

Fifth 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

- Write and interpret numerical expressions including the use of parentheses, brackets, or braces
- Determine prime factors of numbers from 2 to 50
- Analyze patterns and relationships of numbers

Number and Operations in Base Ten

- Understand and explain the number of zeros and the placement of the decimal point when multiplying or dividing by powers of 10
- Read, write, and compare decimal numbers to thousandths using the symbols $>$, $=$, and $<$
- Use place value understanding to round decimals to any place
- Fluently multiply multi-digit whole numbers using the standard algorithm
- Use place value understanding, relationship between multiplication and division, and a variety of strategies to divide numbers up to four digits by a two-digit number with or without remainder
- Add, subtract, multiply, and divide decimals to hundredths using concrete model, drawings, and a variety of strategies

Number and Operations - Fractions

- Use equivalent fractions as a strategy to solve problems involving addition and subtraction of fractions with unlike denominators
- Solve division problems resulting in answers in the form of fractions or mixed numbers
- Solve problems involving multiplication of a fraction or whole number by a fraction
- Solve problems involving division of unit fractions by whole numbers and whole numbers by unit fractions
- Understand concepts of multiplication and division of fractions and mixed numbers using visual models and equations and applying them in real life situations

Measurement and Data

- Convert like measurement units within a given measurement system
- Make a line plot to display a data set of measurements in fractions of a unit
- Understand concepts of volume and volume measurement
- Relate volume to multiplication and division

Geometry

- Graph points on the coordinate plane (e.g. x-axis and y-axis) to solve real-world and mathematical problems
- Classify 2-D figures into categories and in a hierarchy based on properties

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*

- Quote accurately from a text when explaining what the text says
- Determine a theme/ main ideas
- Compare and contrast two or more texts on the same topic
- Describe the point of view of the author/narrator
- By the end of the year, read and comprehend literature and informational text in grades 4-5 text 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*

Listening and Speaking

Students participate in discussions on topics and texts appropriate for 5th graders, building on others' ideas and plan and deliver an informative presentation on a topic

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

Completes a thorough scientific investigation and writes a report

Life, Physical or Earth Science Units

Living Systems, *Mixtures & Solutions*, *Water Planets*

SOCIAL STUDIES

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

United States History and Geography: Making a New Nation

- Major pre-Columbian settlements
- Early explorers and exploration
- Cooperation and conflict among American Indian nations and new settlers
- Political, religious, social, and economic institutions in the colonial era
- Causes, course, and consequences of the American Revolution
- People and those associated with the U.S. Constitution
- Colonization, immigration, and settlement patterns from 1789 to mid-1800's
- States and capitals