

Syllabus Grade 6 Math 2009 – 2010 School Year

Contact Information:

Ms. MacNeill

Telephone: 978-526-2022 Ext: _____

Email: macneilla@mersd.org [email is the best way to contact me]

Website: www.mersd.org Middle School – Team 6

Welcome to middle school and to Grade 6 Math. The following is an overview of the content we will cover this year, what student responsibilities will be, my expectations for you as a student in this classroom, and how you will be evaluated.

Course Description:

Grade 6 Math will cover many of the same topics you studied in 5th grade, but in more depth. Course work will include practice of math skills, and applying these skills to everyday problems and situations, as well as quizzes, tests, and projects. The class time is shorter in 6th grade, and so you will need to be very efficient and effective to get the most out of our time together. Your math text, *Impact Mathematics*, is different from what you have used before. It is a more traditional looking textbook, and you will complete problems from the book on graph paper in class and for homework. Over the course of this school year, you will work on various math strands and be introduced to algebra. You will be asked to explain your thinking, orally and in writing.

Major Content Areas:

Throughout the year, you will build your strengths in writing rules for patterns, number sense, operations with fractions and decimals, percents, creating, interpreting and analyzing graphs and the data they represent, variables and equations, geometry and measurement and probability.

The overarching themes will be using a thoughtful approach to mathematics and developing strategies for problem solving. Class work, active participation, and working cooperatively in small groups are vital to your development as an independent thinker. You can expect to engage in these activities regularly.

Topics:

- Patterns: Identifying patterns, following rules, writing rules
- Number sense: place value, factors, multiples, estimating, prime and composite numbers, adding and subtracting positive and negative numbers, fractions, decimals and percents, prime factorization
- Fractions and Decimals: add, subtract, multiply and divide
- Percents: Converting between fractions, decimals and percents, comparing using percents, finding the percent, finding the whole when given the percent
- Graphing and Analyzing Data: creating and interpreting graphs, statistical "landmarks" (mean, median, mode and range, coordinate graphs, line plots, line graphs, bar graphs, histograms, stem and leaf plots
- Geometry and Measurement: Angles, geometric shapes, area and perimeter of polygons and circles, surface area and volume of geometric prisms, line and rotational symmetry
- Probability: chance events, fairness, experimental and theoretical probability
- Algebra topics: understanding variables, writing algebraic expressions to describe patterns, writing and interpreting rules for real-life situations, equivalent rules, solving equations using backtracking and guess-check-improve methods

Texts and Programs

- **Glencoe, *Impact Math: Course 1***

On-line student edition includes the full text and opportunities for practice and preparation for assessments.

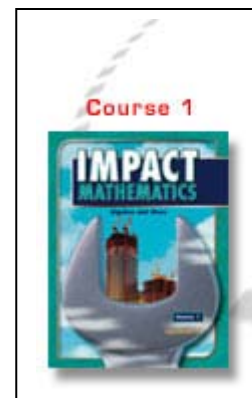
For the online student edition:

Visit: www.impactmath.com ,

Click on: Course 1,

Select: Online Student edition,

Enter Access Code: A0DA75B3E0, where 0=zero



You will be able to view the entire text, but the text cannot be printed due to copyright protections. *For online practice use lesson and chapter resources links.*

- **Study Island:** web-based MCAS preparation program, each student has an account and password.

Expectations:

We will discuss expectations for this and other classes during the first days of school and will develop a classroom contract based on your insights and suggestions. I will have expectations of you, and you will have expectations for me. In general, I expect you to come to class ready to learn. To do this, you need to be prepared with all of the materials you will need, including any assignments, and be a willing participant during class work.

Assessment:

Your work will be graded based on the following criteria:

Tests & Projects	50%
Quizzes	20%
Homework	15%
Class work	15%

Classroom participation and readiness may adjust grades upwards or downwards.
Classroom participation and readiness are defined as follows:

- Readiness: on-time arrival to class with required materials (see supplies)
- Contribution to class discussions
- Completion of or effort on class work
- Active listening and respectful responses to peer comments and work
- On-task behavior during cooperative activities

Supplies:

Please bring the following to class every day:

- Planner
- Textbook
- Homework
- Two sharpened pencils and a correcting pen
- Math notebook
- Math folder

At home you will need:

- Your textbook or access to a computer
- Math Notebook/graph paper