

# What will my student learn in grade 8?



Alaska's public schools now have higher expectations in English and math. These parent guides help you understand what your child will learn. For more information, see <http://education.alaska.gov>

## English Language Arts

In Grade 8 your child will learn how authors present their ideas through word choice, sentence and paragraph structure, and other methods. Students will build their writing around strong central ideas, supporting them with sound reasoning and evidence, precise word choices, smooth transitions, and various sentence structures.



### YOUR CHILD WILL:

- Cite the strongest textual evidence to support his or her analysis and inferences drawn from a text. Distinguish among fact, opinion, and reasoned judgment in a text. Analyze a text's structure and how each part contributes. Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision.
- Analyze the extent to which a filmed or live production of a story or drama stays faithful to or departs from the text, evaluating the choices of the director or actors. Analyze how a modern work of fiction draws on myths, traditional stories, or religious works.
- Write opinion pieces and informative texts in historical, scientific, and technical subjects, including an introduction, a structure to group ideas and evidence, and a conclusion. Support claims with clear reasons and relevant evidence. Use a formal style. Write narratives to develop characters or events, using dialogue, description, concrete and sensory details, and a clear chronology. Plan, edit, and revise writing.
- Use technology, including the Internet, to produce and publish writing, collaborate with others, and gather information. Conduct short research projects, gathering information from multiple print and digital sources. Avoid plagiarism.
- Engage in discussions, building on others' ideas and expressing his or her own clearly. Ask and answer questions about information from a speaker. Report on a topic or tell a story, speaking clearly. Create audio recordings and add visual displays.
- Use standard grammar, usage, capitalization, punctuation, and spelling. Explain the function of verbals (gerunds, participles, infinitives). Use verbs in the active and passive mood. Use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood.

## Help Your Child Learn at Home

**Parent Tips** Try to create a quiet place for your child to study, and carve out time every day when your child can concentrate. 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 what your child is working on, and it will help you be the first to know if your child needs help with specific topics.



### English Language Arts— Eighth Grade

- 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.
- 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?

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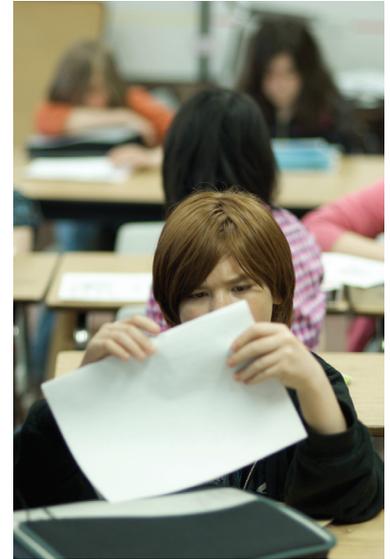
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## Math

In Grade 8 your child will use linear equations to solve a variety of problems. Students will understand that functions describe situations in which one quantity determines another. They will use ideas about distance and angles, and about congruence and similarity, to describe and analyze two-dimensional figures.

### YOUR CHILD WILL:

- Know there are numbers that are not rational, and will approximate them with rational numbers.
- Work with radicals and integer exponents. Perform operations with numbers expressed in scientific notation.
- Understand the connections between proportional relationships, lines, and linear equations. Solve linear equations and pairs of simultaneous linear equations.
- Understand congruence and similarity using physical models, transparencies, or geometry software. Apply the Pythagorean Theorem. Solve real-world and mathematical models involving volume of cylinders, cones, and spheres.
- Investigate patterns of association in bivariate data. Define, evaluate, and compare functions. Use functions to model relationships between quantities.



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### Math—Eighth Grade

Ask your child to share with you any work he or she is doing in math class that strikes him or her as interesting. Some possibilities might include:

- Solving interesting problems involving cylinders and spheres, such as figuring out how much fuel oil fits inside a tank, or how many earths would fit inside the sun.
- Analyzing data with a scatterplot, for example to decide whether exercise and obesity are related.