

HILLTOP PRIMARY SCHOOL CURRICULUM GUIDE

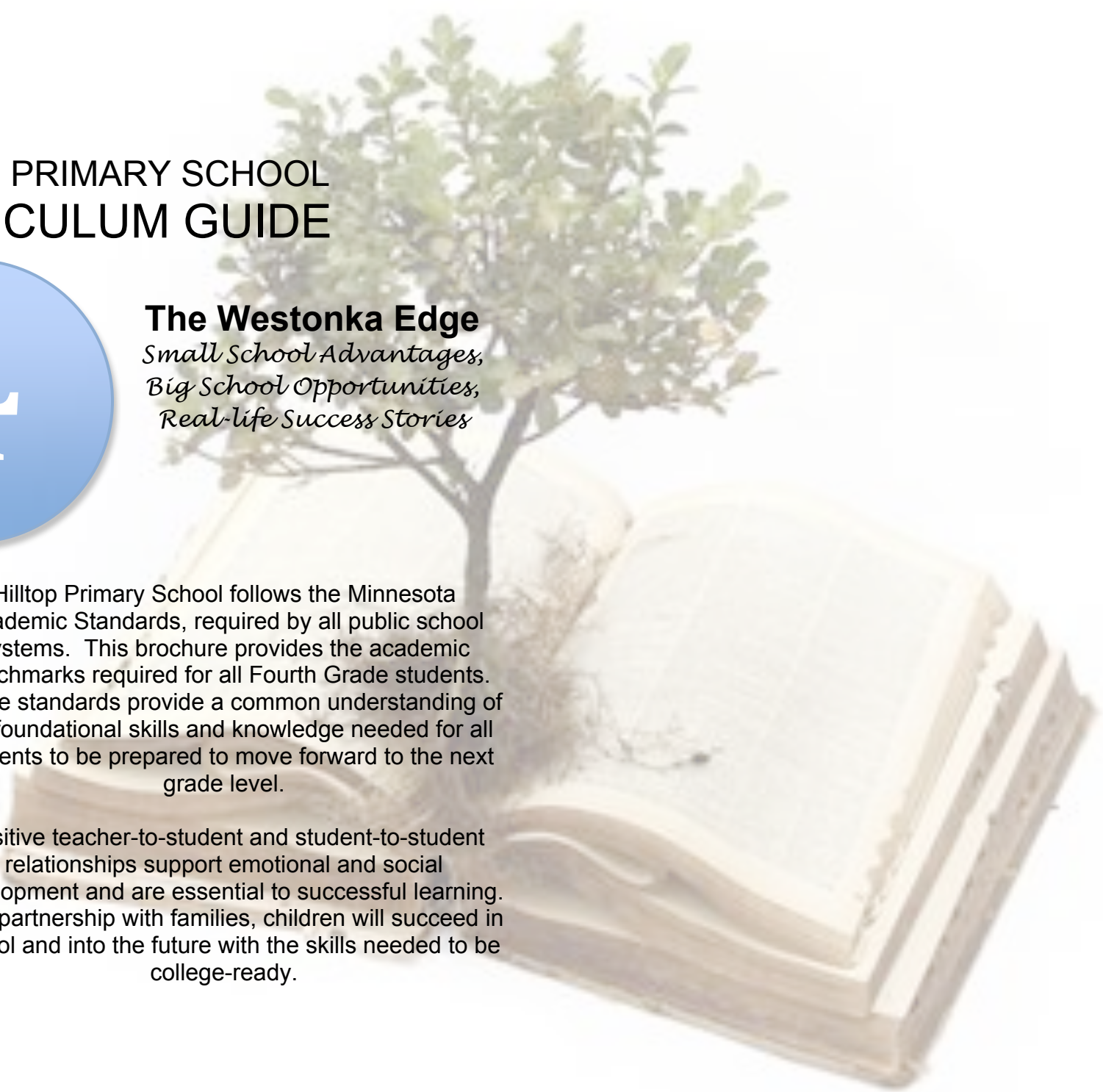


The Westonka Edge

*Small School Advantages,
Big School Opportunities,
Real-life Success Stories*

Hilltop Primary School follows the Minnesota Academic Standards, required by all public school systems. This brochure provides the academic benchmarks required for all Fourth Grade students. These standards provide a common understanding of the foundational skills and knowledge needed for all students to be prepared to move forward to the next grade level.

