

# Henderson County Schools

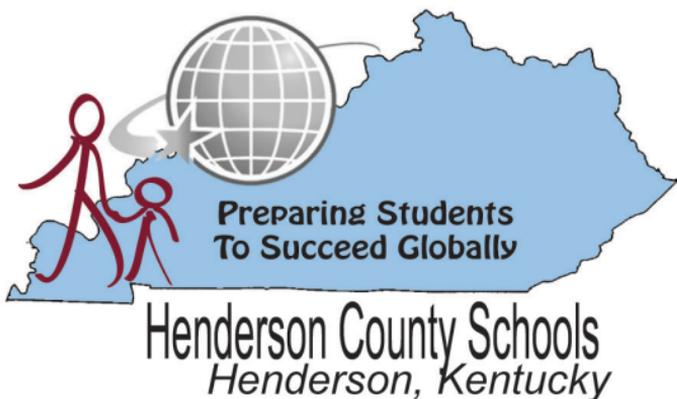
BUILDING  
A STRONG  
FOUNDATION FOR  
SCHOOL SUCCESS

THE KENTUCKY CORE  
ACADEMIC STANDARDS

## **PARENTS' GUIDE**

Middle School Grades 6-8

English, Language Arts, and  
Mathematics



[www.henderson.kyschools.us](http://www.henderson.kyschools.us)

## WHAT ARE THE KENTUCKY CORE ACADEMIC STANDARDS?

The Common Core State Standards were created by teachers, parents, education experts, and others from across the country. The standards provide clear, consistent expectations for what students should be learning at each grade in order to be prepared for college and career.

More than 40 states have adopted these standards to increase academic expectations for students. Kentucky adopted these standards on February 10, 2010 and has renamed them as the Kentucky Core Academic Standards (KCAS).



## WHY ARE THE STANDARDS IMPORTANT?

These standards are important because they help ensure that all students, no matter where they live, are prepared for success in college and the workforce. They help set clear and consistent expectations for students, parents, and teachers; build your child's knowledge and skills; and help set high goals for all students.



## HOW CAN I USE THIS GUIDE TO HELP MY CHILD?

The guide includes:

- Key items that children should be learning in English language arts and mathematics in each grade once the standards are fully implemented.
- Activities that parents can do at home to support their child's learning.
- Methods for helping parents build stronger relationships with their child's teacher.

You should use this guide to help build a relationship with your child's teacher. You can do this by talking to his or her teacher regularly about how your child is doing — beyond parent-teacher conferences.

At home, you can play an important role in setting high expectations and supporting your child in meeting them. If your child needs a little extra help or wants to learn more about a subject, work with his or her teacher to identify opportunities for tutoring, to get involved in clubs after school, or to find other resources.

## TABLE OF CONTENTS

Sixth Grade	4
Seventh Grade	8
Eighth Grade	12



This guide is adapted from materials of the National PTA.

<http://www.pta.org/4446.htm>

# SIXTH

This guide provides an overview of what your child will learn by the end of 6th grade in mathematics and English language arts/literacy. It focuses on the key skills in these subjects which will build a strong foundation for success in the other subjects he or she studies throughout the school year. This guide is based on the new

## **English, Language Arts, and Literacy**

In 6th grade, students apply skills they learned in earlier grades to make sense of longer, more challenging books and articles. That includes:

- Learning about how authors try to influence readers and find reasons to support their ideas.
- Focusing on how authors make their points and support their arguments with evidence and reasoning to help 6th grade students sharpen their abilities to write and speak with more clarity and coherence.
- Expanding their vocabularies and using new words in stories, reports, and essays.

To meet these literacy goals, students must devote significant attention to precise details in their reading and when writing.

