

4th Grade Curriculum

2005-2006



Paul Cuffee School
459 Promenade Street
Providence, RI 02908

LANGUAGE ARTS

Students in grade four will be familiar with the following areas:

Reading

- Read and respond to a variety of fourth grade reading material for a variety of purposes
- Read aloud fluently with appropriate pacing and expression
- Read and spell fourth grade sight words
- Use root words to learn the meaning of unknown words
- Use words with multiple meaning such as synonyms, antonyms, homonyms, homophones
- Question, analyze, and predict using prior knowledge
- Compare and contrast plots, settings, and characters presented by different authors
- Demonstrate comprehension of reading through writing, discussion, and dramatization
- Know the difference between cause and effect and fact and opinion
- Follow simple step-by-step written directions
- Use a dictionary, thesaurus, encyclopedia, and atlas appropriately

Writing

- Write cursive correctly and neatly (by 3rd/4th quarter)
- Self-correct when writing
- Correctly use commas and direct quotations, apostrophes in possessives, contractions, and possessives
- Write in a variety of forms, including narratives, responses to literature, informational reports, summaries, and letters
- Create a composition that includes an introduction, details, and a conclusion
- Understand the organization of almanacs, newspapers, and periodicals as well as how to use those print materials
- Demonstrate basic keyboarding skills and familiarity with computer terminology

Listening and Speaking

- Listen and respond to oral communication and speak in a way that confirms understanding of key ideas
- Speak with effective vocabulary and use details, examples, or experiences to explain or clarify information
- Paraphrase and summarize written and oral information
- Give precise directions and instructions
- Make oral presentations about familiar experiences or interests for integrated Units of Study
- Report orally on summaries of events, articles, or books
- Recite poems

MATHEMATICS

Students in grade four will be familiar with the following areas:

Number sense

- Understand concept of odd and even numbers
- Read, write and understand place value of numbers in the millions, thousands, and hundreds
- Round whole numbers and decimals; understand when rounding is appropriate
- Draw pictures to represent fractions; write fractions that represent drawings
- Solve problems using addition, subtraction, multiplication, and division
- Identify factors, multiples, primes and composite numbers

Algebra and functions

- Use and interpret variables (x), mathematical symbols, and properties to write and simplify
- Understand that each side of an equation is equal to the other side

Measurement and Geometry

- Understand perimeter and area
- Use two-dimensional coordinate grids to represent points and graph lines and simple drawings
- Identify parallel and perpendicular lines, radius and diameter of a circle, congruent figures, and figures that have symmetry
- Identify characteristics of triangles and quadrilaterals
- Understand mode, median, range, and mean
- Understand polygons

Statistics, Data Analysis, and Probability: (Science integrated)

- Collect, organize, record, and interpret data (using number line, graph, table, chart)
- Identify in a set of data the mode (most), median (middle), outliers (far out)
- Make predictions and express outcomes (using tables, grids, tree diagrams) for simple probability situations

Mathematical Reasoning

- Use strategies, skills, and concepts to make decisions about how to approach and solve problems
- Generalize a particular problem to other experiences
- Demonstrates understanding of problem solving in multiple ways (writing, picture, or using manipulatives)

SCIENCE

By the end of the year, the students will be able to analyze, differentiate, or distinguish:

- *Life cycles of organisms such as how inheritance and environment determines the characteristics of an organism*
- *All plants and animals have life cycles*
- *Organisms and environments such as interdependence of animals and plants in an ecosystem and populations and their effects on the environment*

Physical Sciences

- Design and build simple circuits/series/parallels using components such as wires, batteries, and bulbs.
- Identify the parts of a light bulb
- Build a simple switch
- Design and build a flashlight

Life Sciences

- Identify plants as the primary source of energy and matter entering most food chains.
- Relate producers and consumers to each other through the use of food chains and food webs.
- Characterize ecosystems by their living and non-living components.
- Demonstrate how some plants and animals survive better than others in a particular environment.

Investigation and Experimentation through Science Notebooks

- Distinguish between observation and inference.
- Measure and estimate weight, length, and volume.
- Make and test predictions in order to draw conclusions.
- Construct and interpret graphs.
- Follow a set of written instructions.
- Make claims and show evidence to support them

Earth Materials

- Rocks and minerals have identifiable characteristics
- Many earth materials combine to make up rocks.
- Hardness is the “scratchability” of a mineral and can be used to identify a mineral
- One of calcite’s properties is that it bubbles when placed in vinegar
- Granite is made of minerals which have properties which can be used to identify which minerals are present

SOCIAL STUDIES

By the end of the year, the students will be able to explain, discuss, or interpret:

- *Living and working together in families and communities.*
- *The states and their capitals with Democratic Principles and Values and People from many cultures who contributed to its culture, economic, and political heritage.*
- *Regional cultural contributors that help form our national heritage.*
- *Use maps and other geographic representation tools or technology to acquire, process, and report information from a spatial perspective*
- *How to use mental maps to organize information about people, places, and environment in a spatial context.*
- *Introduction to Longitude and Latitude by locating landmarks on maps.*

Community and Family

- Share and discuss community in the classroom.
- Build a community with the classroom.
- Discuss various communities that we live in or around
- Identify with the numerous communities, cultures, heritages, that show diversity.

United States' Capitals/Regions

- Identify the 50 states.
- List the 50 states with capitals.
- Locate and label the states 50 on a map.
- Identify the states in regions and locate them on a map.
- Identify with important people and landmarks in each region.
- Create reports on states, regions and contributors.

Geography

- Identify landmarks on a map using longitude on latitude.
- Read and create maps using key components like scales, grids, legends, or keys
- Follow directions using a compass.