



Middle Country Central School District

Parents Guide to Elementary Curriculum

Grade 4

By the end of their fourth grade year, students should acquire the following knowledge and skills. Expectations here reflect current New York State standards in each subject area:

Language Arts:

The fourth grade language arts program is fully aligned with the NYS Next Generation ELA Standards and HMH Into Reading Program.

Fourth grade teachers provide ELA instruction through integrated modules, collaborative and individual work, and student-centered learning in order to make children active, independent learners and highly literate members of society. Professional development and literacy blocks support teachers and students.

Fourth grade reading instruction focuses on building fluency and enhancing the students' ability to accurately comprehend and evaluate more complex texts. Students learn to draw inferences, explain concepts in text, determine the meaning of general academic and domain-specific words, and compare firsthand and secondhand accounts of the same topic. The fourth grade writing instruction enables students to participate collaboratively in the research and writing process. Students also effectively use technology to produce clear and coherent opinion, informative, and narrative pieces that are appropriate for the intended task, purpose, and audience.

The following are some of this year's fourth grade modules:

Reading Modules

What Makes Us Who We Are
Come to Your Senses
Rise to the Occasion
Heroic Feats
Art Everywhere
Marvels of Nature

Writing Modules

Personal Narrative
Description
Opinion Essay
Story
Expository Essay
Letter

Tricksters and Tall Tales
Food for Thought
Reading Module (cont.)
Global Guardians
Communication Nation

Imaginative Story
Opinion Essay
Writing Modules (cont.)
Research Report
Poetry
Editorial

Mathematics:

The goal of the mathematics curriculum is for students to understand the concepts of and to become proficient with the skills of mathematics. Students will communicate and reason mathematically. They will become problem solvers by using appropriate tools and strategies through the integrated study of number sense and operations, algebra, fractions, geometry, and measurement and data. This will be accomplished through the implementation of the Middle Country Central School District Content and Process Strands, which are aligned with the New York State Next Generation Learning Standards for math.

Students will:

Number Sense, Operations, and Algebra

- Multiply or divide to solve word problems
- Generate a number or shape pattern that follows a given rule
- Find all factor pairs for a whole number in the range 1-100
- Determine whether a given whole number in the range 1-100 is prime or composite
- Solve multistep word problems and assess reasonableness
- Apply concepts of place value
- Compare and order numbers, fractions and decimals
- Understand fractions on a number line
- Understand meanings of multiplication/division
- Use multiplication/division as inverse operations to solve problems
- Estimate and round numbers less than 1,000

Fractions

- Compare two fractions with different numerators and different denominators
- Understand addition and subtraction of fractions
- Add and subtract mixed numbers with like denominators
- Solve word problems involving multiplication of a fraction by a whole number
- Use decimal notation for fractions with denominators 10 or 100
- Compare two decimals to hundredths by using $<$, $=$, and $>$

Geometry

- Recognize lines of symmetry for two-dimension figures
- Identify points and line segments when drawing a plane figure
- Draw lines of symmetry
- Classify two-dimensional figures based on presence/absence of parallel and perpendicular lines

- Identify right triangles
- Draw and identify intersecting, perpendicular and parallel lines
- Identify points and rays when drawing angles
- Classify angles as acute, obtuse, right and straight

Measurement and Data

- Select tools and units (customary and metric) appropriate for length, mass and capacity being measured
- Know and understand equivalent standard units of length
- Apply the area and perimeter formulas for rectangles in real world problems
- Make a line plot to display a data set of measurements in fractions of a unit
- Measure angles in whole-number degrees using a protractor and sketch angles
- Record data using tables, bar graphs and pictographs
- Read and interpret line graphs

Social Studies:

The ultimate goal of the social studies curriculum is for students to assume their role as responsible citizens and as active contributors to a society that is increasingly diverse, and interdependent with other nations of the world. The Middle Country social studies program is fully aligned with the standards and practices in the NYS K-12 Social Studies Framework.

In fourth grade, students examine New York State and their local communities, and their change over time from pre-colonial history to the modern period.

Topics to be explored include:

- Geography of New York State
- Native Americans of New York State
- Impact of colonization
- Life in colonial New York
- The Revolutionary War in New York State
- Purposes of local and state government
- The struggle for rights and freedom
- New York's role in the Civil War
- Industrial growth and expansion
- Immigration and migration

Science:

In accordance with New York State Science Standards, the Middle Country Central School District emphasizes a hands-on and minds-on approach to learning. Students actively engage in the discovery process, utilizing science and engineering practices to explore scientific concepts. Experiences provide students with opportunities to interact with the natural environment in order to construct explanations about their world. This approach allows students to practice problem-solving skills, develop positive science attitudes, learn new science content, and explore how to think like scientists and engineers.

Fourth grade units include the following:

Scientific Inquiry: The Nature of Science

Density/Buoyancy

Design Technology

Living Environment: Plants & Animals

Special Areas:

Music, Art, Health, Physical Education, SEL and Technology are an important part of your child's educational experience. By participating in special area programs, children are introduced to the fundamentals of each specific discipline, then involved in learning situations which are applications of basic concepts. In all of them, active experiences are provided and children are encouraged to express themselves and to communicate through various subject area media.

MUSIC:

Through singing, listening and movement activities, children learn to differentiate between high and low pitches, recognize groups of metric units, respond orally to the rhythmic flow of music, determine melodic direction (up and down), express personal reaction to consonance and dissonance, begin to recognize that music consists of organized sounds and silences, and learn to distinguish between "soft" and "loud".

ART:

Emphasis is placed on eye-hand coordination and manipulation tasks. Children are asked to cut, fold, tear, paste, paint, draw, sculpt, and make crafts. Through these activities, students can communicate their concepts vis-à-vis their completed art projects.

HEALTH:

The health curriculum focuses on the whole child by analyzing physical, social and emotional well-being. Children learn to make responsible health related decisions.

PHYSICAL EDUCATION:

The curriculum stresses personal living skills in all grades. They begin to develop a sense of the importance of cardiovascular wellness and music fitness. Movement skills are taught which deal with safety and creativity. The entire area of positive self-esteem is developed through various activities. Social emotional learning is also addressed as part of the curriculum.

SEL:

Social-Emotional Learning (SEL) - Through literature, students will delve into the areas of self-awareness, self-management, social awareness, responsible decision-making, and relationship skills. Students will learn how to manage emotions and behaviors, discern how to make responsible and caring decisions, and set personal goals. Research shows SEL improves academic performance, curtails bullying, and builds character.

TECHNOLOGY:

Our technology program is designed to support classroom academic instruction with 1:1 devices. All students are issued their own ChromeBook allowing students access anywhere they have internet access. District subscribed, web-based supplemental products support instruction across all subject areas.

MISSION:

The mission of the Middle Country Central School District is to empower and inspire all students to apply the knowledge, skills and attitudes necessary to be creative problem-solvers, to achieve personal success, and to contribute responsibly in a diverse and dynamic world.