Class Syllabus

Instructor	Kimberly Moody
Subject	Math
Grade	8th
School	Centerview Elementary School

Course Outcomes

In grade 8:

- Students perform operations with rational numbers to expand their understanding of the Real Number System by recognizing irrational numbers and their relationship to rational numbers.
- Students continue to evaluate expressions with exponents, but now can be both positive and negative integers.
- Students should be able to identify the relationship between raising a number to the second power (squaring a number) and taking the square root of a number as inverse operations and likewise, for raising a number to a third power and cube roots.

- Students develop an understanding of the properties of exponents, they should extend their understanding to be able to write very large and very small numbers in scientific notation using positive and negative exponents. They will extend their knowledge of the properties of exponents to solve problems that involve performing operations with numbers in scientific notation.
- Students should develop a solid foundation in graphing proportional relationships and determining and interpreting unit rate and constant of proportionality as the slope of a graph.
- Students should use prior knowledge of equality properties and equivalence for solving equations to solve more complex linear equations in one variable with coefficients that include integers, fractions, and decimals can be solved by expanding expressions with the distributive property and/or combining like terms in equations with variables on both sides. They will also determine if a linear equation results in one, zero, or infinitely many solutions.
- Students will use prior knowledge of graphing inequalities on a number line to be able to graph the solution to a set of linear inequalities on the coordinate plane.
- Students should develop a firm foundational understanding that functions describe situations in which one quantity is determined by another.
- Students should be able to compare properties represented in the same and different forms using tables, graphs, equations, and contextual situations.
- Students will discover similarities and differences of linear and non-linear functions in both algebraical and graphical representations.
- Students will use prior knowledge of scale drawings and connect it to the concept of dilations. They will also explore three other transformations – reflections, rotations, and translations.
- Students will construct informal arguments about properties of triangles and pairs of angles while exploring facts about the angles of a triangle and angles created when parallel lines are cut by a transversal. Students will also extend that understanding to discover the angle-angle criterion for similar triangles.
- Students will explore relationships between the side lengths of right triangles and make connections to a model of the Pythagorean Theorem. They will learn to use the Pythagorean Theorem to find the distance between two non-vertical and non-horizontal points on the coordinate plane.
- Students will combine and extend their knowledge of volume of right prisms and pyramids to finding the volume of cylinders, cones, and spheres.
- Students will be expected to recognize and explain the meaning of positive and negative correlations, clusters, and gaps in data. They are expected to describe qualitative bivariate data that is represented in a scatter plot and explain the relationship if one exists.
- Students will build on their knowledge of single events to determine the probability of compound events.

8th grade Math Instructional Focus Documents:

https://www.tn.gov/content/dam/tn/education/standards/math/Standards_Support_grade_8_Mathematics.pdf

Tennessee State Standards for Math:

https://bestforall-cms.tnedu.gov/sites/default/files/documents/G8_9-24-21.pdf

Cocke County School System Website:

http://www.cockecountyschools.org

Instruction

- **Topics/Competencies/Skills Covered**
  - The Number System
  - Expressions and Equations
  - Functions
  - Geometry
  - Statistics and Probability

- **General Pacing**

1st nine weeks	2nd nine weeks	3rd nine weeks	4th nine weeks
Geometric Figures: • Rigid Transformations and Congruence • Transformations, Similarity, and Angle Relationships Linear Relationships: • Slope, Linear Equations, and Systems of Equations	Functions: • Linear and Nonlinear Relationships Integer Exponents: • Properties and Scientific Notation	Real Numbers: • Rational Numbers, Irrational Numbers, and the Pythagorean Theorem Statistics: • Two-Variable Data and Fitting a Linear Model	• Review • TN Ready Testing

- **Materials needed for the class**
    - **iReady Textbook**
    - **iReady Fluency and Skills Workbook**
    - **Chromebook**
    - **Paper/pencil/three-ring binder**
- Tutoring is offered before school from 7:30 – 8:15 with Ms. Lindsey in room 106 or the students can knock on the outside door #03.

Assessment and Grading

● Grading Policy:

- Final grades assigned for this course are based on the percentage of points earned and are assigned as follows:

Letter Grade	Percentage
A	90% - 100%
B	80% - 89%
C	70% - 79%
D	60% - 69%
F	59% or below

Grades for this course are weighted as follows:

- Tests 40%
- Classwork 30%
- Quizzes 30%,

● Make-up/Late work Policy: Students are required to check the absentee folder for any assignments they missed while absent. Make-up work is to be made up within two days of returning to school.

- Grade Posting Policy – Grades will be updated in Aspen on a weekly basis. Students and parents have access to see these at any time. Progress reports are sent home each $4\frac{1}{2}$ weeks.
- My Path – Students will be expected to log into their myPath for at least 30 minutes per week.

General Expectations

- Students
    - Attendance Policy:
        - https://cockecountyschools.org/departments/attendance/
    - Classroom Policy/Procedures/Discipline:
        - Come to class prepared (pencil, chromebook, binder, homework)
        - Be respectful to others
        - Use polite and appropriate language
        - Arrive to class on time and be ready to learn
        - Try your best

    *Misbehaviors will be dealt with as needed. A demerit system is in place for students. Consequences for infractions include lunch detention, loss of a privilege, parent conference, office referral.

    - Teachers:
        - Email @ moodyk@cocke.k12.tn.us
        - Parent Square
    - Office hours: 8:00am – 3:45 pm

Plagiarism

○ According to Harbrace Handbook, 15th edition: Plagiarism is defined as “presenting someone else’s ideas, research, or opinions as your own without proper documentation, even if it has been rephrased.”

- This includes but is not limited to:
    - ○ Copying verbatim all or part of another’s written work;
    - ○ Using phrases, figures, or illustrations without citing the source;
    - ○ Paraphrasing ideas, conclusions, or research without citing the source;
    - ○ Using all or part of a literary plot, poem, or film without attributing the work to its creator.
- Consequences of Plagiarism

- Plagiarism is a form of stealing and academic fraud. Students who are found guilty of plagiarism have the option of either redoing the assignment within a specified time period and accept a letter drop or taking a zero on the assignment. Parents are to be involved in making this decision.

Religion in the Classroom

The Board affirms that it is essential that the teaching about religion - and not of a religion be conducted in a factual, objective, and respectful manner in accordance with the following guidelines:

- Religious themes may be a part of the curriculum for school-sponsored activities and programs provided it is essential to the learning experience in the various fields of study and is presented objectively;
- The inclusion of religion shall be for educational purposes only;[1]
- The emphasis on religious themes should be only as extensive as necessary for a balanced and comprehensive study of the curriculum. Such studies shall never be used to proselytize, establish, foster, or demean any particular religion, religious tenets, or beliefs; and[1]
- Student-initiated expressions to questions or assignments which reflect their beliefs or non-beliefs about a religious theme shall be accommodated.