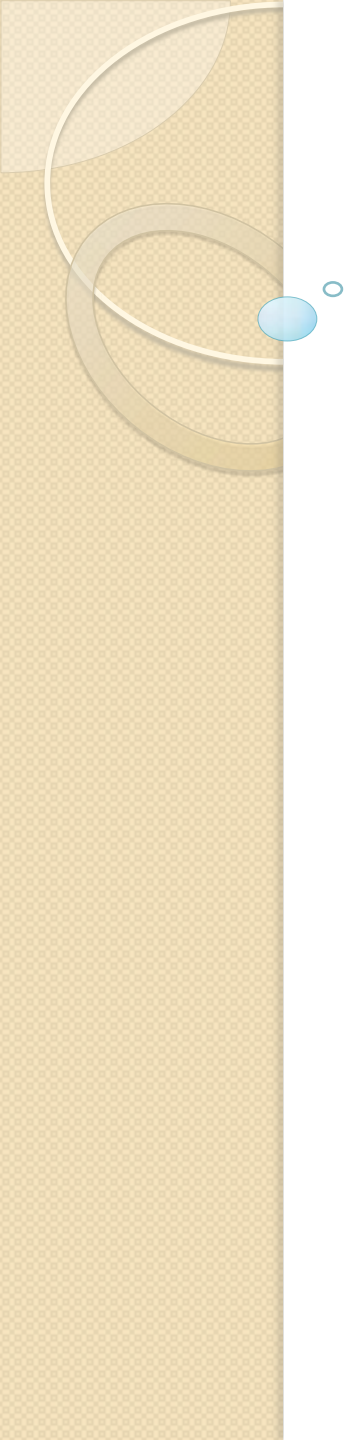




Eureka Math Parent Meeting

Agenda

- Program Overview
- Discuss the “why” for change
- Information Sharing
 - District Communications
 - Teacher Instructional Practice Updates
 - Pacing Updates
 - Next Steps/Questions

Eureka Math Program

- The Eureka Math Program, which is being implemented in Grades 3 and 5 (Salk, Emerson, and Disney) and Grades 4 all buildings, is designed by the Great Minds Initiative.
- Teachers are becoming familiar with resources, utilizing new instructional models, and instructional materials.
Throughout the year, students have been tracking their progress toward meeting grade level competencies as recorded on their report cards.

Instructional Materials and Resources

- Eureka Math:

Eureka Math (also known as EngageNY) was originally created through a partnership with the New York State Education Department. Eureka Math is modular, and it strives to connect math to the real world.

- Zearn:

Zearn Math is based on Eureka Math / Engage NY.

Zearn has digital lessons and small group instruction materials that are designed to teach math concepts as connected ideas, building deep understanding in partnership with the Eureka Math Curriculum.

Focus of Math Instruction

- Make sense of problems and persevere in solving them
- Reason abstractly and quantitatively
- Construct viable arguments and critique the reasoning of others
- Model with mathematics
- Use appropriate tools strategically
- Attend to precision
- Look for and make use of structure
- Look for and express regularity in repeated reasoning

High Expectations:

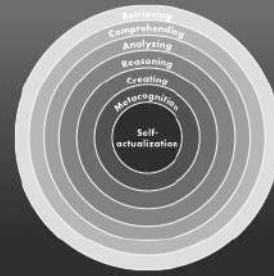
- **Increased Rigor**
 - **Complex Assessments**
- **College and Career Ready Focus**

Why?

Standard for Mathematical Practice	Student Friendly Language
1. Make sense of problems and persevere in solving them. 	• I can try many times to understand and solve a math problem.
2. Reason abstractly and quantitatively. 	• I can think about the math problem in my head, first.
3. Construct viable arguments and critique the reasoning of others. 	• I can make a plan, called a strategy, to solve the problem and discuss other students' strategies too.
4. Model with mathematics. 	• I can use math symbols and numbers to solve the problem.
5. Use appropriate tools strategically. 	• I can use math tools, pictures, drawings, and objects to solve the problem.
6. Attend to precision. 	• I can check to see if my strategy and calculations are correct.
7. Look for and make use of structure 	• I can use what I already know about math to solve the problem.
8. Look for and express regularity in repeated reasoning. 	• I can use a strategy that I used to solve another math problem.

