

WHITEFISH BAY SCHOOL DISTRICT

*Parent Curriculum Overview*  
*Grade 5*



SCHOOL DISTRICT OF WHITEFISH BAY  
1200 E. FAIRMOUNT AVE  
WHITEFISH BAY, WISCONSIN  
[www.wfbschools.com](http://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 21<sup>st</sup> 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 and physical education, 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.

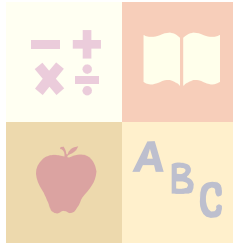
If you would like more information about the district curriculum, log on to [www.wfbschools.com](http://www.wfbschools.com) and select the district office link and then select director of instruction. On this webpage you will find links to curriculum overview documents, learning standards, and resources 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 5 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 fifth 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 3-5<sup>th</sup> 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 fifth grade, students will know and understand at a grade appropriate level:**

- practical applications of addition, subtraction, multiplication, and division.
- the use of several strategies when solving problems.
- how to collect and organize data in charts, graphs and written format.
- accurate computation of addition, subtraction, multiplication and division of fractions.
- mixed numbers and improper fractions.
- measurements in standard and metric forms.
- geometry concepts relating to the shapes and sides of figures, and congruence vs. similarity.
- multiplication and division of decimals.
- ratio, percent, and probability.
- volume, area and perimeter.



## Grade 5 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 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:
  - Context clues
  - Specialized vocabulary
  - Greek and Latin prefixes, suffixes and roots
  - 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:

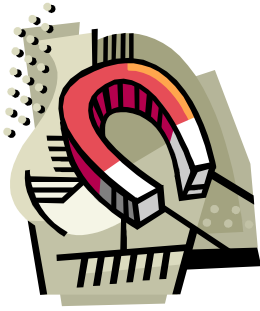
- Selects reading material based on his/her personal criteria and interests
- Uses text and graphic organizers to increase comprehension
- Adjusts speed of reading to suit purpose and difficulty of the text
- Applies strategies to monitor comprehension such as:
  - Makes connections to activate schema
  - 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 multi-paragraph essay
- 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 5 Science

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

**Students work in a lab based, inquiry enriched environment through a variety of experiments and projects to attain first-hand knowledge of scientific concepts and ideals:**

- Students manipulate small catapults called flippers to investigate the variables that contribute to the highest and longest flips of objects. They conduct controlled experiments and graph their results.
- Students experiment with variables that do and do not affect the behavior of pendulums. The students graph their results and use their graphs to predict the behavior of additional pendulums.
- Students construct a fleet of paper-cup boats and discover how many passengers (pennies) each will hold before sinking. The variables of boat depth and arrangement of passengers are explored.
- Students construct rubber-band powered airplanes and fly them on a line. They experiment with a number of variables to see how each affects the distance the plane travels.
- Students are introduced to fats in the human diet and conduct a fat search using the brown paper technique.
- Students use yeast metabolism as an indicator of the presence of sugar in foods. They experiment with different kinds of cereals and relate the amount of gas produced by yeast to the amount of sugar in the cereal. They use the sugar test to test mystery foods for the presence of sugar.
- Students use baking soda as an indicator of the presence of acid. In a closed system, the volume of gas produced by the acid/baking soda reaction is related to the concentration of acids in the sample. Students test foods for general acid content and for a specific acid, vitamin C using indophenol.
- Students learn that foods are often different combinations of different kinds of nutrients. They assemble hypothetical lunches and analyze them in terms of their fat, carbohydrate, and protein content. They calculate the number of calories contributed by each group and assess the nutritional value of their lunches.
- Students are introduced to levers as devices that help us lift weight or overcome resistance. Students investigate the fulcrum, effort and load of one kind of level (class-1) and conduct experiments with a spring scale to discover the relationships between the parts of lever systems. Students draw and graph their results.
- Students investigate and diagram class-1, class-2 and class-3 level systems. They investigate common tools to determine how the tools apply levers.
- Students are introduced to a second simple machine and discover how to set of single-fixed and single-movable pulleys to lift a load. They use a scale to quantify effort with single pulleys. They go on to set up and diagram multiple-pulley systems.
- Students investigate four pulley systems. They record data on each system. They graph and determine the relationship between the number of ropes pulling on the load and the effort needed to lift it.
- Students observe the changes in shadows over a day and relate the position of the sun in the sky to the shadow that is cast. They make and use a shadow tracker to systematically monitor the position of the sun.
- Students set up an investigation to find out what happens when solar energy shines on four earth materials, water, sand, dry soil and wet soil. They relate the differences in temperature change to the properties of the materials.
- Students investigate ways to capture solar energy to heat water in containers and zip-bags. They investigate color, surface area of the collector, and covers on the heater. They establish relationships between the variables in the solar water heater and the rate of temperature increase.
- Students are challenged to discover the most effective way to heat a house with solar energy. They



## Grade 5 Social Studies

The Whitefish Bay Social Studies curriculum will nurture attributes, knowledge, and skills through which young people become socially active and informed citizens who understand the structure and processes of society and have the ability to adapt in a changing social, political, and economic environment.

- **Our Land and First People**
  - Students will describe landforms and other physical features of the United States.
  - Students will explain how and why climate varies throughout the United States.
  - Students will explain how the geography of an area influenced the lives of native people in that region.
  
- **Exploration and Settlement**
  - Many factors motivate exploration of the unknown such as religion, freedom, wealth, and fame, as well as technology.
  - Life in the colonies reflected the geographical features of the settlements.
  - Environment provide resources for human needs and activities.
  - People and/or groups establish settlements based on the needs and wants of that group.
  - The success or failure of a settlement is based on many factors that may or may not be within the settlers' control.
  
