

Lake Shore Public Schools
28850 Harper
St. Clair Shores, MI 48081

**A
PARENT'S GUIDE
TO
MATHEMATICS/ENGLISH LANGUAGE ARTS
GRADE LEVEL CONTENT EXPECTATIONS**

**WHAT YOUR CHILD NEEDS
TO KNOW BY THE END OF**

FIRST GRADE

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Welcome to Our School

This school year promises to be an exciting time for your child, filled with learning, discovery, and growth. It is also a time to share a new guide the Michigan Department of Education has developed for you, outlining the types of literacy and mathematics skills students should know and be able to do at the end of each grade.

Please feel free to share this guide with your family and friends. Use it when you talk with your child's teacher. Ask what *you* can do to support learning in the classroom and reinforce learning at home. You can find more ideas and tools to help you stay involved in your child's education at www.michigan.gov/mde.

We value and share your commitment to your child's education. We look forward to working together to help your child achieve and succeed.

Elementary Principals

George Lewis, Masonic Heights Elementary
Martha Kliebert, James Rodgers Elementary
Elizabeth Netschke, Violet Elementary

A Parent Guide to Grade Level Content Expectations

Michigan Sets High Academic Standards –for ALL

This booklet is a part of Michigan’s Mathematics and English Language Arts Grade Level Content Expectations (GLCE). It is just one in a series of tools available for schools and families. The Michigan Department of Education (MDE) provides similar booklets for families of children in K-5.

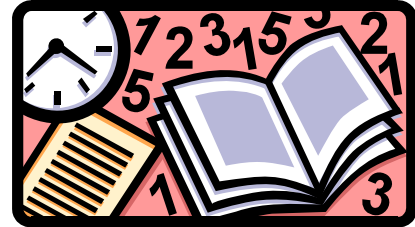
Teacher versions of the Grade Level Content Expectations are finished for grades kindergarten through fifth. They state in clear and measurable terms what students in each grade are expected to know and be able to do. They also guide the design of the state’s grade level MEAP tests required in the No Child Left Behind Act (NCLB) legislation.

Educators and classroom teachers from Michigan school districts have been involved in the development and/or review of Michigan’s GLCE. The expectations were designed to ensure that students receive seamless instruction, from one grade to the next, leaving no gaps in any child’s education. More importantly, they set high expectations in literacy and mathematics so we can better prepare all K-12 students for the challenges they will face in a global 21st century.

To learn more about the Michigan Curriculum Framework, visit www.michigan.gov/mde and click on “**K-12 Curriculum.**”

First Grade Mathematics is the science of patterns and relationships. It is the language and logic of our technological world. Mathematical power is the ability to explore, to imagine, to reason logically and to use a variety of mathematical methods to solve problems - all important tools for children's futures. A mathematically powerful person should be able to:

- reason mathematically
- communicate mathematically
- solve problems using mathematics
- make connections within mathematics and between mathematics and other fields



Michigan's **Mathematics Grade Level Content**

Expectations (GLCE) are organized into five strands:

- Number and Operations
- Algebra
- Geometry
- Measurement
- Data and Probability

In the first grade, children are asked to strengthen their **counting** knowledge, and to explore addition and subtraction using concrete materials and situations. Students will begin to measure time and money, geometry concepts are based on children's experiences in the real world.

Glossary Terms

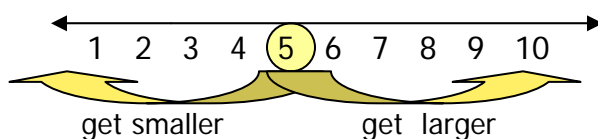
Words that have asterisks (*) are defined in the Glossary located at the end of the math section.

