

## **Lower School Course Outline 4<sup>th</sup> Grade**



### **Subject: Language Arts**

#### **Introduction:**

The fourth grade language arts program builds enthusiasm for reading by emphasizing literature-based reading, teacher read-alouds, and cross-curricular work. The goal is to encourage students to become confident, well-prepared speakers and writers, and attentive, respectful listeners.

#### **Content:**

##### **Reading:**

Students use various comprehension self-monitoring strategies during their daily silent reading period. They read and discuss a broad range of fiction selected by students and teachers. Students do responsive, interpretive, and critical writing activities based on their independent reading. A study of context-based vocabulary includes dictionary work and root and affix analysis.

##### **Writing:**

Students compose, edit, and revise poetry, fiction and non-fiction writing pieces. They are responsible for accurate use of about four hundred high frequency spelling words. After students' spelling stages are determined, spelling instruction is at their individual level. Students extend their word knowledge through the study of sophisticated sound and pattern relationships in polysyllabic words. Daily exercises reinforce conventional spelling, punctuation and the rules of grammar.

##### **Research:**

Students develop research skills, beginning with the use of non-fiction reading and primary source interview material. They are expected to identify and synthesize important ideas, both in reading and in preparing questions for interviews. They learn the skills of taking notes, summarizing, and restating and organizing material.

#### **Materials:**

Trade books, dictionaries, thesauri, *Word Journeys* spelling lists, reference and journaling materials comprise the list of materials.

#### **Evaluation:**

Formal and informal assessment tools include teacher observation, student projects and journals, and checklist assessment.

## **Lower School Course Outline 4<sup>th</sup> Grade**

### **Subject: Math**

#### **Introduction:**

The fourth grade math curriculum is based on the *Everyday Math* Program and reinforces concepts and computational skills learned in the previous grades. Group work is emphasized as well as individual exploration, development, and mastery. The curriculum promotes critical thinking and builds respect for the wide variety of successful strategies employed by students.

#### **Content:**

##### **Numeration:**

The students learn place value through millions and decimals to hundredths. They also learn to compare, add, and subtract decimals, fractions, and percents.

##### **Operations and Computation:**

Various algorithms and mental strategies are used as students master basic number facts and gain proficiency with 2-and 3-digit computation in the four basic operations.

##### **Data and Chance:**

Students learn to read and create graphs and their landmarks, and to understand and use probability and prediction.

##### **Geometry:**

The students learn to identify, draw, compare, and analyze lines, angles, and 2-and 3-dimensional figures.

##### **Measurement:**

Students learn to use tools and take measurements of length, area, volume, weight, temperature, and time. They also learn to use correct unit labels, use unit conversion, and calculate map distances and elapsed time.

##### **Patterns, Functions and Algebra:**

Students learn to create, extend, and describe number patterns. They also use patterns to generate, strategize, and solve story problems, using estimation and mental math, as well as written number models.

#### **Materials:**

*Everyday Math* student journals, Student Reference Book, Study Links, tool kits, and other math manipulatives as needed comprise the list of materials.

#### **Evaluation:**

Formal and informal assessment tools include teacher observation, daily journal work, student self-assessment, and periodic progress checks in the *Everyday Math* program.

## **Lower School Course Outline 4<sup>th</sup> Grade**

### **Subject: Social Studies**

#### **Introduction:**

The fourth grade social studies curriculum is an intense study of New Jersey and its relationship to a larger country and planet. The essential goal is for students to understand and recognize their physical place in the world and to understand how geography has influenced history.

#### **Content:**

##### **New Jersey Geography**

With the Delaware River watershed as a central focus, the students use map skills to explore various aspects of New Jersey, including rivers, topography, climate, agriculture, and population density.

##### **New Jersey History**

Students learn about New Jersey's earliest inhabitants by examining artifacts and by looking at excerpts of journals written by European settlers and explorers. They study Quakerism in order to understand the early Quaker settlement of South Jersey. Students learn about New Jersey's role in the American Revolution by visiting Washington's Crossing and other historical sites for hands-on experiences.

As a part of New Jersey history, students learn about the internment of Japanese Americans during World War II and the eventual settlement of some Japanese Americans in South Jersey to work at the Seabrook Farms vegetable processing plant.

##### **Famous Women**

Students choose a famous woman, conduct research about her, and present their research.

##### **World Tour**

Students take an imaginary tour that visits five continents. During the tour, students use math and research skills to gather data about the countries visited.

##### **Regions of the USA**

Students compare the topography of the regions of the United States, paying special attention to a specific historic event in each region. They look at ways the watersheds in each region influenced that region's history.

#### **Materials:**

*Our Country's Regions* (Macmillan/McGraw-Hill), *New Jersey* (Silver Burdett Ginn), *Everyday Math Student Reference Book*, various maps, and artifacts comprise the list of materials.

#### **Evaluation:**

Unit assessment, class participation, teacher observation, and student project work

## **Lower School Course Outline 4<sup>th</sup> Grade**

### **Subject: Science**

#### **Introduction:**

Fourth grade science students study a variety of topics, with emphasis on hands-on activities and beginning lab techniques. The goal is to encourage students to be organized, communicative, and curious as they explore elements of the natural and manmade world.

#### **Content:**

##### **Life Science:**

The students learn about plants, their structure, and the processes of reproduction and photosynthesis. They also study animal structure and adaptations. They are introduced to concepts of ecology.

##### **Earth Science:**

Students study the solar system, including planets, asteroids, and comets. They also learn specifically about the Earth's origins and the Earth's crust during our study of minerals, rocks, and fossils.

##### **Physical Science:**

Fourth graders study light and color, sound and hearing, and magnets and electricity.

##### **Technology:**

Students study force and motion through the construction and operation of simple machines.

##### **History of Science:**

Students learn about the study of science through time as well as scientists who have made significant contributions to what we now know about the world around us.

##### **Health Science:**

To promote healthy lifestyles, students participate in a trimester of yoga, analyze nutritional information, and review the benefits and dangers of legal drugs.

#### **Materials:**

*Science Horizons* (Silver Burdett Ginn), laboratory equipment, and demonstration objects comprise the list of materials.

#### **Evaluation:**

Unit assessment, lab work, class participation and teacher observation form the basis for the students' grades.