MATH 7

REIDMATH.com

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Course Description

Math is about the study of patterns and requires us as mathematicians to be keen observers, thinkers, inquirers, communicators, and doers. We ask students to notice and develop questions about what they see, to think about and critique their work and the work of others, explain themselves verbally and in writing, and to explore and solve a variety of problems.

Our course of study opens with a unit on integer operations, where students learn to operate with negative values; the lessons in this unit are fundamental and absolutely required for success in all that follows.

Here is a list of the units for the year:

Module 1 - Unit 1: Integers
Positive and negative values, properties, absolute value, additive inverse, number lines, operations, order of operations, and the language of mathematics.

Module 1 - Unit 2: Rational Numbers
Defining rational numbers, comparing values, operations with decimals and fractions, complex numbers, and real world problems.

Module 2 - Unit 5: Ratios & Proportional Relationships
Understand relationships between rational numbers, solve proportions, recognize proportional relationships, understand rates and their representations, understand (1, r) represents unit rate, constant of proportionality (unit rate), formation of equations, graph, and tables from verbal description, and understand similarity.

Module 3 - Unit 3: Expressions
Defining variables, evaluating expressions with substitution, combining expressions and like terms, applying the number properties, determining equivalency, and translating verbal and algebraic expressions.

Module 3 - Unit 4: Equations & Inequalities
Forming equations, translating real world scenarios, solving multi-step equations and inequalities, distinguishing between equations and inequalities, forming inequalities, and graphing inequalities.

Module 4 - Unit 6: Percent Relationships
Determine percentages, the percent equation, percent proportion, consumer math, percent change, and percent error.

Module 5 - Unit 7: Statistics
Central tendency, best representation, misleading graphs, bias, sample and population, spread of data, constructing graphs, and analysis of data.

Module 5 - Unit 8: Probability
Models, simulations, experimental and theoretical, dependent and independent events, and making predictions.

Module 6 - Unit 9: Geometry
Circles, circumference, area, perimeter, compound figures, and angle relationships.

For more curriculum information, check out my website: REIDMATH.com

Lesson Structure

What does a lesson with Ricky look like?

Stage 1: Lesson Prompt/Starter
Students will be introduced to a new concept or the foundations of a prior lesson will be built upon; they will be asked to take the lead on discussions and participate as guides through a lesson focused on problem solving strategies for a specific skill related to the learning objective.

Stage 2: What do you know? What do you notice? What can we ask?
Following our opening discussion, students will work with partners to apply what we have just learned and reinforce, or support, their understanding with an opportunity to clear up any uncertainties.

Stage 3: Group Activity / Reflect & Share
Working with partners, students will be asked to apply their problem solving skills to a variety of rigorous tasks including those where they are expected to create their own problems and identify possible misconceptions.

Stage 4: Independent Assessment / Presenting Your Understanding
Following group discussion and share, students will be asked to present their understanding by applying the skills related to the day's learning objective.

Stage 5: Independent Learning
All students will now be asked to work solo to complete the lesson's conclusion during both class and homework time, which will be individualized based on performance level.

What are the homework expectations?
Independent learning and homework go hand in hand; the focus of our work is that learning is student-led, with our attention always on improvement and reinforcement. In order to ensure the student's greatest possible progress, the student must be provided with ample opportunity to practice the necessary skills. Each student will be given regular home assignments in the following forms: daily lesson completion and conclusion; online skill practice completing at least four IXL skills per week (due every Friday); unit projects; test corrections (due one week from the test's return). Reminders for all homework will be posted online. *Late homework will result in half-credit.*

Assessments
During units and from week to week, students will regularly be asked to show what they know and complete a mastery check-in test or quiz. Furthermore, following the completion of a lesson and or unit, each student will then be faced with an assessment that tests their overall comprehension.

Projects
In addition to regular assignments, all students will be asked to demonstrate their creativity through the completion of a unit project for which they will be able to choose their preferred method of presentation.

Bonus Work

For both the early finisher and those seeking another challenge, a variety of brainteasers and puzzles are posted online and also made available in the classroom; this is in addition to a problem of the week.

Late or Missing Work

Students will be given an opportunity to make up any missing assignments.

Online Expectations

Students are expected to have access to their school email account and each of the following sites for homework and support:

Google Classroom

All assignments and homework is posted here as a reminder.

REIDMATH.com

This is where you find the latest news and updates for our mathematics class.

IXL – 7th Grade

All students *must* complete a number of skills, from a list of those recommended, on a weekly basis.

Khan Academy

A great resource for video support and word problem assessment exercises

LearnZillion

This site has a variety of lesson support elements.

iReady

Individualized online instruction based on the student's performance level.

Keys to Success

1. Prepare to use class and homework time wisely.
2. Work with others to learn from your mathematical experiences.
3. Participate by asking questions and seeking solution paths.
4. Be confident: if you think you can do it, you will find a way.
5. Lead by example, showing initiative and active group membership.

Behavior Policy

Students' behavior will be tracked with an academic incentive tracker, in line with our middle school policy.

Required Supplies

Graph Notebook / Pencils / Ruler

Additional Support

Parents and or students may arrange to meet with me on Tuesday afternoon (2:40 – 3:15). *Students may attend lunch/recess support sessions on a daily basis.*

Test Dates

New York State Mathematics Test: April 30 – May 1, 2019