Lake Shore Central Schools

Anthony J. Schmidt Elementary School

9455 Lake Shore Road Angola, New York 14006-9400 Principal: Mrs. Susan Ciminelli Telephone: (716) 926-2350

Highland Elementary School

6745 Erie Road Derby, New York 14047-9698 Principal: Mr. Chris Walsh Telephone: (716) 926-4397

John T. Waugh Elementary School

100 High Street Angola, New York 14006-1300 Principal: Mrs. Paula Eastman Telephone: (716) 926-2370 Lake Shore Central Schools

CURRICULUM GUIDE FOR GRADES K—5



Grade 3

A MESSAGE FROM THE SUPERINTENDENT

NOTES

Dear Parent/Guardian,

As you are aware, New York State has adopted a series of initiatives which have established Common Core State Standards for grades K-5. Within a series of booklets, Lake Shore Central Schools will provide an overview of the Common Core State Standards, district initiatives in achieving those standards, and core curriculums in English Language Arts, Mathematics, Science and Social Studies. In addition, these booklets provide the goals and objectives for each grade level in the various subjects. It is our hope this information will provide an opportunity for each of you to assist in the learning process of our children.

The education of our children is the responsibility of everyone—the district, parents and the students themselves. In order to achieve success, everyone must work together in this important process. I encourage each of you to take an active role in the education of our children to ensure they achieve their full potential.

I look forward to working with you as we embark upon new and exciting times in the education of our children at Lake Shore Central Schools.

Sincerely,

James Przepasniak Superintendent of Schools

K-5 WEBSITES

For additional information about our curriculum, see the Website for the Lake Shore Central School District.

Curriculum information will be found under the heading of Instructional Programs.

Lake Shore Central School

http://www.lakeshorecsd.org

For additional information about specific topics, please visit the following web sites:

New York State Education Department Parent Resources

http://usny.nysed.gov/parents/

Office of State Assessment

http://www.p12.nysed.gov/apda/

Office of Curriculum and Instructional Support

http://www.p12.nysed.gov/ciai/

Common Core State Standards Initiative

http://www.corestandards.org/

Education is a social process...
Education is growth...
Education is not a preparation for life;
Education is life itself.
—-John Dewey

CONTENTS

A MESSAGE FROM THE SUPERINTENDENT	2
HOMEWORK POLICY	4-5
COMMON CORE STATE STANDARDS	
ENGLISH LANGUAGE ARTS MATHEMATICS, SCIENCE & TECHNOLOGY MATHEMATICS MST #3 SOCIAL STUDIES	6 15 16-17 24
GRADE LEVEL CURRICULUM DESCRIPTORS & OB	JECTIVES
READING WRITING LISTENING SPEAKING MATHEMATICS SCIENCE SOCIAL STUDIES	7-9 13 14 14 18-20 21-23 25-27
NYS TESTING	
ENGLISH LANGUAGE ARTS MATHEMATICS ELEMENTARY SCIENCE SOCIAL STUDIES	29 29 29 29
SUGGESTIONS FOR PARENTS	
READING MATHEMATICS SOCIAL STUDIES	12 20 26
RECOMMENDED READING LIST	10-11
DEVELOPMENTAL DESCRIPTIONS	28
K-6 CURRICULUM WEBSITES	30

HOMEWORK POLICY

Philosophy:

Homework is a valuable aid in helping students maximize their school experience. It reinforces classroom learning, builds responsibility, and develops essential study habits. Homework is one vehicle for home-school communication. Parents are encouraged to make it a positive experience for children. Parents must plan a homework time in order to strike a balance between academics, family life and the child's needs.

General Types of Homework:

- Practice assignments reinforce skills and concepts taught in class.
- Preparation assignments provide background information before topics appear in class.
- Extension assignments emphasize individual needs and interests, creativity and application of knowledge gained in class.
- Study assignments prepare students for tests and provide the completion of independent reading.

