

Council Rock School District
Mathematics Program K –
12

The Council Rock K – 12 Mathematics Program is a unified program. The National Council of Teachers of Mathematics (NCTM) provides and supports the direction and goals that form the underlying framework of our curriculum, program development, instructional practices, and assessment practices. This direction and these goals are also aligned with the Pennsylvania State System of Assessment (PSSA) standards.

It is the commitment to the development of standards and our belief in those standards that helps us to seek constant improvement in the delivery of our program at all levels.

With the standards in mind we have developed a Council Rock School District Mathematics Program mission statement which guides our program and its continuous development.....

“The Council Rock graduate values mathematics and uses mathematical reasoning and communication with confidence to solve theoretical and practical problems across all curricular areas.”

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Grade 6 Mathematics:

**An Overview of Program Goals
and Curriculum Units of Study**

Enclosed are excerpts from the Course Framework for Mathematics Level 6 which provide a glimpse of what your child will be learning about this year and the instructional setting we hope to provide for your child to achieve optimal learning. The series we use is **Glencoe Math Course 1.** We find these resources fully support our standards for mathematics education. Glencoe has a website, **<http://connected.mcgraw-hill.com>**, which can be accessed for additional information about these materials. Council Rock students continue to excel in mathematics on both nationally-normed and state-normed tests. This achievement is attributed to an excellent professional staff, a strong curriculum, conscientious students, and supportive parents. We remain confident that this status will continue.

Program Overview

Completing the elementary program, a 6th grade student will have established a firm foundation in number and operation sense and computation and estimation skills with whole numbers, fractions, and decimals. The student will also be completing the spiraled elementary program where math reasoning and problem-solving skills, geometry concepts, the beginning concepts of algebra, probability, and statistics have been interwoven throughout the curriculum at all levels.

Occasional open-ended projects and assignments may be used to develop the creative aspects of mathematics and to solidify the awareness of the student's own mathematical power. Students will also verbalize concepts and processes, as well as model, draw, and write about these to communicate their mathematical understanding.

Student proficiency with the use of the calculator in problem-solving and concept exploration is a natural part of the curriculum. In addition, a variety of activities involving manipulatives, mathematical models, audiovisual aids, and computer software are used to supplement paper and pencil activities. The student will have many opportunities to develop his or her role as a member of a cooperative learning group.

Referral for placement in the 7th grade courses will be made in early April and will be dependent upon student work and study habits and their performance on district-wide testing.

The emphasis of all learning in the mathematics classroom is that students value mathematics as a tool that can readily be used in their everyday lives and that they experience success with the concepts they strive to learn and understand in the classroom.

GRADE 6

UNITS OF STUDY

PLEASE NOTE: THE FOLLOWING IS A LIST OF CHAPTER TITLES WHICH PROVIDE A QUICK SYNOPSIS OF TOPICS TO BE EXPLORED THIS YEAR. AS YOU BEGIN TO SEE YOUR CHILD'S WORK AS IT ARRIVES HOME AND AS IT IS SHARED WHEN YOU VISIT THE CLASSROOM, YOU WILL HAVE A BETTER UNDERSTANDING OF THE DEPTH AND QUALITY OF THE CONCEPTS YOUR CHILD WILL BE LEARNING THIS YEAR.

1. Ratios and Rates
2. Fractions, Decimals, and Percents
3. Compute with Multi-Digit Numbers
4. Multiply and Divide Fractions
5. Integers and the Coordinate Plane
6. Expressions
7. Equations
8. Functions and Inequalities
9. Area
10. Volume and Surface Area
11. Statistical Measures
12. Statistical Displays