

# CLAREMONT UNIFIED SCHOOL DISTRICT

## Curriculum Goals Fourth Grade

### Language Arts

The Language Arts Program is designed to develop students' reading, writing and oral language skills in order to prepare them to have productive and enriched life-long experiences. The program has a balance of phonics-based skills and literacy development. Students will be encouraged and challenged to develop new knowledge and in-depth understanding in all content areas as they improve their reading skills and progress through the grades. The district program is articulated from kindergarten through twelfth grade and follows the standards outlined by the State of California.

#### Standard 1: Reading Process

To progress toward the content standard in Reading Process, fourth grade students will:

**Demonstrate an understanding of how print is organized and read.**

To progress toward meeting the grade level standard, students will:

- Understand and use the glossary and index of texts.
- Understand and use the dictionary to determine the meaning of unknown words.
- Identify and use internal punctuation to facilitate reading.

**Demonstrate an understanding of word origins and word relationships.**

To progress toward meeting the grade level standard, students will:

- Apply knowledge of common antonyms, synonyms and homonyms to determine meanings of words.
- Use knowledge of prefixes and suffixes to determine meanings of words.

**Read fictional and nonfictional materials for a variety of purposes, and respond in order to demonstrate an understanding.**

To progress toward meeting the grade level standard, students will:

- Recognize cause and effect relationship in text.
- Identify and use textual features such as topic sentences and key words.
- Categorize information to establish relationships among facts.
- Recognize when an author's purpose is intended primarily to entertain.
- Use reading strategies such as skimming, scanning, cross-checking, predicting, and rereading to comprehend text.

#### Standard 2: Literature: Interpreting, Critiquing, and Creating

To progress toward the content standard in Literature, fourth grade students will:

**Read a wide range of literature to build an understanding of common human experience.**

**Read a wide range of literature representing the diversity of the human experience to develop appreciation for other perspectives.**

To progress toward meeting the grade level standard, students will:

- Read self-selected and teacher selected, traditional and contemporary fictional literature from a variety of cultures.
- Read and respond to a variety of poetry.
- Read self-selected and teacher selected non-fictional literature.
- Read and respond to several books in depth (or book equivalents such as, essays, stories, groups of poems, or articles) about one subject.
- Recognize the variety of cultural experiences in literary selections.

- Recognize the universality of literary themes in many cultures and in many different times.

**Apply a variety of strategies to make meaning from literature.**

To progress toward meeting the grade level standard, students will:

- Identify simile and metaphor as literary devices.
- Recognize how a character's traits affect a character's actions.
- Recognize the narrator of a literary piece.

**Make connections between the literature and their experiences to further personal awareness.**

To progress toward meeting the grade level standard, students will:

- Read and respond to literature which relates to their developmental/ experiential level.
- Select and discuss favorite titles and authors and genres.
- Find an underlying theme or author's message in fictional or non-fictional. works and relate them to prior experience.
- Make, confirm and revise predictions concerning plot.

**Standard 3: Writing**

To progress toward the content standard in Writing, fourth grade students will:

**Write a clear and coherent paragraph.**

To progress toward the grade level standard, students will:

- Use legible cursive handwriting.
- Include a topic sentence with supporting details.

**Use the techniques of the writing process.**

To progress toward the grade level standard, students will:

- Apply prewriting, drafting, revising, and editing techniques to their own writing.
- Understand and apply rubrics to various forms of writing.
- Proofread writing using a dictionary.

**Communicate thoughts and ideas using various forms of writing.**

To progress toward the grade level standard, students will:

- Write narratives, stories, and poetry.
- Extend writing into other forms including interview and drama.
- Write descriptive pieces.
- Write informational pieces.

