

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 4 Mathematics:

Enclosed are excerpts from the Course Framework for Mathematics Level 4 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

As students move to the 4th grade, they are beginning their upper elementary study of mathematics and are more able to make the transition from concrete to abstract mathematical ideas. Building upon the foundation that has been laid at the primary level, the students are now able to further explore the concept of place value and number sense as it applies to the four operations. There will be further study of fractions and decimals to build upon their growing use of number in a variety of situations.

A key expectancy of the 4th grade year is that students will have a firm grasp of the majority of the basic facts involving the four operations. More complex computations will be stressed along with strategies for estimation of an approximate answer. The students will begin using the operations in multiple step problem solving. Accuracy, reasonableness, and appropriate use of the calculator as a tool will be stressed.

Communication regarding the problem solving process will be taught and assessed. The students will now be required to formally demonstrate organization of thought and correct use of strategy in written form as they solve multiple step problems in performance assessment tasks. The use of technology will aid in their understanding and practice of mathematics concepts.

Fourth grade mathematics is a time when students begin to value more deeply the role of mathematics in their everyday lives and it is our hope that they will experience success and a growing mathematical power as they strive to learn and understand the concepts presented to them.

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. Numeration
2. Adding and Subtracting Whole Numbers
3. Multiplication Meanings and Facts
4. Division Meanings and Facts
5. Multiplying by 1-Digit Numbers
6. Patterns and Expressions
7. Multiplying by 2-Digit Numbers
8. Dividing by 1-Digit Divisors
9. Lines, Angles, and Shapes
10. Understanding Fractions
11. Adding and Subtracting Fractions
12. Understanding Decimals
13. Operations With Decimals
14. Area and Perimeter
15. Solids
16. Measurement, Time, and Temperature
17. Data and Graphs
18. Equations
19. Transformations, Congruence, and Symmetry
20. Probability

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.