Positive teacher-to-student and student-to-student relationships support emotional and social development and are essential to successful learning. As a partnership with families, children will succeed in school and into the future with the skills needed to be college-ready.



READING SKILLS

Fluency

Students reading at Grade Level:

Fall – 119 words per minute

Winter – 139 words per minute

Spring – 152 words per minute

Word Recognition

- Read unfamiliar complex and multi-syllabic words using advanced phonetic and structural analysis in grade-appropriate text.
- Read aloud narrative and expository text with fluency, accuracy, and appropriate pacing, intonation and expression.

Vocabulary Expansion

- Acquire, understand and use new vocabulary through explicit instruction and independent reading.
- Identify and understand root words, derivations, antonyms, synonyms, idioms, homonyms and multiple-meaning words to determine word meanings and to comprehend texts.
- Use dictionaries or glossaries to find the meaning of new words.
- Use context and word structure to determine word meanings.
- Use knowledge of prefixes and suffixes to determine the meaning of unknown words.

Comprehension

- Read aloud grade-appropriate text (that has not been previewed) with accuracy and comprehension.
- Recall and use prior learning and preview text to prepare for reading.
- Generate and answer literal, inferential, interpretive and evaluative questions about what is read to demonstrate understanding.
- Summarize and paraphrase what is read.
- Infer and identify main idea and determine relevant details in non-fiction text.
- Distinguish fact from opinion, determine cause and effect, and draw conclusions.
- Demonstrate relationships between ideas or events in the texts using graphic organizers.
- Monitor comprehension, notice when reading breaks down and use strategies to self-correct.
- Follow multiple-step written instructions.
- Compare and contrast information on the same topic from two sources.

Literature

- Read and respond to a variety of high quality, traditional, classical and contemporary literary works specific to America, as well as significant works from other countries.
- Identify, respond to, and compare and contrast the literary elements of characterization, plot, setting and theme.
- Identify patterns of sounds such as rhyme and rhythm in poetry.
- Compare and evaluate similar works by different authors in the same genre or theme.
- Compare and evaluate two works by the same author.
- Identify first person and third person point of view.
- Identify and determine the meanings of similes and metaphors.
- Critically read and evaluate text to determine author's purpose and point of view.

- Respond to literature using ideas and details from the text to support reactions and make literary connections.
- Read from and respond to a variety of fiction, poetic and nonfiction texts of increasing complexity for personal enjoyment.

Types of Writing

- Write in a variety of styles to express meaning, including:
 - Descriptive
 - Narrative
 - Informative
 - Friendly letter
 - Poetic
 - Persuasive
 - Thank you note.

Elements of Composition

- Write topic sentences.
- Create multiple paragraph compositions that include:
- Correct paragraph indentation style
 - An introductory paragraph formulating a thesis
 - Supporting evidence that upholds an overall thesis
 - A concluding paragraph as a summary.
- Use composing processes, including:
 - Prewriting - planning strategies such as brainstorming, journaling, sketching, listing, outlining and determining audience, purpose and focus
 - Drafting – organizing, supporting and putting ideas into sentences and paragraphs
 - Revising – improving the quality of content, organization, sentence structure and word choice
 - Editing – correcting errors in spelling and grammar
 - Publishing – producing a document and sharing the writing with the audience.
- Create informative reports, including gathering material, formulating ideas based on gathered material, organizing information, and editing for logical progression.
- Use verbalization (discussions, interviews, brainstorming) to prepare for writing.
- Consider audience in composing texts.

Spelling, Grammar, & Usage

- Compose complete sentences when writing.
- Identify and correct spelling of frequently used words and common homophones.
- Spell roots, suffixes, prefixes, and syllable constructions correctly.
- Apply grammar conventions correctly in writing, including:
 - a. Verb tense
 - b. Adverbs
 - c. Prepositions
 - d. Subject and verb agreement
 - e. Possessive pronouns.

READING SKILLS (cont.)

Spelling, Grammar, & Usage (cont.)

