## 4th Grade Core Academic Subjects

In fourth grade, students prepare for upper school by establishing a greater sense of responsibility. The content pushes them to think, analyze, critique, and learn in a more sophisticated and structured way. They are taught to deeply think about and make connections in what they read, write with clarity, flow, and structure similar to that of traditional essays; and learn more complex concepts across all subject areas. In addition, fourth graders are encouraged to be more independent in their learning, depending less on the teacher's guidance and researching, planning, and revising their work more by themselves. Classes are much more student-led and they engage in hands on activities solving problems with multiple answers. Students rely on logic, problem solving, and critical thinking skills across the curriculum and take risks to grow and stretch their brain! Welcome to a wonderful year full of a discovery, a love of learning, and a passion for knowledge.

### English Language Arts - Writing

Fourth Grade students participate in a variety of writing activities that help them work on the structure/format, the approach, and the conventions necessary to master the following types of writing:

- Persuasive
- Biography
- Nonfiction/Informational Gold Rush
- Creative Fiction
- Poetry

Fourth graders also study parts of speech, sentence structure, and adding to sentences to make them more detailed. Students focus on improving their vocabulary and figurative language in order to accurately describe information with detail using all five senses.

# English Language Arts – Novel Study

Students in 4<sup>th</sup> grade begin learning the art of annotating the text in order to track their thinking and easily locate text evidence throughout the novels. We use a series of codes in order to do this, as well as determine specific adjectives in order to accurately describe the character traits and the feelings of the characters throughout the text. Students write RACCE responses to articulate their understanding of open ended questions by Restating the Question, Answering the Question, Citing Text Evidence (2), and Explaining Their Thinking.

### History

In history, students develop an understanding of physical and human geographical features that define places and regions in the United States, and more specifically, California. Each week they use clues to determine a mystery location to strengthen their understanding of the world around them. They also learn to 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. Fourth graders also study 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. Furthermore, they learn how California became an agricultural and industrial power, tracing the transformation of the California economy and its political and cultural development since the 1850s. In order to solidify their understanding of the economy, students participate in a real life class economy. They apply for a classroom job and responsibly complete that job daily in order to earn a salary. Students earn bonuses and demerits daily and get paid on a weekly basis. Lastly, students grow an understanding of the structures, functions, and powers of the local, state, and federal governments as described in the U.S. Constitution.

#### Math

In math, students begin the year mastering their basic math facts and improving their mental math abilities. Students build on that knowledge in order to develop an understanding and fluency with multi-digit multiplication, and dividing to find quotients involving multi-digit dividends. They also explore fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers. They gain the ability to compare fractions with unlike denominators using a variety of strategies. Students also investigate geometric figures and learn to analyze and classify them based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry. Throughout the year students engage in problem solving and real-world math problems using word problems. They advance their critical thinking skills and determine multiple ways to solve problems. Students grow their number sense throughout fourth grade and, therefore, are able to approach rigorous problems with the necessary tools to evaluate and solve them.

#### Science

In science, fourth grade students study the scientific method as well as the engineering and design process. They learn to ask meaningful questions and conduct careful investigations. They formulate and justify predictions based on cause and effect relationships, and draw conclusions about the relationships between predictions and results. They also construct and interpret graphs from measurements, and communicate results. Students explore states of matter as well as the physical and chemical changes that effect matter. They learn how to design and build simple series and parallel circuits by using components such as wires, batteries, and bulbs. Students learn the role of electromagnets in the construction of electric motors, electric generators, and simple devices, such as doorbells and earphones. Students understand that electrical energy can be converted to heat, light, and motion. In our life science unit, students recognize that all organisms need energy and matter to live and grow. They explore food chains, food webs, ecosystems, and the producers/consumers that are an essential part to them. Furthermore, students identify the properties of rocks and minerals and how the rock cycle works. They explore earth's surface and understand the slow and rapid changes that take place and change the earth over time. Students learn to embrace questions. They are encouraged to be curious, inquisitive, outside-the-box thinkers who strive to find answers through investigation and exploration!

# Civility

During civility, students discuss social emotional topics and develop strategies for dealing with different situations. Each class addresses a specific theme and we use mentor texts to expose this theme and kickstart our conversation around the topic. This class helps students practice the core values necessary to being a polite, courteous, and respectful member of our classroom community and of society in general. Students learn how to properly work together, express their feelings, solve problems, and how to address conflict. Students also develop a growth mindset. In a growth mindset, people believe that their most basic abilities can be developed through dedication and hard work—brains and talent are just the starting point. This view creates a love of learning and a resilience that is essential for great accomplishment.