



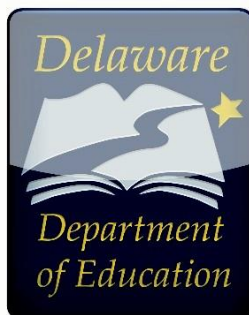
# Delaware Parent Guide

## Preparing Students for Success in

# High School

## Your Child's Progress

*A parent resource for understanding what your child should have learned this year  
as well as helpful suggestions for supporting your child's learning at home  
in preparation for the upcoming school year.*



Dear Families:

In a few weeks you will receive your child's Smarter Assessment score results for this past school year. This Family Score Report provides a great deal of information about your child's scores, including how well your child performed on the test compared to other students and a chart tracking performance across school years. Please take the time to review the report thoroughly so that you understand what type of supports your child needs to progress to the next grade.

The enclosed Family Guide is meant to be used alongside your Family Score Report and offers suggestions for ways to support your child based on his or her Smarter scores. This guide outlines what your child should have learned this year as well as how to prepare for success in the upcoming school year. The information in this guide is based directly on best practices from the national Parent Teacher Association (PTA) and other states and provides guidance to help your child in English language arts/literacy and mathematics.

As you may know, Delaware uses the Smarter Assessment in grades 3 through 8 to help measure student progress toward mastery of the state's academic standards in English language arts/literacy and mathematics. While no single test tells us everything we need to know about how a student is performing in school, these test scores along with in-class work provide you with information on how your child is progressing. We encourage you to meet with your child's teachers to discuss his or her progress, raise any questions you may have, and determine how you can best support the work happening in school.

Preliminary results for Smarter were available to educators through an online reporting system about three weeks after tests were submitted for scoring. Your child's teachers were able to access these Smarter scores to assist with instructional planning. Your child's teachers for the upcoming school year will use Smarter scores to assist with instructional planning as well.

We sincerely appreciate the hard work and support provided at home to ensure that your child is ready to meet the learning goals. We welcome your feedback or suggestions for improving Delaware's Family Score Report and the enclosed Family Guide. Please email us at [assessment@doe.k12.de.us](mailto:assessment@doe.k12.de.us) or call (302) 857- 3391. Best wishes for a wonderful summer.

Sincerely yours,

Mark A. Holodick, Ed.D.  
Secretary of Education




Monica Gant, Ph.D.  
Associate Secretary  
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# Subjects on the Smarter Assessment

When you receive your child's score report, you will receive an overall score as well as information on how your child is progressing in each area. These areas are aligned to the Delaware standards and tell you, your child, and your child's teachers how well your child is mastering the standards.





## Mathematics

The Smarter Assessment for Mathematics is organized by three (3) areas, or claims:

Different Areas of the Mathematics Assessment		
	<b>Concepts &amp; Procedures</b>	<b>Applying mathematical concepts and procedures</b>
	<b>Problem Solving: Modeling and Data Analysis</b>	<b>Using appropriate tools and strategies to solve real world and mathematical problems</b>
	<b>Communicating Reasoning</b>	<b>Demonstrating ability to support mathematical conclusions</b>

## English Language Arts (ELA) / Literacy

The Smarter Assessment for ELA and Literacy is organized by four (4) areas, or claims:

Different Areas of the ELA/Literacy Assessment		
	<b>Reading</b>	<b>Demonstrating understanding of literary and nonfiction texts</b>
	<b>Listening</b>	<b>Demonstrating effective communication skills</b>
	<b>Writing</b>	<b>Producing clear and purposeful writing</b>
	<b>Research/Inquiry</b>	<b>Investigating, analyzing and presenting information</b>

# Mathematics

## What your Child Learned in Grade 8

- Understanding slope (rate of change) and relating linear equations in two variables to lines in the coordinate plane
- Developing the understanding that every rational number (such as  $\frac{1}{2}$ , 0.3, 2, or -2) can be written as a decimal, but that the decimal form of an irrational number (such as  $\sqrt{2}$  or  $\pi$ ) is both non-repeating and infinite (goes on forever)
- Solving linear equations (e.g.,  $-x + 5\left(x + \frac{1}{2}\right) = 2x - 8$ ); Solving pairs of linear equations  $x + 5y = -1$  and  $2x - 2y = 12$ ; 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. NOTE: students don't need to use the function notation but its concept. Comparing the properties of two functions represented in different ways (table, graph, equation, or description)
- Constructing scatter plots and 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 (Example: Evaluating  $\sqrt[2]{36 + 64}$ ; estimating world population as  $7 \times 10^9$ )
- Understanding congruence and similarity using physical models, transparencies, or geometry software (Example: Given two congruent figures, show how to obtain one from the other by a sequence of rotations, translations, reflections, and/or dilations)
- Understanding and applying the Pythagorean Theorem ( $a^2 + b^2 = c^2$ ) to solve problems
- Solving problems involving the volume of cylinders, cones and spheres

