

Katonah-Lewisboro School District

Curriculum Guide

Fourth Grade

2019-2020



FOURTH GRADE CURRICULUM OVERVIEW

The district curriculum is based on the current New York State Learning Standards.

English Language Arts and Literacy: K-5

The Katonah-Lewisboro School District is committed to using a balanced literacy approach which includes explicit instruction and opportunities for students to develop skills and strategies in the areas of reading, writing, listening, and speaking.

Students engage in a comprehensive literacy program which includes the following components of effective instruction.

Reading Instruction	Writing Instruction
Reading Workshop <ul style="list-style-type: none">- Mini-lesson (explicit instruction includes modeling and demonstration)- Independent reading- Small group instruction (guided reading and strategy lessons)- Share Read Aloud Shared Reading Word Study – phonics, spelling, and vocabulary	Writing Workshop <ul style="list-style-type: none">- Mini-lesson (explicit instruction includes modeling and demonstration)- Independent writing- Conferring- Small group instruction- Share Shared and Interactive Writing Mechanics, spelling, grammar, and punctuation

Our **reading curriculum** includes a balance of literature and nonfiction (informational text). Students read daily to improve their fluency, comprehension, and stamina. The level of text complexity increases throughout the K-5 years, and assessments are used to match students with appropriate texts. Additionally, students are taught how to self-select texts for identified purposes and enjoyment. Explicit instruction focuses on foundational skills, fluency, and comprehension.

The **writing curriculum** includes three main types of writing: narrative, informational, and opinion. Students write daily to improve their stamina, volume, and craft. Writing occurs across the curriculum and for a variety of purposes. Students engage in both the writing process and on-demand experiences.

Speaking and listening are also important components of the literacy program. Students are taught how to effectively communicate with each other, engage in opportunities to think critically, and talk with each other about content, strategies, and original ideas.

Fourth Grade:

Building the stamina and skills to read challenging fiction, nonfiction and other texts is fundamental in fourth grade. Children will continue to learn about the world as they build vocabulary skills by reading more complicated stories and poems from different cultures and a range of books on history, science, and the arts. Fourth grade students also will make important strides in their ability to explain plainly and in detail what a book says, both explicitly and what is implied. By fourth grade, students are expected to be writing effective summaries by the end of fourth grade and descriptions of characters or events using standard conventions and mechanics.

Wordly Wise is the primary resource for word study instruction. It provides direct academic vocabulary instruction, and this program includes word lists and definitions that illustrate the meaning of words in context along with differentiated passages. The lessons contain several exercises that reinforce learning by teaching students to use words precisely in a variety of situations. The students learn information on correct usage, interesting word histories, and parts of speech.

A sample of what your child will be working on in fourth grade includes:

- Describing the story elements, such as characters, events, settings, and theme by drawing on specific details and evidence in the text
- *Engaging in a writing unit of study: **The Arc of Story: Writing Realistic Fiction:*** Students learn that the lenses they bring to reading fiction can also be brought to writing fiction, as they develop characters with struggles and motivations and rich stories to tell.
- *Engaging in a writing unit of study: **Boxes and Bullets: Personal and Persuasive Essays:*** Students learn the value of organization and form as they gather evidence to support and express an opinion on topics they know well.
- Paying close attention to key features of informational books and articles to comprehend main and supporting ideas, compare and contrast information, and explain how the author uses facts, details and evidence to support particular points
- Comparing ideas, characters, events and settings in stories
- Writing summaries or opinions about topics supported with a set of well-organized facts, details and examples
- *Engage in a research writing unit of study: **Bringing History to Life:*** Students tackle historical research in which they collect evidence and use details to vividly describe people and events from history.
- Paraphrasing and responding to information presented in discussions, such as comparing and contrasting ideas and analyzing evidence that speakers use to support particular points
- Reporting orally on a topic or telling a story with explicit facts and details
- Writing complete sentences using conventions correctly
- Relating words that are common in reading to words with similar meanings (*synonyms*) and to their opposites (*antonyms*)

MATHEMATICS

The Katonah Lewisboro School District has adopted the hands-on and minds-on K-6 Math Curriculum enVisionmath2.0 as the instructional resource to use within our math workshop model. Students explore grade level concepts with engaging materials, manipulatives, videos, online access and interdisciplinary activities that support student learning. The program is organized to promote focus and coherence each day. Assessments provide meaningful feedback to support student learning. The comprehensive program focuses on Common Core Clusters, develops understanding, and most importantly, connects mathematical content and processes. Learning is also supported through small group and collaborative activities.

