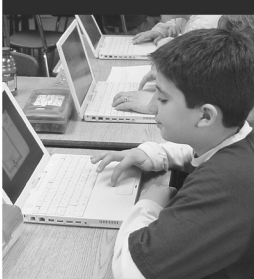


# GCSD

## Curriculum Guide



Guilderland Central School District

Altamont

Guilderland

Lynnwood

Pine Bush

Westmere

GRADE

K

The elementary school program is designed to develop students' confidence in themselves as learners, to instill a love of learning, and to help them develop the knowledge, skills and attitudes needed to communicate effectively, understand the world about them, and participate fully in a democratic society.

This booklet outlines the major content areas and skills taught in this grade level.

Students will engage in integrated study that requires them to read, write, analyze, share and present data and opinions as they pursue solutions and understandings.

While all students will study at least the topics indicated here, there are also opportunities for students to choose other areas of study based on their interests and needs.

Parents can support their children's school learning by using the vocabulary and discussing the concepts identified here as they share reading, discuss current events, or explore new places with their children.

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## EARLY CHILDHOOD PHILOSOPHY

The Early Childhood educators in Guilderland Schools believe that the application of the following principles in the primary grades is critical in starting children toward a career of lifelong learning. It is essential to young children's self-esteem and sense of competence that they learn to take risks, view errors as learning opportunities, and maintain their confidence that they can and will learn.

- Young children learn best through discovery, exploration and active involvement in developmentally appropriate activities.
- Our Kindergarten environment supports a natural approach to learning where children are encouraged to make inquiries, develop observation skills, make choices, interact positively with peers, make decisions, problem solve, take risks and enrich their understanding of the world around them.
- The curriculum is integrated so that children's learning in all areas occurs through a variety of instructional approaches whereby teachers plan with children's interests and suggestions in mind. Teachers guide and enrich the learning experience by extending children's ideas, responding to their questions, engaging them in conversation and challenging their thinking.
- Art, music, movement, drama and dance (and opportunity for other physical activity) are integrated throughout each day. Such activities are needed for children to express themselves aesthetically and physically, and to express ideas and feelings.
- Outdoor activity is planned frequently so children can develop large muscle skills, learn about outdoor environments and express themselves freely.



# PLAY

Before children come to school, they learn about their world around them through play. Teachers build on this by providing the time and materials needed.

There is an old adage: “Play is the work of children.”

It is an essential component of an effective early childhood program. It is the process through which our curriculum is implemented. Play supports children’s growth and development in all areas of the curriculum.

The Kindergarten environment provides a rich selection of props and materials necessary for children’s play.

The classrooms are organized to support children’s play activities through various learning centers such as:

- Art
- Blocks
- Classroom Library
- Computer
- Dramatic Play
- Listening
- Math
- Sand/Water Table
- Reading
- Writing
- Word Study

It is through these centers and invaluable learning experiences that our curriculum becomes truly integrated.



**LANGUAGE ARTS**

The goals of the language arts program are for children to expand their listening skills and their ability to communicate orally and through reading and writing, and to enjoy these activities. Teachers provide generous amounts of time and a variety of interesting activities for children to develop language, writing and reading abilities, such as: looking through, reading, or being read high quality children's literature and nonfiction for pleasure and information; drawing, dictating and writing about their activities and/or ideas; making books of various kinds; being read good literature each day by adults or older children; using the school library and the library area of the classroom regularly. Children read aloud to the teacher, another child, or a small group of children. Teachers also teach literacy when working on science, social studies and other content areas.

In Kindergarten, language arts instruction will focus on:

**LISTENING & SPEAKING**

Rich language is used throughout the day in a variety of ways.

