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PARENTS' GUIDE TO Student Success

7TH GRADE

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 your child will learn 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 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.

WHY ARE ACADEMIC STANDARDS IMPORTANT?

Academic 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.

Of course, high standards are not the only thing needed for our children's success. But standards provide an important first step — a clear roadmap for learning for teachers, parents, and students. Having clearly defined goals helps families and teachers work together to ensure that students succeed. Standards help parents and teachers know when students need extra assistance or when they need to be challenged even more. They also will help your child develop critical thinking skills that will prepare him or her for college and career.

HOW CAN I HELP MY CHILD?

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.

THIS GUIDE INCLUDES

- **An overview of some of the key things your child will learn in English/literacy and math in 7th grade**
- **Ideas for activities to help your child learn at home**
- **Topics of discussion for talking to your child's teacher about his or her academic progress**

English Language Arts & Literacy

In 7th grade, your child will analyze, define, compare, and evaluate ideas when reading, writing, speaking, and listening. He or she will 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. In particular, 7th grade students' ability to cite specific evidence when offering an interpretation of a text matures. They use relevant evidence when supporting their own points in writing and speaking, making their 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 from 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*)

Talking to Your Child's Teacher

Keeping the conversation focused.

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

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?

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 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 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 to Your Child's Teacher

Keeping the conversation focused.

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:

- 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?

Help 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 and 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 what your child is working on, 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.

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

English Language Arts & 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 is interested in.
- Ask your child who his or her favorite authors are. Why does your child like their books? What ideas does the author write about? Who are his or her favorite characters? Why? To find recommendations of books for your child to read, visit www.corestandards.org/assets/Appendix_B.pdf.

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.

For more information, the full standards are available at www.corestandards.org.

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Council of the Great City Schools

parent ROADMAP

SUPPORTING YOUR CHILD IN GRADE SEVEN

ENGLISH LANGUAGE ARTS

America's schools are working to provide higher quality instruction than ever before.

The way we taught students in the past simply does not prepare them for the higher demands of college and careers today and in the future. Your school and schools throughout the country are working to improve teaching and learning to ensure that all children will graduate high school with the skills they need to be successful.

In English language arts and literacy, this means three major changes. Students will continue reading and writing. But in addition to stories and literature, they will read more texts that provide facts and background knowledge in areas including science and social studies. They will read more challenging texts, and be asked more questions that will require them to refer back to what they have read. There will also be an increased emphasis on building a strong vocabulary so that students can read and understand challenging material.

What your child will be learning in grade seven English language arts and literacy

In grade seven, students will continue to develop the ability to cite relevant evidence when interpreting or analyzing a text or supporting their points in speaking and writing. Your child will also build academic vocabulary as he or she reads more complex texts, including stories, plays, historical novels, poems, and informational books and articles. Activities in these areas will include:

- Analyzing how the form or structure of a play or poem contributes to its meaning
- Analyzing how particular elements of a story or play interact (like how the setting shapes the characters or plot)
- Determining how an author develops and contrasts the points of view of different characters or narrators in a text
- Conducting short research projects, drawing on several sources and identifying related questions for further research and investigation
- Engaging in a range of classroom discussions on topics and texts, expressing ideas clearly and building on the ideas of others
- Identifying a speaker's argument and specific claims and evaluating the reasoning and evidence behind these claims
- Using clues such as word roots or add-ons to a word (such as the prefix *hyper–*, which means 'excessive' in the words *hyperactive* and *hypersensitive*) to determine the meaning of a word
- Interpreting figures of speech or references to literature or mythology in a text
- Writing for a range of purposes and audiences

For example, the phrase "a heart of gold" is a figure of speech.

Partnering with your child's teacher

Don't be afraid to reach out to your child's teacher—you are an important part of your child's education. Ask to see a sample of your child's work or bring a sample with you. Ask the teacher questions like:

- Is my child's work meeting grade-level expectations?
- What are my child's strengths and weaknesses?
- What can I do at home to make sure that my child is successful?

In grade seven, students will read a wide range of literature, including stories, plays, and poems. Additionally, they will read to learn information about history, the world, science, and other areas. Here are just a few examples of how your child will develop important reading skills across grade levels.

READING LITERATURE

Grade Six Reading	Grade Seven Reading	Grade Eight Reading
• Students determine the theme or central idea of a text and how it is conveyed through particular details. Students also provide a summary of the text without personal opinions or judgments. • Students explain how an author develops the point of view of the narrator or speaker in a text.	• Students determine a theme or central idea of a text and analyze its development over the course of the text. Students also provide an objective summary of the text. • Students analyze how an author develops and contrasts the points of view of different characters or narrators in a text.	• Students determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot. Students also provide an objective summary of the text. • Students analyze how differences in the points of view of the characters and the audience or reader create such effects as suspense or humor.