In the fourth grade, students generalize place value understanding for multi-digit whole numbers. They use place value understanding and properties of operations to perform multi-digit arithmetic. Students will use the four operations with whole numbers to solve problems. Students will gain familiarity with factors and multiples. They will build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers. Students will represent and interpret data. They will solve problems using measurement and conversion of measurements from a larger unit to a smaller unit. In Geometry, they will understand concepts of angle and measure the angles. The Common Core Domains in grade four are Operations and Algebraic Thinking, Number and Operations in Base Ten, Number and Operations in Fractions, Measurement and Data, and Geometry.

The Common Core Learning Standards focus on the Mathematical Practices listed below:

- **Make sense of problems and persevere in solving them**
- **Reason abstractly and quantitatively**
- **Construct viable arguments and critique the reasoning of others**
- **Model with mathematics**
- **Use appropriate tools strategically**
- **Attend to precision**
- **Look for and make use of structure**
- **Look for and express regularity in repeated reasoning**

SCIENCE

The Science and Technology Concepts Program (STC) was adopted in the summer of 2012. STC was developed by scientists and experienced educators working with the National Science Resources Center (NSRC). The NSRC was established by the National Academies and the Smithsonian Institution. The STC program is aligned with National and State Standards for Science instruction.

The STC program is inquiry based. Questions are asked of students, and some questions are crafted by students as they explore and learn. Students independently and cooperatively work to conduct investigations, make predictions, record data, reflect on and share findings, and apply the skills and knowledge they gain to new situations.

The STC program has age appropriate concepts and skills embedded in each unit. Meaningful connections are made with other disciplines, and from unit to unit and grade to grade. Units include identified resources for informational texts that are aligned with the ELA Common Core Curriculum. These informational texts, in which reading selections are relevant to the topic itself, will further help students make connections to concepts. A clear scope and sequence ensures that as students proceed through the program, they will be well grounded in the different areas of study: life science, earth science, and physical science.

Topics include:

1. Sun, Moon, and Earth

Students study characteristics of each of these bodies, as well as concepts related to celestial movement, rotation, revolution, solar and lunar eclipses, and lunar phases.

2. Properties of Matter

Students learn that matter is anything that has mass and volume, and that matter can be described and classified by its properties. Students use various tools to measure length, mass, volume, and temperature using metric and standard units. Students also extend their knowledge of the states of matter by exploring phase changes in relation to molecular movement.

3. Motion and Design

This unit combines the physics of forces and motion with technological design. Students use various materials to design and build vehicles, then test how those vehicles respond to different forces of motion. They explore, through experiments and multiple trials how forces like friction, gravity, and air resistance work against motion to slow their vehicles down. Students design a vehicle that can perform to certain specifications, and meet “cost” requirements.

4. Land and Water

Students explore different interactions between land and water. They create hills, build dams and grow vegetation. They use their observations of these interactions to make predictions and test them.

SOCIAL STUDIES

Building upon the New York State Social Studies Framework, the Katonah-Lewisboro curriculum supports teachers in integrating the elements of the Framework (Key Ideas, Conceptual Understandings, and Content Specifications) with Social Studies practices and Common Core Literacy Standards into rigorous and engaging curricula and instruction. Through an inquiry-based approach to instruction, students develop thematic and conceptual understandings while applying disciplinary practices and literacy skills in the context of the content of Social Studies.

The Katonah-Lewisboro Social Studies curriculum incorporates the Teacher’s Curriculum Institute (TCI) program as an instructional resource to support our Social Studies Curriculum. TCI is a program that creates social studies resources to enable educators to improve their

ability to engage students in a diverse classroom. TCI resources and services are based on proven teaching strategies and practices that bring education to life to achieve consistent and positive classroom results. The TCI program is specially curated to meet state standards, create engagements in lessons and help students better understand the content through hands-on and experiential exercises. In addition, teachers have access to Social Studies ELA, a digital resource collection curated by educators throughout the region and offered through BOCES of Putnam Northern Westchester. The EngageNY website also provides access to inquiries that are aligned to the New York State Social Studies Framework.

Grade 4 Social Studies is focused on New York State and local communities and their change over time. The course incorporates the study of geography, history, economics, and government. Instruction teaches students about local connections throughout the history of New York State. The Key Ideas span the State’s history from before the European colonial era to the modern period. Conceptual understandings allow students to make connections to present-day New York State and their local community.

