



7th grade Math Syllabus

Instructor Kimberly Moody

Subject Math

Grade 7th

School Centerview Elementary School

Course Outcomes

In grade 7:

- Students will compute unit rates from fractional quantities and discover that computing unit rates computing unit rates with fractions is the same concept as unit rates with whole numbers.
- Students will be exposed to both proportional and non-proportional relationships and engage in discussions about proportional relationships.
- Students will be able to identify the constant of proportionality from multiple representations, including tables, graphs, equations, diagrams, and verbal descriptions.
- Students will use their understanding of proportional reasoning to solve multi-step ratio and percent problems using visual and algebraic models.
- Students will develop an understanding of and computing with rational numbers, including integers, positive and negative fractions, and positive and negative decimals.

- Students will multiply and divide with rational numbers.
- Students will convert rational numbers to decimals using long division and know that the decimal form of rational numbers terminates or eventually repeats.
- Students will use order of operations with rational numbers, including integers, positive and negative fractions, and positive and negative decimals to solve real-world mathematical problems. Problems that require division of rational numbers should include complex fractions.
- Students are introduced to properties of operations with positive and negative integers and should employ this understanding and their prior knowledge of properties operations (distributive, commutative, associative, identity, and inverse properties) of addition and multiplication as strategies for adding, subtracting, factoring, and expanding linear expressions.
- Students will interpret parts of an expression, such as the coefficient, constant, term, and variable, based on the context of the problem.
- Students will be introduced to the concept of scaled drawings. They will explore what happens to shapes when a scale factor is applied to a figure.
- Students will explore sides and angles in triangles and draw conclusions about what makes a triangle.
- Students will solve problems involving area and circumference of circles.
- Students will be provided opportunities to explore supplementary, complementary, vertical, and adjacent angles and their relationship to one another through measuring and identifying patterns to discover their properties.
- Students will explore complicated figures that can be decomposed into triangles, quadrilaterals, and polygons to find their area.
- Students improve the production of data and understand the importance of selecting random samples.
- Students are introduced to random sampling and learn how those samples can be used to gather information about the populations from which they are drawn.
- Students will compare data sets of two distinct populations, using measure of center and variability.
- Students will expand their understanding of ratios and develop an understanding of probability, learning the difference of theoretical and experimental probability.

7th grade Math Instructional Focus Documents:

https://www.tn.gov/content/dam/tn/education/standards/math/Standards_Support_grade_7_Mathematics.pdf

Tennessee State Standards for Math

https://bestforall-cms.tnedu.gov/sites/default/files/documents/G7_9-24-21.pdf

Instruction

- **Topics/Competencies/Skills Covered**

- Ratios and Proportional Relationships
- The Number System
- Expressions and Equations
- Geometry
- Statistics and Probability

- **General Pacing**

1 st nine weeks	2 nd nine weeks	3 rd nine weeks	4 th nine weeks
Proportional Relationships: ● Ratios, Rates, and Circles Numbers and Operations: ● Add and Subtract Rational Numbers	Numbers and Operations: ● Multiply and Divide Rational Numbers Algebraic Thinking: ● Expressions, Equations, and Inequalities	Proportional Reasoning: ● Percents and Statistical Samples Geometry: ● Solids, Triangles, and Angles Probability: ● Theoretical Probability, Experimental Probability, and Compound Events	● 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

- Include plagiarism regarding generative AI (see board policy)
- Include this statement and everything below it:
 - 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; and¹
- Student-initiated expressions to questions or assignments which reflect their beliefs or non-beliefs about a religious theme shall be accommodated.