



KY Standards

Your home for Kentucky Academic Standards.

WELCOME TO GRADE 5!

A Family's Guide to the *Kentucky Academic Standards*

This guide was made to help families understand the *Kentucky Academic Standards* and to show what children will learn by the end of 5th grade. This tool provides information about the key ideas and skills teachers will introduce in mathematics, reading and writing, science and social studies. It includes possible examples of what students will be asked to do in class, how to help your child at home, questions you can ask your 5th-grader and questions families can ask their child's teacher.

This guide also was designed to help parents understand how they can work with teachers to support the learning of their 5th-grader. When teachers and families work together to help students master *Kentucky's Academic Standards*, students can succeed by developing the skills they will need for life after graduation.

If you have questions about this information or if your child needs extra help, please contact your child's teacher.

Why are the *Kentucky Academic Standards* important?

Kentucky Academic Standards are important because they help make sure that all students, no matter where they live or what school they attend, have the skills they need to go after a successful future. Standards represent a goal or outcome of a subject area (such as mathematics, reading and writing, science and social studies). They help set clear and consistent expectations for what students should know and be able to do from kindergarten through high school. The standards are not a curriculum and do not determine the design of a lesson plan or how units should be organized. Decisions on how best to help students meet the goals in the standards are left to local school districts and teachers.

How are the standards organized?

The *Kentucky Academic Standards* are organized differently based on the content area. Some of the *Kentucky Academic Standards* are arranged grade-by-grade, while others are grouped into several grade levels, such as "high school" for grades 9-12. In all subjects, the standards show what students should learn and be able to do, but not how those learning experiences are to be designed or what resources should be used. For more information on the *Kentucky Academic Standards*, visit <https://kystandards.org/> to read the complete standards and find standards-related resources.



kystandards.org



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GRADE 5 MATHEMATICS

OVERVIEW:

During 5th grade, students will develop the ability to add and subtract whole numbers greater than nine using an algorithm (a set of rules). Your child will:

- Spend a lot of time on operations with fractions, specifically multiplication and division;
- Understand concepts of volume by relating volume to multiplication and addition; and
- Understand and apply the statistics process.

Examples of Your Child's Work at School:

- Adding and subtracting fractions with unlike denominators;
- Multiplying fractions by whole numbers and other fractions;
- Dividing fractions by whole numbers and whole numbers by fractions;
- Solving word problems including operations with fractions;
- Adding, subtracting, multiplying, and dividing decimals to the hundredths place;
- Measuring volume using multiplication and division; and
- Graphing points.

How to Help Your Child at Home:

- Use recipes to work on how to multiply with fractions: If you used $\frac{2}{3}$ of a $\frac{3}{4}$ cup of sugar, how much sugar did you use? How much is left?
- Use the length, width and depth of a garden plot to determine how many bags of garden soil to buy.
- Have your child explain how to write a fraction in different ways (for example, $\frac{4}{3}$ is $1\frac{1}{3}$, $\frac{2}{3} + \frac{2}{3}$, $2 \times \frac{2}{3}$, $\frac{8}{6}$, $4 \times \frac{1}{3}$).
- Add and subtract decimals (for example, balancing a checkbook).
- Use games like Battleship to reinforce how to plot points.

Questions You Can Ask Your Child:

- How much of each ingredient would we need if we cut the recipe in half? Double it?
- Show me how you would find the volume of this cereal box (this should go beyond reciting the formula for volume).

Questions You Can Ask Your Child's Teacher:

- How does my child respond to difficult tasks?
- What is the first step my 5th-grader takes to solve a difficult task?
- Is my child making sense of multiplying and dividing with fractions?
- Does my child understand the relationship between fractions and decimals?
- What do you think is giving my child the most trouble? How can I help him or her improve in this area?
- How can I support my child in mathematics?

GRADE 5 READING AND WRITING

OVERVIEW:

During 5th grade, students will analytically read, interpret and write about a wide variety of texts from diverse cultures and time periods. Your child will:

- Explore topics through research projects;
- Write products to explain, express opinions and narrate real or imagined events;
- Support ideas with relevant details and logical reasons; and
- Use correct word choice, spelling, grammar, usage and punctuation.

Examples of Your Child's Work at School:

- Reading closely to find evidence from the text to make inferences, support thinking, determine theme and compare or contrast characters, settings and events;
- Analyzing multiple accounts of the same event or topic, noting important similarities and differences in the perspective they represent;
- Using a variety of media to write opinion pieces with supporting details and information; and
- Choosing a strategy to determine or clarify the meaning of unknown and multiple-meaning words and phrases.