**Standard 4: Language Conventions**

To progress toward the content standard in English Grammar, fourth grade students will:

**Show evidence of standard English grammar, usage, and mechanics in their oral and written work.**

To progress toward meeting the grade level standard, students will:

- Identify and use a wide variety of adjectives.
- Identify and understand the use of conjunctions, prepositional phrases and transitional words to combine short sentences and phrases into complex sentences.
- Use and understand antonyms and synonyms.
- Use apostrophes in possessives and contractions.
- Use quotation marks for dialogue.
- Use underlining, quotations or italics to identify titles.
- Capitalize names of magazines, newspapers, works of art, musical compositions, names of organizations, and the first word in quotations.

### **Use conventional spelling in their written work.**

To progress toward meeting the grade level standard, students will:

- Spell high frequency words, contractions, and compound words correctly.
- Spell grade appropriate words with regular and irregular spelling patterns correctly.
- Use transitional spelling for unfamiliar words.
- Spell by referring to resources when necessary.

### **Standard 5: Speaking and Listening**

To progress toward the content standard in Speaking and Listening, fourth grade students will:

#### **Use speaking and listening strategies to enhance learning.**

To progress toward meeting the grade level standard, students will:

- Listen attentively and respond appropriately to others in a variety of settings.
- Participate as both contributor and leader in group discussions

#### **Use speaking strategies appropriate to audience and purpose.**

To progress toward meeting the grade level standard, students will:

- Organize and deliver an oral presentation.
- Summarize major ideas and supporting evidence presented in spoken messages and formal presentations.
- Give precise directions and instructions.

## **Mathematics**

The major purpose of the K-6 mathematics program is to develop students' abilities to apply mathematics involving problems in everyday living. Ideas, concepts and/or skills are introduced at different grade levels. After introduction, it is expected that some degree of competency will be developed within that level and continue in future levels to the point of mastery. These standards have been adapted for Claremont Unified School District from "Mathematics Content Standards for California Public Schools, 1999," California Department of Education.

During the school year fourth grade students will be working on the following concepts:

Focus Statement: By the end of the fourth grade, students understand large numbers and addition, subtraction, multiplication and division of whole numbers. They describe and compare simple fractions and decimals. They understand the properties of and the relationships between plane geometric figures. They collect, represent and analyze data to answer questions.

### **Number Sense**

- 1.1 Read and write whole numbers in the millions.
- 1.3 Round whole numbers through the millions to the nearest ten, hundred, thousand, ten thousand or hundred thousand.
- 1.4 Decide when a rounded solution is called for, and explain why this is the case.
- 1.5 Interpret different meanings for fractions including parts of a whole, parts of a set, indicated division of whole numbers and quantities (and measures) between whole numbers on a number line; and relate to simple decimals on a number line.
- 1.6 Write tenths and hundredths in decimal and fraction notation and know fraction/decimal equivalents for halves and fourths (e.g.,  $1/2 = 0.5$  or  $.50$ ;  $7/4 = 1\ 3/4 = 1.75$ ).
- 1.7 Write the fraction represented by a drawing of parts of a figure; represent a given fraction using drawings.
- 1.8 Use concepts of negative numbers (e.g., on a number line, in counting, in temperature, "owing").
- 1.9 Identify the relative position of fractions, mixed numbers, and decimals to two decimal places on the number line.
- 2.1 Estimate and compute the sum or difference of whole numbers and positive decimals to two places.

### **Number Sense (continued)**

- 2.2 Round two place decimals or the nearest whole number, and use rounding to judge the reasonableness of an answer.
- 3.1 Demonstrate understanding of, and the ability to use standard algorithms for addition and subtraction of multi-digit numbers.
- 3.2 Demonstrate understanding of, and ability to use, standard algorithms for multiplying a multi-digit number by a two digit number and long division for dividing a multi-digit number by one digit number; use relationships between them to simplify computations and to check results.
- 3.3 Solve problems involving multiplication of multi-digit numbers by two digit numbers.
- 3.4 Solve problems involving division multi-digit numbers by one-digit numbers.
- 4.1 Understand that many whole numbers decompose in different ways (e.g.,  $12 = 4 \times 3 = 2 \times 6 = 2 \times 2 \times 3$ ).
- 4.2 Know that numbers such as 2, 3, 5, 7, 11 do not have any factors except 1 and themselves, and that such numbers are called prime numbers.

