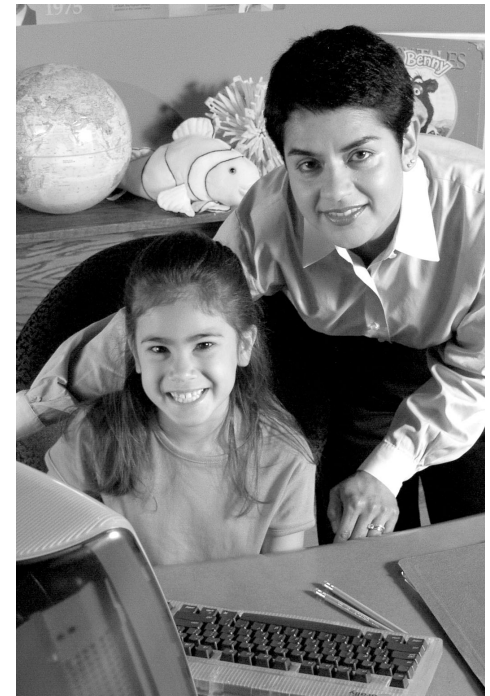


# A Standards Guide for Families



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Reading  
Writing  
Mathematics  
Science  
Social Studies

What is Expected  
in Grade

1



**Standards now,**  
*knowledge for a lifetime.*

Dear Family,

Education in Ohio is changing. This change will help your child succeed in school. It also will better prepare your child for success in college or the work force upon high school graduation.

The basis of this change is new **academic content standards**, which define what your child should know and be able to do at every grade level. There are new standards in English language arts (reading and writing), mathematics, science and social studies.

These new standards let teachers know what they are expected to teach and students know what they are expected to learn. Standards also help educators identify and measure what students know and can do.

Part of this system will include achievement tests to determine how well your child is making progress toward these new standards. These tests will replace the current Ohio Proficiency Tests.

The information in this guide will give you a sample of some of the things your child will need to know and be able to do in reading, writing, mathematics, science and social studies for the first grade. The guide also has helpful practice problems, tips and activities you can do with your child to help him or her achieve the new standards.

*It is important to note that the information in this guide is **not** the complete set of standards; rather, this information is designed to highlight a select number of skills that your child should know and be able to do in the first grade.* The official standards documents, designed for teachers' use, are in some cases several hundred pages long. This booklet has been reduced to this size for your convenience.

To view the complete set of standards, visit the Ohio Department of Education Web site at [www.ohioacademicstandards.com](http://www.ohioacademicstandards.com).

I sincerely thank you for the time, interest and energy you are investing in your child's education. I hope this guide is one of many tools you use to help your child reach these new standards and achieve success inside and outside the classroom.

Sincerely,

Susan Tave Zelman  
Superintendent of Public Instruction

## Language Arts



### Phonemic Awareness, Word Recognition and Fluency

**What this means:** *Being able to read well by sounding out words, recognizing them by sight and reading out loud with ease and fluency.*

- Know the difference between letters, words and sentences.
- Figure out what a word is by sounding out letters.
- Change the sound in a word to make a new or rhyming word.

Check your understanding: **Rhyming**



Take out the “c” in **cat** and replace it with a “b” to make the rhyming word **bat**.

- When reading out loud, make changes in expression, emphasis and timing to show an understanding of punctuation marks.



### Acquisition of Vocabulary

**What this means:** *Being able to recognize clues in reading, ask questions, listen and converse with adults and peers.*

- Use known words in the sentence to figure out other words.
- Know what synonyms and antonyms are.

Check your understanding: **Synonyms and Antonyms**



**Synonyms:** Words that have similar meanings such as *mad* and *angry*, or *nice* and *kind*.

**Antonyms:** Words that have opposite meanings such as *fast* and *slow*, or *sweet* and *sour*.

- Know the meaning of compound words using what is already known about the individual words.

Check your understanding: **Compound Words**



daydream, raindrop, goldfish, highway, baseball

- Find root words and endings (e.g., **walk** is the root word of **walked** and **walking**).
- Use a beginner's dictionary to find the meaning of words.