District
Focus:

Increased
Rigor



COGNITIVE GROWTH TARGETS™

Retrieving: The process of recalling and/or recognizing declarative, procedural, or conceptual knowledge from memory.

Comprehending: The process of initial understanding of declarative, procedural, or conceptual knowledge.

Analyzing: The process of examining knowledge by breaking it down into its components to determine relationships, structure, and/or purpose.

Reasoning: The process of drawing conclusions and/or making judgments based upon evidence, facts, or criteria.

Creating: The process of making, inventing, or producing something new.

Metacognition: The process of reflecting on and regulating one's own cognitive processes.

Self-actualization: The process of understanding one's self.

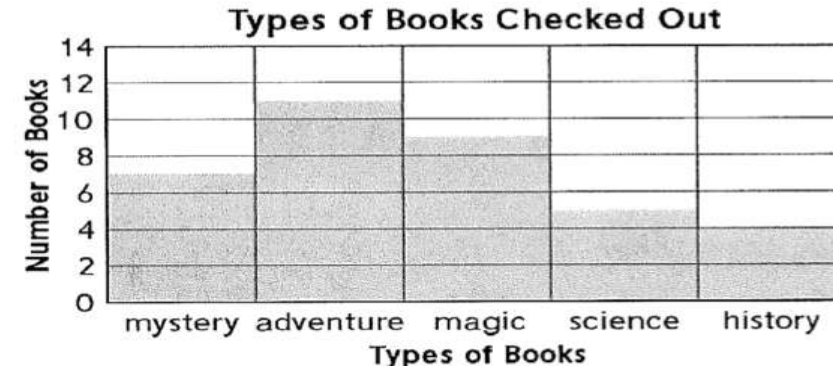
Increased Rigor



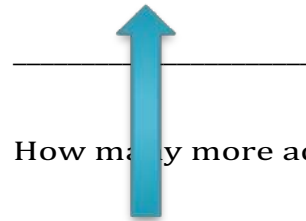
M-STEP GRADE 3 EXAMPLE

Trimester Assessment – 3rd Grade Everyday Math

6. Use the information in the bar graph to answer the questions below.



How many mystery and adventure books were checked out all together?



Retrieval/Comprehension
Questions

How many more adventure books were checked out than science books?

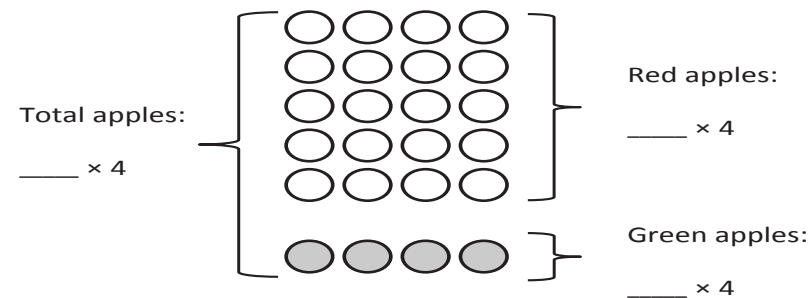
How many books were checked out in all? _____

Explain how you solved for the number of books checked out in all.

End of Module 3rd Grade Eureka Math Assessment

3. Ms. Park buys a tray of apples for a class party. There are 5 rows of 4 red apples. There is 1 row of 4 green apples.

a. The picture below shows Ms. Park's apples. Fill in the blanks to complete the expressions.



- b. Fill in the unknowns in the equation below to match the picture of the apples in Part (a). Use the break apart and distribute strategy to find the total number of apples Ms. Park bought.

$$\underline{\hspace{1cm}} \times 4 = \underline{\hspace{1cm}} \times 4 + \underline{\hspace{1cm}} \times 4$$

Ms. Park bought _____ apples.

Vocabulary and Application

- c. Lilly brings 8 green apples for the class party. Show Lilly's green apples on the picture in Part (a). Then, fill in the unknowns in the equation below to match the new picture. Solve to find the total number of apples.

$$\underline{\hspace{1cm}} \times 4 = \underline{\hspace{1cm}} \times 4 + \underline{\hspace{1cm}} \times 4$$

Multi-stepped

There are _____ apples in all.