### Algebra and Functions

- 1.1 Use letters, boxes, or other symbols to stand for any number in simple expressions or equations (e.g., demonstrate understanding and use of a concept of a variable).
- 1.2 Interpret and evaluate mathematical expressions that use parentheses.
- 1.3 Use parentheses to indicate which operation to perform first when writing expressions containing more than two terms and different operations.
- 1.4 Use and interpret formulas (e.g., Area = length times width or  $A = lw$ ) to answer questions about quantities and their relationships.
- 2.1 Know and understand that equal added to equals are equal.
- 2.2 Know and understand that equals multiplied by equals are equal.

### Measurement and Geometry

- 1.1 Measure the area of rectangular shapes, using appropriate units square centimeter<sup>2</sup>, square meter<sup>2</sup>, square kilometer<sup>2</sup>, square inches<sup>2</sup>, square yard<sup>2</sup>, square mile<sup>2</sup>.
- 1.2 Recognize that the rectangles having the same area can have different perimeters
- 1.3 Understand that the same number can be the perimeter of different rectangles, each having a different area.
- 1.4 Understand and use formulas to solve problems involving perimeters and areas of rectangles and squares. Use these formulas to find the areas of ore complex figures by dividing them into parts with these basic shapes.
- 2.1 Draw the points corresponding to linear relationships on graph paper (e.g., draw the first ten points for the equation  $y=3x$  and connect them using a straight line).
- 2.2 Understand that the length of a horizontal line segment equals the difference of the x-coordinates.
- 2.3 Understand that the length of a vertical line segment equals the difference of the y-coordinates.
- 3.1 Identify lines that are parallel and perpendicular.
- 3.2 Identify the radius and diameter of a circle.
- 3.3 Identify congruent figures.
- 3.4 Identify figures that have bilateral and rotational symmetry.
- 3.5 Know the definitions of right angle, acute angle and obtuse angle. They understand that 90, 180, 270 and 360 degrees are, respectively, associated with  $1/4$ ,  $1/2$ ,  $3/4$  and full turns.
- 3.6 Visualize, describe and represent geometric solids (e.g., prisms, pyramids, etc.) in terms of the number and shape of faces, edges and vertices; interpret two-dimensional representations of three-dimensional objects; and draw patterns (of faces) for a solid that when folded will make a model of the solid.
- 3.7 Know the definitions of different triangles (e.g., equilateral, isosceles, scalene) and identify their features.

### Measurement and Geometry (continued)

- 3.8 Know the definition of different quadrilaterals (e.g., rhombus, square, rectangle, parallelogram, trapezoid).

## Statistics, Data Analysis and Probability

- 1.1 Formulate survey questions, systematically collect and represent data on a number line, and coordinate graphs, tables and charts.
- 1.2 Identify the mode(s) for sets of categorical data, and the mode(s), median, and any apparent outliers for numerical data sets.
- 1.3 Interpret one and two variable data graphs to answer questions about a situation.
- 2.1 Represent all possible outcomes for a simple probability situation in an organized way (e.g., tables, grids, tree diagrams).

## Mathematical Reasoning

- 1.1 Analyze problems by identifying relationships, discriminating relevant from irrelevant information, sequencing and prioritizing information, and observing patterns.
- 1.2 Determine when and how to break a problem into simpler parts.
- 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 Use a variety of methods such as words, numbers, symbols, charts, graphs, tables, diagrams and models to explain mathematical reasoning.
- 2.4 Express the solution clearly and logically using appropriate mathematical notation and terms and clear language, and support solutions with evidence, in both verbal and symbolic work.
- 2.6 Make precise calculations and check the validity of the results from the context of the problem.
- 3.1 Evaluate the reasonableness of the solution in the context of the original situation.

## Science

The goal of the district's Science program is to assure that all students are scientifically literate. A scientifically-literate student is able to understand and use the scientific method as a problem-solving tool. He/She can use the knowledge gained in science to recognize cause and effect relationships and to further investigate solutions to personal, global, and ethical questions.

