

## **LANGUAGE ARTS**

Specific unit goals:

**To understand that language processes (reading, writing, grammar and listening and speaking) involve thinking, discovery and order.**  
**To understand that language follows conventions or rules. These rules help ensure effective communication.**

Student will be able to:

- Use knowledge of sounds and letters to decode multi-syllabic words.
- Spell grade-appropriate high-frequency words.
- Edit writing to correct capitalization for geographical names, special events, titles, and initials of people.
- Write legibly, adhering to margins and correct spacing between letters in a word and words in a sentence.
- Add details, descriptions, and information from different sources to elaborate meaning.
- Group related ideas to paragraphs.
- Use oral language to obtain information, complete a task, and share ideas and personal opinions with others.
- Give verbal and nonverbal feedback to a speaker or promote mutual understanding.
- Clarify spoken messages by restating, questioning, or elaborating.
- Use simple gestures, eye contact, and other nonverbal language to complement and enhance verbal messages.
- Use new grade appropriate vocabulary, including homophones and homographs, introduced in stories, informational texts, word study and reading.
- Express main ideas or events that develop the author's message or underlying theme.
- Write in a variety of grade-appropriate formats for a variety of purposes and audiences, such as: letters, responses to literature, short pieces on content area topics, stories with a beginning, middle, end, and different types of writing (descriptive, narrative, persuasive and research).
- Use common word parts and structures to read new words.
- Differentiate between fact and opinion.
- Ability to identify nouns, verbs, adjectives, adverbs, subject and predicate.
- Explain main ideas or events that develop the author's message or underlying theme.
- Read orally with accuracy, fluency, and expression.
- Locate information in a variety of grade-appropriate resources.
- Appropriately use and understand antonyms, synonyms, and homophones.

## **MATH**

Specific unit goals:

**To understand that patterns help us remember many facts as mathematical ideas.**

**To understand that patterns can lead to educated predictions.**

**To understand that numbers can be represented in many ways, and used for different purposes.**

**To understand that mathematical operations can be modeled in a variety of ways and used to describe events/situations.**

Student will be able to:

- Categorize and justify a number as being odd or even.
- Use properties of addition of whole number to solve problems.
- Use a variety of strategies to solve problems involving addition and subtraction of two-, three- and four digit numbers.
- Estimate and determine the elapsed time between two events or times.
- Create and describe growing numerical and spatial patterns and generalize a rule for the pattern (2, 4, 6,...)
- Identify and describe patterns in a hundreds chart.
- Recognize situations involving multiplication and division of whole numbers and represent the situation with number sentence.
- Recall multiplication facts from  $0 \times 0$  to  $12 \times 12$ .
- Model situations that involve multiplication and division of whole numbers using objects/pictures and number sequences.
- Identify situations involving change and describe the change numerically and verbally.
- Add, subtract and multiple money.
- Compare, order and describe whole numbers with or without relational symbols (greater than, less than, and equal to).
- Add and subtract basic decimal problems.
- Understand the concepts of fractions (halves, thirds, fourths...)
- Use patterns to solve problem situations involving related quantities in which one quantity changes as the other changes.
- Pose questions, collect data using surveys, and organize the data into tables and graphs.
- Answer questions based on data represented in graphs.
- Make reasonable predictions concerning the likelihood of an event occurring (i.e., certain, likely, unlikely, impossible).
- Compare shapes as congruent or similar.
- Use coordinates to locate objects/locations on a grid.
- Measure length and capacity, and weight in U.S. customary and metric units (i.e., pound, kilogram)
- Select appropriate tools for measuring length, capacity and weight.
- Estimate and measure perimeter and area of common shapes and irregular shapes.

## **SCIENCE**

Specific unit goals:

**Students will use the scientific processes: questioning, planning and conducting investigations, using appropriate tools and techniques to gather data, thinking critically and logically about relationships between evidence and explanations, and communicating results.**

Student will be able to:

- Observe, ask questions, and make predictions.
- Plan a simple investigation based on formulated questions.
- Record data in an organized and appropriate format.
- Organize data.
- Communicate and explain finding based on evidence gathered.

Life Science: Understand that basic structures in plants and animals serve a purpose.  
Distinguish the two main groups of plants.  
Identify the different parts of a flower.  
Understand how living things are classified.

Students will be able to:

- Describe the function of the roots, stems, leaves, and flowers.
- Group seeds into two groups (flowering plant or conifer)
- Label, identify, and understand the purpose of the four main parts of a flower.
- List the five groups of vertebrates (fish, amphibians, reptiles, birds and mammals).
- Explain how cold-blooded animals differ from warm-blooded animals.

