## Parent Guide to

## Student Success

Rutherford County Schools is committed to providing high quality instruction anchored in the Tennessee State Standards using state adopted and board approved curriculum resources.

# What to Expect in 8th Grade Mathematics 

8th grade math advances students' understanding of algebraic reasoning. Students consider what a 'solution' looks like by solving single linear equations and systems of linear equations. Students explore functions and their representations to lay a foundation for high school math. Students also learn about geometric figures, lines, and angles, investigating how these figures move and how they are measured.


## A Sample of What Your Child Will Be Working On

- Understanding square roots, cube roots, rational numbers, and irrational numbers.
- Computing with exponents and numbers expressed in scientific notation.
- Analyzing, comparing, and using functions to model relationships
- Solving linear equations and systems of linear equations and using that understanding to analyze situations and solve problems.
- Exploring transformation of two-dimensional figures on the coordinate plane.
- Applying the Pythagorean Theorem to solve problems and find the distance between two points on a coordinate plane.
- Investigating patterns of association in two-variable data sets using a scatter plot.


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## Conversation Starters

## With Students

- Show me how you solved a problem in class today.
- What do you do when you struggle on a math problem?
- Remind your child that productive struggle is an essential part of being successful in mathematics. Keep encouraging them and reach out for help from a classmate or the teacher.


## With Teachers

- Is my child meeting the expectations of this class?
- How can I keep track of their progress and what they are currently studying?
- Are there additional resources you would recommend to support learning outside the classroom?
- Is my child prepared for high school? How do you know?


## ? That seems irrational?

- Rational numbers can be represented as fractions (or ratios of two integers).
- Irrational numbers are numbers that go on forever and never repeat. Some famous examples include the Golden Ratio and $\mathrm{Pi}(\pi)$.


## Resources:

