Reveal Math - Course 1: Modules 1-5
Summer Skill Plan

As you transition into 6th grade math (Course 1), it is essential to reinforce your foundational math skills and prepare for the exciting new concepts ahead. Maintaining a consistent practice routine over the summer will ensure a smooth start to the new academic year and set you up for continued success in more advanced mathematics.

Throughout your summer engagement with math, remember to utilize available resources to deepen your understanding. Tools like "Learn with an Example" and "Watch a Video" can be incredibly helpful when exploring new topics or revisiting challenging areas.

For your Math summer preparation, focus on strengthening your understanding of key concepts from your previous math courses and begin to familiarize yourself with introductory 6th-grade topics. This proactive approach will build confidence and competence for the year ahead.

You should strive to maintain a strong grasp of core mathematical principles, as they form the bedrock of 6th-grade mathematics. Your summer work is a crucial opportunity to review and preview skills, laying a solid groundwork for the demanding curriculum of 6th grade.

Please complete a SmartScore of at least 70 in each skill area

Suggested Additional Practice

- Review and practice fundamental operations with whole numbers, fractions, and decimals.
- Explore concepts related to ratios, rates, and percentages.
- Familiarize yourself with introductory concepts of integers and the coordinate plane.
- Engage with word problems that require applying mathematical operations and reasoning.
- You should strive to maintain a strong grasp of core mathematical principles.
- Your summer work is a crucial opportunity to review and preview skills, laying a solid groundwork for the demanding curriculum of 7th grade

Please reach out to Mr. Scott @ t.scott@hrs-ken.org if you have any questions as you work through your summer math preparation. Mr. Scott is travelling this summer, so please be patient with a response.

Module 1: Ratios and Rates

Lesson 1-1: Understand Ratios

- Write a ratio: word problems W98

- **Also consider**
  - Write a ratio 77D
  - Which model represents the ratio? 66V

Lesson 1-2: Tables of Equivalent Ratios

- Ratio tables PPF

- **Also consider**
  - Identify equivalent ratios 2LM
  - Equivalent ratios: word problems RLZ
  - Write an equivalent ratio NEA

Lesson 1-3: Graphs of Equivalent Ratios

- Ratios and rates: complete a table and make a graph 622

Lesson 1-4: Compare Ratio Relationships

- Compare ratios: word problems 2HT

Lesson 1-5: Solve Ratio Problems

- Solve the proportion 7H5
- Find an equivalent ratio: word problems W8Z

Lesson 1-6: Convert Customary Measurement Units

- Customary unit conversions involving fractions and mixed numbers UHE

- **Also consider**
  - Convert and compare customary units 9TJ

Lesson 1-7: Understand Rates and Unit Rates

- Unit rates JSZ
- Unit prices UKD
- Compare rates: word problems NAF

- **Also consider**
  - Rates: word problems 9AF

Lesson 1-8: Solve Rate Problems

- Unit prices with fractions and decimals 9NF
- Unit rates: word problems FV7

- **Also consider**
  - Calculate speed, distance, or time: word problems TLB

Module 2: Fractions, Decimals, and Percents

Lesson 2-1: Understand Percents

- What percentage is illustrated? RHG
- Benchmark percents with strip models: multiples of 10, 20, 25, 33, and 50 5JV

Lesson 2-2: Percents Greater Than 100% and Less Than 1%

- Convert between percents greater than 100% and fractions UTR

Lesson 2-3: Relate Fractions, Decimals, and Percents

- Convert between percents, fractions, and decimals ZAV
- Convert between percents, fractions, and decimals: word problems 7CZ

- **Also consider**
  - Convert fractions to percents using grid models ZDZ
  - Find what percent one number is of another PEZ
  - Find what percent one number is of another: word problems 498

Lesson 2-4: Find the Percent of a Number

- Percents of numbers and money amounts 8N4
- Percents of numbers: word problems BBY

- **Also consider**
  - Solve percent word problems YWB

Lesson 2-5: Estimate the Percent of a Number

- Estimate percents of numbers 9CV

Lesson 2-6: Find the Whole

- Solve percent problems using strip models MEA
- Find the total given a part and a percent D6L

- **Also consider**
  - Solve percent problems using grid models YX6
  - Solve percent problems ELY

Module 3: Compute with Multi-Digit Numbers and Fractions

Lesson 3-1: Divide Multi-Digit Whole Numbers

- Divide whole numbers - 2-digit and 3-digit divisors CG2
- Division with decimal quotients 7GH
- Divide whole numbers: word problems CNW

