

### **Whitewater Unified School District**

**Elementary Curriculum Brochures** 

Grade Four

http://www.wwusd.org/page/3113



## Literacy

Students in fourth and fifth grade are immersed in at least 60 minutes of daily literacy instruction. This provides a focused time to develop skills in reading, writing, and word study.

Through a balanced literacy framework our elementary schools conduct standards based instruction through various instructional methods and programs. These include: guided reading, shared reading, independent reading, guided writing, independent writing, and word study. Classroom teachers utilize *Words Their Way*, *Making Meaning*, and *Calkins Units of Study* to guide their instruction. All students are supported as they learn to apply new skills and strategies in authentic reading and writing tasks.

### Words Their Way

In fourth grade, students utilize *Words Their Way* developmental spelling curriculum. This researchbased model aligns students to their specific developmental spelling stage. These five stages include:

- Emergent
- Letter name
- Word patterns
- Syllables and affixes
- Derivational relationships

The Words Their Way program recognizes that reading, writing, and spelling are interconnected. Words Their Way utilized that knowledge to develop this program for classroom instruction.

### Making Meaning (Lincoln and Lakeview)

The *Making Meaning* reading program provides research based instruction for teaching comprehension and vocabulary. Lessons begin with a read-aloud of an engaging text, followed by a whole-class discussion about the text. On subsequent days, students revisit the text to learn and practice specific comprehension strategies. Students also practice the strategies independently by reading books they've selected from the classroom library. The program teaches the following comprehension strategies:

- Using schema/Making connections
- Retelling
- Visualizing
- Wondering/Questioning
- Using text features
- Making inferences
- Determining important ideas
- Analyzing text structure
- Summarizing
- Synthesizing

### Writing

The district uses Units of Study in Opinion, Information and Narrative Writing, developed by Lucy Calkins and her colleagues from the Teachers College Reading and Writing Project. Each year teachers deliver "units of study" lasting four to six weeks. Fourth Grade Writing emphasizes the following content:

- The arc of story writing realistic fiction
  - Creating and developing stories and characters that feel real
  - Drafting and revising with an eye toward believability
  - $\circ\;$  Preparing for publication with an audience in mind
  - $\circ~$  Embarking on independent fiction projects
- Boxes and bullets personal and persuasive essays
  - Writing to learn
  - Developing personal essays
  - Personal to persuasive

- Bringing history to life
  - Informational books: Making a conglomerate of forms
  - Working with greater independence
  - Building ideas in information writing
- The literary essay writing about fiction
  - Writing about reading: Literary essays
  - $\circ$   $\;$  Raising the quality of literary essays  $\;$
  - Writing compare and contrast essays

### Handwriting

Lincoln Elementary utilizes the *Zaner-Bloser* handwriting program, while Washington and Lakeview Elementary utilize the *Handwriting Without Tears* program. The readiness and writing materials in this program are hands-on and include multisensory activities. The earlier we teach children to master handwriting, the more likely they are to succeed in school, and write with speed and ease in all subjects. When a child writes well, they're doing so many things simultaneously. There are eight key components of handwriting instruction embedded in this program: memory, orientation, placement, size, start, sequence, control, and spacing.

### Math

Children's experiences shape their attitude toward mathematics for a lifetime. The Math Expressions curriculum is engaging and designed to build children's understanding over time. Math Expressions combines elements of standards-based instruction with the best of traditional instructional approaches. Through drawings, conceptual language, and real-world examples, it helps students make sense of mathematics.

The Fourth Grade program emphasizes the following content:

- Place Value and Multidigit Addition and Subtraction
  - Use place value drawings to help them conceptualize numbers and understand the relative sizes of place values
  - Use different methods to add and subtract whole numbers
- Multiplication with Whole Numbers
  - Draw visual arrays and area diagrams to represent multiplication
  - Reason repeatedly about the connection between math drawings and written numerical work
  - See that multiplication and division algorithms are summaries of their reasoning about quantities

