

Key Skills in the Eighth Grade

Grade Eight students begin pre-algebra, or if their math skills are sufficiently strong, algebra I. In English/language arts, students read and understand a wide variety of text, connecting essential ideas, arguments, and perspectives using their knowledge of text structure, organization, and purpose. They write essays that contain formal introductions, supporting evidence, and conclusions. In addition to their regular school reading, students achieve the 8th grade goal of reading one million words annually on their own including a good representation of narrative and expository text.

By the end of the year, students in grade eight should be able to independently read:

The Hobbit by J.R.R. Tolkien; *Little Women* by Louisa May Alcott; *The Black Pearl* by Scott O'Dell; *Lost Wreck of the Isis* by Robert D. Ballard; *Ginger Pye* by Eleanor Estes; *Red Wall* (series) by Brian Jacques; *Treasure Island* by R. L. Stevenson.

Math (pre-algebra)

Students:

- translate verbal phrases into numerical expressions and evaluate expressions
- solve equations using properties of equality and solve real-world and geometry problems
- identify, factor, multiply, and divide monomials and evaluate expressions containing exponents
- add, subtract, multiply, and divide rational numbers
- use ratios and proportions to solve problems, including scale drawings
- solve equations with variables on each side and with grouping symbols and solve multi-step inequalities
- graph/write linear equations using ordered pairs, x - & y - intercepts, and slope & y -intercept. Find slope
- find and use squares and square roots. Use trigonometric ratios to solve problems
- identify and draw two- & three-dimensional figures. Solve for area, perimeter, surface area, and volume
- display and interpret data in stem-and-leaf plots, box-and-whisker plots, and histograms. Find probabilities and odds
- add, subtract, and multiply polynomials

English/Language Arts

Students:

- compare/contrast the features and elements of consumer materials, such as warranties, contracts, instruction manuals, and product information sheets
- evaluate the unity, coherence, logic, internal consistency, and structural patterns of text
- evaluate the plot (e.g., subplots, parallel episodes, climax), the plot's development, and the way in which conflicts are/are not resolved
- analyze literature showing how it reflects the heritage, traditions, attitudes and beliefs of the author
- identify and analyze recurring themes across works (e.g., good versus evil)
- plan and conduct multiple-step information searches using computers
- write narrative, expository, persuasive, and descriptive texts of at least 500-700 words in each genre
- write biographies, autobiographies, short stories, and narratives using relevant dialogue, specific action, physical description, background description, comparisons of characters
- write responses to literature that exhibit careful reading and insight
- write research reports that have a clearly defined thesis and uses a variety of primary and secondary sources
- give credit for quoted and paraphrased information in a bibliography using MLA citation standards
- write technical documents that identify a sequence of activities to design a system or operate a tool
- edit written manuscripts to ensure correct grammar has been used throughout
- use correct spelling conventions as well as correct punctuation and capitalization
- use subordination, coordination, and apposition to clearly indicate the relationship between ideas
- deliver well organized oral presentations in all genres including narrative, oral response to literature, research presentations, and persuasive presentations

