

**SIXTH GRADE
CONTENT STANDARDS**
Parent Handbook

**Sacramento Diocese
of
Catholic Schools**

Content Standards for

SIXTH 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 Sixth 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:

- Sixth 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 Six

THEME:

God's people are challenged throughout history to follow the teachings of Jesus and His ancestors as seen in Hebrew and Christian scriptures.

OBJECTIVES:

- A. To introduce Jesus' ancestors and events that occurred before His coming.
- B. To grow and respond in faith by examining examples of the people in Hebrew and Christian Scriptures who were faithful to God.
- C. To grow in the knowledge that the kingdom of Jesus' Father is in our midst.
- D. To understand the place of the Word of God in our lives.

1.0 MESSAGE: The Hebrew are the root of the Christian Scriptures.

1.1 God

- 1.1.1 To believe Jesus is the fulfillment of the Hebrew Scripture.
- 1.1.2 To learn about the New Moses, Son of David, Messiah, Bread of Life, Incarnate word.
- 1.1.3 To believe Jesus is the foundation for our faith.

1.2 Scripture

- 1.2.1 To study the historical continuum of the Hebrew people in the Pentateuch.
- 1.2.2 To learn about the historical books: Joshua, Judges, Samuel, and Kings.
- 1.2.3 To learn about the Chronicles: Ezra, Nehemiah, Ruth, Esther, Judith, Tobit, and Maccabees.
- 1.2.4 To understand how God's covenant unfolds in the Christian Scripture through the message of the Gospels, Acts of the Apostles, Letters, and Revelations.
- 1.2.5 To introduce the historical Psalms.

1.3 Doctrine

- 1.3.1 To understand that God calls all people into a loving relationship.
- 1.3.2 To accept that Creation is continued through Jesus' promise of salvation.
- 1.3.3 To understand that the Bible is the inspired Word of God.
- 1.3.4 To accept that the Ten Commandments are rooted in Natural Law.
- 1.3.5 To understand that there are three persons in the Blessed Trinity.

2.0 WORSHIP: Our faith and practices are rooted in the Hebrew tradition.

2.1 Sacraments

- 2.1.1 To increase understanding of the meaning of the seven Sacraments through exploration of Hebrew tradition.

2.2 Prayer

- 2.2.1 To continue to practice, learn, and understand prayers as a sign of our faith: (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...); (8) Prayer to St. Francis; and (9) Acts of Faith, Hope, and Peace

- 2.2.2 To appreciate and understand the liturgical rituals of the Church, particularly the Stations of the Cross, as a prayer form.
- 2.2.3 To continue to honor Mary through praying the Rosary.
- 2.2.4 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 continue to study the Mass as the Liturgy of the Word and Liturgy of the Eucharist.

- 2.3.2 To review responses and prayers used in the celebration of the Eucharist.
- 2.3.3 To continue to study the readings for Sunday liturgy, especially the Hebrew Scripture reading.
- 2.3.4 To plan, participate in and serve as a minister (where appropriate) in liturgy.

2.4 Liturgical Year

- 2.4.1 To continue to participate in the feasts of the Liturgical Year:

| | |
|----------------|--------------------------|
| Advent | Triduum |
| Christmas | Ascension Thursday |
| Epiphany | Pentecost |
| Ash Wednesday | Trinity Sunday |
| Lent | Corpus Christi |
| Passion Sunday | Ordinary Time |
| Holy Week | Feast of Christ the King |

2.5 Feast Days

- 2.5.1 To continue to celebrate special feasts, days, and people.

2.6 Traditions

- 2.6.1 To practice traditional prayers and rituals used during Advent, Lent, and Easter.
- 2.6.2 To experience a variety of Marian devotions.

3.0 MORALITY: Justice and responsibility are treasures of God's Kingdom.

- 3.1 To further develop an awareness of social justice.
- 3.2 To accept the responsibility of stewardship.
- 3.3 To grow in responsibility to make moral decisions.

4.0 CATHOLIC SOCIAL TEACHING: Our mission is to reach out to all in need.

4.1 Justice

- 4.1.1 To respect through word and action elderly, sick, homeless or lonely people.
- 4.1.2 To develop an awareness of the need for social action in response to unjust conditions.
- 4.1.3 To practice the Corporal and Spiritual works of Mercy.
- 4.1.4 To strive to live the Beatitudes.

4.2 Peace

- 4.2.1 To understand the need to develop an awareness to all cultures.
- 4.2.2 To grow in respect in tolerance of each other.
- 4.2.3 To continue to develop a respect for our environment.
- 4.2.4 To practice conflict resolution skills.

4.3 Local Needs

- 4.3.1 To practice doing charitable acts in the local community.
- 4.3.2 To develop an awareness of personal fasting and penance.

5.0 COMMUNITY: The church as a community builds bridges between generations, races, and lifestyles.

5.1 Models of Church

- 5.1.1 To understand that the Church proclaims the Gospel and teaching of Jesus from its earliest times.
- 5.1.2 To believe the Church offers salvation to all people through preaching, teaching, and promoting its causes.
- 5.1.3 To understand the importance of ecumenism, with particular emphasis on respect for the Jewish religion which is studied this year in depth.

5.2 Church History

- 5.2.1 To understand that the early Church is the basis of our faith today.
- 5.2.2 To be a witness to the Good News of Jesus through the study of Scripture and tradition.
- 5.2.3 To study the lives of modern day role models.
- 5.2.4 To develop an appreciation of Mary as a modern day role model.
- 5.2.5 To develop an understanding of Mary in the various roles in which the Church portrays her.
- 5.2.6 To learn about the writings of the Evangelists and St. Paul.

6.0 FAMILY LIFE: All people are worthy of love and respect.

6.1 Human Dignity

- 6.1.1 To develop an understanding of how ethnic, religious, and social customs shape people's lives.
- 6.1.2 To respect all diversity in our society.
- 6.1.3 To emphasize reverence for life.
- 6.1.4 To exercise social responsibilities as people of God.
- 6.1.5 To have and nurture a love and respect for themselves and others.

