A TASTE OF EUREKA

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COURSE DESCRIPTION(7TH GRADE):

The course is divided into the following modules:

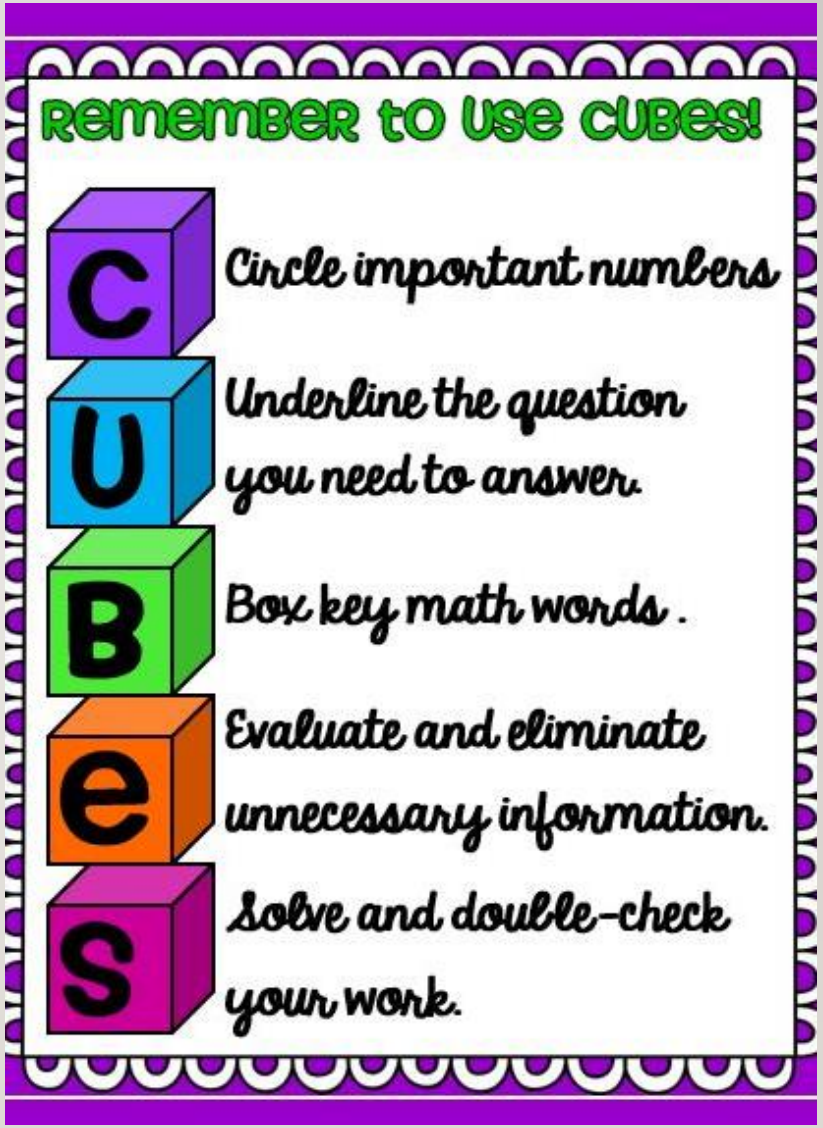
- Ratios and Proportional Relationships
- Rational Numbers
- Expressions and Equations
- Percent and Proportional Relationships
- Statistics and Probability
- Geometry

LESSONS

- The general lesson format consists of teacher-led examples that are followed by guided exercises in which students apply their understanding to related problems.
- There may be discussions within these lessons helping students make critical connections to develop understanding of concepts.
- There are some lessons where students are presented exploratory challenges (ex: rolling dice exploring probability) in the form of activities and/or exercises in which partners or small groups work toward achieving a common goal.

LESSONS CONT.

- It's necessary to use simple reading strategies.
- There is a need to anticipate for words/vocabulary that students don't know or understand.
- Ex: context, better buy, addends, rational numbers, etc.



READING IN A MATHEMATICS CLASSROOM

- "**Research has shown that mathematics texts contain more concepts per sentence and paragraph than any other type of text.** They are written in a very compact style; each sentence contains a lot of information, with little redundancy. The text can contain words as well as numeric and non-numeric symbols to decode. In addition, a page may be laid out in such a way that the eye must travel in a different pattern than the traditional left-to-right one of most reading. There may also be graphics that must be understood for the text to make sense; these may sometimes include information that is intended to add to the comprehension of a problem but instead may be distracting. Finally, many texts are written above the grade level for which they are intended." (Barton & Heidema, 2002).

