In the News

Robinson School

Literacy Across Curriculum

ELA Corner

Student Learning:

5th Grade – Realistic Fiction Book Clubs - Literary Essay

6th Grade – Realistic Fiction Book Clubs – Fiction Writing

7th Grade – Literary Essay

8th Grade – Literary Essay

Note: 5th Grade –

All students have been given access to Lexia as a homework choice. Lexia is an online reading program. Lexia's software records students' reading minutes automatically. Students read at their own pace and their own reading levels. Proven to show growth in all students.

Math Corner

Students Learning: (student homework tips on back pages)

5th Grade - Multi-Digit Whole Number and Decimal Fraction Operations

6th Grade - Arithmetic Operations Including Division of Fractions

7th Grade - Rational Numbers

8th Grade -The Concept of Congruence

Save the Date!

Scholastic Book Fair
12/2/19 – 12/6/19
Parents ONLY Preview Night
12/2: Come and enjoy hot apple cider and snacks while you browse the book fair.

Spaghetti Supper & Report Card Night
November 13th
5pm – 6pm Spaghetti Supper
6pm – 8pm Meet your teacher & get your child's report card

Science & Social Studies Corner

Social Studies

5th Grade – Ancient Civilization – Maya, Aztec, and Incas

6th Grade – Geography of South America

7th Grade – Ancient Civilization – Mesopotamia, Phoenicia

8th Grade – Generation Citizen – Students picking a focus topic based on issues in the community

Science

5th Grade –Earth & Sun - Night Sky
6th Grade - Diversity of Life
7th Grade – Weather & Water
8th Grade – Chemical Interactions

First Book OMG Award Grant

The District of Lowell received a $62k for books from the OMG First Book Award. The Robinson received $1500 to buy books. The students were very excited to pick their own books and take them home.

STEM CLUB

Registration: Calling all boys and girls grades 5-8 to be a participant in our STEM Club. Students will use their creative minds to think of an invention and prove their theory on how it works. The program is held on Mondays from 2:15pm-4:15pm at the school. Bagged lunch and snack are included. If students are already enrolled in the after-school program they can continue to take their bus home. No bus will be provided for students not already enrolled in the after school. This program is 20-weeks ending with a Science Fair in March.
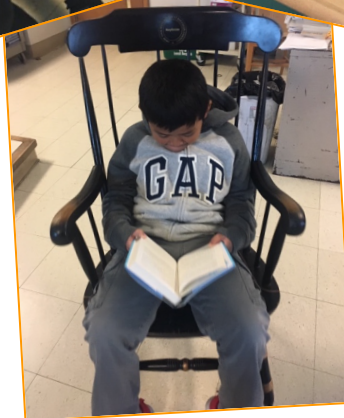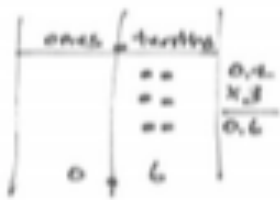
Eureka Math™ Tips for Parents
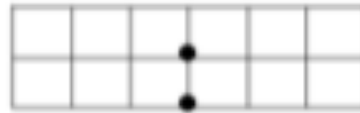
Grade 5 Module 1

Place Value and Decimal Fractions

In this first module of Grade 5, we will extend 4th grade place value work to multi-digit numbers with decimals to the thousandths place. Students will learn the pattern that one-tenth times any digit on the place value chart moves it one place value to the right. They will also perform decimal operations to the hundredths place.
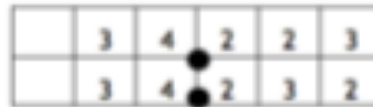

34.223 ◯ 34.232

Place value chart for comparing decimals using <, >, =

0.2 x 3 on the place value chart.

Notice how the dots for two tenths are simply repeated three times for a total of 0.6, or six tenths.

What Comes After this Module:

In Module 2, we will continue to work with place value, moving to multiplication and division of decimal numbers. We move from concrete models to more abstract algorithms, always anchoring our work in our knowledge of place value patterns.

Terms, Phrases, and Strategies in this Module:

Thousandths: related to place value (we have already studied tenths and hundredths)

Exponents: how many times a number is to be used in a multiplication sentence

Millimeter: a metric unit of length equal to one thousandth of a meter

Equation: statement that two mathematical expressions have the same value, indicated by use of the symbol =; e.g., 12 = 4 x 2 + 4

Place value: the numerical value that a digit has by virtue of its position in a number

Standard form: a number written in the format: 135

Expanded form: e.g., 100 + 30 + 5 = 135

Unit form: e.g., 3.21 = 3 ones 2 tenths 1 hundredth

Word form: e.g., one hundred thirty-five

✛ How you can help at home:

- When given a multi-digit number with decimal digits, ask your student what each digit represents (e.g., "What is the value of the 4 in the number 37.346?")