Science instruction in grades K-6 is based on the premise that the nature of science and the intellectual development of the student are closely related. The program builds on developing a student's natural curiosity about his/her surrounding environment. The instruction includes developmental and hands-on activities which emphasize both process skills and conceptual development of scientific knowledge. Instruction at all levels encourages the student to understand the link and interrelationship between the three science disciplines of Physical Science, Earth Science, and Life Science. Students study this interrelationship through the use of the following 3 unifying concepts:

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|-------------------------|---|
| <b>Physical Science</b> | Our physical world is governed by the properties and interactions of matter and energy.               |
| <b>Earth Science</b>    | The Earth, Solar System and Universe are a dynamic system undergoing continual change.                |
| <b>Life Science</b>     | All living things are diverse, interdependent, and constantly changing to adapt to their environment. |

During the school year fourth grade students will be working on all four strands covering topics such as:

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|-------------------------|---|
| <b>Life Science</b>     | Living things adapt and evolve to meet their needs in a changing environment. |
| <b>Earth Science</b>    | The changes in the atmosphere and oceans affect changes in the Earth.         |
| <b>Physical Science</b> | Energy created by changes in matter can be stored, transferred, and used.     |

## Social Studies

The story of California being in pre-Columbian times, in the culture of the American Indian. The history of California then becomes the Story of Successive Waves of immigrants from the sixteenth century through

modern times and the enduring marks each left on the character of the state. California history and geography will come alive for students through the study of its people in all their ethnic, racial, and cultural diversity. Students will analyze how different regions of the state have developed through the interaction of physical characteristics and cultural forces which lead to developments at different times in different ways.

- Pre-Columbian Settlements and People
- Exploration and Colonial History
- Missions, Ranchos, and the Mexican War for Independence
- Gold Rush, Statehood, and the Westward Movement
- The Period of Rapid Population Growth, Large-Scale Agriculture, and Linkage to the Rest of the United States
- Modern California: Immigration, Technology, and Cities

## **Health**

Students in the fourth grade will participate in activities to develop understanding in the nine strands of the health curriculum. They will learn more about their immediate environment and how to apply their knowledge to every day living.

- Personal Health
  - Practice stress management skills
  - Identify health outcomes which can result from appropriate personal health habits
- Consumer and Community Health
  - Describe the range of health services available in the community
  - Differentiate among health care professionals according to the services and products they provide
- Injury Prevention and safety
  - Demonstrate appropriate response in disaster situations
  - Practice safety precautions in daily activities
  - Practice safety precautions in sporting and recreational activities
- Individual Growth and Development
  - Describe body systems and their functions
  - Explain how various parts of the body and body systems may grow and develop at different rates
- Tobacco, Alcohol, and Other Drugs
  - Describe the effects of caffeine, tobacco, alcohol, inhalants
  - Explain how to make correct decisions regarding avoidance of drugs and how to face peer pressure
- Nutrition
  - Explain how food is used by the body
  - Demonstrate the ability to make food choices according to nutrient content
  - Explain the effects of food choices on growth, behavior, and health
- Communicable and Chronic Diseases
  - List diseases that commonly occur at stages of life
  - Make choices reducing the risk of disease
- Family Living
  - Compare various functions of individuals in different types of family units
  - Describe how changes within and outside the family may impact family life
- Environmental Health
  - Identify positive and negative environmental factors in the community that affect health
  - Know and make correct choices to improve the quality of the environment

## **Physical Education**

Physical Education is provided for students in grades one through six for a total period of time of not less than 200 minutes each ten school days. During the school year students will:

- Observe, experience, and appreciate a wide variety of physical activities
- Use available school and community resources to promote lifelong participation in physical activity
- Practice safety during a physical activity
- Relate physical activity to everyday life and career
- Develop and maintain a high level of physical fitness
- Awareness of body/space relationships
- Develop appropriate social behaviors during planned physical activity
- Develop and maintain a positive self-image through planned physical activities
- Improve personal performance of movement activities