## Reading Process – Concepts of Print, Comprehension Strategies and Self-Monitoring Strategies

**What this means:** Through reading, students will understand the basic concepts and meanings of different types of print materials.

- Establish a purpose for reading (e.g., to be informed, to follow directions, to be entertained).
- With the teacher's help use graphic organizers such as webs or lists to show understanding.
- Answer **literal** (directly stated), **inferential** (indirectly stated and require more information) and **evaluative** (require the reader to make a judgment) questions to show understanding about what has been read or watched.
- Choose reading materials based on personal interest, knowledge of authors or suggestions from others.



## Reading Applications – Informational, Technical and Persuasive Text

**What this means:** Reading, understanding, explaining and critiquing different kinds of written materials such as magazines, essays, maps and online sites.

- Be able to put events found in reading material in order.
- Be able to name the main theme (central idea) and details.
- Know that diagrams, charts, graphs and maps are traits of nonfiction (factual) reading.
- Follow directions with more than one step.



## Reading Applications – Literary Text

**What this means:** Organizing and interpreting results through collecting data to answer questions and solve problems, show relationships and make predictions about different types of literature (e.g., fables, tales, short stories).

- Identify favorite books and stories.
- Identify characters and setting (time, location) in a story.
- Know the difference between fantasy (make believe) and reality (fact).



## Writing Processes

**What this means:** Using the steps of prewriting, drafting, revising and editing to publish different types of writing.

- Create a main idea for writing.
- Use strategies such as brainstorming, lists, webs and diagrams to plan writing.
- Write in complete sentences using subjects and verbs.
- Proofread writing to improve grammar, spelling and punctuation.
- Rewrite and share writing samples with others.

## Writing Applications

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**What this means:** Learning about, using and choosing appropriate words for different kinds of writing, from letters to scientific reports, and for different audiences.


- Write simple stories with a beginning, middle and end that include details and descriptive words.
- Write a response to a story to show a feeling or view about what has been read.
- Write letters, invitations, messages, journals, notes and poems for different purposes.

## Writing Conventions

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**What this means:** Understanding and applying punctuation, grammar and spelling rules.

- Print neatly, spacing letters, words and sentences.
- Create written work that can be read by both the writer and others.
- Spell unfamiliar words by using strategies such as sounding out the letters.
- Correctly use punctuation at the end of a sentence.
- Use nouns, verbs and adjectives.

Check your understanding: **Nouns, Verbs and Adjectives** 

A **noun** is a person, place or thing, a **verb** is an action word, an **adjective** is a describing word.

Tom fed the brown dog.

*Tom* is the noun, *fed* is the verb and *brown* is the adjective.

## Research

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**What this means:** Knowing how to gather information in all subjects using different kinds of tools (e.g., books, computers, magazines) and communicate what is found.

- Discuss ideas for researching a topic or area of interest.
- With help from the teacher, use books or observations to gather information to explain a topic.
- Remember important information about a topic with help from the teacher or a family member.
- Report information to others.

## Communication: Oral and Visual

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**What this means:** Delivering presentations on different topics for different types of audiences.

- Use active listening skills such as making eye contact or asking questions.
- Follow simple oral (spoken) instructions.
- Speak clearly and understandably.
- Make a short presentation that is organized, expresses an opinion and shows an understanding of the topic.



## Tips and Activities

- ✓ Gather pictures, alphabet letters or other objects. Let your child tell you which objects are alike, which are different and why.
- ✓ Use magnetic letters to teach your child to recognize the alphabet. Have your child say the letter as he or she points to it or places it on the refrigerator. Spell out your child's name and simple words. Let your child name each of the letters in the words.
- ✓ Say a word or show your child a picture. Let your child write or say the beginning and final sounds.
- ✓ Read a simple poem to your child. Do not give the title of the poem. After reading the poem, ask the child to give a title for the poem. Give the child two choices for a title.
- ✓ If your child has taken a field trip recently, have him or her tell you what he or she liked or disliked about the field trip. Ask your child, "Where would you like to go on a trip and why would you want to go there?"
- ✓ Write four to five words that would make a complete sentence. Make sure the beginning of the sentence begins with a capital letter and the last word ends with a period. Next, have the child put the words in an order that makes sense.
- ✓ Let your child practice printing his or her name several times. Let him or her tell you which sample he or she thinks looks the best.