Key ideas include:

- Native American groups, chiefly the Haudenosaunee (Iroquois) and Algonquian-speaking groups, inhabited the region that became New York State. These people interacted with the environment and developed unique cultures.
- European exploration led to the colonization of the region that became New York State. Beginning in the early 1600s, colonial New York was home to people from many different countries. Colonial New York was important during the Revolutionary Period.
- There are different levels of government within the United States and New York State. The purpose of government is to protect the rights of citizens and to promote the common good. The government of New York State establishes rights, freedoms, and responsibilities for its citizens.
- Different groups of people did not have equal rights and freedoms. People worked to bring about change. The struggle for rights and freedoms was one factor in the division of the United States that resulted in the Civil War.

HEALTH

The health program, The Great Body Shop, is designed to promote behaviors that foster better health. Though students study similar topics at each grade, the depth of content and complexity of ideas vary from grade to grade. All students study growth and development, nutrition, safety, illness prevention, substance abuse prevention, personal safety, family life, and community health.

Topics include:

- Community Safety
- Let’s Talk Teeth
- The Digestive System

- No Smoking
- It's My Body!
- Be Cool. Keep Clean
- The Drug and Alcohol Test
- Your Incredible Hearing Machine
- Exercise

TECHNOLOGY

Rather than being a separate program, technology is seen as a tool to enhance student learning and is, therefore, integrated throughout the curriculum. Students have access to technology tools in the classroom, library media center, and computer lab.

Students:

- Understand and practice responsible use of technology systems and information
- Use technology tools to enhance productivity and creativity
- Use a variety of media formats to communicate information and ideas effectively
- Use technology resources for solving problems and making informed decisions

In addition to previously learned skills, in fourth grade students:

- Demonstrate file saving and retrieval from different drives
- Recognize word processing terms and function
- Edit a word processed file to make indicated corrections
- Use search strategies to locate information electronically

LIBRARY MEDIA

The Katonah-Lewisboro Library Media Program is designed to foster a love of reading and teach the skills that enable students to become effective and efficient users and producers of information. Student exploration of technology for learning and information is a key component of the library curriculum. The library media program integrates skills into all content areas at each grade level. These skills are taught in collaboration with the classroom teacher in the context of the curriculum. The three main areas of emphasis in the library media program are:

The Information Problem-Solving Process

- Formulate appropriate questions
- Locate applicable sources
- Analyze and evaluate information retrieved
- Synthesize learning
- Evaluate the problem-solving process
- Clearly present their findings.

Literature Appreciation

Students acquire an appreciation of a wide range of literature in a variety of formats.

Technology

Students develop the ability to use the tools necessary to access and communicate information.

Fourth grade students:

- Use the OPAC (automated catalog) to locate resources
- Read and understand the characteristics of a variety of literature genres
- Use the research process to explore a topic of study
- Use non-fiction features to facilitate information use
- Use appropriate technology to locate and collect information from a variety of sources
- Use age appropriate multi-media to create a presentation
- Demonstrate age appropriate digital citizenship

ART

The elementary art curriculum allows students to focus on a variety of drawing and painting skills and two-dimensional design in the atmosphere of a traditional *atelier* while adhering to the canon of fine arts as well as the New York State Learning Standards for Visual Arts.

Through the paradigm of art history and criticism we will focus on the elements and principles of art and design with an emphasis on composition and creative problem solving.

Across all grade levels, there is an emphasis on STREAM (Science, Technology, Research, Engineering, Art/Design, and Mathematics). From architectural design to perspective study, to color and value theory and three-dimensional design, STREAM is interwoven and is coming more to the forefront of visual art education.

Students will create projects that apply these skills to a linear (one and two-point) perspective, full color drawing; a still life painting, landscape painting and portraiture.

Students are required to complete projects and sketchbook assignments. Successful students are willing to be creative, take risks, show evidence of effort and master visual language and cognitive skills.

MUSIC

An emphasis is placed on standard notation and its practical usage. Through the use of Orff instruments, students analyze their performances using proper musical terminology. Students will study rondo and theme and variations. Students will embark on an in-depth exploration of classical music from the Baroque Era to the Modern Era. In addition, fourth grade students will have the opportunity to participate in band, orchestra, and chorus.

PHYSICAL EDUCATION

The physical education department places a strong emphasis on physical fitness at all levels. Students are introduced to age appropriate fitness concepts and skills which are emphasized in all grade levels.

The K-5 curriculum encourages the development of the following in students:

- Physical fitness (both cardiovascular and muscular-skeletal)
- Communication skills
- Cooperation
- Risk-taking
- Safety
- Self-initiative
- Leadership
- Trust
- Self-respect, as well as respect for others