Student Responsibilities:

- 1. Listen to class directions for assignments and include due date if necessary.
- 2. Ask questions if you do not understand the assignment.
- 3. Take home the instructions and materials needed to complete the assignment.
- 4. Work with your parents to set a regular time and place to do your homework.
- 5. Do your own work, but ask your parents for assistance if needed.
- 6. Work should be complete, legible and done to the best of your ability.
- 7. Show your parents the completed work to ensure quality.
- 8. Ask your teacher for help the next day if you did not understand the assignment.
- 9. Return assignments on the date due.

N.Y.S. TESTING

English Language Arts (ELA) 3rd, 4th, 5th, 6th, 7th & 8th Grade

Mathematics 3rd, 4th, 5th, 6th, 7th & 8th Grade

Science 4th & 8th Grade

Social Studies 5th & 8th Grade



THIRD GRADE DEVELOPMENTAL DESCRIPTORS

In third grade, the students grow academically and socially. More is expected of the child in school. Listed below are brief descriptors of the developments of third graders. Every child is different and may not fit perfectly into this framework.

The Third Grader may:

- Be able to assume responsibility for his/her actions.
- Actively seek praise.
- Recognize the needs of others.
- Explore the relationship of feelings, goals, and behavior.
- Learn about choices and consequences.
- Begin setting goals.
- Become more responsible.
- Learn how to work with others.

School isn't just academics. Your child's teachers are helping him/her grow socially. At eight-years old, your child is learning how to set goals and understand the consequences of his/her behavior. You can help by encouraging them.

Signs of Trouble

Trouble is on the horizon for any student who hasn't mastered basic reading and math skills by the end of third grade. Any deficiencies in these areas must be addressed before they adversely affect future learning.

Students will have trouble if they are not able to:

- Apply the basic phonics rules in their reading.
- Write complete sentences.
- Automatically read high-frequency words.
- Solve simple story problems in math.
- Master basic math.
- Master basic addition, subtraction, multiplication, and division facts.
- Write legibly in cursive.

HOMEWORK POLICY

The following are guidelines for parents to help monitor the duration of homework assignments. The frequency and/or the nature of assignments may differ among teachers.

Grade	Approximate Time
K	15 minutes (assisted)
Grade 1	15 minutes
Grade 2	15-20 minutes
Grade 3	20-30 minutes
Grade 4	30-45 minutes
Grade 5	45-60 minutes

Parent Responsibilities:

- 1. Provide a quiet and well-lit work area with needed homework materials.
- 2. Schedule a regular time for completion of homework.
- 3. Insist that homework be completed and returned to school on its due date.
- 4. Praise your child for his/her efforts. Display his/her papers and artwork at home. Communicate a positive school attitude.
- Assist your child with assignments only if necessary. Do not over-supervise.
- 6. Consult your child's teacher when necessary.
- Enhance your child's learning through enriching and related experiences such as trips to the library and family field trips.
- 8. Read for pleasure with your child.

ENGLISH LANGUAGE ARTS (ELA)

New York State English Language Arts Standards

Standard 1: Language for Information and Understanding

Students will listen, speak, read, and write for information and understanding. As listeners and readers, students will collect data, facts, and readers, students will collect data, lacts, and ideas; discover relationships, concepts, and generalizations; and use knowledge generated from oral, written, and electronically produced texts. As speakers and writers, they will use oral and written language that follows the accepted conventions of the English language to acquire, interpret, apply and transmit information.

Standard 2:

Language for Literacy Response and Expression Students will read and listen to oral, written and electronically produced texts and performances from American and World literature; relate text and performances to their own lives; and develop an understanding of the diverse social, historical, and cultural dimensions the texts and performances represent. As speakers and writers, students will use oral and written language that follows the accepted conventions of the English language for self-expression and artistic creation.

Standard 3:

Language for Critical Analysis and Evaluation
Students will listen, speak, read and write for
critical analysis and evaluation. As listeners and
readers, students will analyze experiences, ideas,
information and issues presented by others, using
a variety of established criteria. As speakers and
writers they will use oral and written language that
follows the accepted conventions of the English
language to present from a variety of language to present, from a variety of perspectives, their opinions and judgments on experiences, ideas, information and issues.

