

**SEVENTH GRADE
CONTENT STANDARDS**

Parent Handbook

**Sacramento Diocese
of
Catholic Schools**

Content Standards for

SEVENTH 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 Seventh 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:

- Seventh 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 Seven

THEME:

Christ, the Church and the world. Faith calls us to respond to the message of Jesus.

OBJECTIVES:

- A. To discover the teachings of Jesus through Christian Scriptures.
- B. To understand and recognize visible signs of God's grace.
- C. To respond to Christ's message with action.

1.0 MESSAGE: Discover the teachings of Jesus through Christian Scriptures.

1.1 God

- 1.1.1 To understand that Jesus dedicated His life to the marginalized of society.
- 1.1.2 To recognize that Christ is fully human and fully divine.
- 1.1.3 To understand that Jesus continues His mission and presence in the world through the Church.
- 1.1.4 To recognize that Jesus is the Lord of the past, present, and future.
- 1.1.5 To understand that Jesus invites all people to celebrate love in the Eucharistic banquet.

1.2 Scripture

- 1.2.1 To study the style and message of the parables.
- 1.2.2 To understand the demands of discipleship (Sermon on the Mount).
- 1.2.3 To understand the message of healing and reconciliation through parables and narratives.
- 1.2.4 To study the prediction, passion, and resurrection narratives.
- 1.2.5 To recognize the theme of compassion in Christian Scriptures.

1.3 Doctrine

- 1.3.1 To understand Mary's role in salvation.
- 1.3.2 To recognize the communion of saints as the unity of all those who follow Jesus.

2.0 WORSHIP: The sacraments are visible signs of God's grace.

2.1 Sacraments

- 2.1.1 To understand that the Rite of Christian Initiation brings adults and children (7-17 years of age) into the Church and includes the sacraments of Baptism, Confirmation, and Eucharist.
- 2.1.2 To understand the sacraments of healing - Reconciliation and Anointing of the Sick - celebrate Jesus' healing ministry.
- 2.1.3 To understand the sacraments of service - Marriage and Holy Orders - help us to fulfil our vocation.
- 2.1.4 To emphasize that the Eucharist is the central celebration of the Church and to review that it has two main parts--the Liturgy of the Word and the Liturgy of the Eucharist.
- 2.1.5 To review the symbols of individual sacraments and to understand their

meaning.

- 2.1.6 To realize and appreciate that the sacraments are community celebrations that call us to share the love of God with others.

2.2 Prayer

- 2.2.1 To understand that prayer has many forms including memorized prayers, spontaneous prayer, meditative and contemplative prayer.
- 2.2.2 To understand that faith helps us to persist in prayer, especially in times of pain and need, and expresses confidence and trust.
- 2.2.3 To learn to pray to the Holy Spirit for wisdom and courage in life decisions.
- 2.2.4 To understand that prayer and meditation are important parts of working for peace and justice.

- 2.2.5 To realize we are praying as we sing psalms, acclamations, litanies, and hymns at liturgical celebrations.
- 2.2.6 To practice using music and dance as forms of prayer.
- 2.2.7 To understand that we pray with the scriptures during the Liturgy of the Word.
- 2.2.8 To know the following prayers: (1) Sign of the Cross; (2) Act of Contrition; (3) Lord's Prayer; (4) Creed; (5) Hail Mary; (6) Prayer of St. Francis; (7) Doxology (Glory to the Father...); (8) Acts of Faith, Hope, and Love; (9) Grace before and after meals; (10) Memorare; and (11) Hail Holy Queen
- 2.2.9 To have the opportunity to participate in a variety of prayer forms such as recitation, spontaneous prayer, petitions, and guided meditation.

2.3 Liturgy

- 2.3.1 To review the specific parts and order of the Mass - the Liturgy of the Word and the Liturgy of the Eucharist - and to be able to properly use the responses.
- 2.3.2 To understand that there are special liturgies for Holy Days, feast days, and special occasions.
- 2.3.3 To understand what the Lectionary and Sacramentary are.

2.4 Liturgical Year

- 2.4.1 To be able to read and interpret a liturgical calendar.
- 2.4.2 To understand the reason for the sequence of the liturgical year.
- 2.4.3 To review the significance of the colors and symbols for each Church season.

2.5 Feast Days

- 2.5.1 To review that the Catholic Church has special celebrations for feast days.
- 2.5.2 To understand and appreciate that some feasts are specific to various ethnic groups.
- 2.5.3 To understand that national holidays share and celebrate many Catholic/Christian values. (Thanksgiving, Martin Luther King, Jr. Day, Memorial and Veterans' Days, Mother's and Father's Days).
- 2.5.4 To experience and understand rituals associated with saints such as St. Joseph's Day, St. Blaise's Feast, St. Patrick's Day.

2.6 Tradition

- 2.6.1 To understand that the Church is universal in nature but diverse in traditions according to cultural variations.
- 2.6.2 To understand there are many different ways to express faith within the Church.
- 2.6.3 To experience a variety of rituals and traditions associated with Mary.

3.0 MORALITY: As Christians with human dignity, we witness with our lives.

- 3.1 To respect all people as children of God.
- 3.2 To appreciate the gift of life with all its diversity.
- 3.3 To understand that conscience is a gift from God that helps us discern right from wrong.

4.0 CATHOLIC SOCIAL TEACHING: Service is a response to the message of Jesus.

4.1 Justice

- 4.1.1 To understand that justice is the foundation of the Church.
- 4.1.2 To understand that respect for human dignity is key to justice.
- 4.1.3 To understand the need to respect national, ethnic, sexual, and religious differences.
- 4.1.4 To realize that hunger, poverty, and violence are forms of injustice.

- 4.1.5 To promote equality based on respect for each person as a creation of God.
- 4.1.6 To understand that every right has a corresponding responsibility.
- 4.1.7 To understand that for Christians, Gospel values are the foundation of social, economic, and political choices.

4.2 Peace

- 4.2.1 To recognize examples of peace and peacemakers in the Bible.
- 4.2.2 To be encouraged to actively seek and work for peace.
- 4.2.3 To understand that peace is also an inner condition.
- 4.2.4 To realize that peace begins and can grow from the actions of one individual.
- 4.2.5 To understand that tolerance and acceptance are keys to peace.
- 4.2.6 To recognize that Jesus' example of prayer and meditation can guide us to peace.
- 4.2.7 To build on conflict resolution skills.

4.3 Local Needs

- 4.3.1 To recognize the needs of others, both in our own community and throughout the world.
- 4.3.2 To participate in school and class service projects.