- Apply punctuation conventions correctly in writing, including:
 - a. Apostrophes
 - b. Capitalization of proper nouns
 - c. Abbreviations
 - d. Sentence beginnings
 - e. Commas in a series
 - f. Quotation marks.

Research

- Locate information in various reference materials including dictionaries, online dictionaries, glossaries, encyclopedias, and the Internet.

Handwriting & Word Processing

- Write legibly in both print and cursive.
- Apply basic keyboarding skills.

Speaking and Listening

- Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.
- Demonstrate active listening and comprehension.
- Give oral presentations to different audiences for different purposes.
- Organize and summarize ideas, using evidence to support opinions or main ideas.
- Perform expressive oral readings of prose, poetry or drama.

Media Literacy

- Read print, view pictures and video images and listen to audio files and identify distinctions in how information is presented in print and non-print materials.
- Begin to make informed judgments about messages promoted in the media, such as those in film, television, radio and newspapers.
- Use print, pictures, audio and video to express ideas and knowledge gleaned from these sources.

MATHEMATICS

Students Computation at Grade Level:

Fall – Mastered at 97% or above: Addition, Subtraction and Multiplication

Winter – Mastered at 95% or above: Division

Number and Operations

- Demonstrate fluency with multiplication and division facts.
- Use an understanding of place value to multiply a number by 10, 100 and 1000.
- Multiply multi-digit numbers, using efficient and generalizable procedures, based on knowledge of place value, including standard algorithms.
- Estimate products and quotients of multi-digit whole numbers by using rounding, benchmarks and place value to assess the reasonableness of results.
- Solve multi-step real world and mathematical problems requiring the use of addition, subtraction and multiplication of multi-digit whole numbers. Use various strategies, including the relationship between operations, the use of technology, and the context of the problem to assess the reasonableness of results.

- Use strategies and algorithms based on knowledge of place value, equality and properties of operations to divide multi-digit whole numbers by one- or two-digit numbers. Strategies may include mental strategies, partial quotients, the commutative, associative, and distributive properties and repeated subtraction.
- Represent equivalent fractions using fraction models such as parts of a set, fraction circles, fraction strips, number lines and other manipulatives. Use the models to determine equivalent fractions.
- Locate fractions on a number line. Use models to order and compare whole numbers and fractions, including mixed numbers and improper fractions.
- Use fraction models to add and subtract fractions with like denominators in real-world and mathematical situations. Develop a rule for addition and subtraction of fractions with like denominators.
- Read and write decimals with words and symbols; use place value to describe decimals in terms of thousands, hundreds, tens, ones, tenths, hundredths and thousandths.
- Compare and order decimals and whole numbers using place value, a number line and models such as grids and base 10 blocks.
- Read and write tenths and hundredths in decimal and fraction notations using words and symbols; know the fraction and decimal equivalents for halves and fourths.
- Round decimals to the nearest tenth.

Algebra

- Create and use input-output rules involving addition, subtraction, multiplication and division to solve problems in various contexts. Record the inputs and outputs in a chart or table.
- Understand how to interpret number sentences involving multiplication, division and unknowns. Use real-world situations involving multiplication or division to represent number sentences.
- Use multiplication, division and unknowns to represent a given problem situation using a number sentence. Use number sense, properties of multiplication, and the relationship between multiplication and division to find values for the unknowns that make the number sentences true.

Geometry and Measurement

- Describe, classify and sketch triangles, including equilateral, right, obtuse and acute triangles. Recognize triangles in various contexts.
- Describe, classify and draw quadrilaterals, including squares, rectangles, trapezoids, rhombuses, parallelograms and kites. Recognize quadrilaterals in various contexts.
- Measure angles in geometric figures and real-world objects with a protractor or angle ruler.
- Compare angles according to size. Classify angles as acute, right and obtuse.
- Understand that the area of a two-dimensional figure can be found by counting the total number of same size square units that cover a shape without gaps or overlaps. Justify why length and width are multiplied to find the area of a rectangle by breaking the rectangle into one unit by one unit squares and viewing these as grouped into rows and columns.
- Find the areas of geometric figures and real-world objects that can be divided into rectangular shapes. Use square units to label area measurements.
- Apply translations (slides) to figures.
- Apply reflections (flips) to figures by reflecting over vertical or horizontal lines and relate reflections to lines of symmetry.