**Goals:**

- Develop a love of literature
- Develop oral language through conversation, discussion and play

- Actively listen to read-alouds
- Develop auditory discrimination
- Express thoughts verbally
- Listen for rhyming words
- Listen for initial and final sounds
- Follow a sequence of oral directions
- Retell stories
- Sequence chronologically when retelling events
- Develop questioning and problem-solving skills

**READING**

Reading is taught throughout the day in a variety of ways:

*Shared Reading:* Big books, charts (songs, chants, poems), daily messages

*Reading Workshop:* Includes focused instruction, student reading time and sharing

*Read-alouds*

Progress in reading is assessed through:

- Screening three times per year
- Daily observation
- Conferences
- Fountas and Pinnell Benchmark Reading Assessment two times per year



**Goals of reading program:**

- Develop enthusiasm and motivation to read
- Develop phonological and phonemic awareness
- Identify upper and lower case letters
- Developing concept of letter and word
- Associate sounds with corresponding letters
- Follow directionality of text: left to right and top to bottom
- Identify the parts of a book: cover, title, front, back, title page, and page
- Use pictures in a story to construct meaning
- Enjoy good literature of all types
- Understand that stories have a beginning, middle and end
- Develop reading comprehension skills (main idea, sequence of events, and simple cause and effect)
- Understand and increase vocabulary

Growth in reading is assessed both formally and informally throughout the year.

**WRITING**

Writing is taught throughout the day in a variety of ways. Students are presented with numerous opportunities to write for a variety of pur-

poses. Children may express their ideas at different stages: scribble writing, pictures, random letters, initial consonants, initial and ending consonants, writing a letter for each sound in a word.

Writing is taught through:

*Shared Writing:* Teacher and students construct a text collaboratively

*Writing Workshop:* Includes focused instruction, student writing time and sharing

**Writing Goals:**

- Written Expression
- Understand that writing is a way of expressing ideas
- Use drawing and painting as a way of representing ideas
- Proceed from left to right and top to bottom
- Write a variety of pieces, including:
  - Imaginative text
  - Personal narrative
  - Language experience story
  - Card, note, letter
  - Literary response
  - Informational writing

In kindergarten, students will be immersed in writing units of study such as:

- Writerly life (developing a voice as a writer)



- Nonfiction without research
- Revision
- Personal narrative
- Punctuation

Growth in writing is assessed both formally and informally throughout the year.

**HANDWRITING**

**Goal:**

- To achieve functional pencil position, understand boundaries of top and bottom when printing letters and numbers, and build fine motor skills.

**Activities:**

- Write first and last name
- Introduce formation of uppercase letters and lowercase letters
- Practice handling writing tools (clay, sand, markers, wikki stix, paintbrush and easel, finger paints, pencils)



**MATHEMATICS**

Everyday Mathematics is a research-based program developed by the University of Chicago, which is aligned with the National Council of Teachers of Mathematics Standards and New York State Math, Science and Technology standards and mathematics core curriculum. It is used in grades Kindergarten through 5. The curriculum recognizes and builds on children's capabilities by expanding the range of their mathematics experiences and ideas. That goal is achieved by integrating mathematics instruction into curriculum areas. Mathematics is a part of the ongoing daily routines of the classroom.

Everyday Mathematics establishes a framework for dialogue about mathematics between teacher and children and among the children themselves. The curriculum helps children take responsibility for their own mathematics learning. The curriculum meets the developmental needs at all levels, allowing children to explore patterns, extend mathematical concepts and better meet challenging activities.

Key features of the curriculum include:

- Developing readiness through hands-on activities
  - Establishing links between past experiences and explorations of new concepts
  - Sharing ideas through discussion
  - Cooperative learning through partner and small group activities
  - Ongoing assessment
  - Daily routines
  - Practice through games
  - Home/School Partnership
- In Kindergarten, the Everyday Mathematics program is supplemented with a student journal called Growing with Mathematics. This book provides children with an opportunity to practice content and skills they have learned in lessons.

**MATHEMATICAL CONTENT**

Kindergarten is organized into the following content strands:

- Number and Numeration
- Operations and Computation
- Data and Chance
- Measurement and Reference Frames
- Geometry
- Patterns, Functions, and Algebra



Pervasive throughout the content strands are several key mathematical themes. These are:

- Algorithmic and Procedural Thinking
- Estimation Skills and Number Sense
- Mental Arithmetic Skills and Reflexes
- Problem Solving  
Special emphasis is placed on:
  - Establishing links among intuition from past experience, actions with concrete materials, pictures, verbal statements, and symbolic arithmetic statements. For example, children might act out a problem or talk about it to get a feel for what is happening, perhaps draw simple pictures or diagrams, and eventually do some mental arithmetic or write a number model.
  - Discussing and sharing ideas. (Tell us how you do that? Why do you think so? Does everyone agree?)
  - Using and comparing equivalent expressions. (What other ways can we say...or write...?)
  - Expressing qualities and measurements in context by including labels or units. (Five what?)

