

# **Katonah-Lewisboro School District**

## **Curriculum Guide**

### **Fourth Grade**

**2017-2018**



# 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.

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

Social Studies is intended to promote civic competence through the integrated study of the social sciences and humanities. Within the district’s program, Social Studies provides coordinated, systematic study that draws upon all of the other disciplines as well as anchored in the New York State Common Core Standards for Literacy and Writing and the New York State Learning Standards for Social Studies. The primary purpose of the Social Studies program is to help young people develop the ability to make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world.

**The five learning standards, adopted by New York State provide the overall foundation for the Social Studies Curriculum. Each unit of study is derived from and/or aligned to these standards.**

**Standard 1: History of the United States and New York**

Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in the history of the United States and New York.

**Standard 2: World History**

Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in world history and examine the broad sweep of history from a variety of perspectives.

**Standard 3: Geography**

Students will use a variety of intellectual skills to demonstrate their understanding of the geography of the interdependent world in which we live—local, national, and global—including the distribution of people, places, and environments over Earth’s surface.

**Standard 4: Economics**

Students will use a variety of intellectual skills to demonstrate their understanding of how the United States and other societies develop economic systems and associated institutions to allocate scarce resources, how major decision-making units function in the United States and other national economies, and how an economy solves the scarcity problem through market and nonmarket mechanisms.

**Standard 5: Civics, Citizenship, and Government**

Students will use a variety of intellectual skills to demonstrate their understanding of the necessity for establishing governments; the governmental systems of the United States and other nations; the United States Constitution; the basic civic values of American constitutional democracy; and the roles, rights, and responsibilities of citizenship, including avenues of participation.

The fourth grade social studies program is an in-depth study of the geography and history of New York State. Students study New York’s regions and resources as well as significant people, places, events, and issues that have shaped our state. Students learn about local history, with an emphasis on the economic, social, and political factors that shaped local communities, and communities along the Hudson River.

Throughout the year students research a major topic, incorporating reading, note taking, and outlining of relevant information. Students also construct written responses to data based questions using primary source documents. The social studies program is supported by *New York – Adventures in Time and Place*, MacMillan/McGraw-Hill as well as the regional BOCES curriculum.

***Topics include:***

- Native Americans of New York State
- Explorers who came to North America and explored the region that is now New York
- Colonization of New Netherlands
- The American Revolution
- Industrial Growth and Expansion
- Government

**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**

The Katonah-Lewisboro music department offers a sequential based general music curriculum at every grade level. Students will begin learning concrete musical ideas that gradually move toward the abstract as they advance through each grade level. Certain musical concepts and skills will be taught every year, and through spiraling, new skills and concepts will be introduced. In addition, students will gain an understanding of how music correlates to other academic subject areas through authentic and meaningful musical experiences.

These musical experiences are, but not limited to:

- Listening; to practice critical auditory and thinking skills essential to a successful and comprehensive musical education.
- Creating; by encouraging imagination in order to analyze and evaluate music as an expressive art form.
- Moving; to express the importance of music in a historical and cultural context.
- Reading and writing; to connect ideas with symbols, sound patterns, and other musical elements in order to promote music literacy.
- Singing and playing various instruments; to foster an appreciation of music through exciting opportunities to learn new musical and developmental skills.

Music in Grades K-5 is designed to actively engage students in the processes that constitute creation and performance in music, while developing an enthusiasm for music and an understanding of musical concepts. Our general music classes offer students the opportunity to enhance their musical knowledge through listening, creating, moving, reading and writing music, and singing and playing various instruments. The Katonah-Lewisboro music department is committed to providing all students with a comprehensive, rigorous and enjoyable music education.

## **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