5.0 COMMUNITY: The People of God have been present and active throughout history.

5.1 Models of Church

- 5.1.1 To realize that we are all called to be saints.
- 5.1.2 To recognize that martyrs exist even in our time.
- 5.1.3. To realize that there are many role models in addition to the saints.
- 5.1.4 To understand that the Church is a human institution with a divine mission.
- 5.1.5 To understand that the Church functions as Body of Christ, Servant, Sacrament, and Institution.

5.2 Church History

- 5.2.1 To understand the canonization process.
- 5.2.2 To learn about the Doctors of the Church.
- 5.2.3 To learn the ways the Church as institution communicates with the faithful such as Councils and encyclicals.

6.0 FAMILY LIFE: Choice and action are related.

6.1 Human Dignity

- 6.1.1 To understand that mature human sexuality demands a life-enriching commitment to other persons in the community.
- 6.1.2 To understand that human sexuality carries with it the responsibility to work toward Christian sexual maturity.
- 6.1.3 To understand that there are moral guidelines in regard to one's human sexuality.

7.0 TERMINOLOGY:

Abba	ministry	apostolic	miracleAscension
mystical body			
Beatitudes	occasion of sin	capital sins	parable
cardinal virtues	Pentecost		
prejudice	conscience	communion of saints	evangelist
temptation	resurrection of the	body	
incarnate	incarnation	theological virtues	
theology	Kingdom	transfiguration	
Last Supper	virtue	Way of the Cross	
meditation	lay person	life everlasting	

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

Isaiah 7: 10-14	Emmanuel; God with us
Isaiah 11: 1-2	Characteristics of the Messiah
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: 12	Suffering Servant passages
Isaiah 61: 1-3	How Jesus understood his own mission (see Luke 4: 18-19)
Jeremiah 31: 31-34	Promise of a new covenant
Ezekial 11: 19,	
36: 25-26	The Messiah will bring a new spirit
Psalms 22	The prayer of Jesus from the cross
Luke 6: 20-21	Beatitudes
Mark 8: 27-29	Peter's profession of faith
Luke 3: 21-22	Jesus is baptized
John 13: 1-17	The Last Supper
Luke 22: 37-39	The Greatest Commandment
John 15: 2	The True Value
Matthew 1: 18, 2: 23,	
Luke 1-2	Infancy Narrative
Matthew 26-28	Passion, Death, and Resurrection Narrative
Mark 14-15	Passion, Death, and Resurrection Narrative
Luke 22-24	Passion, Death, and Resurrection Narrative
John 18-21	Passion, Death, and Resurrection Narrative
Hebrew Scripture Books (46):	
<u>Pentateuch:</u>	Genesis, Exodus, Leviticus, Numbers, and Deuteronomy
<u>Historical Books:</u>	Joshua, Judges, Ruth, 1 and 2 Samuel, 1 and 2 Kings
<u>Chronicles History and the Later Histories:</u>	
	1 and 2 Chronicles, Ezra and Nehemiah, Tobit, Judith, Esther, 1 and 2 Maccabees
<u>Wisdom Books:</u>	Job, Psalms, Proverbs, Ecclesiastes, Song of Songs, Wisdom, Sirach
<u>Major Prophets:</u>	Isaiah, Jeremiah, Lamentations (Jeremiah), Baruch, Ezekial, and Daniel
<u>Minor Prophets:</u>	Hosea, Joel, Amos, Obadiah, Jonah, Micah, Nahum, Habakkuk, Zephaniah, Haggai, Zechariah, and Malachi
Christian Scriptures (26):	
<u>Gospels:</u>	Matthew, Mark, Luke and John
<u>Other Writings:</u>	Acts of the Apostles and Revelation
<u>Letters:</u>	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 Seven

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 seventh grade, your child will:

- 1.1 Identify idioms, analogies, metaphors, and similes in prose and poetry.
- 1.2 Use knowledge of Greek, Latin, and Anglo-Saxon roots and affixed to understand content-area vocabulary.
- 1.3 Clarify word meanings through the use of definition, example, restatement, or contrast.

2.0 Reading Comprehension (Focus on Informational Materials)

Students read and understand grade-level appropriate material and student 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 seven, students make substantial progress toward this goal.

By the end of seventh grade, your child will:

- 2.1 Understand and analyze the differences in structure and purpose between various categories of informational materials (e.g., textbooks, newspapers, instructional manuals, signs).
- 2.2 Locate information by using a variety of consumer, workplace, and public documents.
- 2.3 Analyze text that uses the cause-and-effect organizational pattern.
- 2.4 Identify and trace the development of an author's argument, point of view, or perspective in text.
- 2.5 Understand and explain the use of a simple mechanical device by following technical directions.
- 2.6 Assess the adequacy, accuracy, and appropriateness of the author's evidence to support claims and assertions, noting instances of bias and stereotyping
- 2.7 Possess the ability to locate a particular verse or reading in the Bible, using only chapter number and verse.
- 2.8 Understand and analyze the differences in structure and purpose between the four gospels and their writers.

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 seventh grade, your child will:

- 3.1 Articulate the expressed purposes and characteristics of different forms of prose (e.g., short story, novel, novella, essay).
- 3.2 Identify events that advance the plot and determine how each event explains past or present action(s) or foreshadows future action(s).
- 3.3 Analyze characterization as delineated through a character's thoughts, words, speech patterns, and actions; the narrator's description; and the thoughts, words, and actions of other characters.
- 3.4 Identify and analyze recurring themes across works (e.g., the value of bravery, loyalty, and friendship; the effects of loneliness).
- 3.5 Contrast points of view (e.g., first and third person, limited and omniscient, subjective and objective) in narrative text and explain how they affect the overall theme of the work.
- 3.6 Analyze a range of responses to a literary work and determine the extent to

which the literary elements in the work shaped those responses.

3.7 Interpret the writings of the gospel writers, using specific Bible verses.

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 seventh grade, your child will:

1.1 Create an organizational structure that balances all aspects of the composition and uses effective transitions between sentences to unify important ideas.