Standard 4:

Language for Social Interaction
Students will listen, speak, read and write for social interaction. Students will use oral and written language that follows the accepted conventions of the English language for effective social communication with a wide variety of people. As readers and listeners, they will use the social communication of others to enrich their understanding of people and their views.

SOCIAL STUDIES K-5

Grade 3: Communities Around the World—Learning About People and Places

- In the grade 3 social studies program, students study about communities throughout the world.
- The five social studies standards form the basis for this investigation as students learn about the social, political, geographic, economic, and historic characteristics of different world communities.
- Students learn about communities that reflect the diversity of the world's peoples and cultures.
- They study Western and non-Western examples from a variety of geographic areas.
- Students also begin to learn about historic chronology by placing important events on timelines.
- Students locate world communities and learn how different communities meet their basic needs and wants.
- Students begin to compare the roles of citizenship and the kinds of governments found in various world communities.

Content Understandings

- Cultures and civilizations
- Communities around the world
- The location of the world community
- Physical, human and cultural characteristics of world communities
- People depending on and modifying the physical environment
- Challenge of meeting needs and wants in world community
- Economic decision-making in world community
- Symbols of citizenship in world community
- People making and changing rules and laws
- Government around the world

SOCIAL STUDIES K-5

SKILLS K-5

- Getting informed
- Using information
- Presenting information
- Participating in Interpersonal and Group Relations

PROBLEM SOLVING SKILLS K-5

- The student will be able to define or identify a problem.
- The student will be able to hypothesize, investigate data and solve problems which are either presented by the teacher or which are identified by the student.
- The student will be able to work with others engaged in problem-finding/solving skills and recognize and accommodate value conflicts in the decision making process.
- The student will be able to communicate orally, visually, and/or in writing the results of the problem finding/solving effort.

CONCEPTS K-5

Change Civic Values
Citizenship Culture
Empathy Environment
Identity Interdependence
Nation-State Needs and Wants
Places and Region Technology

SUGGESTIONS FOR PARENTS

- Make a family tree and talk about family history.
- Visit in your local community.
- Talk to your child at his/her level of understanding about world events.
- Read stories together about famous people.
- Talk about the history of the holidays: Fourth of July, Veterans Day, Patriots Day, etc.

THIRD GRADE ELA DESCRIPTORS READING

THE STUDENT:

Students in third grade use cuing systems to problem solve text difficulties independently. They can recognize most words within text and automatically monitor and self-correct the meaning. Students are reading with expression and confidence. They can summarize the text providing details and a complete understanding of the material. Students in third grade read medium level chapter books, content area books and poetry.

Third grade students are showing independence as readers. They are able to monitor their own reading, self-correct regularly and use expression when reading aloud. The books third graders are reading consist primarily of print with illustrations providing minimal support. They are able to identify the events in sequential order when summarizing the text and they are developing confidence as readers.

THE PROGRAM:

Through the implementation of the literature-based reading program, Orton-Gillingham instruction, and the process approach to writing, Lake Shore students will become competent readers, writers, listeners and speakers.

A balanced literacy approach builds a connection between reading and writing. Reading includes: phonemic awareness, phonics, fluency, vocabulary, and comprehension. Writing is taught using a process approach which emphasizes content, as well as mechanics and spelling. Experiences in the ELA program will help students to listen for and retain information, as well as to speak clearly and confidently in large and small group setting.

THIRD GRADE ELA-READING OBJECTIVES

Orton-Gillingham

Students receive multi-sensory reading and spelling instruction in large groups. Focus begins with decoding/ encoding skills and continues to build vocabulary and comprehension skills. All students are given benchmark assessments three times per year to determine which students are at risk and in need of Academic Intervention Services (AIS).

The Third Grader will be able to....

- Read aloud with fluency and comprehension of any text that is appropriately designed for grade level.
- Use letter-sound correspondence knowledge and structural analysis to decode words.
- Read and comprehend both fiction and nonfiction that is approprately designed for grade level.
- Read longer fictional selections and chapter books independently.
- Take part in creative responses to texts such as dramatizations, oral presentations, fantasy play, etc.
- Point to or clearly identify specific words or wordings that are causing comprehension difficulties.
- Interpret fiction, discuss underlying theme or message.
- Use information and reasoning to examine bases of hypothesis and opinions.
- Infer word meaning from taught roots, prefixes, and suffixes.
- Independently review work for spelling, mechanics, and presentation.

