W.A. PERRY MIDDLE SCHOOL

"Where Excellence is the only Expectation"

Mathematics Course Outline and Procedures

Course: 6th Grade Gifted Math (SC READY)

Teacher: Mr. Fletcher

Date: August 2020/21

Room: Building 2 Room 1

INTRODUCTION

The focus of instruction and learning at W.A. Perry Middle is to improve student achievement by stressing academic rigor and relevance. It is our belief that all students, with committed effort, are capable of excelling. Our students will be expected to raise questions, solve problems and think about the real world as they apply concepts and principles in Mathematics for solutions.

This course outline will define the clear expectations of what students are to learn and our expectations for the learning environment.

GOALS

The Standards for Mathematical Practice describe important skills that mathematics educators at all levels seek to develop in their students.

1. Make sense of problems and persevere in solving them

2. Reason abstractly and quantitatively

3. Construct viable arguments and critique the reasoning of others

4. Connect mathematical ideas and real-world situations through modeling.

5. Use a variety of mathematical tools effectively and strategically.

6. Communicate mathematically and approach mathematical situations with precision. 7. Identify and utilize structure and patterns

COURSE DESCRIPTION

South Carolina College- and Career-Ready (SCCCR) Grade 8 curriculum is designed to provide students with knowledge and skills to solve problems using math tools critically important for college and careers. In SCCCR Grade 8 Math, students build on the conceptual knowledge and skills they mastered in earlier grades in areas such as algebraic thinking, data analysis, and proportional reasoning. Problem solving (word problems), review of basic arithmetic skills, the use of technology (calculators), and math study skills will be integral components in each of those areas.

STANDARDS &- TOPICS

They are designed to promote a balanced combination of procedural and conceptual understanding. Students who possess a concrete understanding of the topics to be covered will be better able to maneuver many problems posed in Math. The topic areas covered in this course are listed.

Grade 8 Overview

The Number System

- Real number system and its structure;
- Operations among the elements of the real number system.

Expressions and Equations

- Work with radicals and integer exponents.
- Understand the connections between proportional relationships, lines, and linear equations.
- Analyze and solve linear equations and pairs of simultaneous linear equations.

Functions

- Define, evaluate, and compare functions.
- Use functions to model relationships between quantities.

Geometry

- Understand congruence and similarity using physical models, transparencies, or geometry software.
- Understand and apply the Pythagorean Theorem.
- Solve real-world and mathematical problems involving volume of cylinders, cones and spheres.
- Produce transformations on a coordinate grid.

The standards that must be revised to ensure success in your Grade 6 SC READY Math State exam are listed below.

The Number System 6.NS

A. Apply and extend previous understandings of multiplication and division to divide fractions by fractions.

1. Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g. by using visual fraction models and equations to represent the problem.

B. Compute fluently with multi-digit numbers and find common factors and multiples. Example:

1. Fluently divide multi-digit numbers using the standard algorithm.

2. Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.

C. Apply and extend previous understandings of numbers to the system of rational numbers.

Example:

1. Understand that positive and negative numbers are used together to describe quantities having

opposite directions or values (e.g. temperature above/below zero, elevation above/below sea

level, credits/debits, positive/negative electric charge); use positive and negative numbers to

represent quantities in real-world contexts, explaining the meaning of 0 in each situation.

Ratios and Proportional Relationships 6.RP

A. Understand ratio concepts and use ratio reasoning to solve problems.

1.   Understand the concept of a ratio and use ratio language to describe a ratio relationship

between two quantities.

2.   Understand the concept of a unit rate associated with a ratio, and use rate language in the context of a ratio relationship.

Expressions and Equations 6.EE

A. Apply and extend previous understandings of arithmetic to algebraic expressions.

1. Write and evaluate numerical expressions involving whole-number exponents.

2. Write, read, and evaluate expressions in which letters stand for numbers.

   B. Reason about and solve one-variable equations and inequalities.

1. Understand solving an equation or inequality as a process of answering a question which values from a specified set, if any, make the equation or inequality true.

C. Represent and analyze quantitative relationships between dependent and independent variables.

1. Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable.

Geometry 6.G

A. Solve real-world and mathematical problems involving area, surface area, and volume.

1. Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.

Statistics and Probability 6.SP

A. Develop understanding of statistical variability.

1.   Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers.