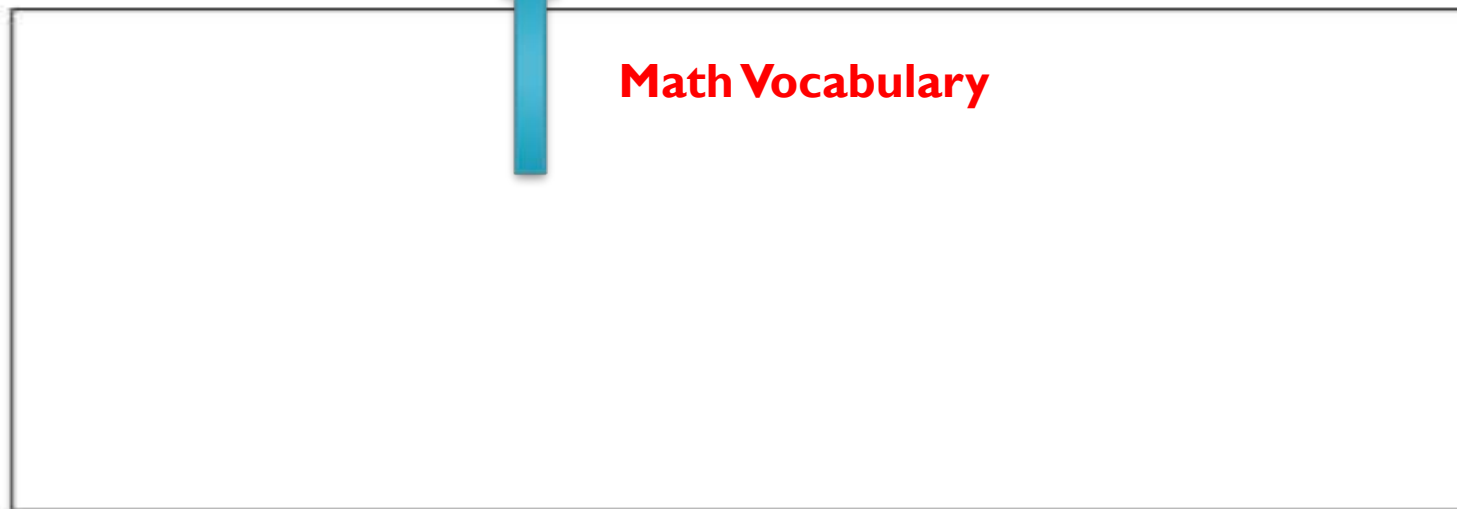
Mathematics Grade 3 Sample Items

Question 3



A city park is in the shape of a rectangle. The park is 120 feet wide and 55 feet long.

55 feet



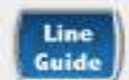
120 feet

Math Vocabulary

Enter the perimeter, in feet, of the city park.

1	2	3						
4	5	6						
7	8	9						
0	.							

