Centerview Elementary

7th grade math

2023-2024 Syllabus

**Part 1: Course Information**

Instructor Information

Instructor: Kimberly Moody

School Telephone: 423-623-4947 EXT.

Email: moodyk@cocke.k12.tn.us

Other: I will be using Remind 101 to stay in contact with important classroom information.

**Course Description:**

In grade seven, your child will learn the concept of rates and ratios and use these tools to solve word problems. Students will work on quickly and accurately dividing multi-digit whole numbers and adding, subtracting, multiplying, and dividing Integers. Students will extend their previous work with fractions and decimals to understand the concept of rational numbers. Students will also learn how to write and solve equations and apply these skills in solving multi-step word problems as well as problems involving area and volume of figures. The curriculum will be taught using both the textbook and the online platform provided by the district. With each new lesson, students will bring a family letter home explaining the learning that will be taking place in the classroom. This letter provides an explanation of the concept, as well as examples. PLEASE SIGN AND RETURN EACH LETTER.

**Standards:**

[**https://bestforall.tnedu.gov/lessons-and-leahttps://bestforall.tnedu.gov/lessons-and-learning-item?content-id=7321rning-item?content-id=7321**](https://bestforall.tnedu.gov/lessons-and-learning-item?content-id=7321)

**Textbook & Course Materials**

I-Ready Textbook/Workbook

Fluency and Practice Workbook

I-Ready online program

Scientific Calculator

**Part 2: Student Learning Outcomes**

**Ratios and Proportional Relationships:** Students extend their understanding of ratios from 6th grade and develop understanding of proportionality to solve single- and multi-step problems. Students use their understanding of ratios and proportionality to solve a wide variety of percent problems, including those involving discounts, interest, taxes, tips, and percent increase or decrease. Students solve problems about scale drawings by relating corresponding lengths between the objects or by using the fact that relationships of lengths within an object are preserved in similar objects. Students graph proportional relationships and understand the unit rate informally as a measure of the steepness of the related line, called the slope. They distinguish proportional relationships from other relationships**.**

**The Number System:** Students develop a unified understanding of numbers, recognizing fractions, decimals (that have a finite or a repeating decimal representation), and percent as different representations of rational numbers. Students extend addition, subtraction, multiplication, and division to all rational numbers, maintaining the properties of operations and the relationships between addition and subtraction, and multiplication and division. These properties are further explored with respect to negative numbers. This exploration is carried out in problems from everyday contexts so that the student can gain a deeper understanding and appreciation for the mathematical concepts being studied.

**Expressions and Equations:** By applying the properties of operations as strategies, students explore working with expressions, equations, and inequalities. They use the arithmetic of rational numbers as they formulate expressions and equations in one variable and use these equations to solve multi-step real-world problems. They use variables to represent quantities and construct simple equations and inequalities to solve problems by reasoning about the quantities.

**Geometry:** Students continue their work with area from 6th grade, solving problems involving the area and circumference of a circle and surface area of three-dimensional objects. In preparation for work on congruence and similarity, they reason about relationships among two-dimensional figures using scale drawings and informal geometric constructions, and they gain familiarity with the relationships between angles formed by intersecting lines. Students solve real-world and mathematical problems involving area, surface area, and volume of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.

**Statistics and Probability:** Students continue their work from 6th grade in order to build a strong foundation for statistics and probability needed for high school. Students understand that statistics can be used to gain information about a population through sampling. They work with drawing inferences about a population based on a sample and use measures of center and of variability to draw informal comparative inferences about two populations. Students investigate the chance processes and develop, use, and evaluate probability models. Students summarize numerical data sets with respect to their context using quantitative measures and describe any overall patterns or deviations from the overall pattern.

**Part 3: Topic Outline/Schedule**

**1st 9 weeks**

Unit 1: Proportional Relationships: Ratios, Rates and Circles

* Solve problems involving scale drawings (7.GA.1)
* Find unit rates involving ratios of fractions (7.RP.A.1)
* Recognize and represent proportional relationships between quantities (7.RP.A.2)
* Use proportional relationships to solve multi-step ratio problems (7.RP.A.3)
* Solve area and circumference problems involving circles (7.G.B.3)

Unit 2: Numbers and Operations: Add and Subtract Rational Numbers

* Add and subtract rational numbers (7.NS.A.1)

**2nd 9 weeks**

Unit 3: Numbers and Operations: Multiply and Divide Rational Numbers

* Multiply and divide with negative numbers (7.NS.A.2)
* Express rational numbers as repeating or terminating decimals (7.NS.A.2)
* Solve problems involving the four operations with rational numbers (7.NS.A.3)

Unit 4: Algebraic Thinking: Expressions, Equations and Inequalities

* Apply properties to add, subtract, factor and expand linear expressions with rational numbers (7.EE.A.1)
* Solve multi-step problems with positive and negative rational numbers (7.EE.B.3
* Rewrite and connect equivalent expressions (7.EE.A.2)
* Fluently solve equations/Solve and graph inequalities (7.EE.B.4)