## What Your Child Will Learn in High School

- Working with rational and irrational numbers, including rational exponents (Example: Rewriting  $(5^3)^{1/2}$  as  $5\sqrt{5}$ )
- Solving problems with a wide range of units and by thinking about units (Example: The Trans Alaska Pipeline is 800 miles long and cost \$8 billion to build. Divide one of these numbers by the other. What is the meaning of the answer? Greenland has a population of 56,700 and a land area of 2,175,600 square kilometers. By what factor is the population density of the United States, 80 persons per square mile, larger than that of Greenland?)
- Solving real-world and mathematical problems by writing and solving nonlinear equations, such as quadratic equations (Example:  $ax^2 + bx + c = 0$ )
- Interpreting algebraic expressions and transforming them purposefully to solve problems (Example: In solving a problem about a loan with interest rate  $r$  and principal  $P$ , seeing the expression  $P(1+r)^n$  as a product of  $P$  with a factor not depending on  $P$ )
- Analyzing functions algebraically and graphically, and working with them in different forms (Example: Given a graph of one quadratic function and an algebraic expression for another, which has the larger maximum?)
- Working with function families and understanding their behavior (linear, quadratic, and exponential)
- Analyzing real-world situations using mathematics to understand the situation better and optimize, troubleshoot, or make an informed decision (Example: Estimating water and food needs in a disaster area; Using volume formulas and graphs to find an optimal size for an industrial package)
- Proving theorems about triangles and other figures (Example: The angles in a triangle add to  $180^\circ$ )
- Solving applied problems involving trigonometry of right triangles
- Using coordinates and equations to describe geometric properties algebraically (Example: Writing the equation for a circle in the plane with specified center and radius)
- Making inferences and justifying conclusions from sample surveys, experiments, and observational studies
- Working with probability and using ideas from probability in everyday situations (Example: The chance that a person who smokes will develop lung cancer compared to a person who develops lung cancer smokes)

# English language Arts/Literacy

## What Your Child Learned in Grade 8

- 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 ideas using 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 (Example: 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 (such as walk, skip, meander, lurch, limp)
- Interpreting figures of speech (Example: irony, puns) and developing a large vocabulary of general academic words and phrases

## What Your Child Will Learn in High School

- Understanding more from and making fuller use of written materials, including using a wider range of evidence to support an analysis
- Making more connections about how complex ideas interact and develop within a book, essay, or article
- Evaluating arguments and specific claims; assessing whether the reasoning is valid and the evidence is sufficient; as appropriate, detecting inconsistencies and ambiguities
- Analyzing the meaning of foundational U.S. documents (the Declaration of Independence, the Preamble to the Constitution, the Bill of Rights)
- Making an argument that is logical, well-reasoned, and supported by evidence
- Writing a literary analysis, report, or summary that develops a central idea and a coherent focus and is well supported with relevant examples, facts, and details
- Conducting several research projects that address different aspects of the same topic, using more complex books, articles, and other sources
- Responding thoughtfully to diverse perspectives; synthesizing comments, claims, and evidence made on all sides of an issue; resolving contradictions when possible
- Sharing research, findings, and evidence clearly and concisely
- Making strategic use of digital media like animations, video, websites, and podcasts to enhance understanding of findings and to add interest
- Determining or clarifying the meaning of words and phrases; Choosing flexibly from multiple strategies like context, Greek and Latin roots (“bene” as in benefactor or benevolent), patterns of words (conceive, conception, conceivable), and by consulting reference materials (dictionaries, glossaries, thesauruses)
- Interpreting figures of speech (Example: Hyperbole, paradox) in context and analyzing their role in the written materials

# How You Can Help Your Child At Home

## Mathematics

**Strategies to improve your child's in High School math understanding:**  
Stay connected to the mathematical content your child is learning each day at school. Ask how they are using strategies and models in their work and how they know their answer is reasonable or accurate.

$$\frac{a}{b} = c$$

### Concepts & Procedures

### Applying mathematical concepts and procedures

- Reinforce mathematics by sharing your thinking as you work through real problems, especially if it takes some time and effort to find a solution.
- Do an internet search for “free math games” and play games with your child.
- Encourage your child to use magazines, clip art, and other resources to find examples of similar and congruent figures.