## Mathematics



### Number Sense and Operations

**What this means:** Using number sense and number skills, from basic counting to paper and pencil calculations, to age-appropriate use of calculators and computers.

- Read and write numerals to 100.
- Count forward to 100, count backward from 100 and count forward or backward from a given number, such as count forward from 20 to 40 and count backward from 75 to 65.
- Represent a number in different ways using words, models and number expressions.

Check your understanding: **Creating Equal Forms of the Same Number**



The number 10 can be described in the following ways:

- a)  $5 + 5$
  - b) 10 blocks
  - c) my brother's age
  - d) one less than 11
- 
- Tell how much a penny, nickel, dime, quarter and dollar are worth and find the value of a small collection of coins.
  - Show commonly used fractions by using words and examples to represent halves, thirds and fourths.
  - Represent problem situations involving addition and subtraction by using objects, drawing pictures and writing simple number sentences.
  - Use strategies such as counting forward or counting backward, making 10, or one more or one less, to practice basic addition and subtraction facts.
  - Use objects or pictures to represent and solve problems involving repeated addition and sharing equally.

Check your understanding: **Modeling Multiplication and Division Concepts**



### Repeated Addition

4 people will be at my party and I want to give 3 balloons to each person. How many balloons will I need?

### Sharing Equally

I have 8 cookies and 4 friends at my party. How many cookies can I give to each friend so each gets the same number of cookies?



## Measurement

**What this means:** Making accurate measurements using the appropriate tools, terms and technology.

- Tell time on the hour and half-hour.
- Be able to put events in order based on time (e.g., spring, summer, fall and winter; morning, afternoon and night).
- Estimate and measure lengths and weights using non-standard units.

Check your understanding: **Non-standard Units**



Non-standard units are common objects of uniform size such as using paper clips to measure length or using blocks to measure weight.

- Estimate and measure lengths in inches, feet or centimeters using simple rulers and other tools.



## Geometry and Spatial Sense

**What this means:** Identifying, classifying and analyzing one-, two- and three-dimensional objects, understanding their properties and using that knowledge to solve problems.

- Identify two-dimensional shapes (e.g., triangles, squares, rectangles, circles) and draw them from memory.

- Sort and describe shapes using their characteristics such as the number of sides or vertices (corners).
- Identify the shapes of the faces of three-dimensional objects.
- Use words to describe location (near, far, close to) and direction (left, right).



## Patterns, Functions and Algebra

**What this means:** Representing patterns and relationships using tables, graphs and symbols and using them to solve problems.

- Sort objects based on two or more things they have in common such as color and shape or size.
- Continue and describe repeating and growing patterns.

Check your understanding: **Repeating and Growing Patterns**



**Repeating pattern:** XO, XO, XO, XO

**Growing pattern:** XO, XOO, XOOO, XOOOO, XOOOOO

- Describe a problem situation using words, pictures or number sentences.



## Data Analysis and Probability

**What this means:** Organizing and interpreting results through data collection to answer questions, solve problems, show relationships and make predictions.

- Collect and organize data into simple charts and graphs such as picture graphs and bar graphs with units of 1.
- Answer questions and make statements about information displayed in a chart or graph.

Check your understanding: **Answering Questions and Making Statements about Graphs**



What does the graph tell us about the number of ...?  
How many more children picked ... than ...?  
How many more students like chocolate ice cream than vanilla or strawberry...?