7.0 TERMINOLOGY:

| | |
|------------------|------------------------------------|
| Exodus | Ark of the Covenant |
| atonement | Genesis |
| miracle | Trinity |
| gentiles | morality |
| Catholic | Hebrew |
| Penitential Rite | Christ |
| Pentateuch | Hebrew Scriptures/Old Testament |
| incarnation | Christian Scriptures/New Testament |
| Psalms | Confirmation |
| Israel | resurrection |
| epistles | Jew |
| Shalom | evangelists |
| Messiah | worship |

8.0 SCRIPTURE REFERENCES to be used to develop the themes of the religion standards.

| | |
|--------------------|---|
| Genesis 1-2 | Creation narrative |
| Genesis 12: 1-6 | Covenant with Abraham |
| Exodus 3 | Revelation of God to Moses |
| Exodus 12: 1-28 | Passover |
| Exodus 20: 1-17 | Ten Commandments |
| Deuteronomy 6: 1-4 | The Great Commandment |
| Psalms 8, 22, 23 | Promise of salvation |
| 51, 139, 150 | Promise of salvation |
| Isaiah 40: 1-11 | Promise of salvation |
| Isaiah 42: 1-4, | Suffering Servant passages |
| 49: 1-7, 50: 4-7, | Suffering Servant passages |
| 52: 13, 53: 1 | Suffering Servant passages |
| Matthew 5: 1-12 | Beatitudes |
| Matthew 1: 18, | Infancy narratives |
| 2: 23, Luke 1-2 | Infancy narratives |
| Matthew 26-28, | Passion, Death, and Resurrection narratives |
| Mark 14-15, | Passion, Death, and Resurrection narratives |
| Luke 22-24, | Passion, Death, and Resurrection narratives |

John 18-21 Passion, Death, and Resurrection narratives

John 13: 1-5 Washing of the disciples' feet

John 15: 5, 11-17 Our connection with Jesus and each other

Hebrew Scripture Books (46):

Pentateuch: Genesis, Exodus, Leviticus, Numbers, and Deuteronomy

Historical Books: Joshua, Judges, Ruth, 1 and 2 Samuel, 1 and 2 Kings

Chronicles History and the Later Histories:

1 and 2 Chronicles, Ezra and Nehemiah, Tobit, Judith, Esther,
1 and 2 Maccabees

Wisdom Books: Job, Psalms, Proverbs, Ecclesiastes, Song of Songs, Wisdom,
Sirach

Major Prophets: Isaiah, Jeremiah, Lamentations (Jeremiah), Baruch, Ezekial,
and Daniel

Minor Prophets: Hosea, Joel, Amos, Obadiah, Jonah, Micah, Nahum,
Habakkuk, Zephaniah, Haggai, Zechariah, and Malachi

Christian Scriptures (26):

Gospels: Matthew, Mark, Luke and John

Other Writings: Acts of the Apostles and Revelation

Letters: Romans, 1 and 2 Corinthians, Galatians, Ephesians,
Philippians, Colossians, 1 and 2 Thessalonians, 1 and 2
Timothy, Titus, Philemon, Hebrews, James, 1 and 2 Peter, 1, 2,
and 3 John, Jude

LANGUAGE ARTS STANDARDS

Grade Six

Reading

1.0 Word Analysis, Fluency, and Systematic Vocabulary Development

Students use their knowledge of word origins and word relationships, as well as historical and literary context clues, to determine the meaning of specialized vocabulary and to understand the precise meaning of grade-level-appropriate words.

By the end of sixth grade, your child will:

- 1.1 Read aloud narrative and expository text fluently and accurately and with appropriate pacing, intonation, and expression.
- 1.2 Identify and interpret figurative language and words with multiple meaning.
- 1.3 Recognize the origins and meanings of frequently used foreign words in English and use these words accurately in speaking and writing.
- 1.4 Monitor expository text for unknown words or words with novel meanings by using word, sentence and paragraph clues to determine meaning.
- 1.5 Understand and explain “shades of meaning” in related words (e.g., softly and quietly).

2.0 Reading Comprehension (Focus on Informational Materials)

Students read and understand grade-level-appropriate material and grade-level Bibles. They describe and connect the essential ideas, arguments, and perspectives of the text by using their knowledge of text structure, organization, and purpose. In addition, by grade eight, students read one million words annually on their own, including a good representation of grade-level-appropriate narrative and expository text (e.g., classic and contemporary literature, magazines, newspapers, online information). In grade six, students continue to make progress toward this goal.

By the end of sixth grade, your child will:

- 2.1 Identify the structural features of popular media (e.g., newspapers, magazines, online information) and use the features to obtain information.
- 2.2 Analyze text that uses the compare-and-contrast organizational pattern.
- 2.3 Connect and clarify main ideas by identifying their relationships to other sources and related topics.
- 2.4 Clarify an understanding of texts by creating outlines, logical notes, summaries, or reports.
- 2.5 Follow multiple-step instructions for preparing applications (e.g., for a public library card, bank account, sports club, league membership).
- 2.6 Determine the adequacy and appropriateness of the evidence for an author’s conclusions.
- 2.7 Make reasonable assertions about a text through accurate, supporting citations.
- 2.8 Note instances of unsupported inferences, fallacious reasoning, persuasion, and propaganda in text.

3.0 Literary Response and Analysis

Students read and respond to historically or culturally significant works of literature, including the Bible, that reflect and enhance their studies of history and social science. They clarify the ideas and connect them to other literary works.