By the end of first grade, your child should know and be able to do the following:

Number and Operations

Count, Write, and Order Numbers

- Count to 110 by 1s, 2s, 5s, and 10s, starting from any number. Count to 500 by 100s and 10s.
- Use numbers to show position in a sequence. (1st, 2nd, 3rd)
- Read and write numbers to 110 and match them to the same number of objects.
- Put numbers in order to 110. Compare numbers using the phrases same as, more than, greater than, fewer than; use the = symbol.
- Arrange small sets of numbers in increasing or decreasing order. (Write the following from smallest to largest: 21, 16, 35, 8)
- Identify one more than, one less than, 10 more than and 10 less than for any number up to 100.
- When using a number line, know that a number to the left of a number is smaller and a number to the right of a number is larger. Example:



- Count backward by 1s starting from any number between 1 and 100.

- Explore place value by bundling (straws) into groups of tens and ones (24 is made of 2 tens and 4 ones or 24 ones).

Add and Subtract Numbers

- List number facts for 2 through 10.
Example: Here are different facts to make 5.
 $1+4=5$ $2+3=5$ $3+2=5$ $4+1=5$ $5+0=5$
- Compare the difference of objects in two groups.
- Add and subtract numbers less than 30. Be able to solve and explain story problems using objects, pictures and/or numerals.
- Understand that subtraction is connected to addition.
Example: Because $3+5=8$, we know that $8-3=5$.
- Know all the addition facts up to $10+10$ and solve the related subtraction facts.
- Find the missing numbers for addition and subtraction facts.
Example: $2+\underline{\quad}=6$ $6-\underline{\quad}=2$
- Add three one-digit numbers. Example: $1+2+4=\underline{\quad}$
- Add and subtract in his/her head (mental math) when the problem involves a 2-digit number and a one-digit number without regrouping or carrying. Example: $22+2=\underline{\quad}$



Measurement (*)

- Measure the lengths of objects in non-standard units Example: Use a pencil as a ruler to get pencil lengths of objects, or connected paper clips as a ruler to get paperclip lengths of objects.
- Compare measured lengths using the words shorter, shortest, longer, longest, taller, tallest.

Explore Concepts of Time

Tell Time

- Tell time on a twelve-hour clock face to the hour and half hour.



Work with Money

- Name different coins and bills.
- Match one coin or bill to another way to form that same amount of money. Example: 1 quarter = 2 dimes and 1 nickel.
- Tell the amount of money they see/have: using cents up to \$1.00 and using dollars up to \$100.00
- Use the symbols \$ and ¢.
- Add and subtract money in dollars only or in cents only.



Solve Problems

- Solve one-step word problems using addition and subtraction, money and time, including how much more or less, without mixing units. Example: $\$1.00 + \$2.00 = \$3.00$

Geometry (*)

- Create and describe shapes.
- Describe common two-dimensional and three-dimensional shapes. Example: the small blue triangle, the large silver can.
- Describe the position of objects using words such as above, below, behind, in front of.
- Create and describe patterns involving geometric objects.
- Create and describe patterns, such as repeating patterns, and grown patterns using number, shape and size.
Example: What would come next in these patterns?

Shapes



Size



- Tell the difference between a repeating pattern and a growing pattern.
- Predict the next element in a simple repeating pattern.
- Describe ways to get to the next element in simple repeating patterns.

Data and Probability

Data analysis and statistics (*)

Use Pictographs (*)

- Collect and organize data to use in pictographs.
- Read and interpret pictographs.
- Make pictographs of given data using both horizontal and vertical graphs. Example: Which child has the most children that live on his or her block? Each ☺ = 1 child



James	☺ ☺ ☺ ☺
Kylia	☺ ☺
Bob	☺ ☺ ☺ ☺ ☺ ☺ ☺

Ways to Encourage Your Child

Great work!
I knew you could do it!
You are getting better every day!
Keep on trying.



Glossary Page

- **data analysis and statistics** - interpret information and see relationships, by using tables, graphs and charts.
- **fluently** - the ability to calculate numbers with ease and accuracy.
- **geometry** - the area of mathematics that involves shape, size, space, position, direction, and movement. It describes and classifies the physical world in which we live.
- **measurement** - finding the length, height, and weight of an object using units like inches, feet, meters, centimeters, and pounds. Time is measured using hours, minutes and seconds.
- **perimeter** - the distance around a two-dimensional shape found by adding together the measured length of all the sides of the shape.
- **pictographs** - a graph constructed with pictures or icons. Pictures are used to represent numbers.