- Learning about the reversibility of most things. (Put in, take out; add, subtract; take apart, put together; go away, come back; expand, shrink; spend money, get money; positive, negative; and so on)
- Using calculators as tools for counting, displaying numbers, problem solving - especially for everyday problems with relatively large numbers - and concept and skill development.

By becoming a part of everyday work and play, these ideas gradually shape children's ways of thinking about mathematics and foster the development of children's mathematical intuition and understanding.



# SCIENCE

*In the 21st century a person must be armed with a science overview to adapt to the extraordinary changes that will occur, to be employed by the new industries that will emerge, and to participate in the decisions that society will make. The key is education and programs such as Science and Technology for Children (STC) and Full Option Science Systems (FOSS) to give every student science content and science process needed to develop scientific literacy.*

Our elementary science program places an emphasis on acquiring skills, knowledge and attitudes toward science through active involvement in hands-on activities. The heart of the program is problem solving. Students are actively engaged in situations which begin with their questions and take them through the process of inquiry. Students gather information to help them find answers to their questions using the data they have collected.

Because many of the ideas being studied have direct relation to other disciplines, students are encouraged to make connections. We provide literature and other resources to foster such connections.

Teachers are encouraged to enrich science instruction with topics of interest to their students and themselves. The catalyst for such studies may be student-generated questions,

teacher or parent interest or current events. Problem solving is the common thread which ties these topical studies to our core curriculum.

Teachers assess student progress by observing their development as observers, hypothesizers, careful data gatherers and generalizers and by watching them work, reviewing their journals, and assessing their written and oral responses.

Our core program includes a unit of study that includes hands-on activities, specific scientific skill development (observing, measuring, comparing, predicting, estimating, and describing), problem solving, and assessment.

In Kindergarten, children will expand their awareness of their natural environment through the study of trees throughout the seasons. Additionally, children will expand their awareness of solids and liquids. Their experiences introduce them to the following concepts, skills and attitudes:

## CONCEPTS

- Solids and liquids can be described by their properties.
- Some properties of solids are color, shape, ability to roll or stack, hardness, magnetic attraction and whether they float or sink.



- Some properties of liquids are color, tendency to flow, degree of viscosity or fluidity, whether they are miscible with water, and whether they float or sink in water.
- Tests can be performed to investigate properties of solids and liquids that cannot otherwise be observed.
- Observe, compare, and describe structures of trees throughout the seasons.

## SKILLS

- Observing and describing the properties of solids and liquids.
- Conducting tests to investigate the properties of solids and liquids.
- Sorting solids into groups on the basis of their properties.
- Comparing similarities and differences among solids.
- Comparing similarities and differences among liquids.
- Applying tests to investigate new solids and liquids.
- Comparing the properties of solids with the properties of liquids.
- Communicating ideas, observations, and experiences through writing, drawing and discussion.
- Comparing shapes, sizes and characteristics of trees and leaves.
- Planting and caring for trees.
- Describing observations using drawings and oral language.

## ATTITUDES

- Accepting that there is more than one way to describe solids and liquids.
- Recognizing the importance of organizing information and results on charts.
- Developing an interest in investigating the physical world.
- Developing a curiosity of living things in our world.



## **SOCIAL STUDIES**

The ten key concept goals of the K-6 social studies curriculum are:

**1 CHANGE**  
basic alterations in things, events, and ideas

**2 CITIZENSHIP**  
membership in a community (school, state, nation...) with its accompanying behaviors, rights, and responsibilities

**3 CULTURE**  
the way of living any society develops to meet its fundamental needs

**4 EMPATHY**  
the ability to understand others through being able to identify in one's self responses similar to the experiences, behaviors, and responses of others