- 1.2 Support all statements and claims with anecdotes, descriptions, facts and statistics, and specific drafts.
- 1.3 Use strategies of note taking, outlining, and summarizing to impose structure on composition drafts.
- 1.4 Identify topics; ask and evaluate questions; and develop ideas leading to inquiry, investigation, and research.
- 1.5 Give credit for both quoted and paraphrased information in a bibliography by using a consistent and sanctioned format and methodology for citations.
- 1.6 Create documents by using word-processing skills and publishing programs; develop simple databases and spreadsheets to manage information and prepare reports.
- 1.7 Revise writing to improve organization and word choice after checking the logic of the ideas and the precision of the vocabulary.
- 1.8 Research the life of a Biblical figure or saint and use word processing skills to publish the work.
- 1.9 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. The 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 seven outlined in Writing Standard 1.0, students:

- 2.1 Write fictional or autobiographical narratives:
 - a. Develop a standard plot line (having a beginning, conflict, rising action, climax, and denouement) and point of view.
 - b. Develop complex major and minor characters and a definite setting.
 - c. Use a range of appropriate strategies (e.g., dialogue; suspense; naming of specific narrative action, including movement, gestures, and expressions).
- 2.2 Write responses to literature and the Bible:
 - a. Develop interpretations exhibiting careful reading, understanding, and insight.
 - b. Organize interpretations around several clear ideas, premises, or images from the literary work.
 - c. Justify interpretations through sustained use of examples and textual evidence.
- 2.3 Write research reports:
 - a. Pose relevant and tightly drawn questions about the topic.
 - b. Convey clear and accurate perspectives on the subject.
 - c. Include evidence compiled through the formal research process (e.g., use of a card catalog, Reader's Guide to Periodical Literature, a computer catalog, magazines, newspapers, dictionaries).
 - d. Document reference sources by means of footnotes and a bibliography.
- 2.4 Write persuasive compositions:

- a. State a clear position or perspective in support of a proposition or proposal.
 - b. Describe the points in support of the proposition, employing well-articulated evidence.
 - c. Anticipate and address reader concerns and counter arguments.
- 2.5 Write summaries of reading materials:
- a. Include the main ideas and most significant details.
 - b. Use the student's own words, except for quotations.
 - c. Reflect underlying meaning, not just the superficial details.
- 2.6 Write a Church petition.

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 the grade level.

By the end of seventh grade, your child will:

- 1.1 Place modifiers properly and use the active voice.
- 1.2 Identify and use infinitives and participles and make clear references between pronouns and antecedents,
- 1.3 Identify all parts of speech and types and structure of sentences.
- 1.4 Demonstrate the mechanics of writing (e.g., quotation marks, commas at end of dependent clauses) and appropriate English usage (e.g., pronoun reference).
- 1.5 Identify hyphens, dashes, brackets, and semicolons and use them correctly.
- 1.6 Use correct capitalization.
- 1.7 Spell derivatives correctly by applying the spellings of bases and affixes.

Listening and Speaking

1.0 Listening and Speaking Strategies

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

By the end of seventh grade, your child will:

- 1.1 Ask probing questions to elicit information, including evidence to support the speaker's claims and conclusions.
- 1.2 Determine the speaker's attitude toward the subject.
- 1.3 Respond to persuasive messages with questions, challenges, or affirmations.
- 1.4 Organize information to achieve particular purposes and to appeal to the background and interests of the audience.
- 1.5 Arrange supporting details, reasons, descriptions, and examples effectively and persuasively in relation to the audience.
- 1.6 Use speaking techniques, including voice modulation, inflection, tempo, enunciation, and eye contact, for effective presentations.
- 1.7 Provide constructive feedback to speakers concerning the coherence and logic of a speech's content and delivery and its overall impact upon the listener.
- 1.8 Analyze the effect on the viewer of images, text, and sound in electronic journalism; identify the techniques used to achieve the effects in each instance studied.
- 1.9 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 seven outlined in Listening and Speaking Standard 1.0, students:

2.1 Deliver narrative presentations:

- a. Establish a context, standard plot line (having a beginning, conflict, rising action, climax, and denouement), and point of view.
- b. Describe complex major and minor characters and a definite setting.
- c. Use a range of appropriate strategies, including dialogue, suspense, and naming of specific narrative action (e.g., movement, gestures, expressions).

- 2.2 Deliver oral summaries of articles and books:
 - a. Include the main ideas of the event or article and the most significant details.
 - b. Use the student's own words, except for material quoted from sources.
 - c. Convey a comprehensive understanding of sources, not just superficial details.
- 2.3 Deliver research presentations:
 - a. Pose relevant and concise questions about the topic.
 - b. Convey clear and accurate perspectives on the subject.
 - c. Include evidence generated through the formal research process (e.g., use of a card catalog, Reader's Guide to Periodical Literature, computer databases, magazines, newspapers, dictionaries).
 - d. Cite reference sources appropriately.
- 2.4 Deliver persuasive presentations:
 - a. State a clear position or perspective in support of an argument or proposal.
 - b. Describe the points in support of the argument and employ well-articulated evidence.
- 2.5 Read in Mass or present a Mass reading in class.
- 2.6 Deliver an oral summary of essays or reports, as they relate to religious figures.

MATHEMATICS STANDARDS

Grade Seven

Number Sense

1.0 Computing

By the end of Seventh Grade, your child will:

- 1.1 Read, write, and compare rational numbers in scientific notation (positive and negative powers of 10) with approximate numbers using scientific notation.
- 1.2 Add, subtract, multiply, and divide rational numbers (integers, fractions, and terminating decimals) and take positive rational numbers to whole-number powers.
- 1.3 Convert fractions to decimals and percents and use these representations in estimations, computations, and applications.
- 1.4 Differentiate between rational and irrational numbers.
- 1.5 Know that every rational number is either a terminating or repeating decimal and be able to convert terminating decimals into reduced fractions.
- 1.6 Calculate the percentage of increases and decreases of a quantity.
- 1.7 Solve problems involving discounts, markups, commissions, and profit and compute simple and compound interest.

2.0 Fractions

By the end of Seventh Grade, your child will:

- 2.1 Understand negative whole-number exponents. Multiply and divide expressions involving exponents with a common base.
- 2.2 Add and subtract fractions by using factoring to find common denominators.
- 2.3 Multiply, divide, and simplify rational numbers by using exponent rules.

2.4 Use the inverse relationship between raising to a power and extracting the root of a perfect square integer; for an integer that is not square, determine, without a calculator, the two integers between which its square root lies and explain why.

- 2.5 Understand the meaning of the absolute value of a number; interpret the absolute value as the distance of the number from zero on a number line; and determine the absolute value of real numbers.

Algebra and Functions

1.0 Writing Expressions

By the end of Seventh Grade, your child will:

- 1.1 Use variables and appropriate operations to write an expression, an equation, an inequality, or a system of equations or inequalities that represents a verbal description (e.g., three less than a number, half as large as area A).
- 1.2 Use the correct order of operations to evaluate algebraic expressions such as $3(2x + 5)^2$.
- 1.3 Simplify numerical expressions by applying properties of rational numbers (e.g., identify, inverse, distributive, associative, commutative) and justify the process used.
- 1.4 Use algebraic terminology (e.g., variable, equation, term, coefficient, inequality, expression, constant) correctly.
- 1.5 Represent quantitative relationships graphically and interpret the meaning of a specific part of a graph in the situation represented by the graph.

