

WHITEFISH BAY SCHOOL DISTRICT

Parent Curriculum Overview
Grade 4



SCHOOL DISTRICT OF WHITEFISH BAY
1200 E. FAIRMOUNT AVE
WHITEFISH BAY, WISCONSIN
www.wfbschools.com

Parents/Guardians of Whitefish Bay Elementary School Students,

Education in Whitefish Bay Schools is a partnership that includes the school, the family and the community. As partners in the education of your children, we want you to be informed about what your child will be learning during this school year. The purpose of this Curriculum Overview is to provide families with a general overview of the core instructional program at each grade level.



Curriculum in the elementary level is designed to provide students with a strong foundation in basic knowledge and skills that will make it possible for them to think creatively and critically as they progress through the K-12 system. To these ends, district curriculum is carefully established by committees composed of the professional staff and community representatives. All curricula undergo comprehensive review and are formally updated every six years through the district curriculum cycle. Student performance data on a variety of classroom, local, state and national assessments are analyzed on an annual basis to ensure students are progressing toward the district's academic standards.

These standards challenge students to learn a broad range of content knowledge and skills while developing their ability to process that knowledge and use those skills. This balance between content (information and knowledge) and process (problem solving and real-world application) may be a shift in approach to the education you received when you were in primary school, yet should set the foundation for future learning in the 21st century.

The methods and instructional strategies in our classrooms bring the curriculum to life. First, we embrace Flippen's saying, "Once you capture a child's heart, you have his mind." Teachers develop trusting relationships with students, and amongst the students in the classrooms, in order to maintain a nurturing climate wherein learning will flourish. Reading and mathematics instruction are offered in flexible, large and small group settings. Hands-on learning activities develop conceptual understanding of mathematics, science and social studies. Students in grades first through fourth will have an hour of foreign language instruction each week. Strong programs for art, music, physical education and guidance, along with the integration of technology as a learning tool, are other important components that contribute to the vitality of the elementary-level program.

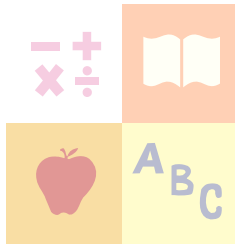
While teachers strive to meet the needs of all students in the classroom, some students benefit from additional assistance or challenge. Academic support programs are available in reading and math. Similarly, *Beyond* programming exists for students whose need for academic challenge far exceeds that of the regular classroom.

If you would like more information about the district curriculum, log on to www.wfbschools.com and select the district office link and then select director of instruction. On this website you will find links to curriculum overview documents, learning standards, and resources for parents. After you have reviewed these resources, if you wish to obtain additional information, please contact your child's teacher, your child's principal, or by contacting the Instruction Office at 963-3927.

As you support your child's academic and intellectual growth this year, encourage him or her to enjoy learning, take risks, confront misunderstandings, put forth diligent effort to develop new skills, and ask an abundance of questions. A tenacious curiosity, willingness to confront the unknown, and an ability to see challenge as an opportunity for growth will provide rewards for a lifetime.

Sincerely,

Laura Myrah
Director of Instruction
School District of Whitefish Bay



Grade 4 Mathematics

The purpose of mathematics education is to build the high levels of mathematical skills, processes, thinking, and problem solving necessary to meet the challenge of a changing technological society.

The fourth grade study of mathematics is designed to develop understandings of mathematics and mathematical processes, and includes problem-solving, comparison, and estimation, as well as basic skills and computation.

Learning with Everyday Math, by the University of Chicago, students will explore exciting mathematical concepts throughout the school year. Students record their work in the consumable student Journal. This will involve teacher-led study, group work with teacher guidance, and hands-on learning activities done in pairs or individually. Materials include the textbook, an array of mathematical tools and manipulatives, as well as games.

For resources to support your child's learning of mathematics using the Everyday Mathematics curriculum, see the Everyday Mathematics parent handbook that was distributed to your family when your child was in first grade. Additionally, all 3-5th grade students are provided with a Student Reference Book with information on key skills and strategies that are used throughout the curriculum.

Starting with the 2006-07 school year, the Everyday Mathematics curriculum is augmented with resources from *Problem Solvers* and *Thinking with Numbers*. These programs are designed to assist students in their efforts to understand and use basic facts and apply their mathematical understanding to solve complex word problems.