MATHEMATICS (cont.)

Geometry and Measurement (cont.)

- Apply rotations (turns) of 90° clockwise or counterclockwise.
- Recognize that translations, reflections and rotations preserve congruency and use them to show that two figures are congruent.

Data Analysis

- Use tables, bar graphs, timelines and Venn diagrams to display data sets. The data may include fractions or decimals. Understand that spreadsheet tables and graphs can be used to display data.

SCIENCE

FOSS: Earth Materials

- Develop an interest in earth materials.
- Gain experiences with rocks and minerals.
- Understand the process of taking apart and putting together to find out about materials.
- Use measuring tools to gather data about rocks.
- Collect and organize data about rocks.
- Observe, describe, and record properties of minerals.
- Organize minerals on the basis of the property of hardness.
- Investigate the effect of vinegar (acid) on a specific mineral, calcite.
- Use evaporation to investigate rock composition.
- Learn that rocks are composed of minerals and that minerals cannot be physically separated into other materials.
- Compare their activities to the work of a geologist.
- Acquire vocabulary used in earth science.
- Exercise language and math skills in the context of science.
- Use scientific thinking processes to conduct investigations and build explanations: observing, communicating, comparing, and organizing.

FOSS: Human Body

- Observe and investigate the human skeletal and muscle systems.
- Become aware of the versatility of movement provided by an articulated skeleton.
- Gain experience with the use of photographs, diagrams, and model bones to gather information.
- Build mechanical models to demonstrate how muscles are responsible for human movement.
- Compare the bones and muscles in their own bodies to photographs and models.
- Investigate response time of hands and feet.
- Develop an awareness of human bone and muscle structure and function and an appreciation for the versatility of the human body.
- Acquire the vocabulary associated with the human skeletal and muscle systems.
- Use scientific thinking processes to conduct investigations and build explanations: observing, communicating, comparing, and organizing.

FOSS: Electricity and Magnetism

- Observe the interaction of permanent magnets with a variety of common materials.
- Discover that magnets display forces of attraction and repulsion.
- Measure the change in force between two magnets as the distance between them changes.

- Identify materials that are conductors and insulators.
- Understand and construct simple open, closed, parallel, and series circuits.
- Learn how to make an electromagnet.
- Experience the relationship between the number of turns of wire around an electromagnet core and the strength of the magnetism.
- Use their knowledge of electromagnets to make a telegraph.
- Acquire vocabulary associated with magnetism and electricity.
- Exercise language, math, and social studies skills in the context of magnetism and electricity investigations.
- Develop and refine the manipulative skills required for making investigations in magnetism and electricity.
- Use scientific thinking processes to conduct investigations and build explanations: observing, communicating, comparing, and organizing.

FOSS: Water

- Observe and explore properties of water in liquid, solid, and gaseous states.
- Observe the expansion and contraction of water as it warms and cools.
- Investigate factors that influence evaporation and condensation of water.
- Consider components of the water cycle.
- Observe and compare how water moves through different types of earth materials, including soil and gravel.
- Consider the water quality of local water sources.
- Investigate how water can be used to do work.
- Acquire vocabulary associated with water.
- Record observations in writing and pictures.
- Exercise language, social studies, and math skills in the context of science.
- Become aware of the importance of water in their lives.
- Use scientific thinking processes to conduct investigations and build explanations: observing, communicating, comparing, and organizing.

SOCIAL STUDIES

Geography

- Understand the physical features of Social Sciences
- Locate and describe major physical features (of the United States) and analyze how they influence cultures/civilizations studied
- Describe patterns of vegetation and landforms in the United States and around the world
- Locate major political and physical features of the United States and World
- Understand the regions of the United States
- Understand population density and life in the regions of the United States
- Locate and name all 50 states, territories, mountain ranges, major river valleys, state capitals and cities
- Demonstrate the ability to locate major political and physical features of the United States and the world

Government and Citizenship

- Identify people who have dealt with challenges and made a positive difference in other people's lives and explain their contributions
- Understand civic values, skills, rights and responsibilities
- Explain some of the responsibilities of people living in a democracy
- Explain why government is needed and what would happen if there was no government

- Know the history of the Pledge of Allegiance and why Americans recite it

Research and Application

- Describe and locate regions of the United States through a research-based project. Features include: History, Climate, Agriculture, Immigrants, Industry and People

MUSIC

Music Foundations

- Demonstrate knowledge of the elements of music; including *rhythm, pitch, form, tone color and expressive qualities*.
- Identify and demonstrate the use of the vocabulary used in the description and understanding of music.