2.0 Evaluating Expressions

By the end of Seventh Grade, your child will:

- 2.1 Interpret positive whole-number powers as repeated multiplication and negative whole-number powers as repeated division or multiplication by the multiplicative inverse. Simplify and evaluate expressions that include exponents.
- 2.2 Multiply and divide monomials; extending the process of taking powers and extracting roots to monomials when the latter results in a monomial with an integer exponent.

3.0 Linear and Nonlinear Functions

By the end of Seventh Grade, your child will:

- 3.1 Graph functions of the form $y = nx^2$ and $y = nx^3$ and using in solving problems.
- 3.2 Plot the values from the volumes of three-dimensional shapes for various values of the edge lengths (e.g., cubes with varying edge lengths or a triangle prism with a fixed height and an equilateral triangle base of varying lengths).
- 3.3 Graph linear functions, noting that the vertical change (change in y -value) per unit of horizontal change (change in x -value) is always the same and know that the ration (“rise over run”) is called the slope of a graph.
- 3.4 Plot the values of quantities whose ratios are always the same (e.g., cost to the number of an item, feet to inches, circumference to diameter of a circle). Fit a line to the plot and understand that the slope of the line equals the quantities.

4.0 Linear Equations

By the end of Seventh Grade, your child will:

- 4.1 Solve two-step linear equations and inequalities in one variable over the rational

number, interpret the solution or solutions in the context from which they arose, and verify the reasonableness of the results.

- 4.2 Solve multistep problems involving rate, average speed, distance, and time or a direct variation.

Measurement and Geometry

1.0 Measurement

By the end of Seventh Grade, your child will:

- 1.1 Compare weights, capacities, geometric measures, times, and temperatures within and between measurement systems (e.g., miles per hour and feet per second, cubic inches to cubic centimeters).
- 1.2 Construct and read drawings and models made to scale.
- 1.3 Use measures expressed as rates (e.g., speed, density) and measures expressed as products (e.g., person-days) to solve problems; check the units of the solutions; and use dimensional analysis to check the reasonableness of the answer.

2.0 Perimeter and Area

By the end of Seventh Grade, your child will:

- 2.1 Use formulas routinely for finding the perimeter and area of basic two-dimensional figures and the surface area and volume of basic three-dimensional figures, including rectangles, parallelograms, trapezoids, squares, triangles, circles, prisms, and cylinders.
- 2.2 Estimate and compute the area of more complex or irregular two- and three-dimensional figures by breaking the figures down into more basic geometric objects.
- 2.3 Compute the length of the perimeter, the surface area of the faces, and the volume of a three-dimensional object built from rectangular solids. Understand that when the lengths of all dimensions are multiplied by a scale factor, the surface area is multiplied by the square of the scale factor and the volume is multiplied by the cube of the scale factor.
- 2.4 Relate the changes in measurement with a change of scale to the units used (e.g., square inches, cubic feet) and to conversions between units (1 square foot = 144 square inches or $[1 \text{ ft}^2] = [144 \text{ in}^2]$, 1 cubic inch is approximately 16.38 cubic centimeters or $[1 \text{ in}^3] = [16.38 \text{ cm}^3]$).

3.0 Geometry

By the end of Seventh Grade, your child will:

- 3.1 Identify and construct basic elements of geometric figures (e.g., altitudes, midpoints, diagonals, angle bisectors, and perpendicular bisectors; central angles, radii, diameters, and chords of circles) by using a compass and straightedge.
- 3.2 Understand and use coordinate graphs to plot simple figures, determining lengths and area relating to them, and determine their image under translations and reflections.
- 3.3 Know and understand the Pythagorean Theorem and its converse and use it to find the length of the missing side of a right triangle and the lengths of other line segments and, in some situations, empirically verifying the Pythagorean Theorem by direct measurement.
- 3.4 Demonstrate an understanding of conditions that indicate two geometrical figures are congruent and what congruence means about the relationships between the sides and angles of the two figures.
- 3.5 Construct two-dimensional patterns for three-dimensional models, such as cylinders, prisms, and cones.
- 3.6 Identify elements of three-dimensional geometric objects (e.g., diagonals of rectangular solids) and describing how two or more objects are related in space (e.g., skew lines, the possible ways three planes might intersect).

Statistics, Data Analysis, and Probability

1.0 Data

By the end of Seventh Grade, your child will:

- 1.1 Know various forms of display for data sets, including a stem-and-leaf plot or box-and-whisker plot; using the forms to display a single set of data or to

compare two sets of data.

- 1.2 Represent two numerical variables on a scatterplot and informally describe how the data points are distributed and any apparent relationship that exists between the two variables (e.g., between time spent on homework and grade level).
- 1.3 Understand the meaning of, and be able to compute, the minimum, the lower quartile, the median, the upper quartile, and the maximum of a data set.

Mathematical Reasoning

1.0 Make Decisions about a Problem

By the end of Seventh Grade, your child will:

- 1.1 Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, identifying missing information, sequencing and prioritizing 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 and Justifying Reasoning

By the end of Seventh 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 by using logical reasoning and arithmetic and algebraic techniques.
- 2.4 Make and test conjectures by using both inductive and deductive reasoning.
- 2.5 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models, to explain mathematical reasoning.
- 2.6 Express the solution clearly and logically by using the appropriate mathematical notation and terms.
- 2.7 Indicate the relative advantages of exact and approximate solutions to problems and give answers to a specified degree of accuracy.
- 2.8 Make precise calculations and check the validity of the results from the context of the problem.

3.0 Make Connections

By the end of Seventh 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 to new problem situations.

HISTORY/SOCIAL SCIENCE STANDARDS

Grade Seven

World History and Geography: Medieval and Early Modern Times

Students in grade seven study the social, cultural, and technological changes that occurred in Europe, Africa, and Asia from 500-1789 AD. After reviewing the ancient world and the ways in which archaeologists and historians uncover the past, students study the history and geography of great civilizations that were developing concurrently throughout the world during medieval and early modern times. They examine the growing economic interaction among civilizations as well as the exchange of ideas, beliefs, technologies and commodities. They learn about the resulting growth of Enlightenment philosophy and the new examination of the concepts of reason and authority, the natural rights of human beings and the divine right of kings, experimentalism in science and the dogma of belief. Finally, students assess the political forces let loose by the Enlightenment, particularly the rise of democratic ideas, and they

learn about the continuing influence of these ideas in the world today.