In fourth grade, students will know and understand at a grade appropriate level:

- a variety of strategies in the problem-solving process using math in everyday situations.
- number relationships and theories, including, reading, writing and using whole numbers, fractions, decimals, percents and negative numbers.
- appropriate methods and tools for computation and estimation, exploring addition and subtraction methods; inventing individual procedures and experimenting with calculator procedures.
- customary and metric measurement, including linear, area, volume, weight, and exploring geographical measurements.
- basic and advanced concepts of geometry, including developing an intuitive sense about 3-dimensional objects, their proponents, uses, and their relationships.
- the design, exploration and use of geometrical and number patterns.
- addition and subtraction to proficiency; developing multiplication and division skills.
- how to use numbers, lines, coordinates, times, dates, latitude and longitude, and barometric pressure.
- basic and advanced properties of algebra using reading, writing and solving number sentences.
- explore mathematical data by collecting, organizing, and interpreting information.



Grade 4 Language Arts

Through the Reading/Language Arts Program, all students will read, write, speak and listen to acquire, clarify, apply and communicate knowledge and ideas as life-long learners.

In fourth grade, students will know and understand at a grade-appropriate level:

Word Study/Vocabulary:

- Uses sounds, including vowels, consonants, blends, consonant and vowel patterns, blending and inflectional endings for decoding words
- Relates words and concepts to aid in spelling and word knowledge by using:
 - Prefixes and suffixes
 - Homophones/homographs
 - Specialized vocabulary
 - Multiple meaning words
 - Figurative language
 - Derivations and relations
- Determines the meaning of words using a glossary, dictionary and thesaurus
- Decodes unknown words with strategies including: context clues, phonetic analysis and spelling patterns

Spelling:

- Employs useful spelling strategies
- Transfers spelling strategies to written work
- Correctly spells frequently used words
- Uses reliable English spelling patterns

Reading/Comprehension:

- Selects reading material based on his/her personal criteria and interests
- Uses text and graphic organizers to increase comprehension
- Adjusts speed of reading to suit purpose and difficulty of the text
- Applies strategies to monitor comprehension such as:
 - Makes connections to activate schema
 - Asks questions
 - Infers
 - Uses fix it strategies
 - Visualizes
 - Makes/revises predictions
 - Synthesizes
 - Determines important ideas/main idea
- Recognizes different types of fiction/nonfiction
- Summarizes information

Writing:

- Uses grammatical and mechanical conventions in writing
- Composes a paragraph (topic sentence, supporting details and conclusion)
- Writes for a variety of purposes
- Uses steps in the writing process: prewriting, drafting, revising, editing and publishing
- Uses descriptive language and a variety of sentence structures
- Reflects and evaluates his/her own writing
- Evaluates, creates, and edits different types of multimedia
- Uses computer to acquire, organize, analyze and edit written material

Speaking/Listening:

- Communicates and expands ideas through speaking and listening
- Follows rules of conversation and makes contributions to discussions
- Listens to classmates and responds to a variety of media
- Makes oral presentations that are clear and concise



Grade 4 Social Studies

Students will acquire the knowledge and skills necessary to become informed, decision-making citizens of local, national, and global societies.

What Are the Social Sciences?	Examine “artifacts” gathered from around their homes to determine which social scientist—a geographer, a historian, an economist, or a political scientist—would be most interested in studying the artifact.
Exploring Regions of the United States	Actively develop key mapping skills as they analyze colorful maps of the United States. The maps reveal information about the five regions of the United States as well as population density, rainfall, elevation, and political boundaries.
The Peopling of the United States	Create a colorful classroom quilt filled with symbols and images representing the settlement experiences and contributions of five American racial and ethnic groups.
A Train Tour of the Northeast	Take a simulated tour of nine key sites in the Northeast region. Students learn about democracy at Plymouth, mass production in Hershey, Pennsylvania, and urbanization while “climbing” the stairs of the Empire State Building.
Population Density and Life in the Northeast	Experience the population density of New York City by using students and desks to represent the land area and population in the city. Afterward, students explore and discuss the advantages and disadvantages of urban and rural settings.
A Boat and Bus Tour of the Southeast	Take a simulated tour of nine key locations in the Southeast region. Students learn about English settlement at Jamestown, American musical traditions in Memphis, and civil rights in Montgomery.
The Effects of Geography on Life in the Southeast	Answer “Geography Investigation” questions on such topics as climate, elevation, natural resources, and bodies of water in the Southeast before hypothesizing and learning about these key geographical influences.
A Crop Duster Tour of the Midwest	Take a simulated tour of nine key locations in the Midwest region. Students learn about ranching in Dodge City, Kansas, the assembly line in Detroit, and American consumerism at the Mall of America.
Agricultural Changes in the Nation’s Breadbasket	Use investigative skills to compare and contrast farm life in the 1800s with farm life today.
A Big Rig Tour of the Southwest	Take a simulated tour of nine key locations in the Southwest region. Students learn about engineering at the Hoover Dam, U.S.—Mexico border relations in El Paso, and westward movement in Guthrie, Oklahoma.
A Case Study in Water Use: The Colorado River	Role play various water users in the Colorado River basin in four different time periods to understand how the river’s water is used and shared—and why it must be conserved.
A Van and Airplane Tour of the West	Take a simulated tour of nine key locations in the West region. Students learn about mining life in Leadville, Colorado, declining salmon populations along the Columbia River, and tourism in Hawaii.
Cities of the West	Develop an advertising campaign promoting a major western city.
Researching Your State’s Geography	Create and play board games that detail the major geographic features of their state.
Researching Your State’s History	Work in groups to make “talking buildings” that tell the story of the history of their state.
Researching Your State’s Economy	Create wax museum exhibits that depict the major economic activities in their state.
Researching Your State’s Government	Develop an idea for a new state law and write and illustrate a storybook about their legislative proposal’s progress in becoming a new law.



