SAN MATEO-FOSTER CITY SCHOOL DISTRICT
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Fourth Grade Curriculum Summary

MATHEMATICS

Adopted Programs: McGraw-Hill Everyday Mathematics

Mathematical Practices from the California Standards *(Consistent at each grade level for developing mathematical "habits of mind")*

- *Make sense of problems and persevere in solving them*
- *Reason abstractly and quantitatively*
- *Construct viable arguments and critique the reasoning of others*
- *Model with mathematics*
- *Use appropriate tools strategically*
- *Attend to precision*
- *Look for and make use of structure*
- *Look for and express regularity in repeated reasoning*

Operations and Algebraic Thinking

- Solve one-step and multistep word problems involving addition, subtraction, multiplication, and division including interpretation of remainders
- Find all factor pairs for a whole number (from 1-100) and determine it as prime or composite
- Generate and analyze number or shape patterns that follow a given rule

Number and Operations in Base Ten

- Generalize understanding for multi-digit whole numbers
- Read, write, and compare whole numbers up to 1,000,000 using the symbols >, =, and <
- Use place value understanding to round whole numbers to any place
- Fluently add and subtract multi-digit whole numbers using the standard algorithm
- Use place value understanding and a variety of strategies to multiply a whole number of up to 4 digits by a one-digit number and multiply two two-digit numbers
- Use place value understanding, relationship between multiplication and division, and a variety of strategies to divide numbers up to four digits by a one-digit number with or without remainders

Number and Operations - Fractions

- Extend understanding of and explain fraction equivalence and comparisons
- Understand addition and subtraction of fractions and mixed numbers with like denominators
- Multiply a fraction by a whole number
- Write tenths and hundredths in both decimal and fraction notations
- Compare decimals to the hundredths by using a visual model and with the symbols >, =, and <

Measurement and Data

- Know relative sizes of measurement units and convert from a larger unit to a smaller unit
- Solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money
- Apply the area and perimeter formulas for rectangles in real world problems
- Draw graphs and solve problems using data on graphs
- Understand concepts of area measurement and relate area to multiplication and addition
- Make a line plot to display a data set of measurements in fractions of a unit
- Understand concepts of angle measurements and measure angles using a protractor

Geometry

- Draw and identify points, lines segments, rays, angles, perpendicular and parallel lines
- Classify 2-D figures based on parallel or perpendicular lines or angles of a specified size
- Recognize a line of symmetry for a 2-D figure

READING-LANGUAGE ARTS

Adopted Programs: Houghton Mifflin (2001)

Reading

Students must read widely and deeply from among a broad range of high-quality, increasingly challenging literary and informational texts*

- Explain what the text says explicitly and draw inferences
- Determine the theme/main idea and summarize the text
- Explain major differences between poems, drama, and prose
- Describe the structure of information in a text
- By the end of the year read and comprehend literature and informational text in grades 4-5 complexity band proficiently

Writing

Students need to learn to use writing as a way of offering and supporting opinions, demonstrating understanding of the subjects they are studying and conveying real and imagined experiences and events*

- Write opinion pieces on topics or texts, support a point of view with reasons and information
- Write informative texts to examine a topic and convey ideas and information clearly
- Write narratives to develop real or imagined experiences or events using effective technique, descriptive details and clear events
- Produce multiple-paragraph texts
- Strengthen writing by planning, revising and editing
- Use technology, including the Internet to produce and publish writing

Listening and Speaking

Students participate in discussions on topics and texts appropriate for 4th graders building on others' ideas, and deliver a narrative presentation

SCIENCE

Adopted Programs: FOSS

The San Mateo-Foster City School District will be implementing the Next Generation Science Standards (NGSS) in school year 2016-2017. In NGSS, each grade level has specific topics of study in Physical Science, Life Science and Earth Science which build on the concepts that were learned in previous years. Elementary schools use the Full Option Science System (FOSS) which is a hands-on, brain-development based curriculum.

Scientific Process Skills

Collects and analyzes data to develop a logical conclusion

Life, Physical or Earth Science Units

Environments, Magnetism & Electricity, Solid Earth

SOCIAL STUDIES

Adopted Programs: Harcourt School Publishers, Reflections: California Series*, 2007, Gr. K-5

California: A Changing State

- California Geography
- Social, political, cultural, and economic life in historic periods
    - Pre-Columbian societies, Spanish mission, Mexican rancho period
    - Bear Flag Republic, Mexican-American War, Gold Rush, statehood
    - Agricultural and industrial power since 1850
- Structure, function, and powers of the local, state, and federal government