7.1 Students analyze the causes and effects of the vast expansion and ultimate disintegration of the Roman Empire, in terms of:

1. The early strengths and lasting contributions of Rome (e.g., significance of Roman citizenship; rights under Roman law; Roman art, architecture, engineering and philosophy; preservation and transmission of Christianity) and its ultimate internal weakness (e.g., rise of autonomous military powers within the empire, undermining of citizenship by the growth of corruption and slavery, lack of education and the distribution of news).
2. The geographic borders of the empire at its height and the factors that threatened its territorial cohesion.

3. The establishment by Constantine of the new capital in Constantinople and the development of the Byzantine Empire with an emphasis on the growing schism between Roman Catholicism and Eastern Orthodoxy.

7.2 Students analyze the geographic, political, economic, religious, and social structures of civilizations of Islam in the middle ages, in terms of:

1. The physical features and climate of the Arabian peninsula, its relationship to surrounding bodies of land and water and the relationship between nomadic and sedentary ways of life.
2. The origins of Islam and the life and teachings of Mohammed.
3. The significance of the Qur'an and the Sunnah as the primary sources of Islamic beliefs, practice and law, and their influence in Muslims' daily life.
4. The expansion of Muslim rule through military conquests and treaties, emphasizing the cultural blending within Muslim civilization and the spread of Islam and the Arabic language.
5. The growth of cities and the trade routes created among Asia, Africa, and Europe, and the products and inventions that traveled along these routes (e.g., spices, textiles, paper, steel, new crops).
6. The intellectual exchanges among Muslim scholars of Eurasia and Africa and the contributions Muslim scholars made to later civilizations in the areas of science, geography, mathematics, philosophy, medicine, art, and literature.
7. Compare the legend of the first simple mosque built in Medina where Mohammed's camel chose to stop and the story of the spot on which Christ chose for his Church in Rome (St. Peter's).

7.3 Students analyze the geographic, political, economic, religious, and social structures of the civilizations of China in the middle ages in terms of:

1. The reunification of China under the Tang Dynasty and reasons for the spread of Buddhism in Tang China, Korea, and Japan.
2. Agricultural, technological, and commercial developments during the Tang and Sung periods.
3. The influences of Confucianism and changes on Confucian thought during the Sung and Mongol periods.
4. The importance of both overland trade and maritime expeditions between China and other civilizations in the Mongol Ascendancy and Ming Dynasty.
5. Compare and contrast the similarities of the teachings of Confucius to the teachings of Jesus (e.g., Jesus – "Do unto to others as you would have them do unto you." Confucius – "When asked, what do you think of repaying evil with kindness, Confucius replied: Then what are you going to repay kindness with? Repay kindness with kindness, but repay evil with justice.").
6. The historic influence of such discoveries as tea, the manufacture of paper, wood block printing, the compass, and gunpowder.

7.4 Students analyze the geographic, political, economic, religious, and social structures of the Sub-Saharan civilizations of Ghana and Mali in Medieval Africa, in terms of:

1. The Niger River and the vegetation zones of forest, savanna and desert and the relationship of these features to the trade in gold, salt, food, and slaves; the

growth of the Ghana and Mali empires.

2. The importance of family, labor, specialization, and regional commerce in the development of states and cities in West Africa.
3. The role of the trans-Saharan caravan trade in the changing religious and cultural characteristics of West Africa, and the influence of Islamic beliefs, ethics and law.
4. The growth of Arabic as a language of government, trade, and Islamic scholarship in West Africa.
5. The importance of written and oral traditions in the transmission of African history and culture.

7.5 Students analyze the geographic, political, economic, religious, and social structures of the civilizations of Medieval Japan, in terms of:

1. The significance of Japan's proximity to China and Korea and the intellectual, linguistic, religious, and philosophical influence of those countries on Japan.
2. The reign of Prince Shotoku of Japan and the characteristics of Japanese society and family life.
3. The values, social customs, and traditions prescribed by the lord-vassal system consisting of shogun, daimyo and samurai and the lasting influence of the warrior code in the 20th century.
4. The development of distinctive forms of Japanese Buddhism.
5. The ninth and tenth century golden age of literature, art, and drama, and its lasting effects on culture today, including Murasaki Shikibu's *Tale of Genji*.
6. Investigate the reasons for the ban of Christianity in Japan in the 1600s by the Ieyasu of the Tokugawa family.

7.6 Students analyze the geography, political, economic, religious, and social structures of the civilizations of Medieval Europe, in terms of:

1. The geography of the Europe and the Eurasian land mass, including its location, topography, waterways, vegetation and climate and relationship of life in ancient Europe and during the Roman Empire.
2. The spread of Christianity north of the Alps and the role played by the early Church and by monasteries in its diffusion after the fall of Rome.
3. The development of feudalism, its operation in the medieval European economy, the way in which it was influenced by physical geography (the role of the manor and the growth of town) and how feudal relationships provided the foundation of political order.
4. The conflict and cooperation between the Papacy and European monarchs (e.g., Charlemagne, Gregory VII, Emperor Henry IV).
5. The significance of developments in medieval English legal and constitutional practice and their importance in the rise of modern democratic thought and representative institutions (e.g., Magna Carta, parliament, development of habeas corpus, and independent judiciary in England).
6. The causes and course of the Religious Crusades and the effects on Christian, Muslim and Jewish populations in Europe with emphasis on the increasing contact with the cultures of the Eastern Mediterranean world.
7. Mapping the spread of the Bubonic Plague from Central Asia to China, the Middle East, and Europe and its impact on global population.
8. The importance of the Catholic church as a political, intellectual and aesthetic institution (e.g., founding of universities, the political and spiritual role of the clergy, creation of monastic and mendicant religious orders, preservation of Latin language and religious texts, St. Thomas Aquinas' synthesis of classical philosophy with Christian theology and the concept of "natural law").
9. The history of the decline of Muslim rule in the Iberian Peninsula that culminated in the "Reconquista" and the rise of Spanish and Portuguese kingdoms .
10. Compile a list of personal, social, economic, and political reasons why a young

man or woman might have had for entering a medieval monastery or convent during the Middle Ages of European history. Contrast these reasons for entering or not entering religious orders today.

7.7 Students compare and contrast the geographic, political, economic, religious, and social structures of the Mesoamerican and Andean civilizations, in terms of:

1. The locations, landforms and climates of Mexico, Central America, and South America and their effects upon the Mayan, Aztec, and Incan economies, trade, and development of urban societies.

