North Shore Schools

Elementary Curriculum Guide 2019-2020 Fourth Grade

North Shore Schools

Our Mission

Our mission is to nurture and enrich our students' natural delight in learning and in the powers of mind and body. Each child's awakening into confident young adulthood requires guided engagement with vital ideas and events of the past to realize fresh possibilities and discoveries for the future.

We aspire to foster in our students those qualities of character consonant with the ideals of a democratic society. We are committed to reaching beyond routine expectations in a learning environment that encourages inquiry and builds its daily practice upon respect for oneself and others.

Shared Valued Outcomes

We strive to support the growth of all North Shore Students as...

- **COLLABORATORS** individuals who work with others towards a common goal.
- **COMMUNICATORS** individuals who articulate thoughts, feelings, information and ideas using oral, written, and non-verbal communication skills in a variety of forms and contexts.
- THINKERS individuals who activate their mind for a variety of purposes.
- PROBLEM SOLVERS individuals who find solutions in conventional and/or innovative ways.
- **INNOVATORS** individuals who are driven to conceive what doesn't exist and bring new ideas to fruition.
- **COMMITED INDIVIDUALS** individuals who exhibit dispositions and 'habits of mind' that lead to growth in self and concern for others.

Administrators

Glen Head School

Dr. Peter Rufa, Principal

Glenwood Landing School

Bridget Finder, Principal

Sea Cliff School

Jeanette Wojcik, Principal

Academic Directors

Ana Aguiar-Mady World Languages and ENL

Elliot Kaye Technology

Chris Marino Special Education

Don Lang Athletics, Health, Physical Education,

and Recreation

Dalia Rodriguez Fine and Performing Arts Devra Small Elementary Humanities

Dr. Carol Ann Smyth Elementary STEM

Content Areas

- English Language Arts
- Social Studies
- Mathematics
- Science
- **♦** STEAM
- ❖ General Music
- ❖ Visual Arts
- Health and Physical Education
- FLES (Foreign Language in the Elementary School)
- Library

English Language Arts

The goal of the K-5 Literacy Program is to help students develop into independent readers, writers, and thinkers.

The workshop model for reading and writing is designed to foster this independence. Please see the "Parent Guide to the Reading and Workshop Model" for a detailed description.*

Children learn through whole-class, small group, and individual instruction. Teachers get to know their students' abilities and needs and monitor their progress through ongoing formal and informal assessments, ensuring that teachers have the information necessary to create lessons that meet the unique needs of each learner, drawing on a range of research-based practices.

A scope and sequence of literacy skills in reading, writing, and word study guide students' growth through the elementary grades. Fourth grade readers learn to summarize and use text-based evidence to support a thesis. They study the interaction of parts of a text with the whole in both fiction and nonfiction. They determine and compare themes, and explore point of view, perspective, foreshadowing and symbolism. They read historical fiction and conduct research using primary and secondary sources. They notice author's craft and purpose. In their writing, fourth graders learn to develop a thesis and organize their writing using "boxes and bullets" (big ideas and supporting details). They write, revise, and edit persuasive essays, literary essays, research-based nonfiction, and articles.

Teachers College supports the reading and writing workshop activities, and "Words Their Way" materials help develop spelling knowledge and skills.

Social Studies

New York State

The Grade 4 social studies program highlights the historical development of New York State and the United States. Specific content knowledge is organized around key ideas and conceptual understandings that can be applied in a variety of contexts across time and place. Students engage in research and inquiry into compelling questions. They learn to gather, interpret, and use evidence. They learn to reason using the understandings and skills of history, geography, economics, and civics.

Students develop literacy and social studies skills simultaneously as they read, listen, speak, and write about social studies content.

Major Grade 4 topics include:

- •Geography of New York State
- Native American Groups and the Environment
- European Exploration and Colonization of New York
- •Colonial and Revolutionary New York
- •In Search of Freedom and Call for Change (Slavery/ Civil War, Women's Suffrage)
- Westward Movement and Industrialization in New York
- •Immigration and Migration

Mathematics

The mathematics curriculum is based upon the Common Core Learning Standards (CCLS). There are 8 Mathematical Practices that set an expectation of understanding of mathematics and are the same for grades K-12.

In Grade 4, instruction focuses on three critical areas:

- Developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends
- Developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers
- Understanding that geometric figures can be analyzed and classified based on their properties

Our math program in fourth grade, *Math in Focus*, is based upon Singapore Math which places an emphasis on developing proficiency with problem solving while fostering conceptual understanding and fundamental skills.