SOCIAL STUDIES K-5

In Social Studies, students confront questions about the wonder and excitement of human kind in the world. Social Studies help students understand their roots, see their connections to the past, comprehend their context, recognize the commonality of people across time, appreciate the delicate balance of rights and responsibilities in an open society, and develop the habits of thoughtful analysis and reflective thinking. In helping students answer these questions, social studies engage students in the study of history, geography, economics, government and civics. Instruction draws on other disciplines such as anthropology, sociology, political science, psychology, religion, law, archaeology, philosophy, art, literature, other humanities subjects and the sciences.

Social studies gives students the knowledge, intellectual skills, civic understanding, and dispositions towards democratic values that are necessary to function effectively in American society. Ultimately, social studies instruction helps students assume their role as responsible citizens in America's constitutional democracy and as active contributors to a society that is increasingly diverse and interdependent with other nations of the world. Social studies instruction provides students with the background to conduct research in order to cast informed votes, with the skills to place conflicting ideas in context, and with the wisdom to make good judgments in dealing with the tensions inherent in society such as the enduring struggle to find the balance between protecting the rights of the individual and promoting the common ground.

SOCIAL STUDIES K-5

Standard 1: History of the United States and New York

Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in the history of the United States and New York.

Standard 2: World History

Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in world history and examine the broad sweep of history from a variety of perspectives.

Standard 3: **Geography**

Students will use a variety of intellectual skills to demonstrate their understanding of the geography of the interdependent world in which we live—local, national, and global— including the distribution of people, places, and environments over the Earth's surface.

Standard 4: Economics

Students will use a variety of intellectual skills to demonstrate their understanding of how the United States and other societies develop economic systems and associated institutions to allocate scarce resources, how major decision-making units function in the United States and other national economies, and how an economy solves the scarcity problem through market and non-market mechanisms.

Standard 5: Civics, Citizenship, and Government

Students will use a variety of intellectual skills to demonstrate their understanding of the necessity for established governments; the governmental system of the United States and other nations; the United States Constitution; the basic civil values of American constitutional democracy; and the roles, rights, and responsibilities of citizenship, includes avenues of participation.



New York State recommends that students read a minimum of 25 books per year across all content areas and standards.

The students read for:

- Information and understanding
- Literary response and expression
- Critical analysis and evaluation
- Social interaction

The following recommended reading list is a sampling of the typical books that may be selected for this grade level.

Children, with support from teachers and parents, are expected to read 25 age-appropriate books. The selections address many interests and maturity levels. When selecting a book, attention should be given to personal preference and needs.

Students should use many strategies while reading. They should systematically monitor their personal reading by asking themselves questions such as "Does it sound right?", "Does it make sense?" and "Does it look right?" The primary goal should always be to read for understanding and enjoyment.

The single most important activity for building the knowledge required for success in reading is reading...Jim Trelease

THIRD GRADE

RECOMMENDED READING LIST

(WITH AUTHOR'S LAST NAME)