2. The roles of people in each society, including class structures, family life, warfare, religious beliefs and practices, and slavery.
3. How and where each empire arose and how the Aztec and Inca empires were defeated by the Spanish.
4. The artistic and oral traditions and architecture in the three civilizations.
5. The Meso-American achievements in astronomy and mathematics, including the development of the calendar and the Mesoamerican knowledge of seasonal changes to the civilization's agricultural systems.

7.8 Students analyze the origins, accomplishments and geographic diffusion of the Renaissance, in terms of:

1. The way in which the revival of classical learning and the arts affected a new interest in "humanism" (i.e., a balance between the intellect and religious faith).
2. The importance of Florence in the early stages of the Renaissance and the growth of independent trading cities (e.g., Venice) with emphasis on their importance in the spread of Renaissance ideas.
3. The effects of re-opening of the ancient "silk road" between Europe and China, including Marco Polo's travels and the locations of his routes.
4. The growth and effect of ways of disseminating information (e.g., the ability to manufacture paper, translation of the Bible into the vernacular, printing).
5. Advances in literature, the arts, science, mathematics, cartography, engineering, and the understanding of human anatomy and astronomy (e.g., biographies of Dante, de Vinci, Michelangelo, Guttenburg, Shakespeare).
6. Research one of the great Renaissance writers or artists and their beliefs inspiring their contributions to the Catholic Church of their day. (Raphael, Michelangelo, Da Vinci, Giotto, Dante).

7.9 Students analyze the historical developments of the Reformation, in terms of:

1. The causes for the internal decay of the Catholic church (e.g., tax policies, selling of indulgences).
2. The theological, political, and economic ideas of the major figures during the Reformation (e.g., Erasmus, Martin Luther, John Calvin, William Tindale).
3. The influence of new practices of church self-government among Protestants on the development of democratic practices and ideas of federalism.
4. The location and identification of European regions that remained Catholic and those that became Protestant and how the division affected the distribution of religions on the New World.
5. How the Counter-Reformation revitalized the Catholic Church and the forces that propelled the movement (e.g., St Ignatius of Loyola, and the Jesuits, the Council of Trent).
6. The institution and impact of missionaries on Christianity and the diffusion of Christianity from Europe to other parts of the world in the medieval and early modern periods, including their location on a world map.
7. The "Golden Age" of cooperation between Jews and Muslims in Medieval Spain which promoted creativity in art, literature and science, including how it was terminated by the religious persecution of individuals and groups (e.g., the

Spanish Inquisition and the expulsion of Jews and Muslims from Spain in 1492).

7.10 Students analyze the historical developments of the Science Revolution and its lasting effect of religious, political and cultural institutions, in terms of:

1. The roots of the scientific revolution (e.g., Greek rationalism; Jewish, Christian, and Muslim science; Renaissance humanism, new knowledge from global exploration).
2. The significance of the new scientific theories (e.g., Copernicus, Galileo, Kepler, Newton) and the significance of inventions (e.g., telescope, microscope, thermometer, barometer).

3. The scientific method advanced by Bacon and Descartes, the influence of new scientific rationalism on the growth of democratic ideas and the coexistence of science with traditional religious beliefs.

7.11 Students analyze political and economic changes in the sixteenth, seventeenth, and eighteenth centuries (Age of Exploration, the Enlightenment, and the Age of Reason), in terms of:

1. The great voyages of discovery, the location of the routes, and influence of cartography in developing a new European world view.
2. The exchanges of plants, animals, technology, culture, and ideas among Europe, Africa, Asia, and the Americas in the 15th and 16th centuries and the major economic and social effects on each continent.
3. The origins of modern capitalism, the influence of mercantilism and cottage industry, the elements and importance of a market economy in seventeenth-century Europe, and the changing international trading and marketing patterns, including their location on a world map and the influence of explorers and map makers.
4. How the main ideas of the Enlightenment can be traced back to such movements as the Renaissance, the Reformation, and the Scientific Revolution and the Greeks, Romans, and Christianity.
5. How democratic thought and institutions were influenced by Enlightenment thinkers (e.g., Locke, Montesquieu, American founders).
6. How the principles in the Magna Carta were embodied in such documents as the English Bill of Rights and the American Declaration of Independence.

7.12 Identify the roles missionaries and social workers play in struggling, war-torn, or third-world nations today.

SCIENCE STANDARDS

Grade Seven

Focus on Life Science

Cell Biology

1.0 God made all living things to be composed of cells, from just one to many trillions, whose details usually are visible only through a microscope. As a basis for understanding this concept, students know:

- 1.1 the way in which cells function is similar in all living organisms.
- 1.2 the characteristics that distinguish plant cells from animal cells, including chloroplasts and cell walls.
- 1.3 the nucleus is the repository for genetic information in plant and animal cells.
- 1.4 mitochondria liberate energy for the work that cells do, and chloroplasts capture sunlight energy for photosynthesis .
- 1.5 cells divide to increase their numbers through a process of mitosis, which

results in two daughter cells with identical sets of chromosomes.

- 1.6 As multi-cellular organisms develop, their cells differentiate.
- 1.7 observe plant and animal cells through microscopes.
- 1.8 how immune system cells fight disease.
- 1.9 how HIV destroys T-cells.
- 1.10 cell organelles and their function.
- 1.11 the cell in its environment.
- 1.12 chemical compounds in cells.
- 1.13 diffusion; osmosis; passive and active transport across cell membrane.
- 1.14 cell mutation causing cancer.

Genetics

2.0 A typical cell of any organism contains genetic instructions that specify its traits. Those traits may be modified by environmental influences. As a basis for understanding this concept, students know:

- 2.1 the differences between the life cycles and reproduction of sexual organisms .
- 2.2 sexual reproduction produces offspring that inherit half of their genes from each parent.
- 2.3 an inherited trait can be determined by one or by many genes.
- 2.4 plant and animal cells contain many thousands of different genes, and typically have two copies of every gene. The two copies (or alleles) of the gene may or may not be identical, and one may be dominant in determining the phenotype while the other is recessive.
- 2.5 DNA is the genetic material of living organisms and is located in the chromosomes of each cell.
- 2.6 human genetic disorders and disease

Evolution

3.0 God initiated the biological evolution process which accounts for the diversity of species developed through gradual processes over many generations. As a basis for understanding this concept, students know:

- 3.1 both genetic variation and environmental forces act to cause evolution and diversity of organisms.
- 3.2 the reasoning used by Darwin in his conclusions that natural selection is the mechanism of evolution.
- 3.3 how independent lines of evidence from geology, fossils, and comparative anatomy provide a basis for the theory of evolution.
- 3.4 how to construct a simple branching diagram to classify several living groups of organisms by shared derived characteristics, and that a branching diagram can be expanded to include fossil organisms.
- 3.5 extinction of a species occurs when the environment changes and the adaptive characteristics of a species are insufficient to allow its survival.