2.   Understand that a set of data collected to answer a statistical question has a distribution, which can be described by its center, spread, and overall shape. **B. Summarize and describe distribution. Example:**

1. Display numerical data in plots on a number line, including dot plots, histograms, and box plots.

2. Summarize numerical data sets in relation to their context.

COURSE REQUIREMENTS

Our focus requires the development of classroom procedures and expectations that support academic rigor and standards.

Students are expected to be engaged in classroom activities. Classes will incorporate Mathematics vocabulary activities, fast facts building games, watching and discussing video

presentations, working in groups on hands on activities, the use of manipulative, power point presentations, use of work stations, Do Nows, Think- Pair and Share strategies, note taking (through foldable and notebooks), computer based lessons, SMART Board Interactive Activities and a host of others.

Materials

A calculator (Suggested: Ti-15) is encouraged but not required. This will be provided from the media center. You will be told when to check them out. Once checked out it would be your responsibility to keep it safe.

1 ruler

1 pack plain paper

2 composition notebooks (NO SPIRAL RING notebooks)

College ruled notebook paper

12 Pencils

Pencil sharpener

Highlighters (six colors)

Additional materials may be needed as the year progresses

All students must maintain an accurate and updated composition notebook and an instructional binder. The instructional binder will be used in a systematic way with other subjects as an Advancement via Individual Determination (AVID) Initiative.

GRADING PROCEDURES

Grades will be based on a variety of assessments. The criteria for creating the grading policy should include the following:

- a minimum of fifteen assessments documented in the grade book during the nine weeks marking period
- Seven/eight assessments must take place before the interim.
- Five of the fifteen must be major assessments such as tests, written compositions, performance based assessment or projects.
- EOC & SC READY like assessments will be frequently used.

The grading breakdowns are:

- Tests/Projects 40%
- Quizzes 25%
- Class Work 25%
- * Homework 10%

Grade Scale: A (90 to 100), B (80 to 89), C (70 to 79), D (60 to 69) F Below 60
Redo/Retake Policy

Richland County School District One is implementing a Redo/Retake Plan as a strategy to help ensure mastery learning for students. Nationwide, educators are continuously looking for methods to incorporate into the classroom which would increase opportunities for students to master content/skills in order to be successful in school. The practice of allowing students to retake assessments, after receiving additional tutoring or instructional support, gives some students additional time to learn as well as deepens their understanding of concepts.

These guidelines include specific assessments that students will be given an opportunity to redo/retake. Assessments covered include the following: weekly assessments, classroom tests/quizzes, and class projects.

Assessments not covered include the following: homework, daily classwork, late work, nine week exams, and final exams.

General Guidelines

➢ Students who score below 70 can redo/retake up to three (3) assessments/projects per marking period. Students will have only one opportunity to redo/retake each assessment. ☐ The higher grade achieved up to 70 (original or redo) will be recorded.

➢ The teacher determines the re-teaching/tutoring opportunity required prior to the student retaking the assessment.

➢ Retakes will cover same objectives but will not be the original assessment/assignment. Alternative assignments may be required at the teacher's discretion since some assessments/assignments may not be replicated.

➢ The redo/retake opportunity will occur no later than within five (5) days of the end of the marking period.

Student Procedures

1. The student must complete a Redo/Retake Plan of Study.
2. Sign and get parent/guardian signature.

3. Submit the Plan of Study to the teacher within three (3) school days of receiving the assessment score below 70.

MODE OF COURSE DELIVERY

Richland One School District has adopted a transitional approach model. We will begin with virtual classes. The classroom rules will outline more detailed expectations and you will hear more in your first own Hall meeting. All initial classes will be online and you are expected to log in on time and be prepared will all materials and prep work. This model will be transitioned into a hybrid model. You will be notified on the date once it has been determined by the School District. The last approach will entail 100% face to face.

W.A. Perry Middle School Microsoft Teams Expectations

Be on time and prepared for class.

Find a comfortable location for online class that is quiet and free of distractions.

Be respectful of your teacher and other classmates when they are speaking.

Mute yourself when entering the online classroom.

Do your best to keep the camera on. Appropriate virtual backgrounds can be used.

Use the chat button to type questions or add comments to the conversation.

If you have a question use the raise hand feature.