By the end of sixth grade, your child will:

- 3.1 Identify the forms of fiction and describe the major characteristics of each form.
- 3.2 Analyze the effect of the qualities of the character (e.g., courage or cowardice, ambition or laziness, Christ like or non-Christ like) on the plot and the resolution of the conflict.
- 3.3 Analyze the influence of setting on the problem and its resolution.
- 3.4 Define how tone or meaning is conveyed in poetry through word choice, figurative language, sentence structure, line length, punctuation, rhythm, repetition, and rhyme.
- 3.5 Identify the speaker and recognize the difference between first- and third-person narration (e.g., autobiography compared with biography).
- 3.6 Identify and analyze features of themes conveyed through characters, actions, and images.
- 3.7 Explain the effects of common literary devices (e.g., symbolism, imagery, metaphor) in a variety of fictional and nonfictional texts.
- 3.8 Critique the credibility of characterization and the degree to which a plot is contrived or realistic (e.g., compare use of fact and fantasy in historical fiction).

Writing

1.0 Writing Strategies

Students write clear, coherent, and focused essays. The writing exhibits students' awareness of the audience and purpose. Essays contain formal introductions, supporting evidence, and conclusions. Students progress through the stages of the writing process as needed.

By the end of sixth grade, your child will:

- 1.1 Choose the form of writing (e.g., personal letter, letter to the editor, review, poem, report, narrative) that best suits the intended purpose.
- 1.2 Create multiple-paragraph expository compositions:
 - a. Engage the interest of the reader and state a clear purpose.
 - b. Develop the topic with supporting details and precise verbs, nouns, and adjectives to paint a visual image in the mind of the reader
 - c. Conclude with a detailed summary linked to the purpose of the composition.
- 1.3 Use a variety of effective and coherent organizational patterns, including comparison and contrast; organization by categories; and arrangement by spatial order, order of importance, or climactic order.
- 1.4 Use organizational features of electronic text (e.g., bulletin boards, databases, keyword searches, e-mail addresses) to locate information.
- 1.5 Compose documents with appropriate formatting by using word-processing skills and principles of design (e.g., margins, tabs, spacing, columns, page orientation).

- 1.6 Revise writing to improve the organization and consistency of ideas within and between paragraphs.
- 1.7 Write fluidly and legibly in cursive or joined italic.

2.0 Writing Applications (Genres and Their Characteristics)

Students write narrative, expository, persuasive, and descriptive texts of at least 500 to 700 words in each genre. Student writing demonstrates a command of standard American English and the research, organizational, and drafting strategies outlined in Writing Standard 1.0.

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

- 2.1 Write narratives:
 - a. Establish and develop a plot and setting and present a point of view that is appropriate to the stories.
 - b. Include sensory details and concrete language to develop plot and character.
 - c. Use a range of narrative devices (e.g., dialogue, suspense).
- 2.2 Write expository compositions (e.g., description, explanation, comparison and contrast, problem and solution):
 - a. State the thesis or purpose.
 - b. Explain the situation.
 - c. Follow an organizational pattern appropriate to the type of composition.
 - d. Offer persuasive evidence to validate arguments and conclusions as needed.

- 2.3 Write research reports:
 - a. Pose relevant questions with a scope narrow enough to be thoroughly covered.
 - b. Support the main idea or ideas with facts, details, examples, and explanations from multiple authoritative sources (e.g., speakers, periodicals, online information searches).
 - c. Include a bibliography.
- 2.4 Write responses to literature and the Bible:
 - a. Develop an interpretation exhibiting careful reading, understanding, and insight.
 - b. Organize the interpretation around several clear ideas, premises, or images.
 - c. Develop and justify the interpretation through sustained use of examples and textual evidence.
- 2.5 Write persuasive compositions:
 - a. State a clear position on a proposition or proposal.
 - b. Support the position with organized and relevant evidence.
 - c. Anticipate and address reader concerns and counter arguments.
 - d. Using Church teachings, solve a moral issue.
- 2.6 Write a Church petition.
- 2.7 Write an original prayer.

Written and Oral English Language Conventions

The standards 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.

By the end of sixth grade, your child will:

- 1.1 Use simple, compound, and compound-complex sentences; use effective coordination and subordination of ideas to express complete thoughts.
- 1.2 Identify and properly use indefinite pronouns and present perfect, past perfect, and future perfect verb tenses; ensure that verbs agree with compound subjects.
- 1.3 Use colons after the salutation in business letters and in citing Bible verses.
- 1.4 Use correct capitalization.
- 1.5 Spell frequently misspelled words correctly (e.g., their, they're, there).

Listening and Speaking

1.0 Listening and Speaking Strategies

Students deliver focused, coherent presentations that convey ideas clearly and relate to the background and interests of the audience. They evaluate the content of oral communication.

By the end of sixth grade, your child will:

- 1.1 Relate the speaker's verbal communication (e.g., word choice, pitch, feeling, tone) to the nonverbal message (e.g., posture, gesture).
- 1.2 Identify the tone, mood, and emotion conveyed in the oral communication.
- 1.3 Restate and execute multiple-step oral instructions and directions.
- 1.4 Select a focus, an organizational structure, and a point of view, matching the purpose, message, occasion, and vocal modulation to the audience.
- 1.5 Emphasize the salient points to assist the listener in following the main ideas and concepts.
- 1.6 Support opinions with detailed evidence and with visual or media displays that use appropriate technology.

- 1.7 Use effective rate, volume, pitch and tone and align nonverbal elements to sustain audience interest and attention.
- 1.8 Analyze the use of rhetorical devices (e.g., cadence, repetitive patterns, use of onomatopoeia) for intent and effect.
- 1.9 Identify persuasive and propaganda techniques used in television and identify false and misleading information.
- 1.10 Weigh media messages against the moral and religious standards of the Catholic Church.