Grade 4 Science

Students will develop the scientific knowledge, skills, and attitudes that enable them to make informed use of science in their lives.

In the fourth grade, students will engage in investigations to develop important understandings:

Students will:

- investigate basic concepts of chemistry – properties of mixtures and solutions.
- dissolve a solid in a solvent, make observations about concentration and saturation of a solution, find evidence of chemical reactions, evaporation and crystal formation.
- Describe characteristics of an ocean (ocean water, density of salt water, people and the ocean, and protecting the ocean).
- examine environmental changes and their effects.
- understand different ways in which living things are grouped.
- understand properties of matter (identifying matter, solids, liquids, gases, senses, and properties).
- consider physical vs. chemical changes, mixtures vs. compounds, filtration, contracting and expanding.
- develop and understanding of electricity and magnetism.
- explore conductors vs. insulators, circuits, fuses, switches, generators, and electroscopes.
- understand the organization of a simple electrical circuit.
- Explore how magnets attract and repel each other and attract certain kinds of other materials.
- Will observe how organisms respond to environmental conditions and how they change their environment.
- Further their understanding of scientific inquiry and how to use simple equipment and tools to gather data and extend the senses.
- gain experience with living and non-living environmental factors in terrestrial and aquatic systems.
- develop the concepts of environmental factor, range of tolerance, and optimum conditions for survival of populations through investigations.
- Understand that scientific investigations involve asking and answering a question and comparing the answer to what scientists already know about the world.
- Understand that scientists use different kinds of investigations.
- Know how to plan and conduct simple investigations.
- use simple equipment and tools to gather data and extend the senses.
- Know how to record careful observations of science experiments.

Grade 4 World Language



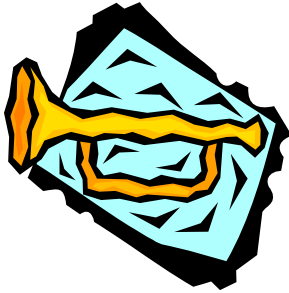
The purpose of the world language program in Whitefish Bay schools is to give students the opportunity to listen to, interact with, and begin to speak another language. Students receive an hour of instruction each week. At Richards, students are taught French. At Cumberland, students are taught Spanish.

The fourth grade World Language student will continue to learn how to:

- Use salutations
- Count from 1 to 1,000, by 1's, 5's and 10's, and practice math problems
- Recite the alphabet and vowels
- Identify group vocabulary
 - Colors and shapes
 - Calendar (days, months, date, seasons and weather)
 - Telling time to nearest quarter hour
 - Clothing
 - Body parts
 - Family
 - Animals (Ocean)
 - Classroom objects
 - Directional words, prepositions, synonyms, antonyms
 - Autobiography
- Demonstrate understanding of simple commands
- Learn new vocabulary that is connected to the grade-level core curriculum
- Understand various aspects of culture
 - Food
 - Music
 - Holidays
 - Dances
 - Money

Elementary Specials Overview

General Music



The kindergarten through fifth grade music program offers a broad spectrum of opportunities designed to promote development on each child's musical potential. It is our goal to provide each student with the skills necessary to both create and enjoy music while understanding it as a universal means of expression. Lessons are designed to convey the joy of music that will encourage each child to seek musical opportunities later in life.

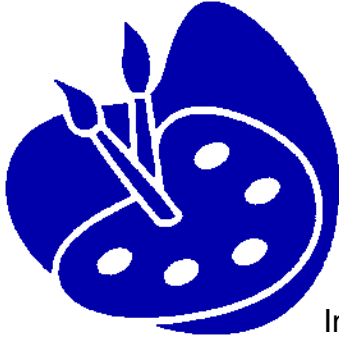
Beginning at the earliest level, students sing, chant, move, and dance to music composed by others while they are encouraged to alter, modify, expand, and improvise upon that music, later creating and composing music on their own. Throughout the elementary school years the children build skills of listening and responding, reading and writing music. The student's own voice is nurtured and good choral habits are stressed throughout the grades. Classroom instruments, both rhythmic and tonal, are used along with recorders at the third grade level and electric keyboards in the upper elementary classes.