How to Help Your Child at Home:

- Read a variety of increasingly challenging texts. Spend time discussing what your child has inferred from the text and what has been explicitly stated.
- Listen to, read or view information about an event. Encourage your child to find another version of the same event from another person's perspective and listen to, read or view it.
- Take turns stating your opinion on a topic of interest (for example, sports, television shows or vacations). This may be a verbal activity or in writing. Ask your child to give three supporting details and elaborate on them.
- Identify words or phrases that do not make sense in spoken language, texts they are reading or in digital resources they are viewing.

Questions You Can Ask Your Child:

- What are you reading in class? What have you learned from the text/about the topic?
- Can you connect personally with what is happening in the text? Why or why not?
- Can you show me a sample of some writing you have done recently? How did you pick a topic and decide what to write? Show me a section of your writing you are proud of/still working on/would like to make better.

Questions You Can Ask Your Child's Teacher:

- What is my child reading and writing about at school and what topics are being explored?
- What vocabulary words does my child need to learn?
- How can I encourage learning at home and what resources do I need to support her or him?

GRADE 5 SCIENCE

OVERVIEW:

During 5th grade, your child will be an active learner who will be doing science to learn science. They will learn skills that promote analysis and interpretation of data, critical thinking and problem solving similar to professionals in the field while making connections across the different areas of science to develop a deeper understanding of the science concepts. Your child will:

- Develop an understanding of the role of gravity in space and on Earth.
- Determine how photosynthesis plays a role in the cycling of matter and energy.
- Describe what matter is made of and explain how it changes with temperature changes.
- Explain how resource availability and energy flow influence patterns of organism interactions.
- Apply their understanding of changes in Earth's materials including plate movement, water and air.

Examples of Your Child's Work at School:

- Using and developing models to represent systems (solar system, oceans, atmosphere, etc.), the relationships of objects within the systems and the relationship between different systems;
- Analyzing data to determine the amount of freshwater and saltwater on Earth;
- Measuring and graphic weight to use as evidence that weight does not change when a substance is heated, cooled or mixed;
- Representing data in bar graphs, pictographs, and/or pie charts to reveal how patterns of shadows and positions of stars change during different times of the year; and
- Gathering information about how human activities have major effects on land, vegetation, streams and oceans and ways that we can help protect earth's resources and the environment.

How to Help Your Child at Home:

- Encourage observations of the sun, moon and stars at home in the evenings and mornings.
- Use apps to learn about and study the motions of the stars during the course of a year.
- Find and discuss ways communities are protecting the Earth's resources.
- Use books and news articles to reinforce learning happening during the school day.

Questions You Can Ask Your Child:

- Why can we only see certain constellations in the fall?
- Why can we see the Big Dipper all year?
- Where does the energy in our food come from?
- How can a plant grow in a plastic bag without dirt?

Questions You Can Ask Your Child's Teacher:

- What are some resources I could use to help my child at home? What are some investigations we can try at home to study matter?
- What are some quality resources (books, apps, etc.) we can use to study the stars and sun?
- What types of writing does my child experience in science?
- What opportunities does my child have to connect other content areas to what they are learning in science?

GRADE 5 SOCIAL STUDIES

OVERVIEW:

In 5th grade, students will explore the people, places and ideas that make up the story of the United States. Your child will:

- Analyze the development and establishment of the U.S. federal government;
- Describe why the government collects taxes and what goods and services it provides society;
- Analyze how cultural, economic and environmental factors encouraged and restricted the movement of people, ideas and goods to and within the United States; and
- Describe the impact of foundational documents on the development of the United States to analyze how a founding principle is applicable today.

Examples of Your Child's Work at School:

- Analyzing the structure of the U.S. government, including separation of power and its system of checks and balances;
- Describing the traditions diverse cultural groups brought with them when they moved to and within the U.S.;
- Analyzing the causes of the American Revolution and the effects individuals and groups had on the conflict; and
- Explaining different approaches people can take to address local, regional and global problems, using examples from U.S. history.

How to Help Your Child at Home:

- Encourage your child to ask questions. When your child asks questions, rather than give answers immediately, suggest thinking about where the answer might be found.
- Read nonfiction materials with your child, such as articles, biographies, etc.
- Discuss with your child similarities and differences in news reports of the same event from multiple news outlets and why this happens.
- Discuss how national and global events have or could have affected your local community.
- Discuss the roles and responsibilities of a Kentucky citizen.
- Talk to your child about the importance of civic participation, such as voting, and locate examples in past and current events.

Questions You Can Ask Your Child:

- What are ways to show good citizenship?
- How do governments make rules and laws to protect, help and serve its citizens?
- How do factors, such as employment, influence the movement of people and goods?
- What's the history behind current events in the United States?

Questions You Can Ask Your Child's Teacher:

- What current events should my child know more about?
- What online resources or books can help my child's learning?
- Are there places we can visit related to early American history in our community?
- What books would support what you are teaching in class?
- What resources are available to support learning about social studies skills?