2.0 Speaking Applications (Genres and Their Characteristics)

Students deliver well-organized formal presentations employing traditional rhetorical strategies (e.g., narration, exposition, persuasion, description). 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 six outlined in Listening and Speaking Standard 1.0, students:

- 2.1 Deliver narrative presentations:
 - a. Establish a context, plot, and point of view.
 - b. Include sensory details and concrete language to develop the plot and character.
 - c. Use a range of narrative devices (e.g., dialogue, tension, or suspense).
- 2.2 Deliver informative presentations:
 - a. Pose relevant questions sufficiently limited in scope to be completely and thoroughly answered.
 - b. Develop the topic with facts, details, examples, and explanations from multiple authoritative sources (e.g., speakers, periodicals, online information).
- 2.3 Deliver oral responses to literature:
 - a. Develop an interpretation exhibiting careful reading, understanding, and insight.
 - b. Organize the selected interpretation around several clear ideas, premises, or images.
 - c. Develop and justify the selected interpretation through sustained use of examples and textual evidence.
- 2.4 Deliver persuasive presentations:
 - a. Provide a clear statement of the position.
 - b. Include relevant evidence.
 - c. Offer a logical sequence of information.
 - d. Engage the listener and foster acceptance of the proposition or proposal.
- 2.5 Deliver presentations on problems and solutions, including areas of social justice:
 - a. Theorize on the causes and effects of each problem and establish connections between the defined problem and at least one solution.

- b. Offer persuasive evidence to validate the definition of the problem and the proposed solutions.
- 2.6 Read in Mass or present a Mass reading in class.

MATHEMATICS STANDARDS

Grade Six

Number Sense

1.0 Comparing and Ordering Numbers

By the end of Sixth Grade, your child will:

- 1.1 Compare and order positive and negative fractions, decimals, and mixed numbers and place them on a number line.
- 1.2 Interpret and use ratios in different contexts (e.g., batting averages, miles per hour) to show the relative sizes of two quantities, using appropriate notations (a/b , a to b , $a:b$).
- 1.3 Use proportions to solve problems (e.g., determining the value of N if $4/7 = N/21$, finding the length of a side of a polygon similar to a known polygon). Use cross-multiplication as a method for solving such problems, understanding it as the multiplication of both sides of an equation by a multiplicative inverse.
- 1.4 Calculate given percentages of quantities and solve problems involving discounts at sales, interest earned, and tips.

2.0 Calculating

By the end of Sixth Grade, your child will:

- 2.1 Solve problems involving addition, subtraction, multiplication, and division of positive fractions and explain why a particular operation was used for a given situation.
- 2.2 Explain the meaning of multiplication and division of positive fractions and perform the calculations (e.g., $5/8 \sim 15/16 = 5/8 \times 16/15 = 2/3$).
- 2.3 Solve addition, subtraction, multiplication, and division problems, including those arising in concrete situations, that use positive and negative integers and combinations of these operations.
- 2.4 Determine the least common multiple and the greatest common divisor of whole numbers; use them to solve problems with fractions (e.g., to find a common denominator to add two fractions or to find the reduced form for a fraction).

Algebra and Functions

1.0 Writing Expressions

By the end of Sixth Grade, your child will:

- 1.1 Write and solve one-step linear equations in one variable.
- 1.2 Write and evaluate an algebraic expression for a given situation, using up to three variables.
- 1.3 Apply algebraic order of operations and the commutative, associative, and distributive properties to evaluate expressions; and justify each step in the process.
- 1.4 Solve problems manually by using the correct order of operations or by using a scientific calculator.

2.0 Rates and Proportions

By the end of Sixth Grade, your child will:

- 2.1 Convert one unit of measurement to another (e.g., from feet to miles, from centimeters to inches).
- 2.2 Demonstrate an understanding that *rate* is a measure of one quantity per unit value of another quantity.
- 2.3 Solve problems involving rates, average speed, distance, and time.

3.0 Patterns

By the end of sixth grade, your child will:

- 3.1 Use variables in expressions describing geometric quantities (e.g., $P = 2w + 2l$, $A = \frac{1}{2}bh$, $C = \pi d$ - the formulas for the perimeter of a rectangle, the area of a triangle, and the circumference of a circle, respectively).
- 3.2 Express in symbolic form simple relationships arising from geometry.

Measurement and Geometry

1.0 Area and Volume

By the end of Sixth Grade, your child will:

- 1.1 Understand the concept of a constant such as π ; knowing the formulas for the circumference and the area of a circle.

- 1.2 Know common estimates of π (3.14; 22/7) and use these values to estimate and calculate the circumference and the area of circles; compare with actual measurements.
- 1.3 Know and use the formulas for the volume of triangular prisms and cylinders (area of base x height); compare these formulas and explain the similarity between them and the formula for the volume of a rectangular solid.

2.0 Geometry

By the end of Sixth Grade, your child will:

- 2.1 Identify angles as vertical, adjacent, complementary, or supplementary and provide descriptions of these terms.
- 2.2 Use the properties of complementary and supplementary angles and the sum of the angles of a triangle to solve problems involving an unknown angle.
- 2.3 Draw quadrilaterals and triangles from given information about them (e.g., a quadrilateral having equal sides but no right angles, a right isosceles triangle).

Statistics, Data Analysis, and Probability:

1.0 Data

By the end of Sixth Grade, your child will:

- 1.1 Compute the range, mean, median, and mode of data sets.
- 1.2 Understand how additional data added to data sets may affect these computations of measures of central tendency.
- 1.3 Understand how the inclusion or exclusion of outliers affects measures of central tendency.
- 1.4 Know why a specific measure of central tendency (mean, median, mode) provides the most useful information in a given context.

2.0 Limitations

By the end of Sixth Grade, your child will:

- 2.1 Compare different samples of a population with the data from the entire population and identify a situation in which it makes sense to use a sample.
- 2.2 Identify different ways of selecting a sample (e.g., convenience sampling, responses to a survey, random sampling) and which method makes a sample more representative for a population.
- 2.3 Analyze data displays and explain why the way in which the question was asked might have influenced the results obtained and why the way in which the results were displayed might have influenced the conclusions reached.
- 2.4 Identify data that represent sampling errors and explain why the sample (and the display) might be biased.
- 2.5 Identify claims based on statistical data and, in simple cases, evaluating the validity of the claims.