- **The English Colonies**
  - Students will imagine they are George Washington and will write a letter to people in Britain encouraging them to move to the colonies.
  - Students will learn and “experience” the life of a slave from capture in Africa, through the Middle Passage, and into their arrival in the Americas.
  
- **The American Revolution**
  - People adapt to, resist, or participate in change.
  - The interdependence of nations has both helpful and harmful consequences.
  - Motivating factors such as basic human rights, quality of life, and protection of family and home can play a role in who ultimately wins a conflict.
  - The independence of a nation has both helpful and harmful consequences.
  - The constitution of the United States established a federal system of government based on power shared between the national and state governments.
  
- **The New Nation**
  - New inventions and improvements in transportation impacted industry, agriculture, and travel in the early and mid-1800's.
  - The purchase and exploration of the Louisiana Territory doubled the size of the United States and allowed for westward expansion.
  - There was a rise in nationalism in the United States after the War of 1812.
  - European immigration and widespread reforms had a significant impact on the American population.

## World Language - Grade 5



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. Additionally, in 5<sup>th</sup> grade, Richards Students receive a ten lesson introduction to French and German and Cumberland Students receive a ten lesson introduction to Spanish and German.

**The fifth grade World Language student will continue to develop skills to:**

- Use salutations
- Count from 1 to 1,000, by 1's, 2's, 5's, 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 five minutes
  - Clothing
  - Body parts
  - Family
  - Animals (jungle)
  - Classroom objects
  - Directional words and prepositions
  - Sports
- Learn new vocabulary that is connected to the grade-level core curriculum
- Demonstrate understanding of, and use simple commands
- Understand various aspects of culture
  - Food
  - Music
  - Holidays
  - Dances
  - Explorers
  - Euro
- Begin to read and write in another language

# Health and Human Growth & Development



## The mission of the K-12 Health Education curriculum:

**Students will develop the necessary knowledge, skills, and understanding for mental/emotional, physical, and social well-being.**

**In fifth grade, students will understand health promotion through instructional concepts such as:**

Self esteem	Peer pressure
Decision-making	Communication skills
Advertising	Social skills
Dealing with stress	Assertiveness
Drug, alcohol and tobacco resistance	

## The mission of the K-12 Human Growth & Development (HGD) Education curriculum:

**The curriculum will complement the home by providing students with the knowledge, skills, and support necessary to understand their social, mental/emotional, and physical development in order to make responsible decision about health and age-appropriate sexual behavior throughout their lifetimes.**

*\* HGD is an elective program. Parents may opt-out their students from participating in identified lessons.*

In fifth grade, students will understand healthy decision-making, and social, mental/emotional, and physical development through instructional concepts such as:

- Reviewing emotional changes during puberty and understanding emotions change during development.
- Discussing and assessing their respect for self and others.
- Examining their own understanding and acceptance of a multicultural and diverse society (various races and persons with disabilities).
- Examining and analyzing changing social and emotional growth
- Applying a decision-making model to situations.
- Comparing, contrasting, and evaluating the influence peers have on decision-making.
- \* Defining puberty and identifying body parts and systems affected by puberty.
- \* Explaining, comparing, and contrasting the differences in males and females.
- \* Identifying the reproductive anatomy of the male and female body.
- \* Discussing and recognizing the purpose of the reproductive system.
- \* Identifying the physical changes that must take place before human reproduction can take place.
- \* Explaining and discussing intercourse and conception.
- Reviewing definitions of the types of abuse and explaining the difference between abuse and discipline.
- Discussing different approaches to use in reporting abuse.
- Identifying supportive help in the home, school and community.
- Defining and differentiating between communicable and non-communicable diseases
- Stating the mean of the acronyms AIDS and HIV.
- Identifying how the virus that causes AIDS is and is not transmitted and naming good health behaviors that contribute to the prevention of HIV transmission.

\* Gender separated lessons

## Elementary Specials Overview

### General Music



#### Mission of the K – 12 Music Education Program:

**Students will begin a lifelong relationship with music through listening, describing, creating, and performing.**

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.

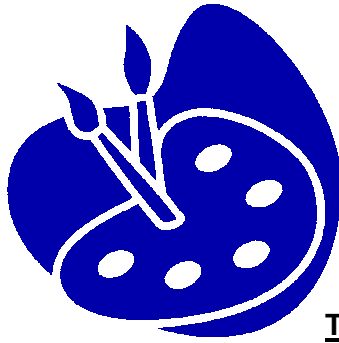
Beginning at the earliest level, students sing, chant, move, and dance to music composed by others while they are encouraged to alter, modify, expand, and improvise upon that music, later creating and composing music on their own. Throughout the elementary school years the children build skills of listening 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
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

### The mission of the K – 12 Visual Art program:

Students will gain the ability to manipulate a variety of media, and develop creative problem-solving skills. Students will build and expand their understanding of art and themselves, as well as establish a life-long relationship with the visual world.

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

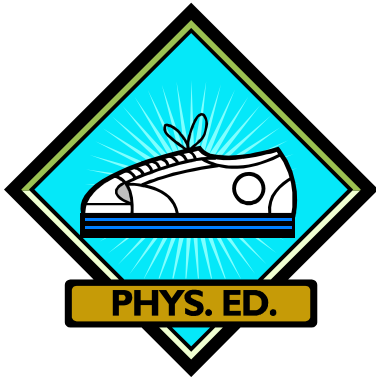
#### **The Principals of Design**

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
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

**The district’s mission for instructional technology is to prepare all students for a global society by empowering them with the 21<sup>st</sup> century skills necessary for lifelong success.**

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.

