FOURTH GRADE BENCHMARKS

Fourth grade is a bridge year between lower form and the academic rigors of the middle form. Our philosophy is that learning is best done through discovery. Our main goal is to instill a lifelong love of learning within our students. The fourth grade curriculum is rich, interesting, and demanding. The writing program exposes the students to many different genres ranging from the personal narrative to feature articles. In reading, the students engage in character study and participate in book clubs as they deepen inferential comprehension skills. In math, the students use manipulatives to solve investigations and play challenging and engaging games, and learn to be adept, flexible thinkers and problem solvers. The fourth graders participate in a 1:1 iPad program, using technology to create and encourage critical thinking. Fourth graders also tackle a year-long study of California history and engage in hands-on investigations in science.

MATH AND ENGLISH/LANGUAGE ARTS (ELA) – Based on Common Core Standards:

- Understanding Common Core
- Common Core for Parents
- Ten Things Parents Should Know About the Common Core State Standards
- Growth Mindset and Common Core

ENGLISH LANGUAGE ARTS

In grade four, students will continue to build important reading, writing, speaking, and listening skills. They will read more challenging literature, articles, and other sources of information and continue to grow their vocabulary. They will also be expected to clearly explain in detail what they have read by referring to details or information from the text. In writing, students will organize their ideas and develop topics with reasons, facts, details, and other information. Activities in these areas will include:

- READING
    - Students will:
        - use appropriate grade level literary terms
        - utilize information from text to form predictions and make and explain inferences, judgments, and decisions show understanding of sequence of events, main idea and supporting details, problem and solution, steps in a process
        - recognize and identify cause and effect compare and contrast events, characters, and text summarize events in logical, or time, order
        - distinguish between fact and opinion, fact and nonfact, important and unimportant information
        - form conclusions or generalizations and support with evidence from text recognize and identify elements of a story including character(s), setting, problem and solution analyze character, character's motive, character's point of view, plot, setting, style, tone, and mood describe how author's point of view affects text
        - read with fluency and understanding for different purposes and respond to varied texts
        - utilize a variety of resources, both print and online, including an encyclopedia, dictionary, and glossary to enhance knowledge of vocabulary
- VOCABULARY AND CONCEPT DEVELOPMENT
    - Students will:
        - use context clues in a sentence to determine the meaning of words across the curriculum
        - use context clues to demonstrate their understanding of the vocabulary words
        - use and identify synonyms and antonyms
        - understand and demonstrate knowledge of multiple meaning words
        - use knowledge of root words to determine the meaning of unknown words within a passage
        - use resources and reference materials as aids to writing and understanding
- SPELLING
    - Students will:
        - use high frequency words correctly, appropriate to grade level
        - use understanding of specific spelling patterns to spell words correctly differentiate between plurals and possessives, and be able to spell them correctly
        - understand and be able to spell correctly words that change forms when adding –ed and –ing
        - spell compound words correctly and distinguish between single, two word and hyphenated
        - understand contractions and the relationship between the two words, understanding that contractions are not used in formal writing understand and differentiate between homophones and homographs

        - identify prefixes and suffixes in base words, and understand that prefixes and suffixes change the word meanings
        - understand how to transfer words and patterns across the curriculum
- GRAMMAR
    - Students will:
        - distinguish complete sentences from sentence fragments
        - learn to identify the types of sentences
        - recognize the correct end marks for each type of sentence
        - recognize parts of speech: nouns, verbs, adjectives, adverbs, and conjunctions
        - use these grammatical elements in grade level sentences
        - correct basic errors in written work
        - explain how words relate to each other within a sentence
        - begin to diagram basic sentences
- WRITING
    - Students will:
        - organize paragraph structure to include a topic sentence that clearly states the main idea; development sentences with examples and supporting details that are relevant to the topic sentence; and a summary sentence that restates the main idea, all in logical sequence
        - understand the relationship between the topic sentence and summary sentence
        - use logical transition words or phrases to signal additional examples
        - demonstrate the ability to follow the required type of writing across the curriculum, including narrative, descriptive, expository, and persuasive use the correct person; i.e. 1st person, 2nd person, 3rd person demonstrate understanding of appropriate tone as it relates to the topic
        - understand and avoid sentence boundary errors (i.e. subject/verb agreement) and homonym errors (i.e. there, their, or they're).
        - write complete sentences following the conventions of correct grammar, capitalization and punctuation
        - demonstrate an understanding of grade-level vocabulary and use vocabulary correctly in sentences.
        - demonstrates neatness and legibility in all written work
        - use grade level vocabulary and spelling in writing incorporate grade level content in writing across the curriculum

