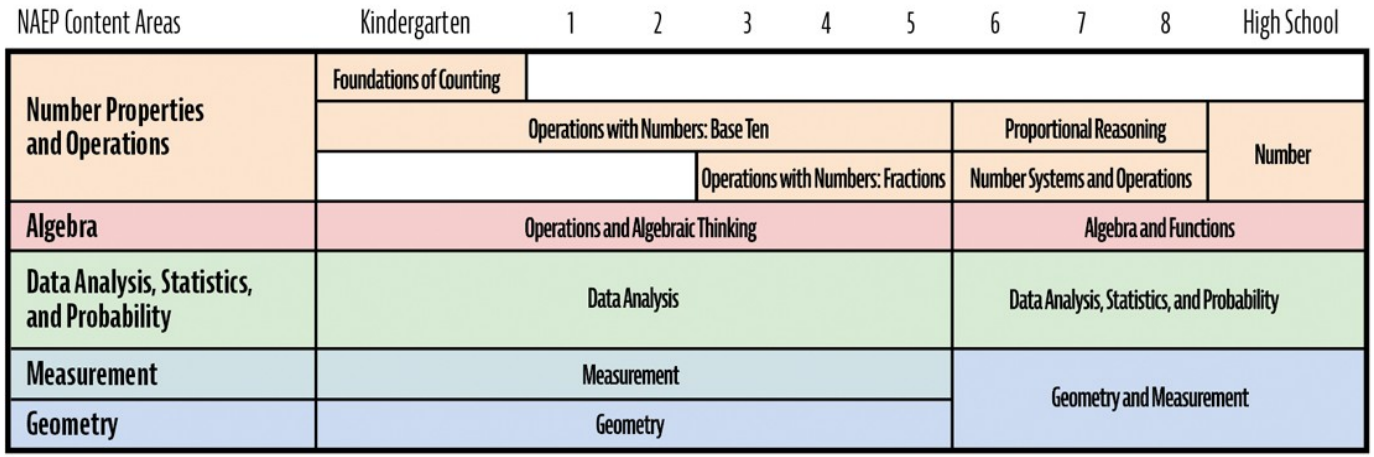
# GRADES 6 - 8 OVERVIEW

Grades 6-8 mathematics focuses on solidifying the foundations of mathematics, empowering students for high school mathematics, and broadening their understanding of mathematics in relation to everyday life. Ensuring that each and every student receives the preparation they deserve will require focus on developing conceptual understanding of the mathematics they will need for a lifetime. These standards build on critical areas of focus for each grade level.

## Overview of Alabama Mathematics Content Areas




*Note: Proportional reasoning is not listed as an 8th grade content area because it has been incorporated into Algebra and Functions.*

# Pathways to Student Success

Grades 6-8 mathematics offers two flexible pathways with five courses: Grade 6, Grade 7, Grade 7 Accelerated, Grade 8, and Grade 8 Accelerated. All middle school students begin at a shared starting point with Grade 6 Mathematics, and all will complete Grade 8 prepared for *Geometry with Data Analysis* in Grade 9, regardless of which middle school pathway they complete.

The standard middle school pathway is challenging and rigorous. It meets the needs of all middle school students, giving them a solid mathematical foundation and preparing them for success in later mathematics courses.

Middle school students who are especially interested and strongly motivated to study mathematics have the option of moving a little faster by choosing an accelerated pathway which combines standards from three courses into two years of study: Grade 7, Grade 8, and *Algebra I with Probability* (otherwise offered in Grade 10). Students who successfully complete this middle school accelerated pathway will be prepared to enter directly into *Algebra II with Statistics* or *Advanced Algebra II with Statistics* after completing *Geometry with Data Analysis* or *Advanced Geometry with Data Analysis* in Grade 9. These students will be required to take two additional courses in Grades 11 and 12 to earn the mandatory four credits in mathematics, since neither of the accelerated middle school courses (nor their combination) is equivalent to a high school mathematics credit. Taking two more courses gives them the opportunity to make additional progress toward their postsecondary goals.

The accelerated middle school pathway is designed to challenge the most proficient and motivated students. Some who start out on this pathway may find it was not the best choice for them. Students who are not making adequate progress in Grade 7 Accelerated are not locked into the accelerated pathway; they may exit the accelerated pathway and take the Grade 8 Mathematics course without any loss of progress.

Students have a second opportunity to accelerate in Grade 9 by taking *Geometry with Data Analysis* and *Algebra I with Probability* at the same time. These opportunities to accelerate allow students to make additional progress toward their postsecondary goals.

Students and their parents should receive ongoing feedback and information about available options as students decide whether or not to pursue, or continue pursuing, an accelerated pathway. That decision should not be made for them without consultation. It is critical that all students be afforded the opportunity to pursue a pathway that supports their interests and goals.