

What will my student learn in grade 9–12?



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 high school your student will become ready for education and careers after graduation, whether it is taking a job, joining the military, attending a technical school, enrolling in an associate degree program, or enrolling in a bachelor's degree program. Whatever students choose, they need to be able to read, write, speak, and listen well, both to gather and analyze information and to express themselves.



YOUR STUDENT WILL:

- Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. Analyze the development of a text's central theme in detail. Analyze how complex characters or ideas develop over the course of a text.
- Determine the meaning of words as they are used in the text, including figurative and connotative meanings. Analyze how an author creates effects through structure, literary devices, the order of events, and use of time.
- Analyze a particular point of view reflected in a work. Analyze multiple interpretations of a story, poem, or drama. Analyze various accounts of a subject told in different media.
- Evaluate the argument and specific claims in a text, assess whether the reasoning is valid and the evidence is relevant and sufficient.
- Write arguments to support claims in an analysis of substantive topics or texts. Develop claims and counterclaims fairly. Use a formal style and objective tone. Write informative texts to convey complex ideas and information. Use precise language and subject-specific vocabulary. Write narratives with well-chosen details and well-constructed sequences of events. Use techniques such as dialogue, pacing, description, reflection, and multiple plot lines. Write to conform to a style manual.
- Use technology, including the Internet, to produce and publish texts, link to other information, and convey information dynamically.
- Participate in collaborative discussions. Come to discussions prepared. Work with peers to set rules for collegial discussions. Respond thoughtfully to diverse perspectives. Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric. Make strategic use of digital media in presentations.

Help Your Child Learn at Home

Parent Tips At the beginning of high school, sit down with your child's teachers, counselor or other advisor to discuss what it will take for your child to graduate, your child's goals, and his/her plans after high school.



Create a plan together to help your child reach these goals. This plan should include:

- An appropriate course sequence to meet your child's goals.
- The most appropriate extracurricular activities for your child.
- Your plan to help your child prepare for college or career. For example, if your child is interested in a particular field, look to see if internships exist to build his/her work experience in that subject area.
- Financing college.

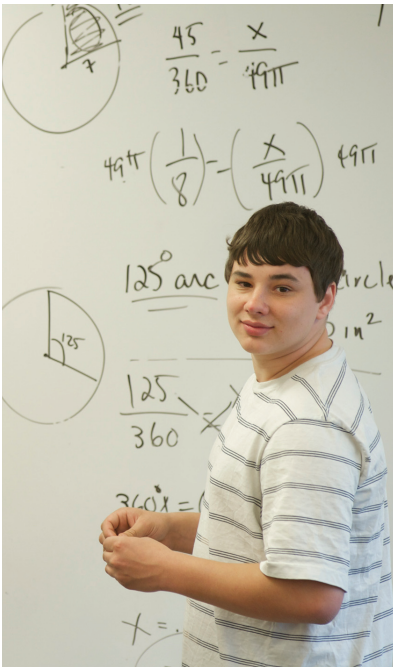
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Math

In high school your student will become ready for education and careers after graduation, whether it is taking a job, joining the military, attending a technical school, enrolling in an associate degree program, or enrolling in a bachelor's degree program. Whatever students choose, they need to be able to navigate a world rich in data and technology.



YOUR STUDENT WILL:

- Through modeling, link classroom mathematics and statistics to everyday life, work, and decision-making. Modeling uses mathematics and statistics to analyze empirical situations, to understand them better, and to improve decisions.
- Extend his or her understanding of number, augmenting real numbers with imaginary numbers to form the complex numbers. Calculators, spreadsheets, and computer algebra systems can be used to generate data for numerical experiments, to help understand the workings of algebra, and to experiment with non-integer exponents.
- Extend his or her work in measurement to include a wider variety of units of modeling, such as acceleration, currency conversions, heat-degree day, social science rates like per-capita income, and everyday rates like batting averages. Quantification is important in science and business.
- Read a mathematical expression with comprehension and analyze its underlying structure. An expression is a record of computation with numbers, symbols that represent numbers, arithmetic operations, and exponentiation.
- Interpret and write expressions to solve equations. An equation is a statement of equality between two expressions. Competence in solving equations often involves looking ahead for productive manipulations and anticipating the nature and number of solutions.
- Understand and use functions. Functions describe situations in which one quantity determines another, such as the effect on an investment of the length of time the money is invested. Because we make theories about dependencies between quantities in nature and society, functions are important tools in constructing mathematical models.
- Understand the attributes and relationships of geometric objects. This knowledge can be applied in many contexts, such as interpreting a schematic drawing, estimating the amount of wood needed to frame a sloping roof, rendering computer graphics, or designing a sewing pattern.
- Understand and use statistics and probability. Decisions or predictions often are based on using data—numbers in context. Statistics provides tools for describing variability in data and for making informed decisions. Technology makes it possible to simulate many possible outcomes in a short amount of time.