MATH

In grade four, your child will use addition, subtraction, multiplication, and division to solve word problems, including problems involving measurement of volume, mass, and time. Students will continue to build their understanding of fractions—creating equal fractions, comparing the size of fractions, adding and subtracting fractions, and multiplying fractions by whole numbers. They will also start to understand the relationship between fractions and decimals. Activities in these areas will include:

- Adding and subtracting whole numbers up to 1 million quickly and accurately
- Solving multi-step word problems, including problems involving measurement and converting measurements from larger to smaller units
- Multiplying and dividing multi-digit numbers
- Extending understanding of fractions by comparing the size of two fractions with different numerators (top numbers) and different denominators (bottom numbers)
- Creating equal fractions (3⁄4 = 3x2⁄4x2 = 6⁄8) • Adding and subtracting fractions with the same denominator
- Building fractions from smaller fractions (3⁄8 = 1⁄8+⁄1 8+⁄1 8)
- Connecting addition and subtraction of whole numbers to multiplying fractions by whole numbers
- Connecting addition of fractions to the concept of angle measurement
- Representing and interpreting data
- Converting fractions with denominators of 10 or 100 into decimals
- Locating decimals on a number line
- Comparing decimals and fractions using the symbols > (more than), = (equal to), and < (less than)

RELIGION (as outlined by the Archdiocese of San Francisco)

- NICENE CREED
  - Students will:
    - demonstrate an understanding of the Beatitudes as their way of building the Kingdom of God
    - understand grace as God's loving presence in their lives
    - identify and discuss the gifts of the Holy Spirit
    - understand Church as a community of worship, witness, and service which carries on the mission of Christ, which they share through their Baptism
- SCRIPTURE
  - Students will:
    - recognize Scripture as the source for the Ten Commandments, the Beatitudes, and the Corporal and Spiritual Works of Mercy
    - name the four gospel accounts of Matthew, Mark, Luke, and John
    - find chapter and verse in the Bible articulate the difference between the Old and New Testaments
- PRAYER/WORSHIP
  - Students will:
    - reflect on the Stations of the Cross and on the Act of Contrition
    - pray the Rosary identify the Holy Days of Obligation
    - demonstrate an understanding that the Mass is the central celebration for God's people
- CHRISTIAN LIVING
  - Students will:
    - give examples of how to live the Beatitudes
    - respond to the Ten Commandments as rules to live God's life of love and the Beatitudes as a way of life modeled by Christ to bring happiness
    - demonstrate an understanding that sin is the greatest obstacle they face in their efforts to love God and neighbor
    - see the Corporal and Spiritual Works of Mercy as ways of responding to the needs of others
- PRAYERS
  - The Rosary
  - Ritual of Stations of the Cross
  - Morning Offering

SCIENCE

- INVESTIGATION
  - Students will:
    - follow a set of written instructions to gather data and complete an experiment
    - know the difference between observations and inferences
    - select appropriate scientific tools and correctly use them to make quantitative and qualitative observations
- PHYSICAL SCIENCE
  - Students will:
    - create an electrical circuit, in series and parallel, and describe how electric current moves through the circuit
    - identify electric charges and magnetic poles
    - understand the properties of electrical and magnetic fields build an electromagnet and a compass
- LIFE SCIENCE
  - Students will:
    - identify producers and consumers in the food chain
    - understand that organisms have different rates of survival in varying environments
    - recognize why plants and animals need each other for survival
- EARTH SCIENCE
  - Students will:

- identify minerals using physical properties
- differentiate between rocks based on physical properties and the rock cycle
- recognize that changes on the Earth's surface happen at different rates
- identify the effects of erosion caused by water and wind

NGSS (Next Generation Science Standards) were developed so that students could do less memorizing and more critical thinking, make connections between the Common Core and Science, align classroom practice with scientific research all while encouraging students to apply their knowledge in an appropriate framework. Please use the link below learn more and view the standards.