DePaola, Tomie—ALL TITLES Simon. Sevmour—ALL TITLES Polacco. Patricia—ALL TITLES Cleary, Beverly—RAMONA BOOKS Stine, R. L.—GOOSEBUMP SERIES McDonald, Megan—JUDY MOODY SERIES Warner, Gertrude Chandler—THE BOXCAR CHILDREN BOOKS Sharmat, Mariorie Weinman—NATE THE GREAT SERIES Lester, Helen—IT WASN'T MY FAULT Napoli, Donna Jo—JIMMY, THE PICKPOCKET OF THE PALACE Allard, Harry—MISS NELSON BOOKS Blume, Judy—THE PAIN AND THE GREAT ONE Blume, Judy—DOUBLE FUDGE Robinson, Barbara—THE BEST CHRISTMAS PAGEANT EVER Martin. Rafe—ROUGH FACED GIRL Steptoe, John—MUFAROS BEAUTIFUL DAUGHTERS Prelutski, Jack—THE NEW KID ON THE BLOCK Prelutski, Jack—FROG WORE RED SUSPENDERS Cleary, Beverly—THE MOUSE AND THE MOTORCYCLE Cameron, Ann— STORIES JULIAN TOLD Steig, William—SYLVESTER AND THE MAGIC PEBBLE Herman, Gail—CAL RIPKEN JR: PLAY BALL Scieszka, Jon-THE TRUE STORY OF THE 3 LITTLE PIGS LON PO PO: A RED RIDING HOOD STORY FROM CHINA (Young) STREGA NONA (DePaola) IT WASN'T MY FAULT (Lester) PERRY WINKLE'S MAGIC MATCH (Madsen) MR. BROWN CAN MOO! CAN YOU? (Seuss) JIMMY, THE PICKPOCKET OF THE PALACE (Napoli) PEANUT BUTTER GANG (Siracusa) MISS NELSON SERIES (Allad) MADELINE (Bemelmans) WALTER THE BAKER (Carle) THE PAIN AND THE GREAT ONE (Blume)

CAM JANSON (Alder)

THIRD GRADE SCIENCE

The Third Grader will be able to....

- Classify animals and plants.
- Identify parts of plants and animals.
- Discover how plants and animals differ from one another.



- Recognize the importance of food, water and shelter for human and animal survival.
- Discover how animals depend on plants and other animals.
- Recognize the life cycle of plants and animals.
- Understand the functions of the body system.
- Discover the three states of matter.
- Explore properties of objects.
- Discover the functions of simple machines.
- ♦ Observe and record weather changes
- Compare the season and how they affect the daily lives of plants and animals.
- Determine how changes in weather affect daily life.
- Explore and investigate science through the use of 4 kits. They include Butterflies, Powders and Crystals, Sound and Buoyancy. This gives students a hands-on approach to Science in which they enjoys and learn.

K-5 SCIENCE AND HEALTH

PHYSICAL SETTING

- Understanding seasonal changes.
- Understanding the water cycle, weather, erosion, and extreme natural events.
- Describe, compare, and observe the properties of matter (color, hardness, odor, sound, taste, length, width, volume, size, shape, mass, temperature, texture and reflectiveness).
- Understand that energy (heat, chemical, light) exists in many forms.
- Describe chemical and physical changes in the states of matter (solid, liquid, gas).
- Describe the effects of common forces, (push & pull) of objects such as magnetism, gravity and mechanical forces.

HEALTH

- Identify how the body systems work and interrelate in pattern of growth and development.
- Explain how and why we should eat nutritionally balanced meals.
- Identify the harmful effects of alcohol, tobacco and other drugs.
- Identify common diseases and disorders and how they may be prevented and treated.

Grade K: Overview of the five senses, the function and development of teeth and oral hygiene

Grade 1: Senses—taste, touch and smell

Grade 2: Senses—sight and sound

Grade 3: Muscular and skeletal system

Grade 4: Digestion and nutrition

Grade 5: Respiratory system

THIRD GRADE RECOMMENDED READING LIST (WITH AUTHOR'S LAST NAME)

POLK STREET (Cliff)
PIPPE LONGSTOCKING (Lindgen)
THE BEST CHRISTMAS PAGEANT EVER (Robinson)
GOOSEBERRY PARK (Rybant)
THE NEW KID ON THE BLOCK (Prelutsky)
THE VELVETEEN RABBIT (Williams)
Dadey, Debbie—BAILEY SCHOOL KIDS SERIES
Blume, Judy—FRECKLE JUICE
Adler, David A. - CAM JANSON
Gleitzman, Morris—TOAD RAGE
Kellogg, Steven—PAUL BUNYAN
Roy, Ron—A TO Z MYSTERIES SERIES
Fritz, Jean—WHAT'S THE BIG IDEA BEN FRANKLIN?
White, E. B.—CHARLOTTE'S WEB
Schwartz, David—IF YOU MADE A MILLION



ELA—READING SUGGESTIONS FOR PARENTS

Making Reading a Family Affair

Hints For Parents

In addition to daily homework assignments, be sure to set aside some time each night for reading. A book may be read in one evening or over a period of several weeks.