3.0 Probabilities

By the end of Sixth Grade, your child will:

- 3.1 Represent all possible outcomes for compound events in an organized way (e.g., tables, grids, tree diagrams) and express the theoretical probability of each outcome.

- 3.2 Use data to estimate the probability of future events (e.g., batting averages or number of accidents per mile driven).
- 3.3 Represent probabilities as ratios, proportions, decimals between 0 and 1, and percentages between 0 and 100 and verify that the probabilities computed are reasonable; knowing that if P is the probability of an event, $1-P$ is the probability of an event not occurring.
- 3.4 Understand that the probability of either of two disjoint events occurring is the sum of the two individual probabilities and that the probability of one event following another, in independent trials, is the product of the two probabilities.
- 3.5 Understand the difference between independent and dependent events.

Mathematical Reasoning

1.0 Making Decisions about a Problem

By the end of Sixth Grade, your child will:

- 1.1 Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, and observing patterns.
- 1.2 Formulate and justify mathematical conjectures based on a general description of the mathematical question or problem posed.
- 1.3 Determine when and how to break a problem into simpler parts.

2.0 Solving Problems & Justify Reasoning

By the end of Sixth 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 Estimate unknown quantities graphically and solve for them using logical reasoning and arithmetic and algebraic techniques.
- 2.4 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models, to explain mathematical reasoning.
- 2.5 Express the solution clearly and logically by using the appropriate mathematical notation and terms and clear language; support solutions with evidence in both verbal and symbolic work.
- 2.6 Indicate the relative advantages of exact and approximate solutions to problems and give answers to a specified degree of accuracy.
- 2.7 Make precise calculations and check the validity of the results from the context of the problem.

3.0 Make Connections

By the end of Sixth 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 the strategies used and apply them in new circumstances.

HISTORY/SOCIAL SCIENCE STANDARDS

Grade Six

World History and Geography: Ancient Civilizations

Students in grade six expand their understanding of history by studying the people and events that ushered in the dawn of the major western and non-western ancient civilizations. Geography is of special significance in the development of the human story. Continued emphasis is placed on the everyday lives, problems and accomplishments of people, their role in developing social, economic and political structures, as well as in establishing and spreading ideas that helped transform the world forever. Students develop higher levels of critical thinking by considering why civilizations developed where and when they did, why they became dominant and why they declined. Students analyze the interactions among various cultures, emphasizing their enduring contributions and the link, despite time, between the contemporary and ancient worlds.

6.1 Students describe what is known through archaeological studies of the early

physical and cultural development of mankind from the Paleolithic Era to the agricultural revolution, in terms of:

1. The hunter-gatherer societies and their characteristics, including the development of tools and the use of fire
2. The location of human communities that populated the major regions of the world and how humans adapted to a variety of environments
3. The climatic changes and human modifications of the physical environment that gave rise to the domestication of plants and animals and the increase in the sources of clothing and shelter

6.2 Students analyze the geographic, political, economic, religious, and social structures of the early civilizations of Mesopotamia, Egypt, and Kush, in terms of:

1. The location and description of the river systems, and physical settings that supported permanent settlement and early civilizations
2. The development of agricultural techniques that permitted the production of economic surplus and the emergence of cities as centers of culture and power
3. The relationship between religion and the social and political order in Mesopotamia and Egypt
4. Compare monotheism and polytheism.
5. The significance of Hammurabi's code
6. Egyptian art and architecture
7. The location and description of the role of Egyptian trade in the eastern Mediterranean and Nile Valley
8. The significance of the lives of Queen Hatshepsut and Ramses the Great
9. The location of the Kush civilization and its political, commercial, and cultural relations with Egypt
10. The evolution of language and its written forms

6.3 Students analyze the geographic, political, economic, religious, and social structures of the early civilizations of the Ancient Hebrews, in terms of:

1. The origins and significance of Judaism as the first monotheistic religion based on the concept of one God who sets down moral laws for humanity
2. The sources of the ethical teachings and central beliefs of Judaism (the Hebrew Bible, the Commentaries): belief in God, observance of law, practice of concepts of righteousness and justice, and importance of study; how the ideas of the Hebrew traditions are reflected in the moral and ethical traditions of Western civilization
3. How Abraham, Moses, Ruth, Naomi, David, and Johanan ben Zaccai influenced the development of the Jewish religion. Discuss Biblical stories of the above.
4. The location of the settlements and movements of Hebrew peoples, including the Exodus, the movement to and from Egypt, and the significance of the Exodus experience to the Jewish people and the other people in history.
5. How the practice of the Jewish religion was modified after the destruction of the second Temple in 70 A.D., and the dispersion of the Jewish population from Jerusalem and the land of Israel

6.4 Students analyze the geographic, political, economic, religious, and social structures of the early civilization of Ancient Greece, in terms of:

1. The connections between geography and the development of city states in the region of the Aegean Sea, including patterns of trade and commerce among Greek city-states and within the wider Mediterranean region
2. The transition from tyranny and oligarchy to democratic forms of government and back to dictatorship in ancient Greece, and the significance of the invention of the idea of citizenship

3. The key differences between Athenian or direct democracy and representative democracy (e.g., draw from *Pericles' Funeral Oration*)
4. The significance of Greek mythology to the everyday life of people in the region and how Greek mythology and epics such as the Iliad and the Odyssey and from Aesop's Fables
5. The founding, expansion, and political organization of the Persian Empire
6. Similarities and differences between life in Athens and Sparta, with emphasis on their roles in the Persian and Peloponnesian Wars
7. The rise of Alexander the Great in the North and the spread of Greek culture eastward
8. The enduring contributions of important Greek figures in the arts and sciences (e.g., biographies of Sappho, Hypatia, Socrates, Plato, Aristotle, Euclid, Thucydides)