Online resources are available at Think Central using the username and password provided by the classroom teacher.

Science

Units of study are aligned with the Next Generation Science Standards.

The standards-based units of study are organized to provide students with stimulating experiences in the life, earth, and physical sciences while developing their critical-thinking and problem-solving skills. The inquiry-based lessons allow students to learn scientific concepts and skills and to acquire scientific attitudes and habits of mind.

Fourth grade students study the following units:

- Waves, Light, and Senses
- Energy
- Weathering and Erosion

STEAM

We strive to educate and inspire students through rigorous, thought-filled, and well-designed instruction in science, technology, engineering, and mathematics, with rich and meaningful disciplinary and interdisciplinary learning opportunities that capitalize upon connections within, between, and among disciplines as well as the application of learning.

In order to thrive as citizens in a highly complex world, students will:

- •learn deeply the fundamental concepts, knowledge, and processes underpinning the core disciplines of science, engineering, technology, and mathematics;
- •construct and apply understanding of interdisciplinary connections across the STEM disciplines and all learning;
- •develop as thinkers, problem solvers, innovators, communicators, collaborators, and individuals committed to themselves and others; and
- •understand and appreciate the role of STEAM in everyday life and STEAM-related careers

Students will participate in four STEAM modules over the course of the school year and have the opportunity to participate in recess clubs.

General Music

The Elementary General Music curriculum is based on the New York State Art Standards and guided by the approaches of Orff, Kodaly, and Music Learning Theory by Edwin Gordon.

Students explore essential questions to understand how music facilitates human expression, nurtures creativity, and creates connections across cultures and history.

The curriculum spirals from Kindergarten through 5th grade to allow students to allow a deeper level of understanding at each grade level.

Elements include rhythm, melody, form, harmony, expression and timbre.

Children explore musical concepts by:

- Listening to music
- Analyzing and interpreting music
- Creating music

Students attend General Music classes 1 time in a 6-day cycle.

Visual Arts

The Art curriculum is based on the New York State Arts Standards, and focuses on the elements of art, the historic and cultural contexts of art, and enduring ideas that make connections across content areas.

Students utilize the elements of art to solve design problems, think creatively and innovatively, and work collaboratively.

Students use a variety of of media to express their ideas and to make meaning of the world they live in. They critique their work and the work of others, and learn to see the world using observation and reflection.

Art journals are used to support reflective and metacognitive thinking, engage in artistic processes, experiment and develop ideas.

Art classes meet 1 time in a 6 day cycle.

Health and Physical Education

During health class, students learn about health enhancing choices.

The units, developmentally appropriate for each grade level, include:

- Personal and Family Health
- Safety and Injury Prevention
- Nutrition and Physical Activity
- Tobacco and Alcohol Prevention

Students enjoy physical activity in safe and positive physical education classes. They are provided with information and develop skills to be physically fit throughout their lives. Daily recess is a laboratory where students practice physical education skills. Physical fitness is vital to each student's unique educational journey, and we encourage every student to be active in and out of school.

FLES

Students in grade 4 will continue to study Mandarin Chinese or Spanish based on their language choice for third grade. The focus of world language instruction in the elementary grades is content-related and integrated into the grade level curriculum. Students discover language learning through the modes of communication: interpersonal, interpretative and presentational. They also begin to develop a sense of global awareness by exploring the cultural differences and similarities between themselves and children in either Mandarin Chinese or Spanish speaking countries. The curricula are based upon the ACTFL National World-Readiness Standards for Learning Languages.

Technology

Technology enables students to step outside the boundaries of the school using vehicles such as video-conferencing and the internet. Computer technology is used to encourage both collaborative and independent learning. These are skills that prepare students for lifelong learning and success in the 21st century. Classrooms are equipped with SMART boards that enhance instructional creativity and enhance student learning. Students regularly use the computer lab during the school day.

Library

During scheduled library classes and through units aligned with classroom curriculum, students learn to navigate traditional and non-traditional library skills.

An appreciation of all media is fostered by demonstration and hands-on experiences. Lessons build from kindergarten through fifth grade to ensure that all students have knowledge of and respect for all media.

In fourth grade, students learn:

- Literature appreciation and selection
- Library organization and material location
- Introduction to internet use and safety