Ask your children to read aloud a portion of the book that they like best. Praise them for trying and doing a good job. This will help with their self confidence in order to build comprehension and personalize their understanding by asking them what they enjoyed about what they read. Encourage them to describe the best part of the story.

Give children an opportunity to make use of the local library. Help them find the appropriate section for their reading level. Teach older children to use the card catalog (or computer) to locate books. Check out library books on a regular basis.

Remember to set an example for your children. Take time to read every day. When children see their parents reading for pleasure, they are motivated to do the same. Share what you have read with your children.

Reading can open doors to knowledge. It leads to a world of information, adventure, mystery, laughter and love. Children will seek to enter this world with encouragement from home and school.

Happy Reading!

K-5 SCIENCE And Health

To meet Common Core State Standards in Science, the Elementary Science Program at Lake Shore stresses learning that is hands-on, process-oriented and inquiry-based. It encourages students to think rather than just memorize. Four hands-on kits are used: buoyancy, powders and crystals, sound and butterflies.

PROCESS SKILLS

- Explain verbally, graphically or in writing the relationship observed in the physical and living environments.
- Use appropriate scientific tools for measuring, observing, describing, classifying and sequencing to solve problems about the natural world.
- Ask "why" questions to seek a greater understanding of objects and events.
- Develop ideas for proposed solutions.
- Suggest ways objects can be improved.
- Generate possible solutions by applying age-appropriate math and science skills.
- Recognize and analyze trends.

LIVING ENVIRONMENT

- Describe the characteristics of living and non-living things.
- Describe the life process common to all living things.
- Recognize that there is a genetic continuity between all living things.
- Describe the structure of plants and animals.
- Understand the life cycle of plants and animals.
- Describe the life functions of common living things.
- Understand the interdependence of plants and animals.
- Recognize that human decisions have an impact on plants and animals.

THIRD GRADE MATHEMATICS

Suggestions for Parents

- Students are still expected to master the basic skills and facts. Help your child memorize the basic facts (addition, subtraction, multiplication and division).
- Review your childs homework daily.
- The grocery shopping experience provides many opportunities for learning such as:
 - -weighing produce
 - -using money—up to one dollar
- Cooking can be a learning experience that involves measurements, fractions, time and temperature.
- Younger children should be encouraged to solve picture puzzles to develop spatial relationship and problem solving skills.
- ♦ Encourage problem solving



THIRD GRADE ELA-WRITING DESCRIPTORS



New York State suggests that students write 1000 words per month.

Third grade writers use a variety of sentence patterns

and descriptive words while establishing a main idea supported by some details. Their sentences are developed in sequential order to develop a theme. As the year progresses, third grade students write with a clear main idea that is supported by ample details. Their writing is easy to follow and understand with a definite beginning, middle and end centered around a theme. Students use conventions of standard written English correctly and consistently.

The Third Grader will be able to....

- Summarize major points from fiction and nonfiction texts.
- Interpret nonfiction, distinguish between cause and effect, fact and opinion, main idea and supporting details.
- Correctly spell previously studied words and spelling patterns in own writing.
- With some guidance, use all aspects of the writing process in producing own compositions and reports.
- Present and discusses own writing with other students and respond helpfully to other students compositions.
- ◆ Independently review work for spelling, mechanics, and presentation.
- Produce a variety of written work, (e.g. literature response, reports, published books, semantic maps) in a variety of formats including multimedia forms.

THIRD GRADE ELA-LISTENING/SPEAKING DESCRIPTORS

Listening

Third graders will focus their attention for a significant period of time. They take in important information and distinguish between what is relevant and what is not. The students display an understanding of the topic by their reaction to what others say. They are aware of and understand others point of view.

The Third Grader will be able to....