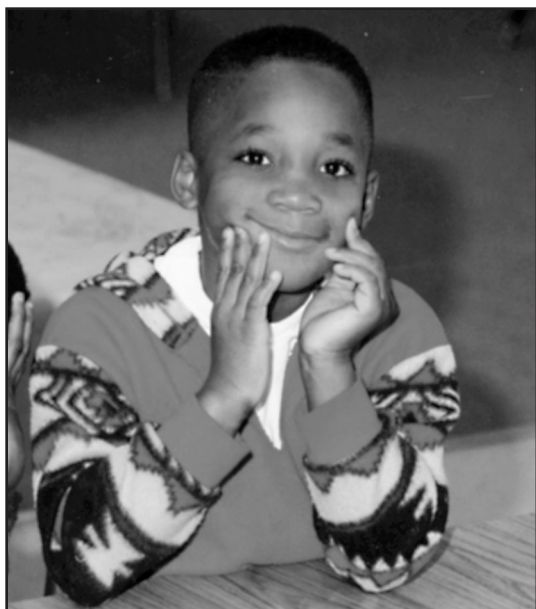
- Describe how likely simple events may occur as possible or impossible and more likely or less likely.



## Mathematical Processes

**What this means:** *Applying problem-solving and reasoning skills and communicating mathematical ideas.*

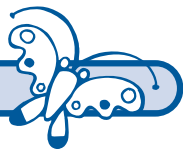
- Show or explain how a problem was solved.
- Recognize the mathematical meaning of common words and phrases.



## Tips and Activities



- ✓ Count by 2s (2, 4, 6...) or 5s (5, 10, 15...) with your child. Use a calendar to show the patterns of counting by 2s, 5s and 10s. Circle the numbers counting by 2s. Circle the numbers counting by 5s. Circle the numbers counting by 10s.
- ✓ Put small objects or candies in plastic eggs or other containers. Have your child sort objects by colors and size if appropriate. Then count how many there are of each set. Ask your child to open any two and find the sum or difference of the number of objects in the two containers.
- ✓ Ask your child to divide a slice of cheese or a sheet of paper into halves or fourths. Use a group of 12 pretzel sticks to represent halves, thirds and fourths by forming groups of equal size.
- ✓ Make a "clock" using a paper plate and "hands" cut from paper. Have your child move the hands on the clock to show and tell the time for getting up in the morning, lunchtime and other similar timeframes.
- ✓ Cut cents off coupons out of the newspaper. Ask your child to show a combination of coins that matches the value of the coupon.
- ✓ Identify and compare the shape and characteristics of everyday objects. Make a book of shapes using pictures from magazines, newspapers or photographs.
- ✓ Arrange objects in order by size or events based on time and use ordinal numbers (e.g., first, second, third, fourth) to describe them.



## Earth and Earth and Space Sciences

**What this means:** *Understanding the interconnected cycles and systems of the universe, solar system and Earth.*

- Understand that resources are things we get from the living (e.g., forests) and non-living (e.g., minerals, water) environment and that resources are needed to meet the needs and wants of a population.
- Explain that many resources are limited, but that the resources can continue to be used (extended) through careful use, using them less, re-using them or through recycling.
- Understand that all organisms (living things) cause changes where they live. These changes can be fast or slow, noticeable or slightly noticeable (e.g., tree roots slowly breaking sidewalks).



## Life Sciences

**What this means:** *Understanding the structure and function of living systems and how they interact with the environment.*

- Understand that organisms, including people, have basic needs which include air, water, food, living space and shelter.
- Explain that food comes from sources other than the grocery store (e.g., farms, oceans, lakes, forests).
- Explore that animals eat plants and/or other animals for food and may also use plants or other animals for shelter and nesting.
- Know that changes in each season (summer, fall, winter, spring) can affect the health, survival or activities of living things.



## Physical Sciences

**What this means:** *Understanding physical systems, concepts and properties of matter, energy, forces and motion.*

- Sort objects based on the materials they are made of and their physical properties.

- Explore that things can be done to materials to change their properties.

*Check your understanding:* **Changing Properties of Materials**



You can change the properties of materials through ways such as freezing water, melting butter, mixing ingredients, cutting paper, wetting an object, bending a paper clip or exposing something to light.

- Explore changes that greatly change the properties of an object (e.g., burning paper) and changes that leave the properties mostly the same (e.g., tearing paper).
- Explore the effects some objects have on others even when the two objects might not touch (e.g., magnets).
- Recognize that the sun is an energy source that warms the land, air and water.
- Describe that energy can come from many sources in many ways.

*Check your understanding:* **Sources of Energy**



Food, gasoline, electricity and batteries are all examples of energy sources.



