

Welcome Back

8th Grade
Math Team



Parent Curriculum Night

- Welcome to the 8th grade presentation on curriculum.
- We will discuss:
 - Our units of study
 - How we assess our students
 - Tips on how to best help your child with math at home.

Units of Study

In the following slides you will see all of our units of study

- We have five major units
 - Number Sense
 - Ratios and Proportions
 - Expressions and Equations
 - Probability and Statistics
 - Geometry
- Our five units are based upon the Common Core Standards whose mastery your children are assessed on during State Exams – with an emphasis on linear relationships and proportional reasoning

Number Sense

This unit covers the use of exponents and numbers in scientific notation

- Exponents

- Laws of Exponents
- Scientific Notation (add/sub/mult/div)

Expressions and Equations

This unit covers the solving for unknown values, and writing an equation from a situation

Equations

- Multi-step equations
- Rational coefficients
- Equations in form $y = mx + b$
- Graphing and solving equations
- Systems of equations (different methods)

Functions

This unit covers the relationship between two quantities. Students create tables, graphs, and different real world situations.

- Relation
- Linear Functions and non-linear functions
- Construct functions
- Quadratic functions

Geometry

This unit covers the angle formed by parallel lines cut by transversal. Also, transformations of shapes in a plane and dimensions of 3D models.

- Parallel lines cut by transversal
- Angles of triangles
- Transformations
- Congruency and Similarity
- Surface area of 3D shapes
- Volume of 3D shapes

Statistics

- This unit covers bivariate relationships.
- Scatter plot
- Line of best fit
- Linear and Non-linear association
- Two-way tables

Assessment

- Exit Tickets
- Quizzes
- Tests
 - Pre- and post- assessment exams
- Projects
- Teacher conferencing/observation
 - Last two methods are formative and help determine groups and individual levels of need

Resources

- www.khanacademy.com
- www.ixl.com
- www.learnzillion.com
- www.deltamath.com
- www.learninggamesforkids.com

Let's Explore...

$$2^3 \cdot 5^2$$

$$\frac{1}{3} \cdot n \cdot 4 \cdot n \cdot \frac{1}{3} \cdot n \cdot 4 \cdot 4$$

$$**2x + 10 = 3x - 5**$$

Connected Math Workbook

- [https://connected.mcgraw-hill.com/c2j/dashboard.do?bookId=WMVDSJS
EQ6HGKX6J8K6Q6SLQK1](https://connected.mcgraw-hill.com/c2j/dashboard.do?bookId=WMVDSJS
EQ6HGKX6J8K6Q6SLQK1)