**5 ENVIRONMENT**  
surroundings, including natural elements and elements created by humans

**6 IDENTITY**  
awareness of one's own values, attitudes, and capabilities as an individual and a member of groups

**7 INTERDEPENDENCE**  
reliance upon others in mutually beneficial interaction and exchange

**8 NATION-STATE**  
a geographic/political organization uniting people by a common government

**9 SCARCITY**  
the conflict between unlimited needs and wants and limited natural and human resources

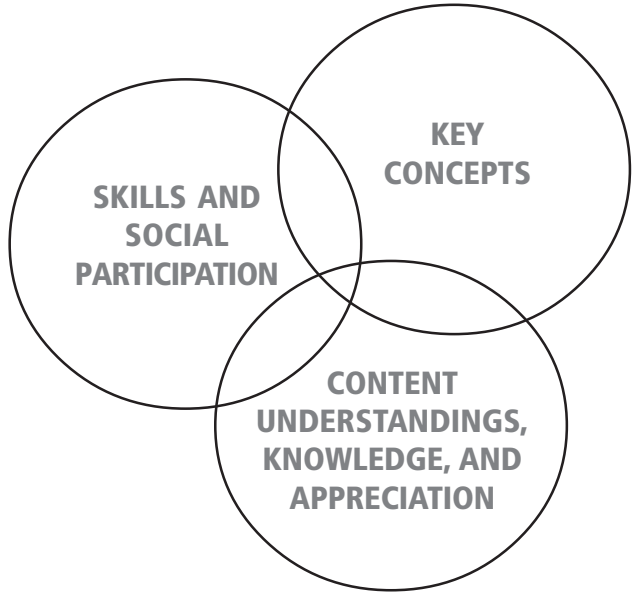
**10 TECHNOLOGY**  
the tools and methods used by people to get what they need and want



Through social studies experiences in the elementary grades, students will develop mental categories which provide a foundation for social studies learning in grades seven through twelve.

As a result of participating in the social studies program, students should demonstrate steady growth in the following abilities and the skills which contribute to them:

1. The ability to obtain, organize, process and communicate accurate social studies information and ideas.
2. The ability to identify and investigate issues, generate and test hypotheses, and take and support positions persuasively.
3. The ability to make appropriate decisions, to identify and solve problems effectively and to initiate appropriate action.
4. The ability to form or acquire a set of standards and apply them to the evaluation of assumptions, sources, evidence, reasoning and arguments (critical thinking) and to the evaluation of beliefs, qualities and behaviors (valuing).
5. The ability to determine and understand their rights and responsibilities and decide how they should be exercised as contributing citizens (citizenship competency).



The social studies program at the Kindergarten level focuses on helping students develop awareness of themselves as growing individuals. Children’s unique qualities as well as similarities to others are stressed. Children learn about values, ideas, customs, and traditions through folktales, legends, music, and oral histories.

In addition, children’s relationships with others in the classroom and the school become sources for social studies learning. Social interaction skills are integral to the kindergarten program. Emphasis is placed on using content that is relevant and personally meaningful. A wide range of interdisciplinary activities can help children grow and develop and gain knowledge and skills. Children also begin to learn about their role as citizens by accepting rights and responsibilities in the classroom and by learning about rules and laws.

**CONTENT UNDERSTANDINGS**

**Myself and others**

- My physical self includes gender, ethnicity, and languages.
- Each person has needs, wants, talents and abilities.
- Each person has likes and dislikes.
- Each person is unique and important.

- People are alike and different in many ways.
- All people need others.
- All people need to learn and learn in different ways.
- People change over time.
- People use folktales, legends, music, and oral histories to teach values, ideas, and traditions.

**My family and other families**

- My family and other families are alike and different.

**My school and school community**

- What is a school?  
My neighborhood:
- My neighborhood can be located on a map.
- Different people live in my neighborhood.

**Location of home, school, neighborhood, and community on maps and globes**

- Land and water masses can be located on maps and a globe.
- The United States can be located on a map and a globe.  
Basic human needs and wants
- People define basic human needs and wants.
- Families have needs and wants.



## HEALTH

Health is a condition of well-being that is required for the development of each individual and for society as a whole. Health instruction at the elementary level builds a strong foundation to promote the health and well-being of our students. The health education program works in partnership with the home, school, and the community. To support this partnership with the parents, a list of videos that may be used is posted on our district website, and, prior to instruction of any personal safety lesson or video, a parent notification letter is sent home with students.

The elementary program provides accurate, age-appropriate information and builds upon prior learning. The curriculum consists of six strands and is taught by the classroom teacher and sometimes the support of other school staff or guest speakers. The six strands are:

- Personal Activity and Nutrition
- Diseases
- Tobacco, Alcohol, and Other Drugs
- Family Life and Maturity
- Violence Prevention
- Unintentional Injury Prevention

## ART

Art assists in the development of the whole child as it supports the child's emotional and intellectual growth through sensory experiences. The art curriculum is designed to promote creativity, imagination, problem solving, critical thinking and artistic expression. Each learning experience includes both a process and/or a product.