READING FOR INFORMATION

Grade Six Reading	Grade Seven Reading	Grade Eight Reading
• Students cite evidence from the text to support analysis of what the text says explicitly as well as inferences drawn from the text. • Students integrate information presented in different media or formats (such as visually, or through numbers) as well as in words to develop a coherent understanding of a topic or issue.	• Students cite several pieces of evidence from the text to support analysis of what the text says explicitly as well as inferences drawn from the text. • Students compare and contrast a text to an audio, video, or multimedia version of the text, analyzing each medium's portrayal of the subject (such as how the delivery of a speech affects the impact of the words).	• Students cite evidence from the text that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text. • Students evaluate the advantages and disadvantages of using different mediums (such as print or digital text, video, or multimedia) to present a particular topic or idea.

As they progress through grade levels, students will be asked more questions that require them to cite details or information from increasingly challenging texts. This will encourage them to become observant and analytical readers.

Writing tasks in grade seven may include stories, essays, reports, and persuasive papers. Here are just a few examples of how your child will develop important writing skills across grade levels.

Grade Six Writing	Grade Seven Writing	Grade Eight Writing
• Students introduce a topic and develop the topic with relevant facts, definitions, concrete details, quotations, or other information. • Students provide a concluding statement or section that follows from the information or explanation presented. • Students organize ideas, concepts, and information using strategies such as definition, classification, comparison/contrast, and cause/effect. • Students use appropriate transitions to clarify the relationships among ideas and concepts. • Students use precise language and subject-specific vocabulary.	• Students introduce a topic clearly, previewing what is to follow, and develop the topic with relevant facts, definitions, concrete details, quotations, or other information. • Students provide a concluding statement or section that follows from and supports the information or explanation presented. • Students organize ideas, concepts, and information using strategies such as definition, classification, comparison/contrast, and cause/effect. • Students use appropriate transitions to create cohesion and clarify the relationships among ideas and concepts. • Students use precise language and subject-specific vocabulary to inform or explain the topic.	• Students introduce a topic clearly, previewing what is to follow, and develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information. • Students provide a concluding statement or section that follows from and supports the information or explanation presented. • Students organize ideas, concepts, and information into broader categories. • Students use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. • Students use precise language and subject-specific vocabulary to inform about or explain the topic.

Some writing guidelines may seem similar from year to year. However, with practice at each grade level, students continue to learn and apply the rules of standard written English and to strengthen and expand their vocabulary, use of language, and sophistication in the development and organization of ideas.

Helping your child learn outside of school

1. Provide time and space for your child to read independently. This time should be free from distractions such as television.
2. Ask your child what topics, events, or activities he or she likes. Then look for books, magazines, or other materials about those topics that would motivate your child to read.
3. It is also helpful when your child sees other people reading at home. You could share what you have read.
4. Make time for conversation at home. Discuss current events, shared interests, and future aspirations for education and career.
5. Visit museums, zoos, theaters, historical sites, aquariums, and other educational places to help increase your child's exposure to new knowledge and vocabulary.
6. Use technology to help build your child's interest in reading. There are several websites where students can read books or articles online. The computer will help with words the student cannot read independently. Libraries also have computers students can use to access those sites. Feel free to ask a librarian or teacher for suggestions.

Additional Resources

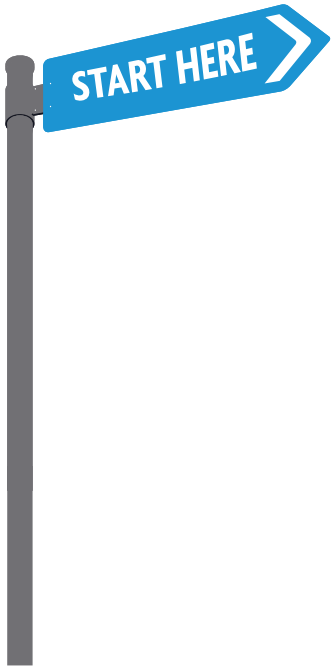
For more information on the Common Core State Standards for English language arts and literacy, go to http://www.corestandards.org/about-the-standards/key-points-in-english-language-arts or http://www.commoncoreworks.org.

Council of the Great City Schools

parent ROADMAP

SUPPORTING YOUR CHILD IN GRADE SEVEN

MATHEMATICS



America's schools are working to provide higher quality instruction than ever before.