Manipulation of the iPad to answer questions

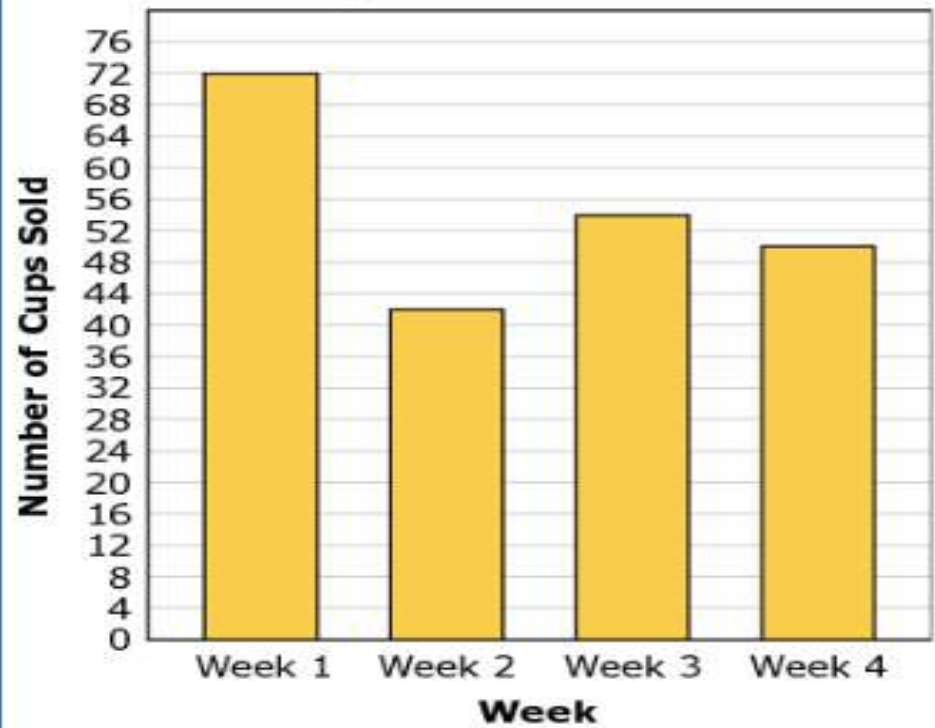


LEMONADE STAND

More Text Above

Jaleen has a lemonade stand. The bar graph below shows the number of lemonade cups sold in each of four weeks in July.

July Lemonade Sales



Use the **July Lemonade Sales** bar graph to complete this task. More Text Below

Jaleen also sold lemonade for 4 weeks in August. She compares her weekly sales in July to her weekly sales in August.

- For week 1, she sold 22 fewer cups in August than in July.
- For week 2, she sold 18 more cups in August than in July.
- For week 3, she sold 26 more cups in August than in July.
- For week 4, she sold 25 fewer cups in August than in July.

Complete the table to show how many cups Jaleen sold each week in August.

August Lemonade Sales	
Week	Cups Sold
1	
2	
3	
4	

Multi-stepped



Increased Rigor and Reading

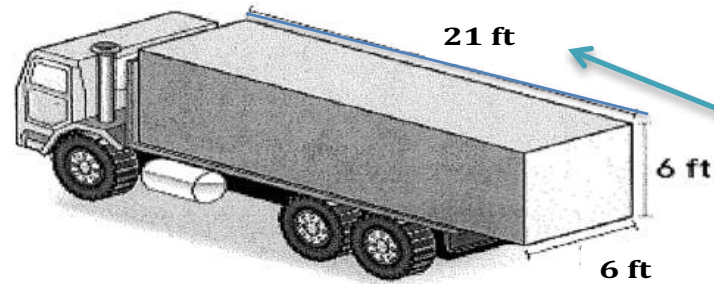
Increased Rigor



M-STEP GRADE 5 EXAMPLE

Trimester Assessment – 5th Grade Everyday Math

23. Sabrina's family is renting a moving truck. The website they checked gave the following dimensions of the truck they thought was best:



Whole Numbers

- a. What is the volume of the moving truck? _____ ft^3

Sabrina's family estimated that they need a truck with a volume of 35 cubic yards. How many cubic yards of storage space does the truck provide? (Hint: Convert truck dimensions from feet to yards and then calculate the truck's volume in cubic yards.)