The elementary art curriculum includes a K-5 sequential learning process exposing children to a variety of techniques, concepts, and skills. The visual art curriculum allows the teacher to guide children through hands-on activities that integrate art history in both past and

present cultures, are criticism, aesthetics, technology, and careers in art through studio experiences in the two and three-dimensional arts.

Children's work is displayed throughout the classroom and building on a regular basis. An annual student art show is also held at the town library.

Elementary art teachers work closely with classroom and special area teachers to promote a positive, exciting learning experience. Connections are made across disciplines while simultaneously allowing children to express themselves as unique individuals.

## LIBRARY MEDIA

The Library Media Program plays a vital role throughout all aspects of the curriculum. The mission of the Library Media Program ensures that all students and staff effectively generate questions, access resources and create and share their new knowledge. In addition to managing the book collection and library web page, the Library Media Specialist provides instruction for individuals, small groups and whole classes of students. Areas of instruction include library orientation and circulation, literature appreciation, information skills and utilizing technology and digital media.

Our Kindergarten students are introduced to and participate in a variety of library experiences, such as:

- Navigating the library, borrowing library materials and becoming good library citizens (Orientation and Circulation)
- Learning the parts of a book, understanding roles of author and illustrator, distinguishing fiction from nonfiction (Literature Appreciation)
- Choosing and evaluating “just right” books, finding books for various purposes (Information Skills)
- Experiencing literature and information in different formats (Utilizing Technology and Digital Media)

**MUSIC**

The purpose of the Guilderland music program is to advance the cognitive and cultural development of every student through active participation in music. Sequential class activities:

- Promote critical thinking and listening skills.
- Foster creativity through musical improvisation and composition.
- Advance innate musical aptitude through class and public performances.
- Encourage an understanding of world cultures.
- Aid neural development of the brain benefiting literacy, spatial reasoning, verbal memory and problem solving skills.
- Allow for a shared community experience by teaching music literacy (pattern structure recognition).

The elementary general music program is offered to students in grades K-5 twice a week for 30 minutes. The emphasis in music class is on the development of each child's tonal, rhythmic and movement skills through a sound before sight approach. Similar to the way children acquire language skills, music is taught as an aural art. Students build a solid foundation of aural and performing skills through singing, rhythmic movement, and

tonal and rhythm pattern instruction before being introduced to notation and music theory. The voice is a natural instrument for all children and emphasis is placed on the singing of a variety of songs from many cultures. Movement activities support dexterity, rhythm skill development, and beat coordination. Creativity, composition, and improvisation are encouraged at every level of music instruction. All students have opportunities to perform on classroom instruments including xylophones and rhythm instruments.

The curriculum utilizes Dr. Edwin Gordon's Music Learning Theory. Children are evaluated for music aptitude in both tonal (melodic) and rhythm skills. The movement portion of the curriculum is based on Phyllis Weikart's Education through Movement developed as a result of her study of the body as the center of learning for children.

In Kindergarten, the essential elements of the curriculum focus on:

- Vocal development & exploration.
- Rhythmic movement in a variety of ways to develop beat readiness and awareness.
- Imprinting beginning tonal & rhythm patterns, the building blocks of music.
- Rote songs/chants.
- Percussion instruments to explore timbre and rhythms.

## PHYSICAL EDUCATION

Guilderland Central School District begins Physical Education in kindergarten. Basic concept and skill development are the primary objectives of the K-4 program. At these grade levels much time is spent helping the learner become aware of and develop a working knowledge of the Elementary Physical Education Concepts:

- Agility
- Balance
- Directionality – ex. left/right, up/down
- Foot-Eye Coordination
- Hand-Eye Coordination
- Locomotor & Axial Movements
- Physical Fitness
- Reaction Time
- Rhythm & Dance
- Spatial Awareness
- Strategy
- Strength/Power/Leverage
- Timing

With these concepts the following attributes are emphasized:

- Safety
- Trust
- Cooperation
- Risk-taking
- Leadership
- Initiative

Children in kindergarten are introduced to and experiment with movement concepts. This introductory period is designed to stimulate body and spatial awareness in many physical education settings. Locomotor movements (skipping, sliding, galloping, etc.) are introduced when students begin to demonstrate confidence and body control through space. Recognition of other students self space and safety are also main objectives of the Physical Education Curriculum. At this age most children love to move. We provide a safe and thoughtful environment for all children to explore and discover movement in a noncompetitive manner. The physical education department stresses the importance of being kind and considerate to classmates, often using conflict resolution skills during all activities, and believes in educating the whole child during Physical Education class.