- Help practice writing numbers correctly by saying multi-digit decimal numbers and having your student write them down. Students can create their own place value charts to help

Welcome to *A Story of Units!*

Each module's parent tip sheet will highlight a new strategy or math model your student will be working on.

Place Value Chart – In Module 1, students will make extensive use of place value tools, as they have done in earlier grade levels. Now, however, students work with the extended place value chart, which includes place values to the thousandths.

(Above) Place Value Chart, with the thousandths place

(Below) 27.346 on the chart

tens	ones		tenths	hundredths	thousandths
2	7	•	3	4	6

Ask your child what they are learning every day.

Eureka Math™ Tips for Parents

Grade 6
Module 1

Ratios and Unit Rates

In this 29-lesson module, students are introduced to ratios and rates and use ratio language and notation to solve real-world problems. Students will explore tape diagrams, double number line diagrams, ratio tables, equations, and the coordinate plane to develop deep understanding, enabling them to become proficient and confident mathematicians in middle school.

One Model Seen in the Module:

The Double Number Line Diagram

Key Words

Ratio: A pair of nonnegative numbers, A:B, where both are not zero, and describes a relationship between the quantities.
Rate: Indicates how many units of one quantity there are for every 1 unit of the second quantity.
Unit Rate: The numeric value of the rate, e.g. in the rate 2.5 mph, the unit rate is 2.5.
Rate unit: The unit of measure of the rate. (e.g. in the rate 2.5 mph, the rate unit is miles per hour)
Equivalent Ratios: Ratios that have the same value.
Percent: Percent of a quantity is a rate per 100.
Associated Ratios: Ratios that are related, e.g. if the ratio of the number of boys to the number of girls is 1:2, we can also determine the ratio of the number of girls to the total number of children is 2:3. We can further determine the ratio of the number of girls to the number of boys is 2:1.
Double Number Line Diagrams: A math model that is often used when quantities have different units and is a visual representation for showing multiple equivalent ratios.
Ratio Table: A table listing pairs of numbers that represent equivalent ratios.
Tape Diagram: Drawings that look like a segment of tape, used to illustrate number relationships. Also known as strip diagrams, bar model, fraction strip, or length model.

One Model Seen in the Module:

The Ratio Table

Number of Cups of Sugar	Number of Cups of Flour
2	3
4	6
6	9

What Came Before this Module:

In Grade 5, students studied multiplicative comparisons, which is the foundation for their understanding of comparing quantities in a ratio relationship. In addition, students worked to develop fluency in operations with whole numbers, fractions, and decimals.

What Comes After this Module:

Students will divide fractions using various strategies and arithmetic operations.

How can you help at home?

✓ Ask your child what they learned in school today and ask them to show you an example.

✓ Reinforce fast recall of multiplication and division facts by playing math games using flashcards. See how many facts your child can answer in 20 seconds. Then, see if they can answer more questions the next time by playing again!

Below is an example of how your child can use a tape diagram to solve a problem in this module.

Your middle school has 900 students. $\frac{1}{3}$ of the students bring their lunch instead of buying lunch at school. What is the value of the ratio of the number of students who do bring their lunch to the number of students who do not?

300 students bring lunch   600 students buy lunch

First, I created a tape diagram. In the tape diagram, $\frac{1}{3}$ of the students bring their lunch instead of buying lunch at school. I determined that 300 students bring their lunch, leaving 600 students who buy their lunch. One unit of the tape diagram represents 300, and 2 units of the tape diagram represent 600. This creates a ratio of 1:2. As such, the value of the ratio of the number of students who bring their lunch to the number of students who buy their lunch is $\frac{1}{2}$.

Ask your child what they are learning every day.

Eureka Math™ Tips for Parents

Grade 7 Module 1

Ratios and Proportional Relationships

In this 22-lesson module, students learn how to recognize proportional relationships given descriptions, tables containing sets of values of two related quantities, and graphs of those values on the coordinate plane. They represent proportional relationships in equations that have the form y=kx. In the latter half of the module, they extend their knowledge to find unit rates of ratios that contain rational numbers (e.g. a speed of $\frac{1}{2}$ mile per $\frac{1}{4}$ hour is a rate of 2 miles per hour). The module concludes with a geometric application of proportional reasoning that serves as a major foundation for geometry topics explored in Grade 8 and Grade 10. Students explore the relationships between the dimensions in scale drawings and recognize the scale factor as the constant of proportionality studied in the earlier topics of the module. They use this relationship to create scale drawings, create original drawings from a scale drawing, and create scale drawings of various scales from a given scale drawing.