- Division with Whole Numbers
  - Draw visual arrays and rectangle diagrams to represent multiplication
  - Reason repeatedly about the connection between math drawings and written numerical work
  - See that division algorithms are summaries of their reasoning about quantities
- Equations and Word Problems
  - $\circ\,$  Use drawings and equations with a symbol for the unknown number to represent the problem
  - Represent verbal statements of multiplicative comparisons as multiplication equations
  - Write equations to represent problems with more than one step
- Measurement
  - Use a two-column table to record measurement equivalents
  - Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale
  - Apply the perimeter and area formulas for rectangles in real world and mathematical problems
- Fraction Concepts and Operations
  - Decompose a fraction into a sum of fractions with the same denominator in more than one way
  - Justify decompositions by using a visual fraction model
  - Use visual fraction models and equations to represent a problem
- Fractions and Decimals
  - Use visual fraction models to explain equivalent fractions
  - Create common denominators or numerators by comparing to a benchmark to compare fractions
  - Use the symbols > < =</li>
- Geometry
  - Use a protractor to measure angles
  - Use an equation with a symbol for an unknown angle measure

## Science

The Whitewater Unified School District elementary science curriculum has been developed to leverage the inquisitive nature of our students, leading them through exciting, inspirational and motivating learning activities. The program has been developed in accordance with the Next Generation Science Standards, with foundational units from the Mystery Science program providing a framework from which our teachers springboard their program.

#### The Following units are taught in Fourth Grade:

#### Human Body, Senses, & the Brain

This introductory human body unit takes the perspective that we can think about our bodies as being like a machine. We have parts for moving around, sensors, and a built-in computer. Students explore their senses and consider how the information we process helps us understand and react to our environment.

#### **Rock Cycle & Earth's Processes**

This unit takes the perspective that every rock has a story. Students will develop an appreciation for the processes that shape the Earth's surface. After considering where volcanoes form and how they erupt, they turn to investigations of rocks breaking apart and creating potential hazards. Through hands-on investigation, students explore the world of rocks and design ways of protecting humans from their dangers.

#### Sound, Waves, & Communication

This unit helps students develop the idea that sound is an actual thing, a wave of vibrations traveling through the air. Equipped with this understanding, students can begin to make sense of how sound and music work.

#### Energy, Motion, & Electricity

This introductory energy unit will encourage students to think about the energy that things need to move. Students will explore how energy makes things go, from powering vehicles to moving one's body. Students will experiment with rubber bands to discover the relationship between how much energy is stored in a material and how much is released. They will investigate the role that hills play in making roller coasters move and the energy transfer that happens when two objects collide. Students will realize that thinking about the world in terms of energy helps them make sense of how and why things speed up and slow down. Hands-on activities focus on engineering, testing hypotheses and using results to develop their ideas.

## Social Studies

It is the mission of the WUSD Social Studies department to develop participatory, civic minded, culturally literate citizens, who are empowered to make informed and responsible decisions in a diverse and interdependent world.

The WUSD elementary social studies curriculum is based on Wisconsin Standards for Social Studies, which has its foundational philosophy in the College, Career, and Civic Life (C3) framework for Social Studies. Across all grades, K-12, the Wisconsin Standards for Social Studies encompass the integrated study of geography, history, economics, political science, and the behavioral sciences. Our elementary program uses content and materials from the *Into Social Studies* program to provide a framework for a high quality social studies foundation.

In Fourth Grade, the scope and the social studies curriculum includes:

- Wisconsin Unit required by the state
- Geography
- U.S. Landscapes
- All About Regions
- The Midwest
- How Government Works

## Visual Arts

Art is a way of understanding ourselves and our relationship with the world around us. Throughout the K-5 Art program, Art Educators teach students visual arts instruction twice per six-day cycle. Our art curriculum is based from the National Art Standards. Artistic Processes are the cognitive and physical actions by which arts learning and making are realized. National Core Arts Standards are based on the artistic processes of Creating; Performing/Producing/Presenting; Responding; and

Performing/Producing/Presenting; Responding; and Connecting, which include the following:

- Generate and conceptualize artistic ideas and work
- Organize and develop artistic ideas and work
- Refine and complete artistic work
- Select, analyze and interpret artistic work for presentation
- Develop and refine artistic techniques and work for presentation
- Convey meaning through the presentation of artistic work
- Perceive and analyze artistic work
- Interpret intent and meaning in artistic work
- Apply criteria to evaluate artistic work
- Synthesize and relate knowledge and personal experiences to make art
- Relate artistic ideas and works with societal, cultural and historical context to deepen understanding