6.5 Students analyze the geographic, political, economic, religious, and social structures of the early civilizations of India, in terms of:

1. The location and description of the river system and physical setting that supported the rise of this civilization
2. The significance of the Aryan invasions
3. The major belief and practices of Brahmanism in India and how they evolved into early Hinduism
4. The social structure of the caste system
5. The life and moral teachings of Buddha and how Buddhism spread in India, Ceylon, and Central Asia
6. The growth of the Maurya empire and the political and moral achievements of the emperor Asoka
7. Important aesthetic and intellectual traditions (e.g., Sanskrit literature, medicine, metallurgy, mathematics including Hindu-Arabic numerals and the zero)

6.6 Students analyze the geographic, political, economic, religious, and social structures of the early civilizations of China, in terms of:

1. The location and description of the origins of Chinese civilization in the Huang-He Valley Shang dynasty
2. The geographical features of China that made governance and movement of ideas and goods difficult and served to isolate that country from the rest of the world
3. The life of Confucius and the fundamental teachings of Confucianism and Taoism
4. The political and cultural problems prevalent in the time of Confucius and how he sought to solve them
5. The policies and achievements of the emperor Shi Huangdi in unifying northern China under the Qin dynasty
6. The political contributions of the Han dynasty to the development of the imperial bureaucratic state and the expansion of the empire
7. The significance of the trans-Eurasian "silk roads" in the period of the Han and Roman empires and their locations
8. The diffusion of Buddhism northward to China during the Han dynasty

6.7 Students analyze the geographic, political, economic, religious, and social structures in the development of Rome, in terms of:

1. The location and rise of the Roman Republic, including such important mythical and historical figures as Aeneas, Romulus, and Remus, Cincinnatus, Julius Caesar, and Cicero
2. The character of the government of the Roman Republic and its significance (e.g., written constitution and tripartite government, checks and balances, civic duty)
3. The location of and the political and geographic reasons for the growth of Roman territories and expansion of the empire, including how the Roman empire fostered economic growth through the use of currency and trade routes
4. The influence of Julius Caesar and Augustus in Rome's transition from republic to empire
5. The migration of Jews around the Mediterranean region and the effects of their conflict with the Romans, including the Romans' restrictions on their right to live in Jerusalem
6. The origins of Christianity in the Jewish Messianic prophecies, the life and teachings of Jesus of Nazareth as described in the New Testament, and the contribution of St. Paul the Apostle and later St. Augustine to the definition and spread of Christian beliefs (e.g., belief in the Trinity, resurrection, salvation)
7. The circumstances that led to the spread of Christianity in Europe and other Roman territories
8. The legacies of Roman art and architecture, technology and science, literature, language, and law
9. Share examples of religious art.

SCIENCE STANDARDS

Grade Six

FOCUS ON EARTH SCIENCE

Plate Tectonics and Earth's Structure

1.0 Plate tectonics explains important features of the Earth's surface and major geologic events God has created. As the basis for understanding this concept, students know:

- 1.1 evidence for plate tectonics based on the fit of the continents, location of earthquakes, volcanoes, and mid-ocean ridges, and the distribution of fossils, rock types and ancient climatic zones.
- 1.2 the solid Earth is layered with cold, brittle lithosphere; hot, convecting mantle, and dense, metallic core.
- 1.3 lithospheric plates, on the scales of continents and oceans, move at rates of centimeters per year in response to movements in the mantle.
- 1.4 earthquakes are sudden motions along breaks in the crust called faults, and volcanoes/fissures are locations where magma reaches the surface.
- 1.5 major geologic events, such as earthquakes, volcanic eruptions and mountain building result from plate motions.
- 1.6 how to explain major features of California geology in terms of plate tectonics (including mountains, faults and volcanoes).
- 1.7 how to determine the epicenter of an earthquake and that the effects of an earthquake vary with its size, distance from the epicenter, local geology and the type of construction involved.

Shaping The Earth's Surface

2.0 Topography is reshaped by weathering of rock and soil and by the transportation and deposition of sediment. As the basis for understanding this concept, students know:

- 2.1 water running downhill is the dominant process in shaping the landscape, including California's landscape.
- 2.2 rivers and streams are dynamic systems that erode and transport sediment, change their course and flood their banks in natural and recurring patterns.
- 2.3 beaches are dynamic systems in which sand is supplied by rivers and moved along the coast by wave action.
- 2.4 earthquakes, volcanic eruptions, landslides and floods change human and wildlife habitats.

Heat (Thermal Energy) (Physical Science)

3.0 Heat moves in a predictable flow from warmer objects to cooler objects until all objects are at the same temperature. All forms of energy are controlled by God. As a basis for understanding this concept, students know:

- 3.1 energy can be carried from one place to another by heat flow or by waves, including water waves, light and sound, or by moving objects.

- 3.2 when fuel is consumed, most of the energy released becomes heat energy.
- 3.3 heat flows in solids by conduction (which involves no flow of matter) and in fluids by conduction and also by convection (which involves flow of matter).
- 3.4 heat energy is also transferred between objects by radiation; radiation can travel through space.

Energy In The Earth System

4.0 Many phenomena on the Earth's surface are affected by the transfer of energy through radiation and convection currents, as planned by God. As a basis for understanding this concept, students know:

- 4.1 the sun is the major source of energy for phenomena on the Earth's surface, powering winds, ocean currents and the water cycle.
- 4.2 solar energy reaches Earth through radiation, mostly in the form of visible light.
- 4.3 heat from Earth's interior reaches the surface primarily through convection.
- 4.4 convection currents distribute heat in the atmosphere and oceans.
- 4.5 differences in pressure, heat, air movement and humidity result in changes of weather.