The way we taught students in the past simply does not prepare them for the higher demands of college and careers today and in the future. Your school and schools throughout the country are working to improve teaching and learning to ensure that all children will graduate high school with the skills they need to be successful.

In mathematics, this means three major changes. Teachers will concentrate on teaching a more focused set of major math concepts and skills. This will allow students time to master important ideas and skills in a more organized way throughout the year and from one grade to the next. It will also call for teachers to use rich and challenging math content and to engage students in solving real-world problems in order to inspire greater interest in mathematics.

What your child will be learning in grade seven mathematics

In grade seven, students will further develop their understanding of rates and ratios, using tables, graphs, and equations to solve real-world problems involving proportional relationships. Students will also work on quickly and accurately solving multi-step problems involving positive and negative rational numbers—any number that can be made by dividing one integer by another, such as ½, 0.75, or 2. Additionally, students will expand their knowledge of geometry and apply the properties of operations to solve real world problems involving the measurement of multi-dimensional objects. Activities in these areas will include:

- Determining whether two quantities are in a proportional relationship and using knowledge of rates, ratios, proportions, and percentages to solve multi-step problems
- Identifying the unit rate of change (the constant rate at which the value of a variable changes) in tables, graphs, equations, and verbal descriptions
- Calculating the unit rates associated with ratios of fractions, including quantities measured in different units (for example, the ratio of ½ a mile for every ¼ of an hour means that you travel 2 miles in an hour)
- Solving problems using equations to find the value of one missing variable
- Applying the properties of operations to generate equivalent mathematical expressions
- Solving multi-step word problems by adding, subtracting, multiplying, and dividing positive and negative rational numbers in any form (including whole numbers, fractions, or decimals)
- Understanding that numbers cannot be divided by 0
- Converting rational numbers to decimals using long division
- Describing situations in which positive and negative quantities combine to make 0
- Finding the area of two-dimensional objects and the volume and surface area of three-dimensional objects

An equation is a mathematical statement where letters (known as variables) are used to represent unknown numbers, such as 2x + 6 = 12. An expression is an open-ended sentence, such as 2x + 6 or 5-y. In this expression, the variables are "x" and "y."

Partnering with your child's teacher

Don't be afraid to reach out to your child's teacher—you are an important part of your child's education. Ask to see a sample of your child's work or bring a sample with you. Ask the teacher questions like:

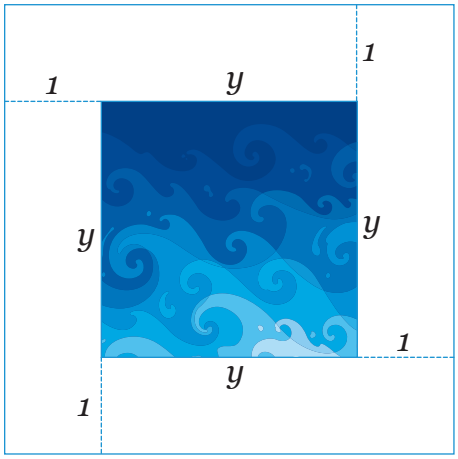
- Where is my child excelling? How can I support this success?
- What do you think is giving my child the most trouble? How can I help my child improve in this area?
- What can I do to help my child with upcoming work?

Here are just a few examples of how students will learn about and work with expressions and equations in grade seven

Grade Six Mathematics	Grade Seven Mathematics	Grade Eight Mathematics
• Write and evaluate numerical expressions involving whole number exponents (such as $5+3^2$)	• Re-write an expression in different forms to show different solutions to a problem or how quantities are related	• Know and apply the properties of integer exponents (positive numbers, negative numbers, or 0) to write equivalent expressions (such as $4^2 \cdot 4^3 = 4^5$, where "•" means to multiply)
• Read, write, and evaluate expressions in which letters stand for numbers. For example, "*subtract y from 5*" can be written 5-y	• Use variables to represent quantities and construct simple equations and inequalities (for example, 5x +2 > 10) to solve problems	• Graph proportional relationships, identifying the unit rate as the slope (how steep or flat a line is)
• Understand that solving an inequality or an equation such as 2+x=12 means answering the question, *"what number does x have to be to make this statement true?"*	• Solve multi-step word problems involving positive and negative numbers	• Solve linear equations (equations that make a straight line when they are graphed, such as y=2x+ 1)
• Represent two quantities that change in relationship to one another (for example, weight increasing along with height)	• Understand that solving an inequality or an equation such as ¼ (x+5) = 21 means answering the questions, *"what number does x have to be to make this statement true?"*	

Writing the same expression in different ways allows students to think through and solve real-world problems.