Earth And Life History (Earth Science)

4.0 Evidence from rocks allows us to understand the evolution of life on Earth. As the basis for understanding, students know:

- 4.1 Earth processes today are similar to those that occurred in the past and slow geologic processes have large cumulative effects over long periods of time.
- 4.2 the history of life on Earth has been disrupted by major catastrophic events, such as major volcanic eruptions or the impact of an asteroid.
- 4.3 the rock cycle includes the formation of new sediment and rocks. Rocks are often found in layers with the oldest generally on the bottom.
- 4.4 evidence from geologic layers and radioactive dating indicate the Earth is approximately 4.6 billion years old, and that life has existed for more than 3 billion years.

- 4.5 fossils provide important evidence of how life and environmental conditions have changed.
- 4.6 how movements of the Earth's continental and oceanic plates through time, with associated changes in climate and geographical connections, have affected the past and present distribution of organisms.
- 4.7 how to explain significant developments and extinctions of plant and animal life on the geologic time scale.
- 4.8 viruses and bacteria; how infectious diseases spread.
- 4.9 research report on virus/bacterial disease using paraphrasing of resource materials.
- 4.10 types of protists and algae.

Structure And Function In Living Systems

5.0 The anatomy and physiology of plants and animals of God's world illustrate the complimentary nature of structure and function. As a basis for understanding this concept, students know:

- 5.1 plants and animals have levels of organization for structure and function, including cells, tissues, organs, organ systems, and the whole organism.
- 5.2 organ systems function because of the contributions of individual organs, tissues, and cells. The failure of any part can affect the entire system.
- 5.3 how bones and muscles work together to provide a structural framework for movement.
- 5.4 how the reproductive organs of the human female and male generate eggs and sperm, and how sexual activity may lead to fertilization and pregnancy.
- 5.5 the function of the umbilicus and placenta during pregnancy.
- 5.6 the structures and processes by which flowering plants generate pollen and ovules, seeds, and fruit.
- 5.7 relate the structures of the eye and ear to their functions.

Physical Principles In Living Systems (Physical Science)

6.0 Physical principles underlie biological structures and functions of God's universe. As a basis for understanding this concept, students know:

- 6.1 visible light is a small band within a very broad electromagnetic spectrum.
- 6.2 for an object to be seen, light emitted by or scattered from it must enter the eye.
- 6.3 that light travels in straight lines except when the medium it travels through changes.
- 6.4 how simple lenses are used in a magnifying glass, the eye, camera, telescope, and microscope.
- 6.5 white light is a mixture of many wavelengths (colors), and that retinal cells react differently with different wavelengths.
- 6.6 the angle of reflection of a light beam is equal to the angle of incidence.
- 6.7 how to compare joints in the body (wrist, shoulder, thigh) with structures used in machines and simple devices (hinge, ball-and-socket, and sliding joints)
- 6.8 how levers confer mechanical advantage and how the application of this principle applies to the muscular-skeletal system.
- 6.9 that contractions of the heart generate blood pressure, and that heart valves prevent back flow of blood in the circulatory system.
- 6.10 light interacts with matter by transmission (including refraction), absorption, or scattering (including reflection).
- 6.11 the steps of the scientific method and application for problem solving; understanding and demonstrating.

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.
- 7.8 identify changes in natural phenomena over time without manipulating the phenomena.

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

- Visit the library and/or bookstore with your child.
- Provide comfortable reading level and age appropriate materials.
- Subscribe to magazines of interest for different members of the family.
- Schedule a family reading time where everyone is reading books, magazines, newspaper, etc.
- Encourage your child to read nonfiction, informational materials, etc.

Reading Comprehension

- Read magazines, newspapers, and editorials on current events and discuss point of view of the author, speaker, with person reading the article.
- After reading a story, ask questions about the story.
- Talk with your child about the plot, climax, and outcome of text.

Writing

- Have your child write about daily events in their journal.
- Have your child write summaries of T.V. programs, plays, productions, critiques, evaluations, etc.
- Encourage creative writing including prayers, poems, short stories, etc.
- Have your child use technology to communicate to others.
- Have your child use a computer for writing, using the capabilities of the machine to enhance the writing.

Written and Oral English Language Conventions

- Have your child edit/correct errors found in the newspaper.
- Supervise your child editing letters they have written, looking for correct punctuation, capitalization, grammar, and sentence structure.
- Have the child use computer software to enhance their writing (e.g., grammar checker).

Listening and Speaking

- Have your child read material aloud. Listen for voice inflections, seeing if the tone of the voice fits the theme being read.
- Have your child create and put on a play by themselves or with friends.
- Have your child listen to and explain the lyrics of a selection of music.
- Listen to books on tape, speeches, poetry, etc.
- Memorize and recite good literature, poems, etc.

HOME ACTIVITIES FOR MATHEMATICS

Number Sense

- When shopping, give your child real and practical experiences such as calculating discounts, determining the better buy, and figuring change.
- When cooking, have your child change a recipe by doubling or cutting the amounts in half.
- Have your child calculate interest, fees, and penalties for a savings account.

Algebra and Functions

- Have your child create and solve problems using department store ads (e.g., Find three items that total \$50.00 including tax).
- Have your child solve problems that have multiple solutions (e.g., How many ways can you make a double dip ice cream cone given 5 flavors of ice cream).

Measurement and Geometry

- Build projects (e.g., sewing, woodwork, crafts, tile floors, anything requiring a design) with your child using 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).
- Have your child make a scale map of your block, house, etc.

Statistics, Data Analysis, and Probability

- Have your child calculate averages for sports (e.g., free throw percentage, baseball averages, rushing average, passing percentage, quarterback ratings).
- Have your child calculate and graph calorie intake per meal or per day.
- Design and build, with your child, carnival type games and state the probability for winning each game (e.g., When rolling one die, the probability of rolling a five is one chance in six because there are six sides on the dice). Next have friends play each of the games and compare the number of times they win with the projected probability.

Mathematical Reasoning

- Play strategy games with your child (e.g., Battleship on a coordinate grid, chess).
- Have your child solve puzzles (e.g., riddles, crossword).
- Have your child plan a family budget.
- Purchase a logic book for your child.