Ecology (Life Science)

5.0 Organisms in ecosystems exchange energy and nutrients among themselves and with the physical environment in God's amazing circle of life. As a basis for understanding this concept, students know:

- 5.1 energy entering ecosystems as sunlight is transferred by producers into chemical energy through photosynthesis. That energy then passes from organism to organism in food webs.
- 5.2 over time, matter is transferred from one organism to others in the food web and between organisms and the physical environment.
- 5.3 populations of organisms can be categorized by the functions they serve in an ecosystem.
- 5.4 different kinds of organisms may play similar ecological roles in similar biomes.
- 5.5 the number and types of organisms an ecosystem can support depends on the resources available and abiotic factors, such as quantity of light and water, range of temperatures and soil composition.

Resources

6.0 Sources of energy and materials differ in amounts, distribution, usefulness and the time required for their formation. God has provided a huge array of resources, which we must use wisely. As a basis for understanding this concept, students know:

- 6.1 the utility of energy sources is determined by factors that are involved in converting these sources to useful forms and the consequences of the conversion process.
- 6.2 different natural energy and material resources including air, soil, rocks, minerals, petroleum, fresh water wildlife and forests, and classify them as renewable or nonrenewable.
- 6.3 natural origin of the materials used to make common objects.

Investigation And Experimentation

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

- 7.1 develop a hypothesis.
- 7.2 select and use appropriate tools and technology (including calculators, computers, balances, spring scales, microscopes and binoculars) to perform tests, collect data and display data.
- 7.3 construct appropriate graphs from data and develop qualitative statements about the relationships between variables.
- 7.4 communicate the steps and results from an investigation in written reports and verbal presentations.
- 7.5 recognize whether evidence is consistent with a proposed explanation.

- 7.6 read a topographic map and a geologic map for evidence provided on the maps, and construct and interpret a simple scale map.
- 7.7 interpret events by sequence and time from natural phenomena (e.g., relative ages of rocks and intrusions).
- 7.8 identify changes in natural phenomena over time without manipulating the phenomena (e.g., a tree limb, a grove of trees, a stream, a hill slope).

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

- Schedule with your child regular visits to the library and/or bookstore.
- Provide comfortable reading level and age appropriate materials.
- Subscribe to magazines of interest for different members of the family.
- Have your child share information about books, magazines, newspaper.
- Schedule a family reading time where everyone is reading books, magazines, newspaper, etc.

Reading Comprehension

- Have family discussions about things read, including book reviews, discussions about various characters in a story, 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.
- Have your child share newspaper articles they have read and then discuss the event.

Writing

- Have your child write about daily events in their journal.
- Have your child write letters and thank you notes.
- Have your child write summaries of movies, T.V. programs, etc.
- Have your child communicate with friends using the E-mail.
- Have your child use a computer for writing, using portions of the program that make the paper “pleasing to the eye” such as adding graphics to the text.
- Supervise your child while they edit their own work.

Written and Oral English Language Conventions

- Play word games such as Scrabble, Probe, Pictionary with your child.
- Have your child edit/correct errors found in the newspaper.
- Edit the letters your child has written looking for correct punctuation, capitalization, grammar, and sentence structure.

Listening and Speaking

- Discuss points of views expressed in the media with your family.
- Listen as your child speaks, helping him/her to use correct grammar and to avoid using improper language.
- Encourage your child to listen to the opinions of others and, when needed, ask for support of their opinions.

HOME ACTIVITIES FOR MATHEMATICS

Number Sense

- Play number games with your child.
- Help your child practice multiplication and division facts using flash cards.
- When shopping, give your child real and practical experiences such as weighing fruit, comparing prices, calculating discounts, determining the better buy, and figuring change.
- When cooking, have your child change the recipe by doubling or cutting in half the

amounts.

- Have your child calculate interest, fees, and penalties for a savings account.

Algebra and Functions

- Have your child plan a trip and determine miles to travel, gas mileage for the car, the amount of gas to be used, the traveling speed, and estimated arrival time.
- Have your child discuss the different currency rates in different countries. Discuss how much 100 dollars of American money might be worth in Japan, China, Canada, for example.

Measurement and Geometry

- Have your child build projects (e.g., sewing, woodwork, crafts, tile floors, anything requiring a design) using the concepts of geometry, area, and circumference.
- Work with your child in planning home improvement projects that require measuring, using standard and metric units (e.g., building a cabinet, determining square footage of a room before painting).

Statistics, Data Analysis, and Probability

- Have your child calculate averages for sports (e.g., free throw percentage, Baseball averages, Football rushing average, passing percentage, quarterback ratings).
- When working on a science project, have your child collect and record data.
- Play card or dice games with your child and mathematically determine the probability of winning.

Mathematical Reasoning

- Play reasoning games with your child (e.g., purchase a logic book).
- Have your child solve puzzles (e.g., riddles, crossword).
- Have your child plan a family budget.

HOME ACTIVITIES FOR HISTORY/SOCIAL SCIENCE

Early Physical and Cultural Development of Humankind

- Take your child to a museum to see fossil evidence, or artifacts, of pre-historic man.
- Using branches, vines, twigs, and/or grass, build a shelter in the back yard, like the ones built by pre-historic man, and spend the night in this shelter. Discuss with your child the shelter they built and how it felt to sleep there.

Early Civilizations of Mesopotamia, Egypt, and Kush

- Have your child create a series of symbols for different words or letters. Then have your child write a message using these symbols, as done by the ancient cultures then read the message.
- While camping by a river/creek, have your child build a toy boat and put the boat in the water. Observe the current it follows, obstructions, problems with navigation, etc. Compare this with the problems people had with early water transportation.

Structures of the Ancient Hebrews

- Talk with your child about the present religions in the world and discuss some of their similarities and differences.
- Discuss with your child the significance of Judaism, the first religion to believe in one God, a God who gives moral laws for man.
- On a map, locate the countries Egypt and the surrounding area, noting that this is where the Hebrews developed as a nation.