Show proper "netiquette" at all times.

Follow all RCSD1 Acceptable Use Policy (AUP) guidelines.

Be patient and try your best!

NINE WEEKS PORTFOLIO

All students will turn in a Portfolio at the end of EACH nine weeks. Portfolio will be kept by the teacher and will be given to students to present to Parents during Academic Report Conference Nights. The Portfolio will have the following binder tabs:

Tab 1 - Do Nows & Notes   Tab 2 – Class Work

Tab 3 – Homework   Tab 4 – Graded Assessment (2Quizs and 2Test OR 3

Quizzes and 1 Test)

Tab 5 – Mathematical Problem Solving Project

Tab 6 – Rubrics/Special Instructions

Portfolio will be discussed thoroughly in class. It will consist of the five tab categories listed above and will entail four pieces of work under categories one to four and one piece under the category marked mathematical problem solving project. Students may choose documents they tested well on or revised with proper corrections. They will also be expected to provide a brief statement about why they chose each piece and what skills were learned.

The category marked Problem Solving will require students to solve problems using their unique strategies. It may also require students to research, write and apply real world applications to a

concept. For example, they may be required to research the term slope and to describe how it is used in the field of construction.

HOMEWORK /LATE ASSIGNMENT POLICY

Homework will be assigned at least three times per week. Students will be expected to have a Homework Journal as questions asked will often require them to write a step by step explanation of their solution.

Students are responsible for the homework regardless of their class attendance. Accommodations will be made for delayed absence due to illness or for other reasonable excuses. Late assignments will attract point deductions.

ACADEMIC DISHONESTY POLICY

There are many different forms of academic dishonesty. The following are just a few examples to help students to have an idea as to what types of behaviors should be avoided.

Cheating: Using unauthorized notes or other study aids during an examination; using unauthorized technology during an examination; improper storage of prohibited notes, course materials and study aids during an exam, looking at other students' work during an exam or in an assignment where collaboration is not allowed; attempting to communicate with other students in order to get help during an exam or in an assignment where collaboration is not allowed; allowing another person to do one's work and submitting it as one's own.

Plagiarism: The representation of another person's work as one's own.

Facilitating Dishonesty: Aiding another person in an act that violates the standards of academic honesty; allowing other students to look at one's own work during an exam or in an assignment where collaboration is not allowed; providing information, material, or assistance to another person knowing that it may be used in violation of course, departmental, or college academic honesty policies; providing false information in connection with any academic honesty inquiry.

Falsifying records and Official Documents**:** Forging signatures or falsifying information on official academic documents such as application forms, Hall Passes, Parent Teacher

Communication Forms, letters of permission, or any other official School document
ATTENDANCE /TARDY POLICY

After returning to school after an **absence,** a note must be submitted to the database clerk (Guidance Department Office) explaining reason for absence.

Tardies will be logged each day.

1st Tardy: Warning

2nd Tardy: Warning

3rd Tardy: Lunch Detention

4th Tardy: After School Detention

5th: Tardy - Saturday Detention

6th Tardy – Administrative Intervention, This could result in a Referral

ALEKS

ALEKS is a research-based, online program that offers course products for mathematics, business, science, and behavioral science. Using personalized learning and adaptive assessments, ALEKS quickly and accurately determines exactly what a student is most ready to

learn. This software will be used in this course to help you to strengthen your math skills. You

will receive a username and a password in class and a through introduction to the system.

CONDUCT: Teacher will distribute and discuss Classroom Rules and Procedures in a Separate
Document

EXTRA CREDIT: Students can receive extra credits if they are a part of the Afterschool

program and if the grades they receive from such program is higher than the one received from

me. This however can only contribute 20% towards his total grade.

TUTORING DAYS AND HOURS: To be announced.

CONTACT INFORMATION

Mr. Fletcher

6 – 8 Mathematics

(803) -256-6347 (Extension 3201)

Office Hours: Thursdays and Fridays (4:15 -5:00)

(To better serve you, please call to notify me of your desire to have a conference).

Email address:

kevin.fletcher@richlandone.org

Detach and return bottom portion to teacher. Keep top portion for reference.

I have received the requirements and procedures for (student's name)
_____.

Course Name _____

_____ _____ _____

Parent's/Guardian's Signature   Date Student's   Signature

Phone Number _____