## Science and Technology

**What this means:** *Understanding the relationship between science and technology to design and construct devices to solve problems.*

- Explore that some kinds of materials are better than others for making something new (e.g., building materials used in “The Three Little Pigs”).
- Explain that when trying to build something or get something to work better, it helps to follow the directions and ask someone who has done it before.
- Identify materials that can be recycled.

Check your understanding: **Recyclable Materials**



Help your child think of things around the house that could be recycled such as newspapers, glass or aluminum cans.

- Identify how people can save energy by turning things off when they are not using them (e.g., lights, water, motors).
- Explore that tools are used to make things and that some things cannot be made without them.
- Explore that several steps are needed to make something (e.g., making cookies, building with blocks).

## Scientific Inquiry

**What this means:** Using scientific processes to ask questions, conduct investigations, gather, analyze and communicate information.

- Ask “what happens when” questions.
- Explore “what happens when” questions of other students.
- Use the correct safety processes when completing a science experiment.
- Work in a small group to complete an investigation (a study) and then share what was found with others.
- Use the correct tools and simple equipment to gather data (e.g., timers, magnifiers).
- Make estimates (educated guesses) to compare lengths, weights and time intervals.
- Communicate work orally (spoken), through writing or through pictures.
- Describe things as close to correct as possible and compare with the observations of others.



## Scientific Ways of Knowing

**What this means:** Learning how to think scientifically and understanding how people have shaped the study and practice of science.

- Discover that when a science experiment is done the same way many times, one can expect to get a very similar result each time.
- Give good explanations (reasons) based on evidence (proof) from experiments.
- Explain that everybody can do science, invent things and have scientific ideas no matter where they live.

### Tips and Activities

- ✓ Make a sundial and monitor the sun’s motion throughout the day, week, month or year.
- ✓ Watch wild animals in the neighborhood and parks and make observations about their behavior during the seasons. For example, watch birds nesting in the spring and follow the development of their young. Compare that to the behavior you see in the fall season.
- ✓ Take a group of objects (e.g., buttons, shells, office supplies) and help develop your child’s observation skills by sorting them by color, shape, use or texture.
- ✓ Develop your child’s senses by having him or her explore a variety of textures, smells, sounds and tastes in a variety of situations and have him or her discuss them with you in great detail. Environments could include a park, a garage, a kitchen or a store.
- ✓ Collect something of interest like rocks, leaves, shells or insects. Not only will your child have a valuable collection, but finding out the “inside scoop” on these items is what science is all about.
- ✓ Make three small models of simple houses made of different materials and test the strength of each.
- ✓ Conduct a simple experiment several times in the same way to determine if you get the same results each time.



**Focus:** *Families now and long ago, near and far*



### History

**What this means:** *Understanding the pattern of events that have happened in the past.*

- Recite the months of the year.
- Be able to put events from one's own life in order (e.g., birth, preschool, kindergarten, etc.).
- Tell the difference between past, present and future.
- Use pictures (photographs), artifacts (objects) and books to learn about how other families lived in the past.

**Check your understanding: Artifacts**



Seeing a plow or a spinning wheel can help a child begin to understand how food was grown or clothing was made long ago. When looking at an old book, he or she would notice that an old book usually has fewer pictures, which are not usually in color.

- Compare the past and the present by looking at daily life and understand the jobs that men, women and children did in order to meet basic human needs.
- Be able to tell the stories of the heroism of the people associated with state and federal holidays.



### People in Societies

**What this means:** *Identifying both similarities and differences in the traditions of various groups of people.*

- Find similarities and differences in ways different cultures meet common human needs such as food, clothing, shelter, language and self-expression through using art.

**Check your understanding: Cultures**



When learning about Japan, children may learn that rice is served at most meals. For festivals, the Japanese may wear traditional clothing such as a kimono. Most houses and apartments are smaller than American houses. The Japanese language uses symbols that look different than our alphabet. Children learn the art of paper folding called origami.

- Identify the customs and traditions of a country on each continent by studying folktales, music and art created by people living in that culture.
- Describe family and local community customs and traditions.
- Describe daily life in other countries including the roles of men, women and children.