Example: Each ☺ = 1 cookie



First Grade English Language Arts (ELA) is more than just reading and writing. It includes skills like speaking, listening, and viewing as well. ELA offers us a way to communicate. Through ELA, your child can apply what s/he learns to solve real problems at home, at school and in the community.

Glossary Terms

Words that have asterisks (*) are defined in the Glossary located at the end of this section.

By the end of first grade, your child should know and be able to do the following :

Reading

Word Recognition & Word Study

Phonemic Awareness (*)

- Change the sounds of words by changing letters that can make new words. Example: "hat" becomes "_at".
- Recognize that words are made of sounds blended together and that words have meaning.



Phonics (*)

- Use letter-sound clues to recognize a few one-syllable words, blends and consonant diagraphs (*) such as letter-sounds, word chunks, word families and diagraphs th, ch, sh.

Word Recognition

- Easily recognize familiar first grade words they see in print.
- Automatically recognize a growing number of basic sight vocabulary words. (Obtain a list from your child's teacher.)
- Be able to use prefixes, suffixes (*) and context clues (*) to read and understand unknown words. (**untie**, **replay**, **careless**, **playful**)

Vocabulary

- Know the meaning of words he/she hear and see often. (Ask the teacher for a grade-level vocabulary list.)
- Use strategies to make sure the words used in texts sound right and make sense.
- Use strategies to help figure out the meaning of words that describe objects, actions, etc, when they appear in a story.

Fluency (*)

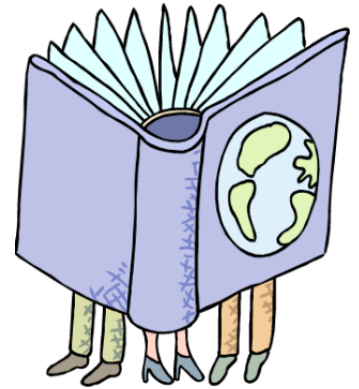
- Automatically read words first graders see often, whether they appear alone or in a sentence.
- Read aloud using expression reacting to the periods and question marks.
- Independently read aloud new text with 95% accuracy in books matched to their ability.

Narrative Text (Fiction)

- Recognize how various cultures are represented in high-quality literature.
- Identify and describe a variety of genre including realistic fiction, fantasy and folktales.
- Identify a story's problem/solution, order of events, and beginning/middle/end.
- Identify how authors/artists use:
 - Pictures to support ideas
 - Words like before, after, now, etc., to show the order of events
- Show through their conversations, drawings, or writing that they know how two or more stories are connected.

Informational Text (Non-fiction)

- Name and describe different types of informational text, such
- as how-to books, science and social studies magazines.
- Discuss patterns such as the order in which things happen or ways they are described.
- Explain how authors and illustrators use features like headings, titles, captions and pictures to help readers understand ideas.
- Show through drawings, writing or conversations how two or more informational texts are connected.



Comprehension

- Use their own experiences to help understand new ideas and connect to ideas
- in texts.
- Retell up to three events, in order, from a familiar story.
- Connect and compare a story to their lives as well as compare a story other stories.
- Compare and contrast relationships among characters, events
- and key ideas.
- Use drawings to show key ideas and details in stories.
- Ask questions as they read.
- Remember and use what has been read from other subject
- areas.

Metacognition (*)

- Know when to ask questions when reading familiar text
- Know when he/she does or does not understand the texts
- Use simple strategies to increase their understanding of texts.
Example: Reread the story.
- Use book covers and/or pictures to predict what might happen next.
- Talk about the author's purpose.
- Begin to sort and put information in order with the help of the teacher.
- Discuss with teacher which comprehension strategies worked.



Critical Standards (*)

- Decide and discuss what qualities make stories good.
- With help from the teacher, begin to know how to measure the quality of their own work and the work of others.

Reading Attitude

- Be excited about reading and learning how to read.
- Choose to read and write on their own during free time in school and at home.