Technological Foundations

- Demonstrate the ability to read and notate music.
- Demonstrate proper tone production and articulation while singing and/or playing a classroom instruments.

Create Music

- Improvise, compose or arrange rhythms *and* melodies using classroom instruments.

Performance and Presentation

- Sing and play a varied repertoire that includes expanded melodies.
- Revise performance based on the feedback of others and self-reflection.

Respond and Critique

- Compare and contrast the characteristics of a variety of musical works and performances.

ART

Elements of Art

- Produce a work of art which line expresses a feeling
- Understand the difference between geometric and/or free form shapes
- Recognize the emotional value of color
- Create a piece of art work using various textures
- Produce a simple one-point perspective drawing
- Recognize form on a flat surface and produce a shaded geometric form
- Produce an art work using lights and darks

Principles of Design

- Produce a work of art using radial symmetry
- Produce an art work including two or more different patterns
- Recognize divisions of space and investigate the facial proportions and proportions of the human body
- Repeat a motif
- Recognize differences in art works and produce a piece of art work that demonstrates the use of variety
- Recognize the dominant elements in a work of art

Create and Make

- Continue to develop scissor skills
- Use a variety of tools and techniques and demonstrate use of a ruler to produce a straight line

- Mix paint including secondary colors and produce a painting using warm and/or cool colors and introduce intermediate colors
- Create a block print, paper sculpture, a slab clay model, and a coil clay model
- Use various fiber arts to design and create a paper or fiber weaving

Respond and Critique

- Show art works and discuss differences and similarities
- Understand Surrealism in a variety of art works

PHYSICAL EDUCATION

Personal Fitness

- The student will be assessed in the specified fitness areas and tested and reported in six fitness areas at school:

Mid-year Formative Assessment

- Cardiovascular
- Strength
- Core
- Flexibility

Fall and Spring Fitness Assessment

- Mile
- Push Ups
- Sit Ups
- Sit & Reach
- 50 yd. Dash
- Shuttle Run

Lifetime Skills

- Develop rhythms, manipulative skills, and activity rules & skills at a grade 4 proficiency level.

Participation and Effort

- Participate in various activities

Social Interaction and Sportsmanship

- Follow established rules and use the rules and norms in various activities

MEDIA

Basic Computer Use

- Open and close applications (using the dock, using pull down menus)
- Manipulate mouse (click, hold and drag)
- Log-on and log-off procedures
- Name and save documents to student folder
- Print documents
- Move between applications

Keyboarding

- Use correct posture
- Use touch typing (home row – correct finger position)
- Keyboard from a prepared document (create the same document)
- Use quick shortcuts (apple c, apple v, apple w)
- Type 15 words per minute

Word Processing and Desktop Publishing

- Format text (size, font, capitalization, punctuate, and style)
- Use correct line spacing
- Cut, copy and past
- Use and understand when to use the Select All tool
- Spell check completed work
- Select and import graphics
- Align text (left, right, center)
- Set margins for a document
- Create a table within a document
- Create a text document – a business letter with correct format
- Create a text document – 4 to 5 paragraphs (edit and revise)

Spreadsheet

- Create a graph in Excel
- Create a chart or graph as part of a presentation

Presentation

- Use a storyboard to plan a presentation
- Use a template to present information (PowerPoint)

Ethical and Safe Use of Technology

- Demonstrate proper care of equipment and software, leave equipment ready for the next user
- Show respect for privacy of individual passwords
- Show respect for privacy/ownership of files
- Navigate bookmarked sites
- Recognize and respond appropriately to material or messages that are inappropriate or potentially compromise their safety
- Use guided internet search tools (Google, Kids Click, Yahoooligans)
- Compare results from two or more search resources with teacher direction
- Evaluative information gathered from internet for accuracy, relevance, appropriateness with teacher direction
- Abide by copyright and plagiarism guidelines
- Abide by internet and safety guidelines
- Use appropriate style for crediting sources