- About the NGSS Standards
- The Standards
- Why Science Matters

SOCIAL STUDIES (per California State Standards)

- Students demonstrate an understanding of the physical and human geographic features that define places and regions in California. Students will:
  - explain and use the coordinate grid system of latitude and longitude to determine the absolute locations of places and regions in California and on earth.
  - distinguish between the North and South Poles; the equator and the Prime Meridian; the tropics; and the hemispheres, using coordinates to plot locations.
  - identify California's state capital and describe the various regions of California, including how their characteristics and physical environments affect human activity.
  - identify the locations of the Pacific Ocean, rivers, valleys, and mountain passes and explain their effects on the growth of towns.
  - use maps, charts, and pictures to describe how communities in California vary in land use, vegetation, wildlife, climate, population density, architecture, services, and transportation.
- Students describe the social, political, cultural, and economic life and interactions among people of California from the pre-Columbian societies to the Spanish mission and Mexican rancho periods. Students will:
  - discuss the major nations of California Indians, including their geographic distribution, economic activities, legends, and religious beliefs; and describe how they depended on, adapted to, and modified the physical environment by the cultivation of land and use of sea resources.
  - identify the early land and sea routes to, and European settlements in, California with a focus on the exploration of the North Pacific, noting especially the importance of mountains, deserts, ocean currents, and wind patterns.
  - describe the Spanish exploration and colonization of California, including the relationships among soldiers, missionaries, and Indians.
  - describe the mapping of, geographic basis of, and economic factors in the placement and function of the Spanish missions; and understand how the mission system expanded the influence of Spain and Catholicism throughout New Spain and Latin America.
  - describe the daily lives of the people, native and nonnative, who occupied the presidios, missions, ranchos, and pueblos. discuss the role of the Franciscans in changing the economy of California from a hunter-gatherer economy to an agricultural economy.
  - describe the effects of the Mexican War for Independence on Alta California, including its effects on the territorial boundaries of North America. discuss the period of Mexican rule in California and its attributes, including land grants, secularization of the missions, and the rise of the rancho economy.
- Students explain the economic, social, and political life in California from the establishment of the Bear Flag Republic through the Mexican-American War, the Gold Rush, and the granting of statehood. Students will:
  - identify the locations of Mexican settlements in California and those of other settlements, including Fort Ross and Sutter's Fort.
  - compare how and why people traveled to California and the routes they traveled.
  - analyze the effects of the Gold Rush on settlements, daily life, politics, and the physical environment. study the lives of women who helped build early California.
  - discuss how California became a state and how its new government differed from those during the

Spanish and Mexican periods.

ART (per California State Standards)

- ARTISTIC PERCEPTION
  - Students will:
    - perceive and describe contrast and emphasis in works of art and in the environment
    - describe how negative shapes/forms and positive shapes/forms are used in a chosen work of art identify pairs of complementary colors (e.g., yellow/violet; red/green; orange/blue) and discuss how artists use them to communicate an idea or mood
    - describe the concept of proportion (in face, figure) as used in works of art
    - describe and analyze the elements of art (e.g., color, shape/form, line, texture, space, value), emphasizing form, as they are used in works of art and found in the environment
- CREATIVE EXPRESSION
  - Students will:
    - use shading (value) to transform a two-dimensional shape into what appears to be a three dimensional form (e.g., circle to sphere)
    - use the conventions of facial and figure proportions in a figure study
    - use accurate proportions to create an expressive portrait or a figure drawing or painting
    - use the interaction between positive and negative space expressively in a work of art
    - use contrast (light and dark) expressively in an original work of art
    - use complementary colors in an original composition to show contrast and emphasis
- HISTORICAL AND CULTURAL CONTEXT
  - Students will:
    - describe how art plays a role in reflecting life (e.g., in photography, quilts, architecture)
- AESTHETIC VALUING
  - Students will:
    - discuss how the subject and selection of media relate to the meaning or purpose of a work of art
    - identify and describe how various cultures define and value art differently
    - describe how the individual experiences of an artist may influence the development of specific works of art
- CONNECTION, RELATIONSHIPS, AND APPLICATIONS
  - Students will:
    - construct diagrams, maps, graphs, timelines, and illustrations to communicate ideas or tell a story about a historical event