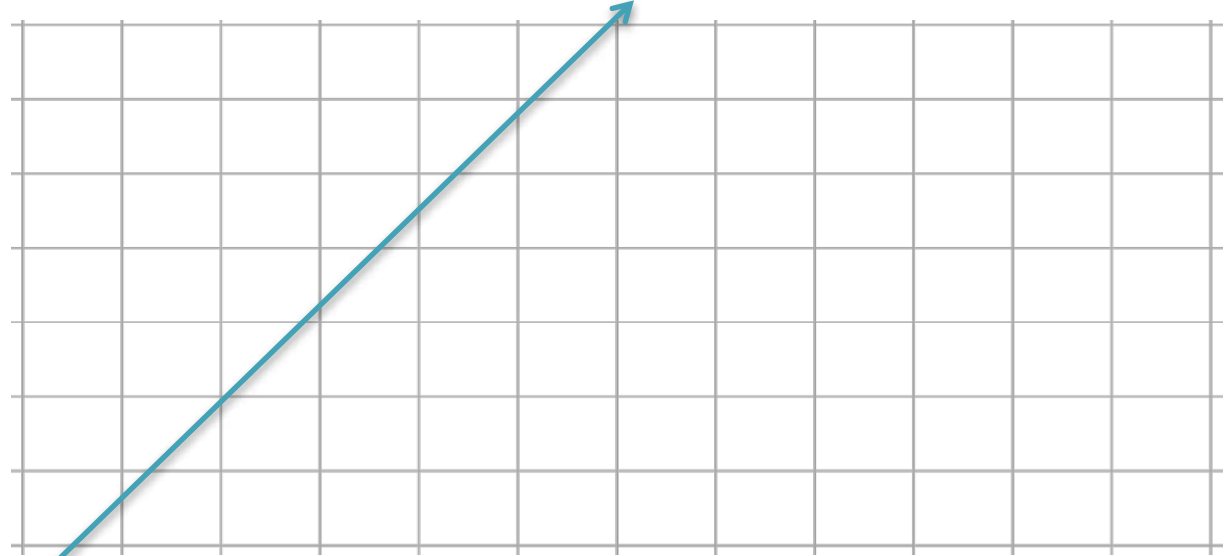
Comprehension

- b. The volume of the truck in cubic yards is _____ yds^3 .
c. Is the moving truck large enough for Sabrina's family? Explain why or why not.

End of Module — 5th Grade Eureka Math Assessment

Name _____ Date _____

1. Use your ruler to draw a rectangle that measures $4\frac{1}{2}$ by $2\frac{3}{4}$ inches, and find its area.



2. Heather has a rectangular yard. She measures it and finds out it is $24\frac{1}{2}$ feet long by $12\frac{4}{5}$ feet wide.

- a. She wants to know how many square feet of sod she will need to completely cover the yard. Draw the yard, and label the measurements.

- b. How much sod will Heather need to cover the yard?

- c. If each square foot of sod costs 65 cents, how much will she have to pay to cover her yard?

Number Complexity

Complex
Task –
Multi-stepped

Reasoning/Creating

**COMMUNITY GARDEN**

Your class is going to plant vegetables in a section of the local community garden. The garden manager has provided an area to plant the vegetables as follows:

The total area for the class to plant vegetables will be a rectangle 40 feet long and 30 feet wide.

The class has decided to plant four rectangular sections of the class garden with vegetables according to this plan:

- $\frac{1}{4}$ of the garden will be planted with carrots.
- $\frac{1}{6}$ of the garden will be planted with potatoes.
- $\frac{1}{8}$ of the garden will be planted with broccoli.
- $\frac{1}{12}$ of the garden will be planted with corn.

In this task, you will analyze the class plan and determine an alternate plan that will help make the most use of the available area.

Your class has decided to plant potatoes in the unused portion of the garden plot.

Part A

What total fraction of the class garden will be planted with potatoes? Remember that $\frac{1}{6}$ of the garden is already planned for potatoes.

Enter your response in the first response box.

Part B

How many total square feet of the class garden plot will be planted with potatoes?

Enter your response in the second response box.

										?
1	2	3								
4	5	6								
7	8	9								
0	.	$\frac{\Box}{\Box}$								
										?

Multi-stepped

Increased reading/
Vocabulary



**COMMUNITY GARDEN**

Your class is going to plant vegetables in a section of the local community garden. The garden manager has provided an area to plant the vegetables as follows:

The total area for the class to plant vegetables will be a rectangle 40 feet long and 30 feet wide.

The class has decided to plant four rectangular sections of the class garden with vegetables according to this plan:

- **1/4 of the garden will be planted with carrots.**
- **1/6 of the garden will be planted with potatoes.**
- **1/8 of the garden will be planted with broccoli.**
- **1/12 of the garden will be planted with corn.**

In this task, you will analyze the class plan and determine an alternate plan that will help make the most use of the available area.

Using the new plan with more potatoes, write an equation to show that the **total area** of the class's garden is used to grow vegetables. Make sure the equation shows that the sum of the areas, in square feet, of each section equals the total area of the class's garden.