Structures of the Early Civilizations of Greece, India, and China

- On a map, locate major Asian cities located by rivers, and cities along the Mediterranean Sea Coastline. Discuss reasons why these cities developed, including the importance of water for trading goods, delivering news, political influences and cultural ideas. Discuss how water helped sustain cities and expand the civilization.
- With your family, spend the weekend living in a Caste system.. Assign all the family duties to duplicate a Caste System. (e.g., The top people are dictators to the two layers below them. The second layer may dictate to the lower level, but not the top. The lowest level are the servants.) Appoint family members for each level and

role play the system. At the end of the weekend, discuss the feelings of each person and the social justice for this system.

- The next weekend, role play a democratic form of government where discussion, collaboration, and voting take place prior to decisions that effect the family. Again, discuss the feelings of each person and the social justice for this system.
- Take your child to a cultural restaurant (e.g., Chinese, Greek, Indian) and sample their food, comparing it to American food. Discuss why this food became part of that country's diet (e.g., weather, land, soil conditions, proximity to the ocean).
- Go on a shopping trip and look for material or items made totally of one of the four different types of natural fibers (silk, cotton, wool, and linen). Compare these fibers for texture, durability and comfort. Discuss why these natural fibers are usable in all cultures.

Structures During Development of Rome

- With your child, look on a map or globe and locate Rome and the surrounding area. Then discuss why the Roman Empire took over the “then know world” (e.g., talk about climate, geography, the vast coastline, agriculture).
- Discuss with your child the system, used by the Romans, of bartering. Set up a store in your house, owned and run by mother. All children must barter for all merchandise, using a form a currency developed by the kids (e.g., Jelly Bellys, M & M’s.). Discuss the process of bartering and how this concept is used in your family and America today.
- With your child, look around your community to discover buildings that have Roman architectural influence.

HOME ACTIVITIES FOR SCIENCE

Focus on Earth Science

Plate Tectonics and Earth’s Structure

Plate Tectonics Accounts for Important Features of the Earth’s Surface

- With your child, make, or find, a map of the Pacific basin and locate Japan, the Phillipians, Hawaii, North and South America, major mountain ranges, and the San Andreas Fault. Label the areas that have earth quakes or volcanoes.
- With your child, look on the Internet for a sight showing the location of earthquakes and active volcanoes. Put a mark on your map showing the location of each earthquake and volcano The area around the Pacific Ocean is known as the “Ring of Fire.” Discuss this concept with your child, using your map.
- With your child, look on the Internet, finding the number of earthquakes that take place in the world every day. Record this number. Record the number of daily earthquakes for a week.

Shaping Earth’s Surface

Topography is Reshaped by the Weathering

- When walking by a stream with your child, look at the inside and outside curves. Talk about how and why their edges are different.
- With your child, look at different land formations and discuss all signs of erosion.
- With your child, walk along a beach and observe the wave action on the surface of the sand. Then create different shapes in the sand and watch how the waves affect them.
- Do the following experiment with your child:
Find two aluminum basting pans. Fill one with dirt and one with growing grass. Tilt the two pans. Using a light spray, run water in each pay and watch the erosion that takes place. Discuss the part plants play in saving our soil.

- With your child, watch the news for natural disasters and discuss their effects on people, plants, and animals and if/how man's activities might have influenced the disaster..

Heat

Heat Moves in a Predictable Flow from Warmer Objects to Cooler Objects

- With your child, light a candle in a darkened room and watch the heat waves.
- Have your child touch a metal faucet spout then turn on the hot water. Let them feel the change of temperature in the metal. Discuss the differences between convection of heat via the flow of water and the conduction heat in the metal.

Energy in the Earth System

Earth's Surface is Affected by the Transfer of Energy

- With your child, put water in two different jars and record the temperature of the water. Put the two jars in the sun, covering one jar with a white paper and the other with black paper. After an hour, record the temperatures of the water. Discuss why the water temperatures are different. Discuss the concept of heat and color and how this affects the color of clothes worn in places where it is hot.
- With your child, place a "pin wheel" above a candle, far enough so it will not catch on fire. Watch the heat from the candle spin the pin wheel. Talk about heat radiation.

Ecology

Organisms in Ecosystems Exchange Energy and Nutrients

- With your child, take a trip and notice the different types of ecosystems. Discuss the types of plants and animals that are found and discuss why some are more abundant than others.
- In the park or in your own back yard, select, with your child, one square yard of ground that has plants and small animals (e.g., beetles, worms). Plot the location of each organism and tell how each interacts.
- On the square yard of ground, count, with your child, the number of each kind of plant and animal found. Record your results and make a bar graph showing this information.

Resources

Sources of Energy and Materials Differ in Amounts, Distribution, Usefulness, and the Time Required for Their Formation.

- Discuss, with your child, the different types of energy found in the world, discussing renewable and nonrenewable resources.
- With your child, identify different things around the house and determine what the item is made of and identify if that material is a renewable or nonrenewable resource.
- Discuss, with your child, where electrical energy comes from, discussing different methods of generating electricity and the consequences, if any, of these different processes.
- As a family, begin the process of conserving electricity. Each month, when the electric bill arrives, put the number of "kw" used during the month. Post the number each month and see if the family can use less electricity.
- Using the information above, have your child make a line graph showing the usage of electricity over a period of six months.

Investigation and Experimentation

Scientific Progress is Made by Asking Meaningful Questions and Conducting Investigations

- Assist your child on their science fair project, making sure they include the:
 1. Question The question that they will answer
 2. Hypothesis Their first answer to the question
 3. Materials Used Items for the experiment
 4. Results What really happened
 5. Conclusions What was learned from the experiment.
- Help your child select the appropriate tools to conduct their experiment.
- Help your child as he/she makes graphs/charts to display their data.

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.

