning home improvement projects such as measuring for a book case, finding the area of a room before purchasing floor covering, measuring for new curtains, etc.
- Have your child create a growth chart showing his/her height and weight for one year.
- Have your child find parallel (e.g., railroad tracks, snow skis) and perpendicular (e.g., wall and floor, table top and table legs) objects.
- Find geometric shapes in the world (e.g., buildings, signs).

Statistics, Data Analysis, and Probability
- Have your child graph and chart personal accomplishments (e.g., 4H, scouting, sports).
- Have your child keep track of the weather (e.g., high and low temperatures, wind speed) for one month and make a chart summarizing the information. Then explain the chart.
- When working on a science project, have your child collect and record data.
- Have your child read periodicals and discuss the graphs/charts.
- Play card or dice games with your child and discuss the probability of winning.

Mathematical Reasoning
- Play games, such as "Connect Four" and "Battleship," with your child.
- Work together with your child to solve puzzles (e.g., riddles, crossword).
- Make a double batch of cookies with your child, solving the problem, How do you double a recipe?

HOME ACTIVITIES FOR HISTORY/SOCIAL SCIENCE

Geography of California
- On a California map showing latitude and longitude, locate the State Capitol, other cities (e.g., San Francisco, Los Angeles, San Diego) and the Pacific Ocean.
- As you travel throughout California, compare and contrast the different regions,

including the human and natural resources.
- On a globe, find the North and South Poles, Prime Meridian, Tropics of Cancer and Capricorn, and the hemispheres.
- Use maps when planning a trip, discussing the route to be taken and marking the route with a felt pen.
- Discuss reasons why your ancestors moved to California.

History of California

- Visit California's historical sites such as Indian Museums, Missions, mines, dams, festivals, and celebrations. Look for items that pertain to mining or pioneer history.

- Have your child make a timeline for completing a project or chore. Discuss the purpose/use of timelines.
- Visit restaurants of different cultures and point out cultural foods, architecture, and customs.
- Explore biographies of Californians and historical events by reading, viewing documentaries, and searching the Internet (e.g., "California Heartland" and "California Gold" on PBS).
- Create a family album with pictures, recipes, map of immigration routes taken to California, family timeline, etc.

Transformation of California's Economy since 1850

- Discuss with older family members and/or friends how methods of earning a living in California have changed during their lifespan.
- Help your child earn, save, and use money wisely.

Government, both State and Federal

- As a family, participate in local, state, and federal government. proceedings, discussing how they are the same and different.
- On election day, talk about the voting process, your rights and responsibilities as a citizen, and take your child with you when you vote.
- Visit the State Capitol.
- Write to local, state, and federal officials.

HOME ACTIVITIES FOR SCIENCE

Physical Sciences

- When baking a cake, ask the child to help and observe the cake batter before and after it bakes. Talk about the change that took place.
- Explore the forces between objects by picking up items with a magnet, using static electricity to attract items (e.g., rub a comb with wool and pick up little pieces of paper), and observing the force of gravity (e.g., drop a rock and a marble and see which lands first).

- Observe and talk about how energy can be transformed from one form to another (e.g., take apart an electric motor and note how electromagnets cause the motor to turn, creating energy to run electric devices).
- Observe and discuss the structure of the solar system by making a model of the sun and the nine planets.
- Research the size of the sun and planets, then make a scale model of two planets such as the Earth and Jupiter.

Life Sciences

- Observe and talk about how energy can be transformed from one form to another (e.g., energy is stored in plants, which is eaten by animals, which are eaten by larger animals and/or human beings).
- Learn about the life cycle of different animals either by observing the changes or looking at pictures (e.g., frog).

Earth Sciences

- On a nature walk, discuss and compare different ecosystems (e.g., aquatic, wetlands, forest, desert) with your child.
- On a nature walk, observe and discuss how organisms are adapted to their environment and how organisms can change their environment (e.g., beaver's teeth help it eat to survive; beaver eating trees remove trees from the environment; beaver's dams affect stream movement).

Investigations and Experimentation

- Help your child use a:
  1. Thermometer to measure the temperature of air and water.
  2. Yardstick to measure the size of two rooms in the house.
  3. Clock to measure the time it takes to complete things.
  4. Tape measure to measure wood for a project.
  5. Measuring cup to measure ingredients for baking.
- Take the outside temperature, over a short period of time, and record the temperature readings in an organized chart. Be able to discuss this chart with others.

STUDENT'S RECORDS

How is your child's progress in school? Is he/she learning the required skills for their grade level? Are these questions that you have been asking? The **Student Records** on the following pages will allow you to identify the Standards your child has learned this year.

How to use the Student Records

As you see that your child has mastered one of the skills on the **Student Record,** write a date in the appropriate box. You could find out that your child knows the skill by: (1) giving them a test; (2) looking at your child's school papers; (3) observing your child perform the skill in his/her everyday life experiences, etc. Whatever the case, this **Student Record** is available for you to chart your child's progress throughout the school year.

Using the Student Record During a Teacher Conference

While talking to the teacher take out the **Student Record** and discuss your findings with the teacher. In this way, you are discussing real data about your child's knowledge of skills. During the discussion, the teacher may suggest changes to the **Student Record** because of classroom assessments or observations.

Keys to Success

Remember the following keys:

1. Always take this handbook to your teacher/parent conference so you can track your child's educational progress.
2. As your child demonstrates their knowledge of a specific skill, always write the date in the space provided.
3. Plan home activities that will help your child master one or more of the skills listed, then record his/her progress.
4. Discuss, with your child, his/her progress and set goals.