PROBLEM SETS

- The middle school/high school problem sets at the end of each lesson are expected to be used as independent practice at home.
- The sets can be customized - (Must do, Could do, Extension)
- Students must be shown the connection between the set and the lesson. It must be stressed that lessons are a resource to use while working.
- Teachers are encouraged to be flexible in their use of items from the problem set to best meet the specific needs of their students to support their conceptual understanding.

EXIT TICKETS

- Exit Tickets are available for every lesson.
- They are meant to be formative.
- They are NOT to be graded.
- RMS uses them after multiple lessons to be formative, as a review, and as an opportunity for support on the concepts.

WHAT IS A COUNTING EXERCISE?

SKILL AND FLUENCY

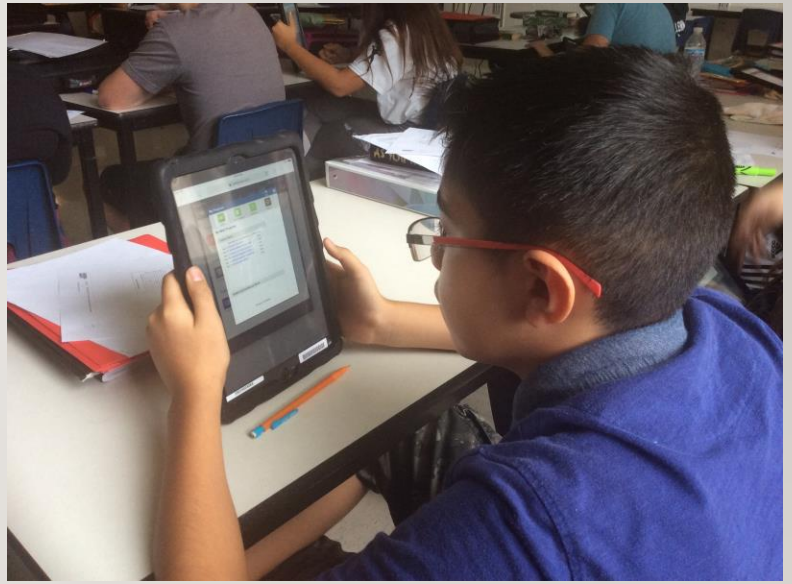
- Students are challenged through the standards to calculate with speed and accuracy.
- Students must have practice with core functions.
- "Fluency must be addressed in the classroom or through supporting materials, as some students might require more practice than others." (Eureka – Focus on Fluency)
- RMS has three ways to accomplish this task:
  - SPRINTS – timed fluency task
  - Mobymax.com
  - Rapid White-Board Exchange
  - Counting Exercise

WHAT IS A MATH SPRINT?

ASSESSMENT

- AFFIRM – A digital assessment resource created by Greatminds.org
- Edulastic.com - An online technology-enhanced assessment resource.
- Eureka Math writers/trainers have acknowledged that the assessments provided contain problems designed to be the highest and most rigorous open-ended tasks. The writers have also advised schools and teachers to revise these assessments to best meet their needs and the needs of their students.
- The Eureka Math Mid-module and End-of-Module Assessments do provide a rich resource of rigorous problems that can be included on your assessment.
- Additionally, selected problems can be assigned for students to work on at different times throughout the module, as review during future modules, as part of group or pair work, or as extension activities for some students while other students are provided important small group support.