The music literature in the classroom is chosen to reflect the backgrounds of our students as well as to expose them to the wide diversity of music created by the peoples of the world.

All children receive General Music instruction as per the time allotments shown below. In addition, fourth and fifth grade students may choose to be involved in the string program. Fifth grade students may choose to be involved in the band program. All fifth grade students are included in the fifth grade choir program.

General Music Time Allotments:

4-year-old kindergarten:	15 minute class once a week
half day 5-year-old kindergarten:	20 minute class twice a week
full day 5-year-old kindergarten:	20 minute class twice a week
first grade through fourth grade:	25 minute class 3 times per week
fifth grade:	50 minutes per week (either two 25 minute classes or one 50 minute class)
	PLUS
	One 40 minute choir period



Art

In the elementary art program, students will develop creativity and problem-solving skills, build and expand their understanding of art, and successfully manipulate a variety of media.

The elementary art curriculum allows students to begin to:

- Demonstrate understanding of artistic principles through effective use of media, tools, vocabulary and processes.
- Manipulate various media, materials and/or images to be expressive.
- Develop and relate his or her knowledge of art to themselves and others.
- Understand, discuss and respond to works of art.

Students experience a wide variety of materials and media in the elementary art program. They are shown proper techniques for creative use of materials. Projects are assigned with specific goals and criteria in mind, but allow for personal creativity and problem solving. When possible, art experiences link to school-wide as well as classroom learning themes and activities.

Learning experiences center around:

The Elements of Art

color
value
line
texture
shape
form
space

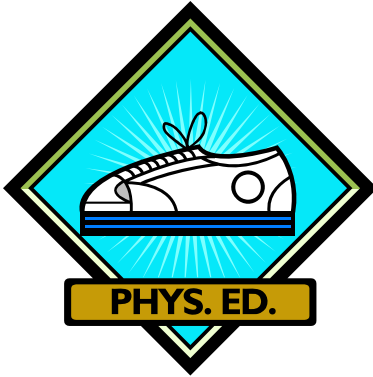
The Principals of Design

Balance
Emphasis
Harmony
Variety
Graduation
Rhythm
Proportion

Art Time Allotments:

Kindergarten: 30 minute class once a week
Grades 1-5 60 minute class once a week

Physical Education



Physical Education will enable each student to acquire the knowledge and skills to pursue and enjoy a lifetime of healthful activities.

Elementary physical education offers a wide variety of physical activities to our students. Our theme of “children learning to move and moving to learn” guides us to teach not only physical skills, but also movement concepts and principles needed for their development.

Optimal fitness for students ages 4 to 11 is the priority. Building healthy lifestyles through physical activity is discussed and practiced in every class. Good sportsmanship, teamwork, respect, and establishing positive attitudes and self-confidence are also common threads in each lesson. Students will learn responsible social and personal behavior in the gym while fitness and physical skills are practiced, and aerobic and sport-specific games are played.

We hope that children will wholeheartedly enjoy physical activity so it will become an integral part of their daily lives and carry over into adulthood.

Physical Education Time Allotments:

4-year-old kindergarten:	30 minute class once a week
half day 5-year-old kindergarten:	30 minute class once a week
full day 5-year-old kindergarten:	30 minute class twice a week
first grade through fourth grade:	25 minute class 3 times per week
fifth grade:	40 minute class 3 times per week



Technology

Students in Whitefish Bay utilize technology to enhance and extend their learning throughout the curriculum. Technology available includes classroom computers and computer labs with server and Internet access, classroom monitor/tv/vcr units, portable word processors, and a variety of peripheral equipment. Teachers design and implement technology experiences which allow students to access technology at developmentally appropriate stages. Technology application integrated with district standards enable students to:

- Use a variety of technology tools in order to facilitate and demonstrate learning across the curriculum.
- Use technology to communicate in various ways.
- Understand and operate computer systems and other technologies.
- Understand, respect and apply rules of ethics to be responsible users of technology.

Technology applications are integrated as appropriate throughout the elementary curriculum. Integrated word processing instruction is introduced in first grade, with new elements added each year through grade five. Word processing is integrated with other curricular areas such as reading, language arts, science, and social studies. Formal keyboarding instruction begins in third grade and builds through grade five. Efficient, safe, and ethical use of varied technologies is taught at all grade levels.