Lesson 3-2: Compute with Multi-Digit Decimals

- Add and subtract decimals 4F6
- Multiply decimals 2WT
- Divide decimals V2F

- **Also consider**
  - Add, subtract, multiply, or divide two decimals P6W
  - Add, subtract, multiply, or divide two decimals: word problems 8HT

Lesson 3-3: Divide Whole Numbers by Fractions

- Reciprocals R9V
- Divide whole numbers by fractions using models QND
- Divide whole numbers by fractions PLD

Lesson 3-4: Divide Fractions by Fractions

- Divide fractions using models E6R
- Divide fractions ABT

Lesson 3-5: Divide with Whole and Mixed Numbers

- Divide fractions by whole numbers using models NUM
- Divide fractions and mixed numbers K6K
- Divide fractions and mixed numbers: word problems RF2

- **Also consider**
  - Divide fractions and mixed numbers using models SGD
  - Divide fractions and mixed numbers using models: word problems LKG
  - Divide fractions by whole numbers in recipes HL9

Module 4: Integers, Rational Numbers, and the Coordinate Plane

Lesson 4-1: Represent Integers

- Understanding integers 8EP
- Graph integers on horizontal and vertical number lines 36C

- **Also consider**
  - Integers on number lines K6J

Lesson 4-2: Opposites and Absolute Value

- Understanding opposite integers X8L
- Understanding absolute value TLR
- Absolute value 2YZ
- Absolute value and integers: word problems 9CW

Lesson 4-3: Compare and Order Integers

- Compare integers 4G6
- Put integers in order CMQ

- **Also consider**
  - Integer inequalities with absolute values 4A8

Lesson 4-4: Rational Numbers

- Rational numbers on number lines DJE
- Compare and order rational numbers using number lines FMS
- Compare and order rational numbers: word problems ETK

- **Also consider**
  - Classify rational numbers using a diagram 64K
  - Absolute value of rational numbers KGX
  - Compare and order rational numbers JNH

Lesson 4-5: The Coordinate Plane

- Objects on a coordinate plane GFN
- Graph points on a coordinate plane VHQ
- Quadrants F5T

Lesson 4-6: Graph Reflections of Points

- Reflections of points KDG

Lesson 4-7: Absolute Value and Distance

- Distance between two points A7P
- Coordinate planes as maps N96

- **Also consider**
  - Follow directions on a coordinate plane XDQ

Module 5: Numerical and Algebraic Expressions

Lesson 5-1: Powers and Exponents

- Write multiplication expressions using exponents TY5
- Evaluate powers with whole number, decimal, and fractional bases XXS

Lesson 5-2: Numerical Expressions

- Evaluate numerical expressions one step at a time XCQ
- Evaluate numerical expressions involving whole numbers MLU
- Write numerical expressions for word problems XB2

- **Also consider**
  - Evaluate numerical expressions involving decimals YEE
  - Evaluate numerical expressions involving fractions WNE
  - Identify mistakes involving the order of operations V46

Lesson 5-3: Write Algebraic Expressions

- Identify terms and coefficients 9KE
- Write variable expressions TPE
- Write variable expressions: word problems 6LQ

Lesson 5-4: Evaluate Algebraic Expressions

- Evaluate variable expressions SY5
- Evaluate variable expressions with decimals, fractions, and mixed numbers 49T
- Evaluate variable expressions: word problems 7XA

Lesson 5-5: Factors and Multiples

- Greatest common factor AMB
- Least common multiple NGA
- GCF and LCM: word problems ZB8

- **Also consider**
  - Least common multiple of three or four numbers ZRM
  - Greatest common factor of three or four numbers FBD

Lesson 5-6: Use the Distributive Property

- Multiply using the distributive property 2HH
- Factor numerical expressions using the distributive property MX2
- Factor using the distributive property VVQ

- **Also consider**
  - Multiply a mixed number by a whole number WPV
  - Multiply using the distributive property: area models 7XM
  - Factor variable expressions: area models BGR

Lesson 5-7: Equivalent Algebraic Expressions

- Write equivalent expressions using properties R8H
- Identify equivalent expressions NUQ
- Add and subtract like terms SRM

- **Also consider**
  - Identify properties of addition and multiplication M6U
  - Identify equivalent expressions using strip models W5U
  - Identify equivalent expressions using algebra tiles W2T