- Interpret nonfiction, distinguishes cause and effect, fact and opinion, main idea and supporting details.
- Listen to a poem for descriptive words, feeling, and comparisons.
- Listen to and compare two eyewitness accounts of a situation.
- Recognize author's viewpoints.

◆ Speaking

When speaking, the third grader responds consistently to directions or questions with relevant information. The student contributes to class discussions with appropriate comments and questions, taking turns within a conversation. They communicate main ideas and some supporting details effectively using descriptive vocabulary. They convey the meaning of ideas by coordinating facial and body gestures with tone of voice.

The Third Grader will be able to....

- Summarize major points from fiction and nonfiction texts.
- Interpret fiction, discuss underlying theme or message.
- Ask how, why, and what-if questions in interpreting nonfiction texts.
- Interpret nonfiction, distinguish between cause and effect, fact and opinion, main idea and supporting details.
- Present and discuss own writing with other students and respond helpfully to other students compositions.

Suggestions for Parents:

- Parents should model proper listening skills.
- Parents should model correct grammar and pronunciation of words.

THIRD GRADE MATHEMATICS

The Third Grader will be able to....

- Use models to show division.
- Relate multiplication to divide.
- Use 2, 3, 4, and 5 as divisors.
- ◆ Use 6, 7, 8, and 9 as divisors.
- Use fact families to relate multiplication and division.
- Explore remainders with 1-digit divisors.
- Identify two- and three-dimensional shapes.
- Identify lines, line segments, rays and right angles.
- Identify congruent, similar, and symmetrical figures.
- Find perimeter, area, and volume.
- Identify and write fractions, mixed numbers, and equivalent fractions for parts of regions and sets.
- Compare fractions; find fractional parts of sets.
- Write decimals through hundredths for a given fraction (includes mixed numbers).
- Add and subtract decimals.
- Multiply and divide with tens and hundreds.
- Estimate products.
- Multiply two- and three-digit numbers by one-digit numbers.
- ◆ Divide two-digit numbers by one-digit numbers, with and without remainders.
- ♦ Analyze and solve problems using skills and strategies.
- puzzles to develop spatial relationship and problem solving skills.



THIRD GRADE MATHEMATICS

The following learning objectives are covered at the Third Grade level at Lake Shore Central Schools

The Third Grader will be able to...

- Read and write whole numbers through hundred thousands and ordinal numbers through ninety-nine.
- Round to the nearest ten or hundred.
- Compare and order whole numbers through hundred thousands.
- Determine the value or compare sets of coins and bills; make change up to \$10.00.
- Use basic facts to add sums to 18.
- Find missing addends; add three numbers.
- Subtract from 18 and less using basic facts.
- Relate addition and subtraction using fact families.
- Estimate sums and differences.
- ◆ Add two-, three-, and four-digit numbers, including money.
- Tell and use time, including the calendar.
- Estimate time; determine elapsed time.
- Estimate, measure, and convert customary units of length, capacity, weight, and temperature.
- Estimate, measure, and convert metric units of length, capacity, weight, and temperature.
- Relate arrays and repeated addition to multiplication.
- Use 0, 1, 2, 3, 4, and 5 as factors.
- Use arrays to show multiplication.
- Use 3, 4, 6, 7, 8, and 9 as factors.
- Find missing factors; multiply three numbers.
- Read and make bar graphs and pictographs.
- Use ordered pairs to locate points on a grid.
- Determine the probability of an event.
- ♦ Identify odd/even numbers

MATHEMATICS, SCIENCE & TECHNOLOGY (MST)

Common Core State Standards for Mathematics, Science and Technology

Standard 1: Analysis, Inquiry and Design

Students will use mathematical analysis, scientific inquiry, and engineering design, as appropriate, to pose questions, seek answers, and develop solutions.

Standard 2: Information Systems

Students will access, generate, process, and transfer information using appropriate technologies.

Standard 3: Mathematics

Students will understand the concepts of and become proficient with the skills of mathematics; communicate and reason mathematically; become problem solvers by using appropriate tools and strategies. Through the integrated study of number sense and operations, algebra, geometry, measurement, statistics and probability.