Writing

Writing Genre (*)

- Write a brief personal story using pictures, words, and/or sentences.
- Write a short informational piece that can include headings, titles, or pictures to help readers understand their ideas.
- Help with a class research project by adding key information gathered from materials supplied by the teacher.



Writing Process

- With help from the teacher, think about how those who will read the paper will react as they plan to write.
- Write three or more connected sentences using first grade punctuation and spelling.
- Use word lists to try to correct their spelling.
- Make changes to their own writing by reading it to a friend, and asking for ideas to improve it to make the meaning more clear.
- Use book language when writing stories. ("Once upon a time...")

Personal Style

- Develop a personal style when speaking, writing or acting out messages. Example: may express feelings, use details and show examples.

Grammar and Usage

- Write with complete sentences beginning with a capital letter and ending with a period, question mark or exclamation point.

Spelling

- Correctly spell one-syllable words they see often from common word families.
- Use beginning and simple ending sounds, or words lists provided by the teacher to figure out how to spell more words.

Handwriting

- Form upper and lower case letters neatly, so that people can read them.

Writing Attitude

- Be eager to write and learn to write.



Speaking

Conventions (*)

- Use singular and plural nouns (boy/boys, mouse/mice) and contractions. (isn't, can't, won't)
- Use singular possessive pronouns. (my, mine, hers, his)
- Use words to show relationships of events in sentences or stories (if, because and after).
- Use words endings while speaking (-s, -es, -ed, -ing or -er).
- Use language to communicate with all kinds of people for all kinds of reasons. (express wants and needs, solve problems)
- Be able to speak out loud to the teacher:
 - stand straight and tall
 - make eye contact
 - use illustrations
- Make presentations using Standard English (*) or their version of Standard English if they are in the process of learning English.
- Give examples of how language in story books is used differently than in real life.



Spoken Discourse (*)

- Stay on topic while responding to comments and questions from others during conversations.
- Briefly tell or retell familiar stories in an organized way that makes sense from the beginning to end.
- Be able to talk about the meanings of and the connections between two or more stories.
- Plan and deliver simple presentations or reports that are organized and include several facts and details.

Listening and Viewing

Conventions (*)

- Give, restate and follow two-step directions.
- Ask good questions during a report or presentation.
- While in conversations, use eye contact and pay attention.
- While in large or small groups pay attention and listen carefully to others.
- Be able to tell who is giving a message and who is receiving the message.

Response

- Choose, listen to or view and discuss a variety of good books, both classic and recently written.
- Listen to or view and discuss a variety of genres. (fairy tales, poetry, stories)
- Make connections between two or more stories as they think about them They can do this by discussing the stories, drawing pictures and/or writing.

Glossary Terms



- **consonant diagraphs** - two consonants together that make one sound. Examples: ch, sh, th.
- **context clues** - hints from the surrounding words, phrases or sentences about the unknown word.
- **conventions** - the rules about how words and language works.
- **critical standards** - the high level of quality students must be able to recognize, to determine if their work reaches that expectation.
- **fluency** - the ability to recognize letters or read words with speed and accuracy.
- **genre** - a category used to describe different kinds of texts, such as poems, fairy tales, fables, etc.
- **metacognition** - the process of thinking about one's own thinking. Example: Being able to monitor when you know or don't understand a lesson.
- **phonics** - the predictable relationship between the sounds of spoken language and the letters of the alphabet that represent those sounds in written language.
- **phonemic awareness** - the ability to notice, think about and work with the individual sounds in spoken words.
- **Prefixes/suffixes** – word parts known as affixes. These parts are added to words. Prefixes are added to the beginning of words (untie) and suffixes are added to the end of words (cheerful).
- **spoken discourse** - to participate in conversation or discussion.
- **Standard English** - the form of English widely accepted as being clear and proper.
- **syllable**- a word part that contains a vowel or vowel sound. Words can have 1 or more syllables. Example: hat' has 1 syllable hat & 'letter' has 2 syllables let ter
- **writing genre** - a category used to describe different kinds of writing, usually by form such as poetry, stories, fairy tales, etc.

Ways to Encourage Your Child

This looks wonderful!

That's a neat idea.

That's great!

You're learning fast.