

7th Grade Math – 1st Semester

Teacher: Bridget Severe, Room 103

School Phone: 588-2262 Ext. 26

Home Phone: 589-3051

E-mail: Bridseve@mackayschools.org

Mrs. Severe's Website: www.mackayhs.weebly.com

Course Description

This Math course is designed to reinforce and expand the concepts and skills introduced in the 6th grade. Students will develop an understanding of and applying proportionality, including similarity through numbers, operations, algebra, and geometry. An understanding of and using of formulas to determine surface areas and volumes of three-dimensional shapes through measurements, geometry, and algebra will also be developed. A focus will also be on the understanding of operations on all rational numbers and solving linear equations.

Common Core Standards

Students will:

- Understand and demonstrate knowledge of rational numbers including integers, fractions, decimals, percents, and absolute values.
- Recognize pertinent information for problem solving.
- Know, understand, and use appropriate mathematics vocabulary.
- Know and understand how to perform general computations accurately and use that information to compute problems drawn from real life situations.
- Understand how to estimate and judge reasonableness of results.
- Understand and use the U.S. customary and metric measurements.
- Be able to apply the concepts of rates, ratios, and proportions and analyze each.
- Use algebraic symbolism as a tool to represent mathematical relationships.
- Evaluate, solve, and understand algebraic expressions and inequalities.
- Understand the concept of functions and represent each in a variety of formats.
- Apply functions to a variety of problems.
- Understand and apply concepts of size, shape, and spatial relationships.
- Apply the geometry of right triangles.
- Understand and apply graphing in two dimensions.
- Know and understand the concepts of data analysis, probability, and statistics.

Instructional Materials

Textbook: Glencoe McGraw-Hill Math Connects Course 2 and Internet for practice.

Class Expectations

- Be Prepared – always have your pencil, paper, notebook, book(s), and completed assignments – **Each day an assignment is late your grade will be reduced by 10%.**
I **DO NOT** give ZEROS (0), if you do not turn in an assignment you will be given an incomplete until it is finished. This is your education, your future, you are expected to complete each assignment.
- Be Respectful – to teacher, classmates, and visitors; respect all school rules (dress code, etc...); raise hand before speaking; respect others' opinions.
- Be Actively Engaged – pay attention, participate, take notes, ask questions, and provide answers.

- Take Care of the textbooks given to you, desks you sit in, items you borrow from others and any other class materials presented.
- Be Responsible for Your Actions

Class Materials Needed

All your writing will be in pencil and one notebook specifically for Math.

Tentative Units with Instructional Dates

Quarter 1

<ul style="list-style-type: none"> ▪ Week 1 – Pre-assessment, Introduction to the Language of Mathematics, Importance of Mathematics, Begin Chapter 1, Introduction to Algebra and Function 	<p>Standard: Know, understand, and use appropriate mathematics vocabulary.</p>
<ul style="list-style-type: none"> ▪ Week 2 – Chapter 1, Introduction to Algebra and Function, focusing on patterns, and the four-step problem solving. 	<p>Standard: Recognize pertinent information for problem solving.</p>
<ul style="list-style-type: none"> ▪ Week 3 – Chapter 1, Introduction to Algebra and Function, Problem Solving, focusing on order of operation, exponents, and functions, Chapter 1 Exam 	<p>Standard: Understand the concept of functions and represent each in a variety of formats and apply functions to a variety of problems.</p>
<ul style="list-style-type: none"> ▪ Week 4 – Chapter 2, Integers, focusing on absolute value, adding, and subtracting integers 	<p>Standard: Understand and demonstrate knowledge of rational numbers including integers, fractions, decimals, percents, and absolute value.</p>
<ul style="list-style-type: none"> ▪ Week 5 – Chapter 2, Integers, focusing on multiplying and dividing integers, Problem Solving 	<p>Standard: Understand and demonstrate knowledge of rational numbers including integers, fractions, decimals, percents, and absolute value.</p>
<ul style="list-style-type: none"> ▪ Week 6 – Chapter 2, Integers, focusing on comparing and ordering integers and reviewing concepts, Chapter 2 Exam 	<p>Standard: Understand and demonstrate knowledge of rational numbers including integers, fractions, decimals, percents, and absolute value.</p>
<ul style="list-style-type: none"> ▪ Week 7 – Chapter 3, Algebra: Linear Equations and Functions, focusing on writing and solving expressions and equations 	<p>Standard: Evaluate, solve, and understand algebraic expressions and inequalities.</p>
<ul style="list-style-type: none"> ▪ Week 8 – Chapter 3, Algebra: Linear Equations and Functions, focusing on solving two-step equations. 	<p>Standard: Evaluate, solve, and understand algebraic expressions and inequalities.</p>
<ul style="list-style-type: none"> ▪ Week 9 – Chapter 3, Algebra: Linear Equations and Functions, focusing on functions and graphs, chapter 3 exam, and Chapters 1-3 Exam 	<p>Standard: Apply functions to a variety of problems.</p>

Quarter 2

<ul style="list-style-type: none">▪ Week 10 – Chapter 4, Fractions, Decimals, and Percents, focusing on prime factorization and Greatest Common Factor	Standard: Understand and demonstrate knowledge of rational numbers including integers, fractions, decimals, percents, and absolute value.
<ul style="list-style-type: none">▪ Week 11 – Chapter 4, Fractions, Decimals, and Percents, focusing on fractions and decimals and fractions and percents	Standard: Understand and demonstrate knowledge of rational numbers including integers, fractions, decimals, percents, and absolute value.
<ul style="list-style-type: none">▪ Week 12 – Chapter 4, Fractions, Decimals, and Percents, focusing on Least Common Multiple and comparing and ordering rational numbers and chapter 4 exam	Standard: Understand and demonstrate knowledge of rational numbers including integers, fractions, decimals, percents, and absolute value.
<ul style="list-style-type: none">▪ Week 13 – Chapter 5, Applying Fractions, focusing on estimating fractions and adding and subtracting fractions	Standard: Know and understand how to perform general computations accurately and use that information to compute problems drawn from real life situations.
<ul style="list-style-type: none">▪ Week 14 – Chapter 5, Applying Fractions, focusing on adding and subtracting mixed numbers and problem solving	Standard: Understand how to estimate and judge reasonableness of results.
<ul style="list-style-type: none">▪ Week 15 – Chapter 5, Applying Fractions, focusing on multiplying and dividing fractions.	Standard: Understand and demonstrate knowledge of rational numbers including integers, fractions, decimals, percents, and absolute value.
<ul style="list-style-type: none">▪ Week 16 – Chapter 5 exam, review, and Chapters 4-6 Exam	Standard: Understand and demonstrate knowledge of rational numbers including integers, fractions, decimals, percents, and absolute value.
<ul style="list-style-type: none">▪ Week 17 – Review for Final Exam	Standard: Understand and demonstrate knowledge of rational numbers including integers, fractions, decimals, percents, and absolute value.
<ul style="list-style-type: none">▪ Week 18 – Semester Final Exam	

Assessment/Tests

See Instructional Units/Dates

Grading Procedures

- Each assignment, assessment, project will be worth individual points.
- Homework will be due daily. Full points will not be given if the assignment is late.
- All assessments must be taken during the class period. If absent, the student should arrange a make-up time before or after school.
- Grades will be calculated by dividing the total points earned by a student by the total points possible.