### Problem Solving: Modeling and Data Analysis

### Using appropriate tools and strategies to solve real world and mathematical problems

- Encourage your child to review notes, draw pictures, and use resources to solve problems independently.
- Encourage your child to stick with a problem that may seem difficult at first. (Example: 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, such as a swimmer crossing the English Channel or a space probe traveling to another planet.
- Encourage your child to use what is already known to find answers for new problems.
- Discuss with your child real-world and mathematical problems involving area, surface area, and volume.



### Communicating Reasoning

### Demonstrating ability to support mathematical conclusions

- Ask your child to use clear definitions in discussion with others and in their own reasoning. Encourage your child to state the meaning of the symbols chosen, including using the equal sign consistently and appropriately.
- Encourage your child to justify their conclusions, communicate them to others, and respond to the arguments of others.

# How You Can Help Your Child At Home

## English Language Arts (ELA) / Literacy

### Strategies to improve your child's Grade 8 ELA/Literacy understanding:



#### Reading

#### Demonstrating understanding of literary and nonfiction texts

- Encourage your child to read a self-selected text for at least 20 minutes each day.
- Reading comprehension is driven by knowledge of the world. Have conversations with your child about what they learn in their science, social studies, and arts classes including vocabulary words.
- Encourage your child to identify an interest and read as many texts as they can on one topic. Reading builds knowledge. Engage them in conversations about what they're reading.
- Engage your child in direct experiences via field trips and other activities to build knowledge of the world. Multimedia can also provide a wealth of information that can't be experienced first-hand. This can include videos, news stories, and podcasts.
- Ask your child to read a favorite part of their text aloud. Practicing reading with expression builds comprehension abilities.



#### Writing

#### Producing clear and purposeful writing

- Reading and writing processes are closely connected. Ask your child to write to you about something they have read or listened to. This can take the form of a note or a letter. Promote the use of complete sentences and correct capitalization and punctuation.
- Ask your child to write down instructions you give them. This activity requires them to use skills required to complete a writing task such as reviewing information, translating it into their own words, and making a plan for completion.
- In conversation, ask your child to use relevant examples to justify an opinion or statement. Also, inquire about their sources of information. What about their source makes him/her believable?
- If your child wants to purchase a new item or visit a new place, have him or her conduct research and explain why their sources had the best information. The explanation must be supported with facts and details.

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## Additional Resources

### College and Career Planning

- **Delaware Goes to College** – <http://delawaregoestocollege.org/>  
Provides information on preparing for education after high school. Includes checklists, scholarship deadlines, text messaging supports, and more. Families should begin now to ensure students select the appropriate course sequence and extracurricular activities in high school as well as understand the options for paying for college and advanced training to ensure success after graduation.
- **Khan Academy – Free personalized SAT Prep** – <https://www.khanacademy.org/sat>  
Provides official, personalized SAT prep for FREE based on student PSAT scores. Includes practice tests, instructional videos, daily reminders, instant feedback and more.

### Mathematics and ELA

- **Be a Learning Hero** – <http://bealearninghero.org/>  
Provides help with mathematics homework, tips on reading, answers about the new tests, what your child should know grade by grade, and other topics from trusted partners.
- **Roadmaps to the Standards** – <http://www.cgcs.org/page/328>  
Provides parents with detailed information about the expectations of the Common Core in mathematics for K-12. Shows what children will learn and how parents can support learning.
- **Practice Tests** – <http://www.smarterbalanced.org/assessments/practice-and-training-tests/>  
Provides students with a preview of test questions aligned to the academic standards in English language arts/literacy and math for each grade. Similar in format and structure to the actual test.

### Mathematics (only)

- **Khan Academy Math** – <http://www.khanacademy.org/commoncore>  
Provides an extensive library of user-friendly content for K-12 mathematics. Students can practice at their own pace and make use of interactive challenges and videos. Requires online access.
- **Illustrative Mathematics** – <http://illustrativemathematics.org>  
Provides mathematical tasks and solutions as well as how the tasks illustrate content standards. The site also provides videos and vignettes illustrating the Mathematical Practices.

### ELA (only)

- **Sora-Student Reading App** - <https://soraapp.com/library/deal>  
Provides access to the e-book collection from your child's school library and public library.
- **TypingClub** – <https://www.typingclub.com>  
Offers lessons, videos and games to teach typing in a fun way with added accessibility options like voice narration, font choices, and contrast settings.
- **ProCon.org** – <https://www.procon.org>  
Presents “the pro and con arguments to controversial issues in a straightforward, nonpartisan, freely accessible way.” Each topic is further broken down into subcategories, and multiple voices speak for each side, giving readers a granular, nuanced look at every issue.
- **AllSides** – <https://www.allsides.com>  
Users compare how different publications and websites from all sides of the political spectrum report on the same stories.