Although fitness for all students is important, kindergarten students are introduced to healthy lifestyle choices, and are not formally assessed at this level. First grade is the first year that a student will be formally tested in physical fitness.

The Physical Education program is designed, ultimately, to enhance each child's development, and provide a foundation of knowledge and skills, to lead a healthy life.



## HOME-SCHOOL CONNECTION

In Kindergarten, there is NOT a formal homework policy. However, teachers may occasionally ask parents to extend the curriculum at home through play-based activities and projects. Since parents are their children's first teachers, we ask that they continue to encourage their children to:

- Be curious about the world around them.
- Ask questions.
- Make lists.
- Play games.
- Read road signs and food packages.

- Visit the library.
- Make discoveries through spontaneous play activities.

The most important thing that parents can do at home is to read books aloud to their children from a variety of genres, and to model good reading practices and enjoyment, such as questioning, laughing out loud and relating the story to a personal experience. We value parents as our partners in learning as we continue on this journey together.

## SCHEDULE FOR KINDERGARTEN PROGRAM

Individual teachers may vary their schedule, and call areas different names - below is a schedule of what a typical day in Kindergarten might look like.

### Morning Meeting

- Calendar
- Songs - music and movement
- Shared Reading
- Charts - poems, chants, finger rhymes
- Big Books

- Read Alouds

### Writers Workshop

### Readers Workshop

### Math

### Language/Word Study

### Center time:

- Small guided groups
- Play or choice time

### Outside play (weather permitting)

### Science/Social Studies

# KINDERGARTEN/PARENT COMMUNICATION OVERVIEW

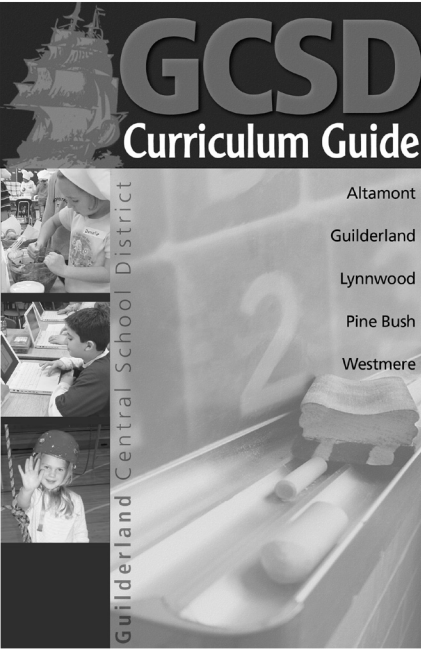
September/October	Open House	<ul style="list-style-type: none"> <li>• Share information re: program/curriculum expectations</li> </ul>
October	Parent-Student Information Sheet	<ul style="list-style-type: none"> <li>• Parents “Tell us about your child” (returned prior to November conference)</li> </ul>
October/November	Parent Conference	<ul style="list-style-type: none"> <li>• Parents and teacher share information regarding social/emotional growth and learning attitudes and behaviors.</li> <li>• Review child’s work and set goals.</li> <li>• Conference Notes with observations and goals sent home.</li> </ul>
March	Parent Conference	<ul style="list-style-type: none"> <li>• Parents and teacher share observations and evidence of student growth and progress.</li> <li>• Review work - compare to fall samples.</li> <li>• Set goals.</li> <li>• Conference Notes with observations and goals sent home.</li> </ul>
June	End of year summary	<ul style="list-style-type: none"> <li>• Specific comments/observations/goals for each student.</li> </ul>
ANYTIME	Teacher or parent initiated conference re: behavior change, successes, or concerns.	





Curriculum Guide for **GRADE**

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Guilderland Central School District

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**G U I L D E R L A N D**  
CENTRAL SCHOOL DISTRICT



September **2011**