MUSIC (per California State Standards)

Students will:

- read and write notation of increasing complexity
- analyze lyrics of songs written for specific purposes
- play songs from memory and a varied selection of songs from different cultures write simple rhymes in a song form
- identify characteristics of an effective musical composition, including structure, content, style, and meaning identify the sounds of a variety of musical instruments as well as male and female voices
- perform simple songs from various cultures for the school population

SPANISH

- Learn the *Sign of the Cross* and *Holy Mary*
- How to greet people informally and formally
- Letters of the alphabet
- Learn numbers 0-100 by tens
- Learn numbers 100-1000 by 100s
- Learn basic classroom instruction (e.g. please sit in your seat)

- Review Days of the week and months
- Learn how to properly introduce oneself
- Learn title of family members (e.g. father, mother, aunt, uncle, etc.)
- Learn 10 colors and shapes

PHYSICAL EDUCATION (per California State Standards)

- MOVEMENT SKILLS AND PATTERNS
  - Students will:
    - change direction quickly to maintain or to increase the spacing between two players
    - jump a self-turned rope throw and catch an object with a partner while both partners are moving throw overhand at increasingly smaller targets, using proper follow-through
    - catch a fly ball above the head, below the waist, and away from the body strike with a racket, a lightweight object that has been tossed by a partner
    - serve a lightweight ball to a partner, using the underhand movement pattern
    - strike a gently tossed ball with a bat, using a side orientation hand-dribble a ball
    - perform a folk dance
- PHYSICAL FITNESS AND HEALTH
  - Students will:
    - participate in appropriate warm-up exercises for particular physical activities
    - participate in continuous moderate to vigorous physical activities at the appropriate intensity to increase aerobic capacity
    - perform increasing numbers of abdominal curl-ups and traditional push-ups
    - demonstrate basic stretches using proper alignment for hamstrings, quadriceps, hip flexors, triceps, back, shoulders, hip adductors, hip abductors, and calves
    - meet minimum requirements for health-related physical fitness, using scientifically based health-related physical fitness assessments
- SOCIAL DEVELOPMENT
  - Students will:
    - set a personal goal to improve an area of health-related physical fitness and work toward that goal in nonschool time
    - accept responsibility for one's own performance
    - respond to winning and losing with dignity and respect
    - include others in physical activities and respect individual differences in skill and motivation

TECHNOLOGY PROGRAM

Computer Literacy Skills

- Be able to highlight text and use cut, copy, and paste functions from one application to another.
- Continue formal keyboarding and type at 15 wpm with 1 error/min maximum
- Independently log onto the server, retrieve appropriate files, and save files in the appropriate place.
- Independently print and use the print dialogue box (as per school policy). Understand page setup for printing and print preview before printing.

Research Skills

- Independently navigate within appropriate software to search for information and/or activities.
- Responsibly search the Internet using multiple search engines and keyword searches. Further develop search techniques. Understand validation techniques.
- Know how to input URLs and use, add, and delete bookmarks.
- Use EasyBib to provide bibliography/sources cited information. Understand "plagiarism."

Data Organization Skills

- Create graphs/charts from simple numerical data in a spreadsheet and be able to interpret and organize information using these graphs/charts.
- Enter data into a spreadsheet and then read and interpret the data.
- Use mind-mapping software to independently organize ideas within the curriculum (if software such as Inspiration is available).

Publishing and Composing Skills

- Use basic word processing skills to type multiple paragraphs. Be able to independently use the tab key and highlight, insert, and delete text.
- Understand how to use common formatting and editing functions (font, style, and size) and how to change formats of text using the margins and tabs.
- Become familiar with proofreading work using a spell checker (if available), saving changes to their original documents.
- Use basic (line, shapes, eraser, paint brush, spray can) and be introduced to other (patterns, fills, rotate) drawing tools to illustrate concepts in the curriculum.
- Independently import, resize, and reshape graphics.
- Create a simple multimedia project independently (e.g., PowerPoint, web page, video, MovieMaker, etc.).