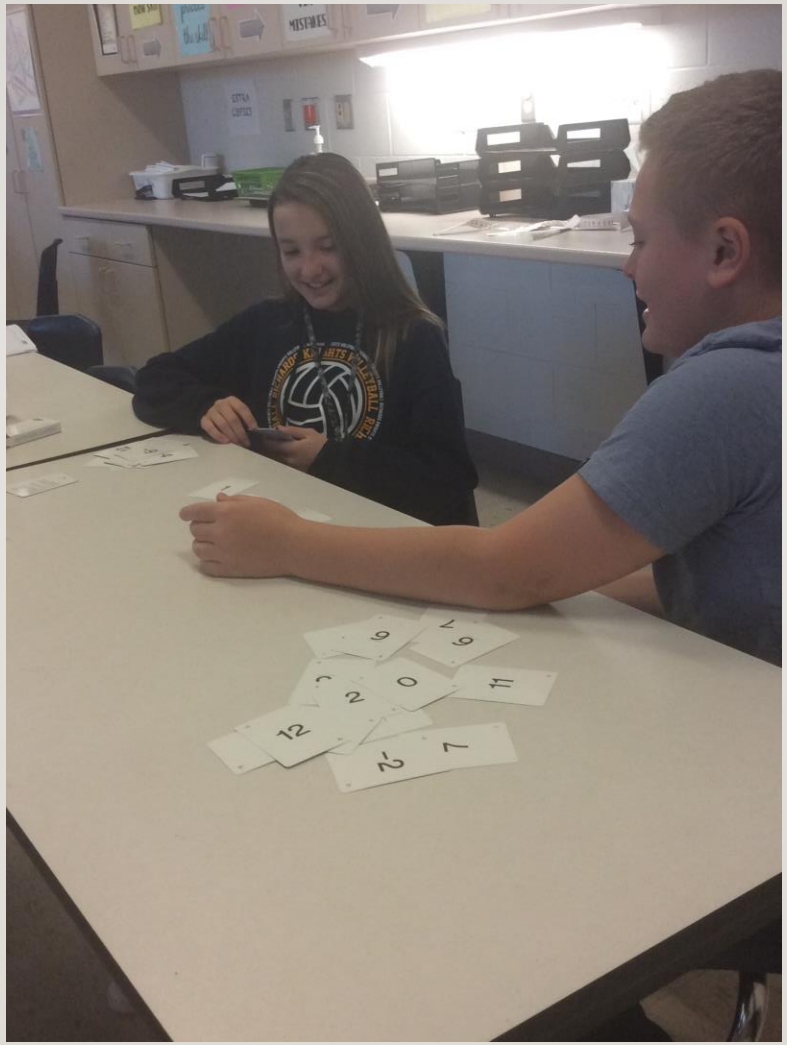
MOBYMAX AND EXERCISES



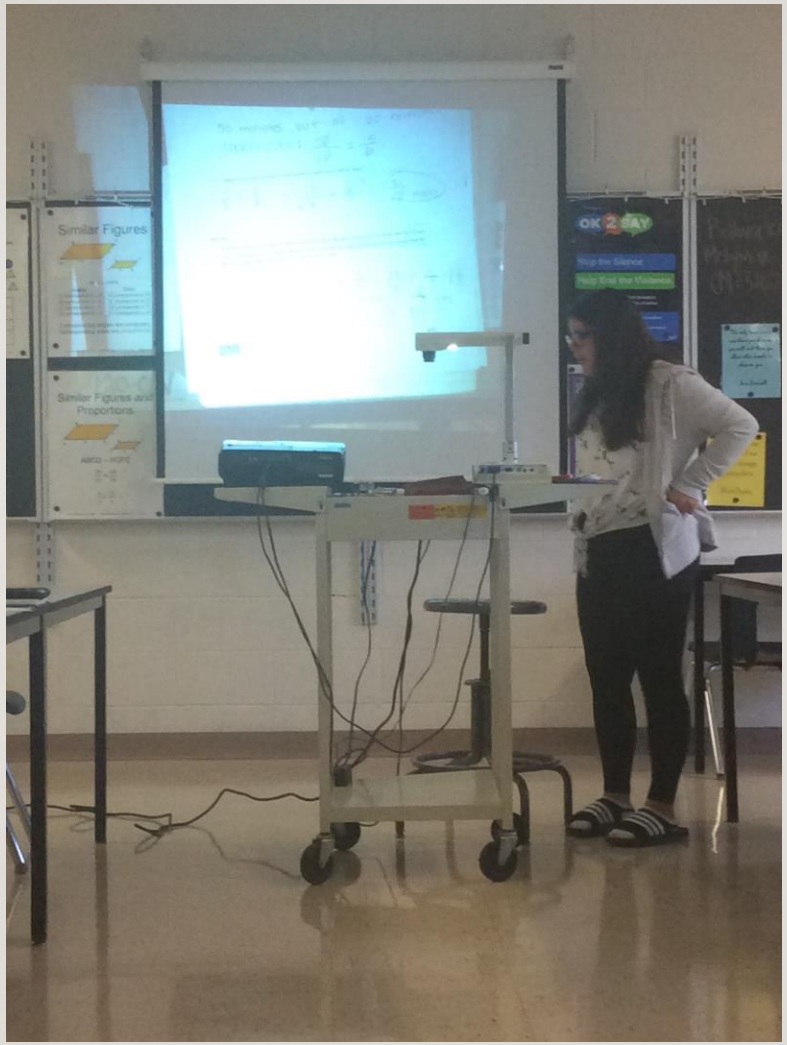
SUPPORTING MATERIAL

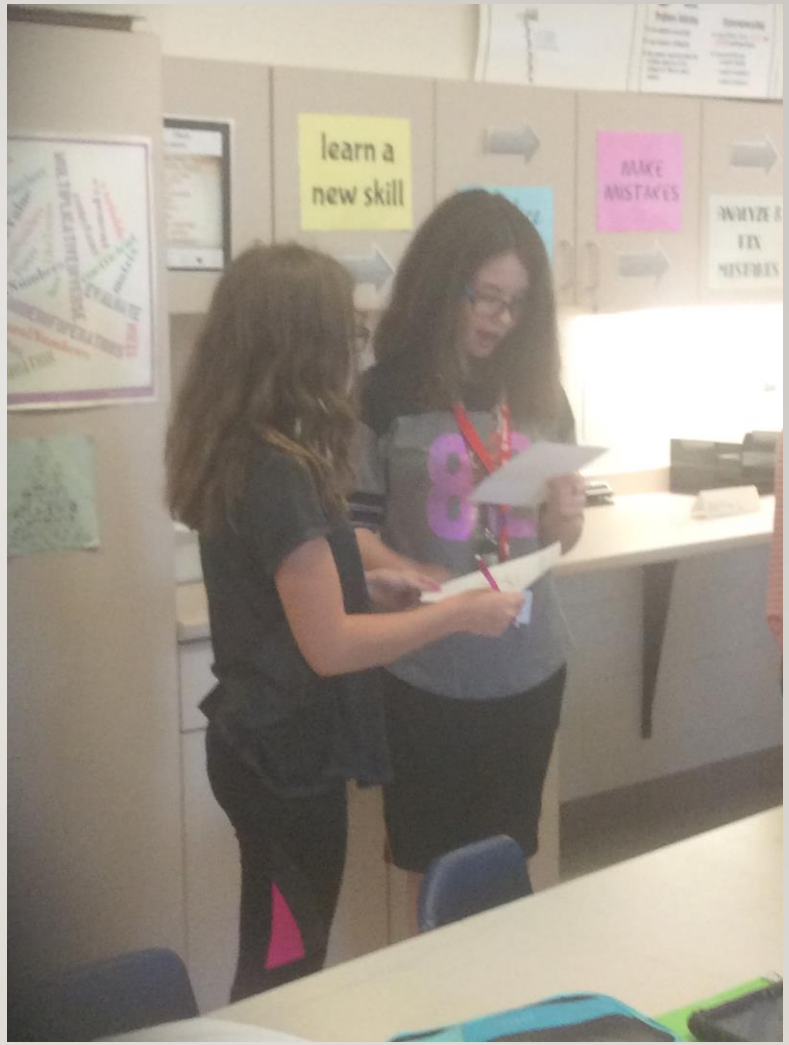
- Modules are printed as workbooks for each student.
- On BB, the Module contains important information, the Module iBook, and daily plans.
- www.explorelearning.com Gizmos are used as virtual manipulatives.
  - Ex: Direct Variation, Adding/Subtracting Integers on Number Lines
- Eureka Manipulatives Kit – Ex: Integer Cards, rulers, protractors
- www.khanacademy.org – Aligned to Eureka and Common Core Standards
- www.illuminations.nctm.org - recommended by Eureka as additional support.
- Personal Whiteboards – cardstock and page sleeve
- www.edulastic.com

INTEGER GAME



STUDENT REPORT OUT AND GIVE-ONE-TO-GET ONE





SOURCES

- www.medium.com
- www.corelearn.com
- www.greatminds.org
- www.ascd.org/publications/books/105137/chapters/Reading-in-the-Mathematics-Classroom.aspx
- Eureka Training
- PLC Collaboration