HOME ACTIVITIES FOR HISTORY/SOCIAL SCIENCE

Causes and Effects of the Expansion and Disintegration of the Roman Empire

- Discuss, with your child, some of the reasons why the Roman Empire took over the “then know world.” Discuss climate, geography, vast amount of coastline, agriculture, closeness to major waterways., etc.
- Talk with your child about reasons why the Roman Empire might have collapsed. Include; (1) democratic government was taken over by an emperor with ultimate power, (2) the empire was so large it was unmanageable, and (3) the revolution by the slaves.

Explore the Structures of the Civilization of Islam, China, Ghana, Africa, Japan, and Europe, in the Middle Ages

- Make a map of Asia, Europe, and northern Africa. On the map, include major mountain ranges, rivers, and oceans. Next identify the goods that each of the

- countries traded. Put these on the map.
- With your child, look around the house and identify the different items (e.g., piano keys, spices, gun powder, tea, salt) and tell what country they came from.
- For fun, have your child cook one meal without using any seasoning. Discuss the flavor of the food and how food might have tasted in the early days if the countries had not traded spices.
- The political structure of the Eastern Hemispheres, during the middle ages, was ruled by the rich and educated people. In your family, play the computer game of “Who Wants to be a Millionaire.” Each family member plays 3 games each. At the end of this time, the person with the highest winnings becomes the educated ruler of the family for a weekend. Talk about how it felt being ruled by the most educated person in the family.

Compare the Meso-American and Andean Civilizations.

- On a map of the world, help your child locate Mexico, Central America, South America, the Andes Mountains and the Amazon basin. Talk about what people in the family know about this area.
- Before taking a trip to the mountains, have your child run 100 yards then talk about how he/she feels. When arriving in the mountains, have your child again run 100 yards and talk about how he/she feels. Discuss running at the different altitudes and how professional football players, for example, have to adapt to high elevations when playing in Denver, CO.
- With your child, plan and cook a Mexican meal.
- While traveling with your child, look for and discuss Mexican art in California.

Analyze the Origins, Accomplishments, and Geographic Diffusion of the Renaissance.

- With your child, look up the word “Renaissance.” in the dictionary and discuss the definition.
- Talk with your child about how Leonardo da Vinci developed plans for mechanical devices, such as the helicopter. Have your child build a model using a set of plans (e.g., a model airplane, model car).
- Have each member of the family develop a set of plans for a bridge. Using simple materials (e.g., sugar cubes, tooth picks, pop cycle sticks) have each person build their bridge. Put different weights on each bridge to determine the strongest one. Award a prize for the strongest bridge.
- With your child, visit a newspaper office and see the technique used for printing. Compare this process to the Gutenberg printing press.
- With your child, find a map of Asia, Europe, and northern Africa, and note the trade routes, (e.g., the silk road and the travels of Marco Polo).
- Visit a museum and note the artwork and the signature of the artist. Discuss with your child the fact that the Renaissance period was the first time in history that people were recognized as individuals (e.g., signing his/her name to a painting).
- On your next trip with your child, talk about the different types of architecture (e.g., Spanish, Roman, Western, Oriental).
- Help your child create a word search including 20 names of people and cities influential in the Renaissance period.

The Reformation.

- In history, the Reformation was the time when the people began to protest some of the beliefs and practices of the catholic church. These people left the Catholic church and formed the Protestant religions. During this time, the Bible underwent a number of translations into English. With your child, compare scriptures from two or more different translations and discuss their differences, similarities, and clarity.
- With your child, create a map showing the land owned by the dominate religious influences, before and after the reformation.

Historical Developments of the Scientific Revolution

- Copernicus, using the idea of shadow's at different locations, determined that the earth rotated around the sun and that the earth was round. With your child, make a sun dial and use this device to tell time.
- With your child, talk about the result of the scientific revolution, pointing out the number of things we have around the house that use a thermometer, microscope, telescope, and barometer. Discuss how these inventions improved people's lives.
- With your child, follow the news of the next space shuttle mission. Discuss our modern day reaction to space travel. How would one react to this who believed that the sun rotated around the Earth? How have these missions created global interaction?

Political and Economic Change in the sixteenth, seventeenth, and eighteenth Centuries

- Have each member of the family make a batch of cookies from scratch, without help from others, as an example of a Cottage Industry. Then, have family members work together to make a batch of cookies, as an example of Mercantilism. Discuss the advantages and disadvantages of each way of working.
- Create a crossword puzzle using the names of inventions from the 16th. - 19th. centuries. (e.g., steam engine, printing press).

HOME ACTIVITIES FOR SCIENCE

Focus on Life Science

Cell Biology

Living Organisms are Composed of Cells

- With your child, look at books that discuss cells, noting that all things are made of cells and that things grow because of cell division.

Genetics

A Typical Cell Contains Genetic Instructions that Specify its Traits

- With your child, build a family tree, going as far back in generations as possible.

Record such characteristics as color of hair, eye color, height, blood type, etc. Talk about similarities and differences.

- Have your child list as many characteristics as he/she can that were inherited from his/her parents. Talk about that fact that each cell contains genetic instructions and character traits.

Evolution

Biological evolution accounts for the diversity of species

- With your child, find pictures showing the evolution of an animal, such as a horse. Note how the animal has changed over time.
- With your child, explore the variety of breeds of a certain type of animal (e.g., breeds of dogs, rabbits). Talk about reasons for all these different breeds
- With your child, look at pictures showing how man has changed over the past millennium because of climate, food supply, shelter, medicines, etc.

Earth and Life History

Evidence from Rocks Allows us to Understand the Evolution of Life

- With your child, talk about reports of endangered plants and/or animals, discussing what caused the problems and what solutions are being considered.
- With your child, talk about the ways in which an organism may become extinct and things we can do to keep this from happening.

Structure and Function in Living Systems

Anatomy and Physiology of Plants and Animals Illustrate the Complementary Nature of Structure and Function.

- With your child, make a cardboard and rubber band model of the arm. Cut out two pieces of cardboard and attach rubber bands to the cardboard, representing the biceps and triceps muscles. Move the cardboard back and forth and observe the movement of the rubber bands. Compare this to the movement of the muscles in the arm.
- When shopping at the grocery store, purchase a whole chicken. With your child, cut up the chicken before cooking. While cutting the chicken, identify all the structure parts (e.g., leg, knee joint, back bone).
- With your child, look at a tulip flower or hibiscus blossom. Identify the structures of the plant. Discuss the yellow powder, discussing what is this powder and what is its function.
- Discuss, with your child, the reproductive organs in humans, discussing how the female organs produce the egg and the male organs produce sperm. Talk about how sexual activity may lead to fertilization and pregnancy.

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.