**3rd 9 weeks**

Unit 5: Proportional Reasoning: Percents and Statistical Samples

* Solve multi-step ratio and percent problems (7.RP.A.3)
* Solve problems involving percent change and percent error (7.RP.A.3)
* Determine if a sample is representative of a population (7.SP.A.1)
* Recognize that increasing sample size affects sampling variability (7.SP.A.2)
* Compare measures of center (7.SP.B.3)
* Determine the appropriate measure of center or variability for comparing two data sets (7.SP.B.4)
* Summarize and describe numerical data sets (7.SP.D.8)

Unit 6: Geometry: Solids, Triangles and Angles

* Solve problems involving area and surface area and volume (7.G.B.5)
* Solve problems involving angle measure (7.G.B.4)
* Construct triangles given three angle measures or three side lengths (7.G.A.2)

Unit 7: Probability: Theoretical Probability, Experimental Probability and Compound Events

* Interpret the likelihood of an event occurring (7.SP.C.5)
* Calculate theoretical and experimental probability of simple events (7.SP.C.6)
* Develop a probability model (7.SP.C.7)

**4th 9 weeks**

* Review
* TN Ready Test

**Part 4: Grading Policy**

**Grade Weights:**

Classwork/in class assignments – 30%

Quizzes – 30%

Tests – 40%

Total weight – 100%

**Grading Policy:**

A – 90-100

B – 80-89

C – 70-79

D – 60-69

F – 0-59

Grades will be posted in the Aspen Grade Portal: <https://sis-cocke-county.tnk12.gov/aspen/logon/do>

User names and passwords were given to the students at the beginning of the school year.

**Part 5: Course Policies**.

Participate: Be part of the class and participate in discussions and activities.
Build Rapport: If you find that you have any trouble keeping up with assignments or other aspects of the course, make sure you let your instructor know as early as possible. As you will find, building rapport and effective relationships are key to becoming an effective professional. Make sure that you are proactive in informing your instructor when difficulties arise during the semester so that they can help you find a solution.
Complete Assignments: Assignments must be submitted by the given deadline or special permission must be requested from instructor *before the due date*. Extensions will not be given beyond the next assignment except under extreme circumstances.
All discussion assignments must be completed by the assignment due date and time. Late or missing discussion assignments will affect the student’s grade.

Academic Dishonesty Policy
**1. Academic dishonesty includes such things as cheating, inventing false information or citations, plagiarism and helping someone else commit an act of academic dishonesty. It usually involves an attempt by a student to show possession of a level of knowledge or skill that he/she does not possess.**
**2. Teachers have the initial responsibility for detecting and dealing with academic dishonesty. Instructors who believe that an act of academic dishonesty has occurred are obligated to discuss the matter with the student(s) involved. Instructors should possess reasonable evidence of academic dishonesty. However, if circumstances prevent consultation with student(s), instructors may take whatever action (subject to student appeal) they deem appropriate.**
**3. Teachers who are convinced by the evidence that a student is guilty of academic dishonesty shall assign an appropriate academic penalty. If the teachers believe that the academic dishonesty reflects on the student's academic performance or the academic integrity in a course, the student's grade should be adversely affected. Suggested guidelines for appropriate actions are: an oral reprimand in cases where there is reasonable doubt that the student knew his/her action constituted academic dishonesty; a failing grade on the particular paper, project or examination where the act of dishonesty was unpremeditated, or where there were significant mitigating circumstances; a failing grade in the course where the dishonesty was premeditated or planned.**

**Student Testing Code of Ethics and Security**

     It is important for you as a student to know that the following guidelines are to be strictly followed.  This year the TNReady test will count at least 10% of your final semester grade.  Your work on this test is very important and it deserves your best effort.
I understand that during testing on the days of the assessment, I am responsible for:

* Not having any electronic devices on me or in my purse/backpack/pockets
	+ Including but not limited to cell phones, smart phones, smart watches, etc. **during testing or during breaks.**
	+ Best practice is for students to leave devices at home or in their lockers on the day of testing.
	+ If I am caught with a device during testing or during breaks, my test may be nullified, resulting in a zero as at least 10% of my final semester grade, and any school level disciplinary action as deemed appropriate by the administration.
* Trying my best on the test
	+ If I do not attempt to test (I give **no answers or randomly answer** questions) my test score may be nullified, resulting in a zero as at least 10% of my final semester grade, and any school level disciplinary action as deemed appropriate by the administration.
	+ The testing administrators and proctors in the testing environment will determine if no answers or random answering is taking place.
	+ I will focus and put forth effort on the test.
* Being honest and not cheating
	+ If I am caught cheating (taking pictures of the test, writing down and passing answers, talking to other students, looking on other computers, using software outside the testing platform), my test  may be nullified, resulting in a zero as at least 10% of my final semester grade, and any school level disciplinary action as deemed appropriate by the administration.

**Important Note:** Any form of academic dishonesty, including cheating and plagiarism, may be reported to the office.

**Course policies are subject to change.** It is the student’s responsibility to check for corrections or updates to the syllabus. Any changes will be posted in the classroom.