Council Rock School District Mathematics Program K-12

The Council Rock K – 12 Mathematics Program is a unified, spiraled 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 NCTM's commitment to the development of national 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."

Grade 1 Mathematics:

Enclosed are excerpts from the Course Framework for Mathematics Level 1 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 **Pearson enVision Math.** We find these resources fully support our standards for mathematics education.

Pearson has a website, www.pearsonsuccessnet.com, which can be accessed for additional information about these materials. Each student will receive a user name and password and will have full access to their grade level math book and all program materials online. Teachers are able to assign homework, online quizzes, and review sheets through this website. In order to use the online resources, you will need to have Adobe Shockwave installed. This is a free downloadable program. For technological assistance, you can reach the Pearson Tech Help Line at 800-234-5832 or contact them through the website listed above.

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

At grade one, students are provided with frequent opportunities to discover and explore the interrelationships among a broad range of mathematical topics. Students are introduced to a variety of strategies to build number and operation sense and to apply these skills to problem solving. The topics are introduced at the grade one level and continue through the spiraled elementary program. Using a variety of materials and activities, the child is exposed to numerous models of mathematical concepts and processes. The major goal is to provide each child with a maximum opportunity to enjoy the development of his or her mathematical intuition. The classroom atmosphere is one that encourages exploration and investigation.

Many concepts and skills are introduced and developed with the use of manipulatives to provide the students with a foundation of physical and concrete experiences on which to build their mathematical understanding. These concrete experiences give deeper meaning to later paper and pencil activities.

Technology is an integral part of the first grade program. Calculators are used as a tool in developing problem solving skills and in allowing the students to explore higher concepts that previously may have been beyond their grasp. Computer programs are used to reinforce numerous mathematical concepts.

First graders become aware that math is everywhere and therefore should be valued. Throughout first grade, students become more confident in their own ability to use math to solve problems. It is with the help of math that students are able to develop a positive attitude toward becoming lifelong learners.

Units of Study

PLEASE NOTE: The following is a list of topic titles which provide a quick synopsis of concepts 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.

- 1. Numbers to Twelve
- 2. Comparing and Ordering Numbers
- 3. Understanding Addition
- 4. Understanding Subtraction
- 5. Five and Ten Relationships
- 6. Addition Facts to Twelve
- 7. Subtraction Facts to Twelve
- 8. Geometry
- 9. Patterns
- 10. Counting and Number Patterns to 100
- 11. Tens and Ones
- 12. Comparing and Ordering Numbers to 100
- 13. Counting Money
- 14. Measurement
- 15. Time
- 16. Addition Facts to 18
- 17. Subtraction Facts to 18
- 18. Data and Graphs
- 19. Fractional Parts
- 20. Adding and Subtracting With Tens and Ones

Additional Resources and Websites

We frequently get requests for both remediation and enrichment activities. Although the enVision program does provide these, you can find additional resources, games, and websites at www.crsd.org/mathmoments or on your math specialist's website. In addition, this year we have the 24 Game online, which can be accessed at www.firstinmath.com. Your child will be given a user name and password in school.