One Representation Seen in This Module

Graphical representation of a proportional relationship is a straight line that includes the point (0,0).

Coordinate Plane
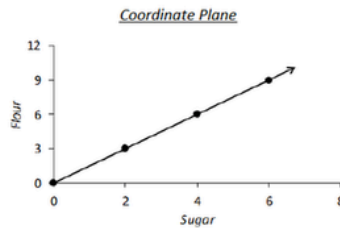
Key Words

Proportional To: Measures of one type of quantity are proportional to measures of a second type of quantity if there is a number k>0 so that for every measure x of a quantity of the first type the corresponding measure y of a quantity of the second type is given by kx, i.e. y= kx. The number is called the *constant of proportionality*.

Proportional Relationship: A one-to-one matching between two types of quantities such that the measures of quantities of the first type are proportional to the measures of quantities of the second type, *e.g. a farmer sells one pound of apples for $2 so two pounds of apples costs $4 and three pounds of apples costs $6, etc.*

One-to-One Correspondence: Two figures in the plane, S and S¹, are said to be in one-to-one correspondence if there is a pairing between the points in S and S¹, so that each point P of S is paired with one and only one point P¹ in S¹, and likewise, each point Q¹ in S¹ is paired with one and only one point Q in S.

Scale Drawing:
A scale drawing refers to a reduced-size or enlarged-size 2-dimensional picture of another 2-dimensional picture.

Another Representation Frequently Used in this Module.

Ratio Table

Time (h), t	Distance (km), t
0	0
1	10
2	20
3	30

What Came Before this Module:

In Grade 6, students explored ratios, rates, and unit rates. They connected ratio and rate to whole number multiplication and division and used concepts of ratio and rate to solve problems.

What Comes After this Module:

There is a focus on types of ratios as they can represent part-to-part relationships or part-to-whole relationships. There is often a misconception that ratios are fractions and this is of course not always the case. Students understand a rate as assigning a numerical value to the relationship between two sets of quantities using a new unit of measure derived from the units of the quantities being compared (e.g. in a relationships where distance in miles is being compared to time measure in hours, the unit of measure of the rate is miles per hour, often denoted mph).

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Grade 8 Module 1

Integer Exponents and Scientific Notation

In this 13- lesson module, students expand their knowledge of operations on numbers to include integer exponents and use this knowledge to transform expressions. Students will also make conjectures about how zero and negative exponents of a number should be defined and prove the properties of integer exponents. Students will also make sense out of very large and very small numbers and will use the number line to guide them in determining the relationship between numbers.

The Laws of Exponents

For $x, y > 0$, and all integers a, b, the following holds:

$$x^a \cdot x^b = x^{a+b}$$

$$\left(x^b\right)^a = x^{ab}$$

$$(xy)^a = x^a y^a$$

In general, if x is any number and m, n are positive integers, then

$$x^m \cdot x^n = x^{m+n}$$

In general, if x is nonzero and m, n are positive inte

$$\frac{x^m}{x^n} = x^{m-n}, \text{ if } m > n.$$

For any positive number x and for any positive integer n, we define

$$x^{-n} = \frac{1}{x^n}.$$

x^{-1} is just the reciprocal, $\frac{1}{x}$, of x.

We use the definition above to prove that the following statement is true for *all integer* exponents b.

$$x^{-b} = \frac{1}{x^b}.$$

Key Words

Scientific Notation:
The scientific notation is the representation of a number as the product of a finite decimal, *d*, and a power of 10. The decimal *d* must be greater than or equal to 1 and less than 10. The exponent of the power of 10 must be an integer. For example, the scientific notation for 192.7 is 1.927×10^2. An example of a number that is not written in scientific notation is 0.234567×10^3 because 0.234567 is not greater than or equal to 1 and less than 10.

Order of Magnitude:
The order of magnitude of a *finite decimal* is the exponent in the power of 10 when that decimal is expressed in scientific notation. For example, the order of magnitude of 192.7 is 2 because when 192.7 is expressed in scientific notation as 1.927×10^2, 2 is the exponent of 10^2.

2019

FACULTY Corner

SAVE THE DATE: NOVEMBER 13ᵀᴴ 5:00pm

**ENJOY A DELICIOUS SPAGHETTI SUPPER
ROBINSON TEACHERS COOK & SERVE
5:00pm – 6:00pm**

**MEET THE TEACHERS &
RECEIVE THEIR REPORT CARD
6:00pm – 8:00pm**

SEPTEMBER ATTENDANCE WINNERS

Congratulations to our class winners for September

**5th grade Ms. McKenna 85.8%
6th grade Mr. Manning 91.6% (Whole School)
7th grade Ms. White-yelito 88.8%
8th grade Ms. Wu 80.3%**

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