Standard 4: Science

Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.

Standard 5: Technology

Students will apply technological knowledge and skills to design, construct, use and evaluate, products and systems to satisfy human environmental needs.

Standard 6: Interconnectedness Common Themes

Students will understand the relationship and common themes that connect mathematics, science, and technology and apply the themes to these other areas of learning.

Standard 7: Interdisciplinary Problem Solving

Students will apply the knowledge and thinking skills of mathematics, science, and technology to address real-life problems and make informed decisions.

THIRD GRADE MST #3

All mathematics education within the Lake Shore Central Schools is based on Standard 3 from the Common Core State Standards for Mathematics, Science and Technology.

Mathematics learning and testing are dependent upon three components of function in our world today. The Components include the ability to understand and become proficient with math skills, to be able to communicate mathematically, and to problem solve using appropriate tools and strategies. The goals of these components are broken down into two strands: Process Strands and Content Strands.

Process Strands:

- Problem Solving
- Reasoning and Proof
- ♦ Communication
- Connections
- ♦ Representation

Content Strands

- ♦ Number Sense and Operations
 - -Skip count by 25's, 50's, 100's to 1,000.
 - -Read and write whole numbers to 1.000.
 - -Compare and order numbers to 1000.
 - -Understand place value up to 1,000.
 - -Use a variety of strategies to write three-digit numbers.
 - -Know the commutative property of addition and multiplication.
 - -Use 1 as the identity element for multiplication.
 - -Use the zero property of multiplication.
 - -Know the associative property of addition.
 - -Develop an understanding of fractions as part of a whole.
 - -Know the meaning of numerator and denominator.
 - -Recognize fractional numbers as equal parts of a whole.
 - -Explore equivalent fractions (1/2, 1/3, 1/4).
 - -Compare and order unit fractions (1/2, 1/3, 1/4) and find their locations on a number line.
 - -Develop an understanding of the properties of odd/even numbers as a result of addition or subtraction.
 - -Add and subtract 3-digit numbers.
 - -Know single-digit multiplication and division facts.
 - -Solve multiplication problems with factors up to 12 x 12.
 - -Use the area model, tables, patterns, arrays, and doubling to Provide meaning for multiplication.

THIRD GRADE MST #3

- -Use tables, patterns, halving, and manipulatives to provide meaning for division.
- -Know strategies to select correct operational method in problem solving.
- -Estimate numbers up to 500 and know when it is appropriate to estimate.
- -Check reasonableness of an answer by using estimation.

♦ Algebra Strand

- -Use the symbols <,> = to compare whole numbers and unit fractions.
- -Describe and extend numeric(+,-) and geometric patterns.

Geometry Strand

- -Define circle, triangle, square, rectangle, rhombus, trapezoid, and hexagon.
- -Identify congruent and similar figures.
- -Know cube, cylinder, sphere, prism, and cone.
- -Identify the faces on a three dimensional shape as two dimensional shapes.
- -Identify and construct lines of symmetry.

Measurement Strand

- -Select and use ruler/yardstick to measure to the nearest whole and 1/2 inches, whole feet, and whole yards.
- -Measure objects, using ounces and pounds.
- -Recognize that capacity can be measured.
- -Compare capacity.
- -Measure capacity, using cups, pints, quarts, and gallons.
- -Count and represent combined coins and dollar, using currency symbols (\$0.00).
- -Relate unit fractions to the face of the clock; Whole = 60 minutes, 1/2 = 30 minutes, and 1/4 = 15 minutes.
- -Tell time to the minute, using digital and analog clocks.
- -Use standard (customary) and non-standard units to estimate measurements

♦ Statistics and Probability Strand

- -Formulate questions about themselves and their surroundings.
- -Collect data using observation and surveys, and record appropriately.
- -Construct a frequency table to represent a collection of data.
- -Identify the parts of pictographs and bar graphs.
- -Display data in pictographs and bar graphs.
- -State the relationship between pictographs and bar graphs.
- -Read and interpret data in bar graphs and pictographs.
- -Formulate conclusions and make predictions from graphs.