### ***A Sample of What Your Child Will Be Working on in 6th Grade***

- Analyzing how chapters of a book, scenes of a play, or stanzas of a poem fit into the overall structure of the piece and contribute to the development of ideas or themes
- Gaining knowledge from materials that make extensive use of elaborate diagrams and data to convey information and illustrate concepts
- Evaluating the argument and specific claims in written materials or a speech, and distinguishing claims that are supported by reasons and evidence from claims that are not
- Presenting claims and findings to others orally, sequencing ideas logically, and accentuating main ideas or themes
- Writing arguments that provide clear reasons and relevant evidence, using credible sources
- Writing brief reports that examine a topic, have a clear focus, and include relevant facts, details, and quotations
- Conducting short research projects to answer a question, drawing on several sources and sharpening the focus based on the research findings
- Reviewing and paraphrasing key ideas and multiple perspectives of a speaker
- Recognizing variations from standard English in his/her own and others' writing and speaking, and using this knowledge to improve language use
- Determining the correct meaning of a word based on the context in which it is used (e.g., the rest of the sentence or paragraph; a word's position or function in a sentence)

## 6TH

Common Core State Standards, which have been adopted by more than 40 states. These K–12 standards are informed by the highest state standards from across the country. If your child is meeting the expectations outlined in these standards, he or she will be well prepared for 7th grade.

### **Mathematics**

The skills and understanding that your child will gain during 6th grade are among the most important foundations for college and career readiness. These include:

- Working with ratios and rates
- Working with variables and variable expressions — the building blocks of algebra

Many of this year's topics will remain a major emphasis throughout the middle school years and into high school.

### ***A Sample of What Your Child Will Be Working on in 6th Grade***

- Understanding ratios and rates, and solving problems involving proportional relationships
- (e.g., if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?)
- Dividing fractions and solving related word problems (e.g., how wide is a rectangular strip of land with length  $\frac{3}{4}$  mile and area  $\frac{1}{2}$  square mile?)
- Using positive and negative numbers together to describe quantities; understanding the ordering and absolute values of positive and negative numbers
- Working with variables and expressions by generalizing the way numbers work (e.g., when adding numbers, the order doesn't matter, so  $x + y = y + x$ ; likewise, properties of addition and multiplication can be used to rewrite  $24x + 18y$  as  $6(4x + 3y)$ , or  $y + y + y$  as  $3y$ )
- Understanding the process of solving simple equations
- Writing equations to solve word problems and describe relationships between quantities (e.g., the distance  $D$  traveled by a train in time  $T$  might be expressed by an equation  $D = 85T$ , where  $D$  is in miles and  $T$  is in hours)
- Reasoning about relationships between shapes to determine area, surface area, and volume

## ***Talking With Your Child's Teacher***

When you talk to the teacher, do not worry about covering everything. Instead, keep the conversation focused on the most important topics. In 6th grade, these include:

- Reading closely and citing evidence from grade-level fiction and nonfiction to support an analysis of what the materials say
- Developing a rich vocabulary of complex and sophisticated words and using them to speak and write more precisely and coherently
- Analyzing and solving problems using concepts of ratio/rate
- Working with variables and expressions
- Analyzing and solving word problems using equations

Ask to see a sample of your child's work. Ask the teacher questions such as:

- Is this piece of work satisfactory?
- How could it be better?
- Is my child on track?
- How can I help my child improve or excel in this area?
- If my child needs extra support or wants to learn more about a subject, are there resources to help his or her learning outside the classroom?
- How can I help my child improve or excel in this area?

## **English, Language Arts, and Literacy**

- Listen with your child to a television reporter, politician, or other speaker. Ask your child to tell you the speaker's main points. Was the speaker trying to convince the audience of something? How?
- Visit a library or book store together and ask the librarian or bookseller to recommend young adult books, such as *Roll of Thunder, Hear My Cry* by Mildred D. Taylor.
- To find more books for your child to read, visit [www.corestandards.org/assets/Appendix\\_B.pdf](http://www.corestandards.org/assets/Appendix_B.pdf).
- Invite your child to participate in an adult gathering, such as a meal with friends, to practice listening skills and making conversation.
- Encourage your child to learn by using the library or the Internet what life in your community was like 100 years ago. Have your child write a story, poem, or play about that time.



## ***Helping Your Child Learn at Home***

Learning does not end in the classroom. Children need help and support at home to succeed in their studies.

