



Georgia Mathematics Performance Standards

2007-08 brings changes for grades 3, 4, 5, and 8

In an effort to improve what Georgia students learn, the Georgia Department of Education is completely rewriting the curriculum used in the state’s schools. The new Georgia Performance Standards cover all core (Language Arts, Science, Mathematics, Social Studies) subjects and are designed to be not only more rigorous, but also more relevant for today’s student. The massive undertaking is being phased in over a seven-year period. In 2005-2006, new math standards were introduced in grade 6. The following year, grades K-2 and 7 began the new math curriculum. In 2007-2008, grades 3, 4, 5 and 8 will follow Georgia Performance Standards. This completes the math curriculum roll-out in grades K – 8.

Is Fulton required to adopt the Georgia Performance Standards?

Yes. The Georgia Performance Standards, or GPS, replaces the previous state curriculum called the Georgia Quality Core Curriculum (QCC). The Georgia Department of Education (DOE) requires that all public schools adopt the new curriculum. As with the previous curriculum, Fulton County has the flexibility to supplement and enrich our mathematics curriculum by teaching additional concepts that go above and beyond the DOE’s requirements.

Which students are affected by the curriculum changes?

The new mathematics curriculum will be fully implemented in grades K-8 in 2007-08.

The phase-in schedule for mathematics after 2007-08 is:

2008-09	9th grade	2010-11	11th grade
2009-10	10th grade	2011-12	12th grade

What are the major differences between the old curriculum (Quality Core Curriculum) and the Georgia Performance Standards (GPS) in the area of mathematics?

GPS sets higher expectations for all students. The new curriculum defines what best demonstrates mastery of concepts. The Quality Core Curriculum was based on a checklist of concepts to be covered by teachers. Knowing if a student truly understood each concept or had the necessary depth of knowledge to advance to higher-level mathematical concepts was not defined in the QCC.

GPS provides the curriculum framework to change this. The new curriculum guides both teaching and learning. Teachers can readily determine what students already know and the extent to which the student understands and can apply key mathematics concepts. GPS also makes both the teacher and student accountable. QCC objectives were so broad that it was not possible to adequately cover each objective in a given year. Teachers had to decide the most important topics. This did not always match what the state thought was important. GPS, on the other hand, clearly states what we expect students to know and be able to do. It then provides the teachers with the curriculum and resources to make sure every student can succeed.

The new mathematics standards focus on important concepts. Students develop grade appropriate skills needed to solve mathematical problems that occur in real-life situations, using probability, algebra, geometry, measurement and other mathematical concepts that are integrated throughout the curriculum. While the traditional memorization of multiplication tables and formulas are still important and necessary, GPS also makes sure that students can move beyond the concrete to the abstract and actually put mathematics to use. This change at

the elementary level better prepares students for the switch from concrete to abstract concepts used in middle and high school mathematics.

Will the new mathematics curriculum challenge my child?

Yes. The new mathematics standards focus on the development of “deeper mathematical knowledge,” not simply more “surface” mathematical processes. In grades K-5, the new standards actually increase academic rigor by emphasizing conceptual development. A deeper understanding of mathematical concepts is achieved by going beyond mere memorization. There is a greater use of hands-on manipulatives, discovery learning and technology integration. Numerous assessments have been developed to make sure each child is being taught at his or her appropriate level. Every child will be challenged with the new curriculum.

In eighth grade, the alignment of assessment and accountability moves from pure skill to true application of mathematical concepts. It also allows for integration of multiple mathematical strands (algebra, geometry, data analysis, numbers and operations, and process standards) into performance tasks that allow students to solve real-world problems. This alignment helps teachers to focus on what students are expected to know and be able to do at each grade level.

The new curriculum brings together many mathematics concepts. It allows middle school students to complete the equivalent of an Algebra I course plus approximately half of a geometry course by the end of eighth grade. Middle school students will participate in activities that are considered to be on-level or advanced while meeting grade-level standards unless they are one full year ahead. Teachers will modify the level of instruction to each child’s skill level. Specific details on the concepts taught at each grade level are online at www.fultonschools.org/dept/curriculum/math/gps.pdf.

Will eighth graders still be able to earn high school credit in mathematics?

As of now, the answer is yes. Fulton is one of only a few school systems in the state that awards high school credit for certain middle school courses. Unless changes are made at the state level, Fulton intends to continue this practice. However, advanced students will be able to earn only one math credit instead of the two currently available. This is because the new curriculum is so much more rigorous that many of the concepts currently taught at the high school level are now expected as the on-grade level course for 8th graders. Since students are taking the course expected at middle school, they will not be able to receive high school credit. Fulton will, however, differentiate courses by offering not only on-grade level, but also advanced mathematics in the middle school. This will allow advanced students to enter high school on track to progress to Calculus or higher-level courses by their junior year.

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