Life Cycles: Understand the life cycles of plants and animals.

Students will be able to:

- Explain how growth, death, and decay are part of the life cycle.
- Compare life cycles of various plants and animals.

Organisms and Environments: Understand the relationships among various organisms and their environment.

Students will be able to:

- Identify the living and nonliving components of an ecosystem.
- Explain the interrelationships among plants and animals in different environments (producers, consumers, decomposers)
- Describe how the environment may factor into how an organism's ability to grow, reproduce and thrive. (temperature, water, light)

Earth Science: Identify the basic properties of Earth materials

Understand the importance of water to our planet.

Students will be able to:

- Identify the layers of the Earth (crust, mantle, core)
- Describe the different types of rocks and how they are formed (Igneous, sedimentary, metamorphic)
- Classify rocks based on the physical properties (color, texture)
- Explain how volcanoes are formed and identify the different types of volcanoes.
- Name the four main oceans (Arctic, Pacific, Atlantic and Indian)
- Understand the ratio of land to water on the Earth and fresh water to salt water.

## **SOCIAL STUDIES**

Specific unit goals:

**Interpret timelines of events studied.**

**Understand the importance of maps in early explorations.**

**Describe the earliest exploration of the New World by the Vikings.**

**Understand the importance of early explorers, what they were looking for when they began their journeys, what they found and how their discoveries impacted their times. (Columbus, Magellan, Vespucci, Ponce de Leon)**

**Identify some of the major leaders and groups responsible for the founding of the original colonies in North America (John Smith, William Penn, Lord Baltimore, John Winthrop)**

**Identify the location of the 13 colonies.**

Students will be able to:

- Interpret a basic historical time line and understand the sequential significance in history.
- Identify the location of the North and South Poles, the Equator, the Prime Meridian, Northern Southern, Eastern Hemispheres.
- Use maps to locate an absolute location (longitude and latitude)
- Understand that the “discovery” of America happened hundreds of years before Columbus.
- Identify the different routes each explorer undertook and its impact to the world at that time.
- Identify key people who help establish the original colonies.
- Identify the location of the original 13 colonies.

Students will learn by:

- Teacher directed lessons
- Working in small and large groups.
- Participating in field trips outside the classroom.

- Participating in small and large class discussions.
- Observing demonstrations.
- Completing research projects.
- Conducting internet research.
- Reviewing various periodicals.
- Using flash cards for recall of information.

Students will be assessed by:

- Individual in-class assignment completion.
- Individual and/or group projects.
- Completion of homework assignments.
- Tests and quizzes.
- Class participation
- Work quality
- Oral discussions.
- Journal entries

Text/Materials Used:

- Math Exploration and Applications, Harcourt
- World of Language, Silver Burdett & Ginn
- SRA Spelling, SRA McGraw-Hill
- Explode the Code, Nancy M. Hall
- Science Horizons, Silver Burdett & Ginn
- Teacher directed resources
- Chapter books

4th Grade Objectives

Lori Fukuoka

2009 - 2010

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- Spell grade-appropriate high-frequency words, irregular plurals; common homophones; and words that have blends and contractions.
- Edit writing to correct capitalization for geographical names, special events, titles, and initials of people.
- Write legibly, adhering to margins and correct spacing between letters in a word and

words in a sentence.

- Correct use of punctuation (periods, commas, apostrophes, quotation marks...)
- Group related ideas to paragraphs.
- Use oral language to obtain information, complete a task, and share ideas and personal opinions with others.
- Give verbal and nonverbal feedback to a speaker or promote mutual understanding.
- Clarify spoken messages by restating, questioning, or elaborating.
- Use simple gestures, eye contact, and other nonverbal language to complement and enhance verbal messages.
- Use new grade appropriate vocabulary, including homophones and homographs, introduced in stories, informational texts, word study and reading.
- Confirm or revise predictions after locating evidence in the text.
- Identify the main idea or problem and solution in a text and how it is resolved.
- Write in a variety of grade-appropriate formats for a variety of purposes and audiences, such as: letters, responses to literature, stories with a beginning, middle, end, and different types of writing (descriptive, narrative, persuasive, and research).
- Differentiate between fact and opinion.
- Ability to identify nouns, verbs, adjectives, adverbs, subject and predicate.
- Explain main ideas or events that develop the author's message or underlying theme.
- Read orally with accuracy, fluency, and expression.
- Locate information in a variety of grade-appropriate resources.
- Appropriately use and understand antonyms, synonyms, and homophones.
- Write a bibliography entry for a book and websites.

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