- Try to create a quiet place for your child to study, and carve out time every day when your child can concentrate on reading, writing, and math uninterrupted by friends, brothers or sisters, or other distractions.
- You should also try to sit down with your child at least once a week for 15 to 30 minutes while he or she works on homework. This will keep you informed about your child's work, and it will help you be the first to know if your child needs help with specific topics.

By taking these small steps, you will be helping your child become successful both in and outside the classroom.

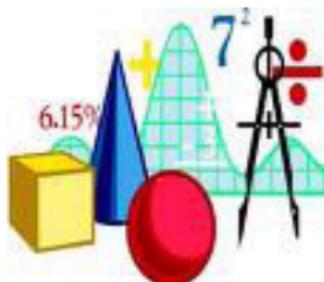
*Talk with your  
child's teacher*

*Additionally, here are some activities you can do with your child to support learning at home:*

### **Mathematics**

Look for “word problems” in real life. Some 6th grade examples might include:

- Determining the average speed of a family trip, based on the distance traveled and the time taken;
- Estimating the time that a trip will take, given the distance and an estimate of the average speed. (Examples can also come from the news — for example, a swimmer crossing the English Channel or a space probe traveling to another planet.)
- Finding the surface area of the walls and ceiling in a room to determine the cost of painting the room.



# SEVENTH

This guide provides an overview of what your child will learn by the end of 7th grade in mathematics and English language arts/literacy. It focuses on the key skills in these subjects which will build a strong foundation for success in the other subjects he or she studies throughout the school year. This guide is based on the new

## **English, Language Arts, and Literacy**

In 7th grade, your child will:

- Analyze, define, compare, and evaluate ideas when reading, writing, speaking, and listening
- Continue to analyze how themes in fiction and nonfiction develop over the course of a book or article. Readings will include classic and contemporary pieces that represent diverse perspectives.
- Cite specific evidence when offering an interpretation of a text
- Use relevant evidence when supporting his/her own points in writing and speaking, making his/her reasoning clear to readers or listeners or constructively evaluating others' use of evidence. This ability will help your child in every facet of his or her studies.

### ***A Sample of What Your Child Will Be Working on in 7th Grade***

- Citing several sources of specific evidence from a piece when offering an oral or written analysis of a book, essay, article, or play
- Analyzing works of fiction to see how events advance the plot and how setting shapes the characters
- Determining an author's point of view or purpose in a nonfiction work and analyzing how the author takes a position different than that of other authors
- Organizing and focusing his or her own writing, including supporting statements and conclusions with evidence and showing that the evidence is accurate and reliable
- Conducting research in response to a specific question by drawing on evidence from several credible literary or informational sources to support an analysis or reflection
- Avoiding plagiarism and following a standard format for citations (e.g., footnotes, bibliography)
- Evaluating a speaker's key points and reasoning, asking questions, and stating his or her own well-supported ideas in discussions
- Presenting claims and findings to others emphasizing main points, making eye contact, speaking loudly enough, pronouncing words clearly, and using formal English when the situation calls for it
- Using common, grade-appropriate Greek or Latin affixes and roots as clues to defining the meaning of a word (e.g., semi-, semiannual, semicircle)

## 7TH

Common Core State Standards which have been adopted by more than 40 states. These K–12 standards are informed by the highest state standards from across the country. If your child is meeting the expectations outlined in these standards, he or she will be well prepared for 8th grade.

### Mathematics

In 7th grade, your child will grow in skill and understanding as he or she continues the previous grade's work in proportional relationships, equations, and positive and negative numbers. These topics will remain a major emphasis throughout the middle school years and into high school. A good command of rates and proportional relationships, including percentages, is also an important life skill.