### Geography

**What this means:** *Identifying the location of places, understanding how places are connected and how human activity affects them.*

- Make simple maps and models and use symbols that stand for familiar places such as the classroom, school or neighborhood.
- Use symbols to locate important places on a map and globe.



Check your understanding: **Map Symbols**



Symbols represent places on a map that are explained in the map key. They may include lines for boundaries, dots which locate towns or cities, and special symbols for places like parks, airports or museums.

- Describe physical features (e.g., lake, river, hill, mountain, forest) and human features (e.g., town, city, farm, park, playground, house, traffic signs/signals) of places in the community.
- Compare areas within the community and tell how they are similar (e.g., how a park is similar to a farm).



## Economics

**What this means:** Understanding how to make decisions in our economic system.

- Explain that people cannot have everything that they want because resources are limited so they must make choices.
- Find examples of ways that people produce, make, use and trade goods and services in the community.
- Explain ways that people may get goods and services by trading or using money.

Check your understanding: **Why We Use Money**



Trading doesn't work well if the value of the items to be traded is not equal (e.g., a candy bar and a computer game). People can buy something with money even if they don't have an object of the same value to trade to the seller.



## Government

**What this means:** Understanding why government is necessary and how it works.

- Understand how authority figures (e.g., parents/guardians, teachers, principals, police officers) provide for the safety and security of people.
- Explain how voting can be used to make group decisions.
- Recognize symbols of the United States that stand for its democracy and values including the bald eagle, the White House, the Statue of Liberty and the national anthem.
- Understand why rules are needed in different settings or situations and why the rules need to be fair.
- Discuss the consequences of not following rules.



## Citizenship Rights and Responsibilities

**What this means:** Preparing to become active citizens.

- Show why it is important to have fair play, good sportsmanship, respect for the rights and opinions of others and to treat others the way you want to be treated.
- Show self-direction in school tasks.
- Show accountability for actions.
- Show pride in personal accomplishments.
- Show traits of citizenship including being trustworthy and fair, having self-control and respecting those in authority.



## Social Studies Skills and Methods

**What this means:** Collecting information, organizing it and using it to make decisions.

- Get information about a topic using different oral (spoken) and visual sources.

Check your understanding: **Using Sources to Get Information**



First-graders are beginning readers and they are curious about the world around them. A child who wants to know more about a topic might look at pictures in books that are read aloud. The child might also get information from a video or other people.

- Sequence (put in correct order) information.
- Communicate information orally (spoken) and visually.
- Show courtesy and respect for others in a group by staying on the topic and paying attention to the speaker.



*Note: Some of the tips and activities in this guide were derived from "parent tips" posted on the Web sites of Georgetown County School District in South Carolina ([www.gcsd.k12.sc.us](http://www.gcsd.k12.sc.us)) and Chelsea Publishing House ([www.teachervision.com](http://www.teachervision.com)). These resources were used with permission of the authors whom we gratefully acknowledge.*

*Additionally, the Department would like to thank the Ohio Muskingum Valley Educational Service Center for assisting the Department with this publication.*

**Tips**  .....  
*and Activities*

- ✓ As your child learns more about the calendar, you might ask, "What month is this?" "What month comes next?"
- ✓ Children learn about holidays in school including President's Day, Dr. Martin Luther King, Jr. Day, Veteran's Day and Thanksgiving. These celebrations are good opportunities to ask your child what he or she has learned about the people connected with each holiday.
- ✓ Look at pictures in books or visit historic sites to find out about life long ago. Talk about things that stay the same like the need for food and shelter. Explore differences in the way that we get our food now and compare the kinds of homes we live in today to homes long ago.
- ✓ Look at photographs of children in other parts of the world. See whether your child knows where these children come from. Ask how he or she knows.
- ✓ As you travel around your community ask your child to name parts of the landscape that you see such as hills, ponds or rivers.
- ✓ Hang a map of the United States in your child's room and practice finding Ohio.
- ✓ Allow your child to make simple purchases.
- ✓ As you visit places like a park, the public library or the swimming pool, talk about the rules for each place. Discuss the reasons that different places have different rules.
- ✓ Use pictures of your child at different ages and see if he or she can put them in order.