Example of a problem involving mathematical expressions



In expressing the number of one foot square tiles needed to border a square pool with a length of y (where y represents a whole number), students might write 4y+1+1+1+1, 4y + 4, or 4 (y + 1). All are different ways to express the same value.

Here are just a few examples of how students will develop an understanding of ratios and proportions in grade seven.

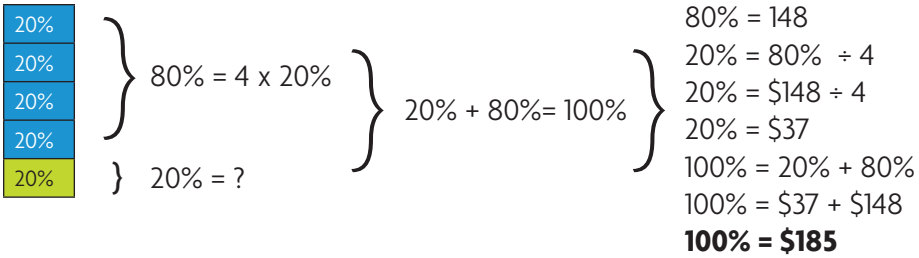
Grade Six Mathematics	Grade Seven Mathematics	Grade Eight Mathematics
• Understand the concept of a ratio and use the correct language to describe it • Understand the concept of a unit rate (the rate per unit, or a ratio with a denominator of 1) and use the correct language to describe it • Use ratio and rates to solve real-world problems	• Analyze proportional relationships and use them to solve real-world problems • Calculate the unit rates associated with ratios of fractions, such as the ratio of ½ a mile for every ¼ of an hour • Recognize and represent proportional relationships in various ways, including using tables, graphs, and equations • Identify the unit rate in tables, graphs, equations, and verbal descriptions	• Understand the connections between proportional relationships, lines, and linear equations • Graph proportional relationships, interpreting the unit rate as the slope of the graph • Use physical models, transparencies, or other tools to show that *similar* objects have the same shape but different sizes (for example, a small square magnified into a larger square)

In grade seven, students use diagrams to solve problems involving proportions. Students use diagrams and tables to think through and solve real-world problems involving ratios.

Example of a problem involving proportions

Problem: After a 20% discount, the price of a skateboard is $148. What was the price before the discount?

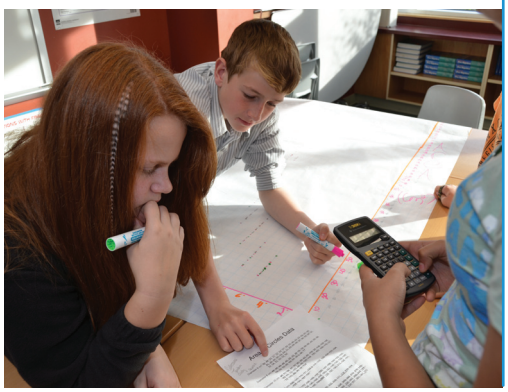
Solution: After a 20% discount, the price is 80% of the original price. So 80% of the original price is $148. Students use this information to find the value of 20% and 100% of the original price.



ALTERNATE ROUTE

Students will also learn to write and solve the equation representing this situation as 0.8x = 148

Helping your child learn outside of school



1. Ask your child to calculate the unit rates of items purchased from the grocery store. For example, if 2 pounds of flour cost $3.00, how much does flour cost per pound?
2. Use store advertisements to engage your child in working with numbers. For example, if a store advertises 30% off, have your child estimate the dollar amount of the discount, as well as the sale price of an item.
3. Have students use four 4's and any of the four arithmetic operations to write the numbers from 0 to 20 (for example, 44-44=0; 4•4-4•4 = 0. How do you get 1? 4/4+4-4=1).
4. Encourage your child to stick with it whenever a problem seems difficult. This will help your child see that everyone can learn math.
5. Praise your child when he or she makes an effort, and share in the excitement when he or she solves a problem or understands something for the first time.

Additional Resources

For more information on the Common Core State Standards for mathematics, go to http://www.corestandards.org/about-the-standards/key-points-in-mathematics or http://www.commoncoreworks.org.

For more information on the standards in mathematics related to ratios/proportions or mathematical expressions and equations, go to http://commoncoretools.me/category/progressions/.

For math games and challenges to do at home, go to http://www.figurethis.org/download.htm.