### ***A Sample of What Your Child Will Be Working on in 7th Grade***

- Analyzing proportional relationships (e.g., by graphing in the coordinate plane) and distinguishing proportional relationships from other kinds of mathematical relationships (e.g., buying 10 times as many items will cost you 10 times as much, but taking 10 times as many aspirin will not lower your fever 10 times as much)
- Solving percent problems (e.g., tax, tips, and markups and markdowns)
- Adding, subtracting, multiplying, and dividing positive and negative numbers, and solving related word problems
- Solving word problems that have a combination of whole numbers, fractions, and decimals (e.g., a woman making \$25 per hour receives a 10% raise; she will make an additional  $\frac{1}{10}$  of her salary an hour, or \$2.50, for a new salary of \$27.50)
- Solving equations such as  $\frac{1}{2}(x - 3) = \frac{3}{4}$  quickly and accurately and writing equations of this kind to solve word problems (e.g., "I knocked over a carton of milk, and 3 cups were spilled before I set the carton upright again. When I poured out the remaining milk equally into two measuring cups, there was  $\frac{3}{4}$  of a cup of milk in each one. How much milk was originally in the carton?")
- Solving problems involving scale drawings
- Using statistics to draw inferences and make comparisons (e.g., deciding which candidate is likely to win an election based on a survey)

## ***Talking With Your Child's Teacher***

When you talk to the teacher, do not worry about covering everything. Instead, keep the conversation focused on the most important topics. In 7th grade, these include:

- Reading closely and citing several sources of evidence from grade-level fiction and nonfiction works to support an analysis of what the material says
- Developing a rich vocabulary of complex and sophisticated words and using them to speak and write more precisely and coherently
- Analyzing proportional relationships
- Arithmetic with positive and negative numbers
- Solving equations quickly and accurately, and writing equations to solve word problems

Ask to see a sample of your child's work. Ask the teacher questions such as:

- Is this piece of work satisfactory?
- How could it be better?
- Is my child on track?
- How can I help my child improve or excel in this area?
- If my child needs extra support or wants to learn more about a subject, are there resources to help his or her learning outside the classroom?
- How can I help my child improve or excel in this area?

*Additionally, here are some activities you can do with your child to support learning at home:*

### **English, Language Arts, and Literacy**

- Visit a local art museum together. Take time to closely observe the details of the paintings or other art objects and talk about what you see there.
- Have your child help plan a family outing, using the Internet or library to research a place he or she finds interesting.
- Ask your child who his or her favorite authors are. Why does your child like their books? About what ideas the authors write. Who are his/her favorite characters? Why? To find recommendations of books for your child to read, visit [www.corestandards.org/assets/Appendix\\_B.pdf](http://www.corestandards.org/assets/Appendix_B.pdf).



## ***Helping Your Child Learn at Home***

Learning does not end in the classroom. Children need help and support at home to succeed in their studies.

- Try to create a quiet place for your child to study, and carve out time every day when your child can concentrate on reading, writing, and math uninterrupted by friends, brothers or sisters, or other distractions.
- You should also try to sit down with your child at least once a week for 15 to 30 minutes while he or she works on homework. This will keep you informed about your child's work, and it will help you be the first to know if your child needs help with specific topics.

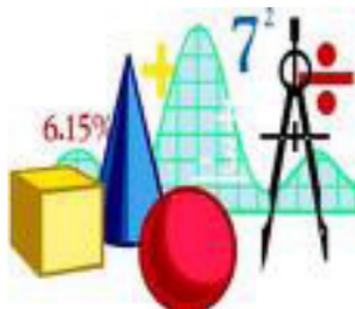
By taking these small steps, you will be helping your child become successful both in and outside the classroom.

*Talk with your  
child's teacher*

### **Mathematics**

Look for “word problems” in real life. Some 7th grade examples might include:

- Figuring the amount of a 15% tip or determining what percentage of weekly income goes to pay taxes.
- Using a scale diagram in a manual or a newspaper article to determine lengths, areas, distances, or other measures.
- For a long-term project, help your child choose a stock and follow its value on the stock market using the newspaper or the Internet. Have your child calculate the stock's percent increase or decrease each month.



# EIGHTH

This guide provides an overview of what your child will learn by the end of 8th grade in mathematics and English language arts/literacy. It focuses on the key skills in these subjects, which will build a strong foundation for success in the other subjects he or she studies throughout the school year. This guide is based on the

## **English, Language Arts, and Literacy**

To prepare for bigger challenges in high school, 8th grade students must grapple with major works of fiction and nonfiction that extend across cultures and centuries. As they work diligently to understand precisely what an author or speaker is saying, students also must learn to question an author's or speaker's assumptions and assess the accuracy of his or her claims. They also must be able to report findings from their own research and analysis of sources in a clear manner.