## Music

Music education at the elementary level develops the creative capacities for lifelong musical enjoyment and success. The WUSD Music Standards and Curriculum reflects the actual processes in which musicians engage. The standards cultivate a student's ability to carry out the four areas of Creating, Performing, Responding and Connecting. Through music, students learn to connect to themselves and society. In 4th Grade, music students will:

- Create and perform musical ideas to demonstrate grade level concepts in a Tuneful, Beatful and Artful way.
  - Continuing to expand the Solfege and Rhythmic syllables to read and write music to better prepare students for continuing their musical development on voice, classroom instruments and through orchestra, band and/or choir.
- Respond to music by demonstrating the expressive qualities of the musical examples provided.
  - Utilizing voice, movement, musical instruments, writing using grade level vocabulary and drawing/mapping.
- Connect musical knowledge with other subjects and their daily life.

# Keyboarding

Introducing students to keyboarding in the elementary grades ensures that they develop efficient techniques instead of acquiring self-taught, and sometimes hard-to-break, habits. These efficient keyboarding skills allow students to concentrate on the quality of what they are composing or producing. We cannot create an educational environment that requires keyboarding skills and not explicitly and systematically *teach* keyboarding to students. Whitewater Unified School District supports and encourages keyboarding as a key computer technology core subject with formal keyboarding instruction beginning at Kindergarten. The Keyboarding Without Tears program is the research-based curriculum used in the Whitewater Unified School District. This effective, game-based curriculum for students in grades K–5 fits perfectly into the developmental progression of writing. It teaches pre-keyboarding and keyboarding skills, alongside computer readiness, digital citizenship, and digital literacy.

At the Fourth Grade level our keyboarding curriculum encompasses: Keyboarding Success uses keyboarding games to promote muscle memory, accuracy, and speed. Students practice formatting and typing skills with engaging and changing themes: Oh, Look! (visual arts), Greek & Latin, Go Geography, and Words & Writers. Spot Checks are used to gauge student understanding of specific skills. Each Spot Check measures speed and accuracy.

# Physical Education

The Whitewater Health and Physical Education Program provides a quality K-12 student-centered program that instills a variety of values, skills and knowledge. The program prepares and allows all students to take ownership of leading a health and active life now and into adulthood.

- Physical Fitness 5 Components of Fitness
  - o Cardiorespiratory endurance
  - o Muscular Strength
  - Muscular Endurance
  - Flexibility
  - Body Composition
- Physical fitness pre & post test
- Goal setting fitness measurements
- 5 for Life Summative pre & post test
- Variety of circuit training
- Health
  - Heart Health
  - Fuel up on Nutrition pre & post test
  - Skeletal system (every other year)
  - Muscular system (every other year)
- Motor Skills Applies skills
- Manipulative Skills
  - Overhand throw mastery point
  - Catch mastery point
- Combination Skills
  - Dribbling while moving mastery point
  - Striking while moving mastery point
- Character Education Traits Applies safe practices, adherence to rules and procedures, etiquette, cooperation and teamwork, ethical behavior, and positive social interaction.
- Integrated Core Curriculum (Literacy, Spelling, Math, Technology)

# Technology

In order to prepare students for a world filled with ever-changing technology, our teachers integrate various technology tools and resources into their classrooms. The focus, however, is on the digital literacy skills that students need to excel in any environment where technology plays a role.

Students learn lessons in the context of their class projects and during their library time. A Digital Literacy Curriculum has just been completed, assuring that all important technology skills are covered at the appropriate grade levels.

Throughout the elementary grades, students receive instruction and practice in:

- Basic technology fluency (including navigating on all devices, handling files and documents, and keyboarding skills)
- Internet safety (protecting personal information and passwords, being safe online)
- Digital citizenship (cyberbullying, respect others, using information responsibly)
- Collaborating and communicating online (document sharing, email, publishing online)

# Library

The role and functioning of the school library has changed significantly over the years. It is still the hub of the school for encouraging literacy and finding appropriate and engaging reading materials. Students still come to the library to learn about the new and exciting books that are available for checkout, but it is also the place for a variety of other learning.

The library staff provides instruction on some of the digital literacy skills that students need now and in their future. Each class meets in the library once every six days to learn about how to find and use information (both for projects and for their own interests.) They also learn skills and tools for creating, problem-solving, organizing, and sharing their learning. Some of the internet safety and digital citizenship lessons are taught in the library, and they learn how to use online resources, databases, and eBook collections.