- Carrots
- Potatoes
- Broccoli
- Corn

1	2	3	+	-	×	÷			
4	5	6	<	=	>				
7	8	9	$\square^{\square}$	($\square$)					
0	.	$\frac{\square}{\square}$							

Students are asked to create something “new.”

Reasoning/Creating



Parent Communication

- We have heard from our parents who would like to better understand how students will be given the opportunity to meet all grade level competencies.

Recent Updates and District Communications

- District Parent Communication
- District FAQ on Eureka Math
- Website updates

<https://www.fraser.k12.mi.us/eurekamath>

- FAQ Posted online
- Grades 3-5 Competency Overviews

Key Points

- We have designed a plan for completing this school year to allow Eureka math students to have opportunities to meet the grade level competencies and be prepared for success on the M-STEP.
- On March 1, teachers began restructuring instructional time to teach all concepts in the remaining modules. Students will continue to monitor their progress during each module.

- 
- Students will continue to monitor their progress during each module and will be assessed using module assessments of competency.



TEACHER INSTRUCTIONAL PRACTICES



Teacher Instructional Practices

- We have collaborated with all Eureka Math Teachers to recalibrate instructional practices.
- Teachers have met for additional days of professional development to focus exclusively on math instructional models and pacing.
- They have shared ideas and best practices to assure that students will be meeting grade level competencies.

Lesson Openers

- Whole Class Instruction (ALL STUDENTS)
 - Application Problem
 - Fluency Practice
- Concept Development – In some cases, concept development and/or common misunderstandings may need to be covered whole group

Whole Group Instruction with the Teacher

- Students learn with their teacher working on fluency, application problems, and concept development with concrete manipulatives. Paper/pencil or whiteboard.
- Concept Development: Opening example problems, problem sets, vignettes, student work samples.
- Guided Practice: Zearn and/or Interventionist
- Independent Practice: Paper Problem Sets and/or Digital Student Notes to accompany Zearn lesson.

Adjustments for students ahead of pace and students who need additional support.

- The students who are ahead of pace can still move on their own following the Lesson Opener, but they will still meet with the teacher for at least 10 minutes daily.
- During Independent Practice, the teacher can bring small groups together to remediate and provide additional support to smaller groups during independent practice.



PACING UPDATES

Pacing Updates

- Eureka Grade Level Teachers have met and reviewed the competency statements and learning objectives to prepare students for both the M-STEP and in meeting the grade level requirements.

5th Grade - 3rd Trimester Topic Progression With Learning Objectives

Below you will find the Learning Objectives and Competencies that are being assessed throughout the 3rd Trimester in 5th Grade. Please understand that instruction will extend beyond the lessons listed below.

Note:

- Instructional Focus
- Order Of Lessons
- Alignment to Learning Objectives

Instructional Focus	Learning Objectives	Competency Statement
Module 3: Addition and Subtraction of Fractions		
Lessons 4 and 7	5.ASFR.3A	Number – Fractions - 5.NF.A Skill Competency: Students will use equivalent fractions as a strategy to add and subtract fractions.
MidModule 3	5.ASFR.3A 5.ASFR.3B	Number – Fractions - 5.NF.A Skill Competency: Students will use equivalent fractions as a strategy to add and subtract fractions.
Lessons 12 and 13	5.ASFR.2A 5.ASFR.3B	Number – Fractions - 5.NF.A Skill Competency: Students will use equivalent fractions as a strategy to add and subtract fractions.
EndModule 3	5.ASFR.3A	Number – Fractions - 5.NF.A Skill Competency: Students will use equivalent fractions as a strategy to add and subtract fractions.
Module 4: Multiplication and Division of Fractions and Decimal Fractions		
Lessons 5, 8, 10	5.MDFR.2A 5.MDFR.2B 5.EEQ.3B	Number – Fractions - 5.NF.B Skill Competency: Students will apply and extend previous understandings of multiplication and division to multiply and divide fractions. Operations and Algebraic Thinking - 5.OA.A Skill Competency: Students will write and interpret numerical expressions.
Lesson 12	5.ASFR.3A	Number – Fractions - 5.NF.A

Next Steps

- Continue to work with parents, teachers, and students to communicate Math Expectations.
- Work together to prepare our students for both the M-STEP and end of year content expectations.

Questions/Comments