### ***A Sample of What Your Child Will Be Working on in 8th Grade***

- Citing the evidence that most strongly supports an analysis of what is explicitly stated and/or implied from a book, article, poem, or play
- Analyzing where materials on the same topic disagree on matters of fact, interpretation, or point of view
- Learning how authors support their ideas through word choice, sentence and paragraph structure, and other methods
- Building writing around strong central ideas or points of view; supporting the ideas with sound reasoning and evidence, precise word choices, smooth transitions, and different sentence structures
- Planning and conducting research projects that include several steps and use many credible and documented print and digital sources
- Analyzing the purpose of information presented in diverse media (e.g., print, TV, web) and evaluating its social, political, or commercial motives
- Presenting findings and claims to others, emphasizing key points with relevant evidence and sound reasoning, adapting speech to the audience and the formality of the setting, and responding to questions and comments with relevant observations and ideas
- Using strong, active verbs to create a clear picture for the reader (e.g., walk, skip, meander, lurch, limp)
- Interpreting figures of speech (e.g., irony, puns) and developing a large vocabulary of general academic words and phrases

new Common Core State Standards, which have been adopted by more than 40 states. These K–12 standards are informed by the highest state standards from across the country. If your child is meeting the expectations outlined in these standards, he or she will be well prepared for high school.

## **Mathematics**

In 8th grade, your child will learn a number of skills and ideas that he/she must know and understand to be ready for college and career. Your child will continue to learn how to write and reason with algebraic expressions. Your child also will make a thorough study of linear equations with one and two variables. Building on previous work with relationships between quantities, your child will be introduced to the idea of a mathematical function. He/she will prepare for high school geometry by understanding congruence (same shape and size) and similarity of geometric figures.

### ***A Sample of What Your Child Will Be Working on in 8th Grade***

- Understanding slope, and relating linear equations in two variables to lines in the coordinate plane
- Solving linear equations (e.g.,  $-x + 5(x + 1/3) = 2x - 8$ ); solving pairs of linear equations (e.g.,  $x + 6y = -1$  and  $2x - 2y = 12$ ); and writing equations to solve related word problems
- Understanding functions as rules that assign a unique output number to each input number; using linear functions to model relationships
- Analyzing statistical relationships by using a best-fit line (a straight line that models an association between two quantities)
- Working with positive and negative exponents, square root and cube root symbols, and scientific notation (e.g., evaluating  $\sqrt{36 + 64}$ ; estimating world population as  $7 \times 10^9$ )
- Understanding congruence and similarity using physical models, transparencies, or geometry software (e.g., given two congruent figures, show how to obtain one from the other by a sequence of rotations, translations, and/or reflections)
- Understanding and applying the Pythagorean Theorem ( $a^2 + b^2 = c^2$ ) to solve problems

## ***Talking With Your Child's Teacher***

When you talk to the teacher, do not worry about covering everything. Instead, keep the conversation focused on the most important topics. In 8th grade, these include:

- Reading closely and drawing evidence from grade-level fiction and nonfiction works that most strongly supports an analysis of the material
- Developing a rich vocabulary of complex and sophisticated words and using them to speak and write more precisely and coherently
- Linear equations with one and two variables
- Functions
- Congruence and similarity of geometric figures

Ask to see a sample of your child's work. Ask the teacher questions such as:

- Is this piece of work satisfactory?
- How could it be better?
- Is my child on track?
- How can I help my child improve or excel in this area?
- If my child needs extra support or wants to learn more about a subject, are there resources to help his or her learning outside the classroom?
- How can I help my child improve or excel in this area?

*Additionally, here are some activities you can do with your child to support learning at home:*

### **English, Language Arts, and Literacy**

- Make time in everyone's busy schedule for family discussions about things going on around the world. Weekends can be a chance for everyone to catch up.
- Visit the campus of a local college with your teen.
- Begin talking about college early. What does he or she expect from college? What high school courses will your child need to pass to prepare for college?
- Make sure to keep books and magazines around the house that your child will enjoy reading. For a list of book recommendations, visit [www.corestandards.org/assets/Appendix\\_B.pdf](http://www.corestandards.org/assets/Appendix_B.pdf).



## ***Helping Your Child Learn at Home***

Learning does not end in the classroom. Children need help and support at home to succeed in their studies.

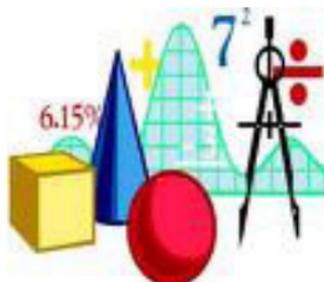
- Try to create a quiet place for your child to study, and carve out time every day when your child can concentrate on reading, writing, and math uninterrupted by friends, brothers or sisters, or other distractions.
- You should also try to sit down with your child at least once a week for 15 to 30 minutes while he or she works on homework. This will keep you informed about your child's work, and it will help you be the first to know if your child needs help with specific topics.

By taking these small steps, you will be helping your child become successful both in and outside the classroom.

*Talk with your  
child's teacher*

### **Mathematics**

- Solving interesting problems involving cylinders and spheres, such as figuring out how much water fits inside a garden hose, or how many earths would fit inside the sun.
- Analyzing data with a scatterplot, for example to decide whether exercise and obesity are related.
- Solving “just for fun” algebra puzzles, such as: “I’m thinking of two numbers. The difference between the numbers is 40. Twice the smaller number is 20 more than the larger number. What are my numbers?”



## Think College and Career!

### College and Career-Bound:

It is never too early to begin supporting your child's lifelong success. Whether you went to college or not, your child can go to college. Additional education leads to more money earned across a lifetime and a healthier life.

As the parent of a middle school student you can help your child achieve and be ready for college by:

- Encouraging academic challenge—work those harder problems.
- Continuing to support your child's study and homework—help prepare a homework planner and create a special place to do work.
- Remembering that class grades matter, not only in stating how much your child knows. Your child's GPA (grade point average across all their classes) from the 9th grade forward affects his/her ability to get scholarships.
- Helping your child become involved in after-school activities such as sports, school clubs and other extra-curricular activities or volunteer work.
- Discussing career options with your child and encouraging his/her ideas.
- Talking with your child's teacher about the results of the EXPLORE test which is designed to help your child learn more about career options.
- Reviewing your child's individual learning plan and thinking about career options they might desire.
- Ensuring that your child takes time to read a lot, helping him/her with the ability to succeed in every class.
- As your child schedules 9th grade classes while in 8th grade **be sure to complete a Colonels 2 College application.** Even if your child is looking at a university, the academic and attendance goals will help keep him/her on track.

## Think College and Career!

### College and Career-Bound:

Don't put barriers to your child's success in place. Start thinking now about how to overcome financial and other barriers:

- Financial aid for college is available.
- Scholarships are available along with state money.
- Colonels 2 College provides any Henderson County public high school graduate who meets specific grade and attendance requirements a scholarship to Henderson Community College.
- Your high school graduate can live at home and attend college close by.
- Different colleges and universities have different costs. You can find a college that provides a good education you can afford.
- KEES (Kentucky Educational Excellence Scholarship money is available

### Online Resources to help parents:

- <http://www.gohigherky.org/>
- <http://www.knowhow2go.org/>
- <http://www.kheaa.com>
- <http://www.learningtogive.org/parents/>
- <http://www2.ed.gov/parents/academic/help/hyc.html>
- <http://www.college.gov>
- <http://students.gov>

**What is best for your child?** A community college that offers an associate's degree which transfers directly to a technical career or a university that leads to a bachelor's degree? There are numerous topics to study (majors) at either type of institution. Visit Henderson Community College to learn more!

**Explore Career Options:** Help your child visit different work places with the family or family friends to get a real perspective on what work is like and what education is needed to do that work. Have your child talk with his/her teachers and others about careers of interest. This helps him/her set a goal.





Henderson County Schools  
1805 Second St.  
Henderson, KY 42420

Nonprofit  
U.S. Postage  
**PAID**  
Permit # 443  
Henderson, KY