Tuesday, February 8, 2022

Shareese and Aja

Grade 2, Unit 6, Eureka – *expected launch 2.17*

Objectives

- To prepare to teach Eureka Math: Foundations of Multiplication, Division, and Area unit through analysis of the Unit Assessment and supporting materials
- To begin preparations for facilitating the Unit Internalization Meeting with 2nd grade teachers the week of February 14, 2022

Agenda

- The Big, Essential Picture
- Standards Deconstruction
- Assessment Analysis
- Pacing and Prioritization
- Teacher Pre-Work

The Big, Essential Picture

- What is the purpose of this module?

  Unit 6 lays the conceptual foundation for multiplication and division necessary for 3rd grade.

- Describe the progression of this content across grades. (Across grade coherence)

  Number and Operations

1st Grade bc

Algebraic Reasoning

1st Grade The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships. The student is expected to:	2nd Grade *The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships. The student is expected to:*	3rd Grade
1.5B skip count by twos, fives, and tens to determine the total number of objects up to 120 in a set	2.7A determine whether a number up to 40 is even or odd using pairings of objects to represent the number.	

Geometry and Measurement

1st Grade 2nd Grade		3rd Grade
	The student applies mathematical process standards to select and use units to describe length, area, and time. The student is expected to:	
	2.9F use concrete models of square units to find the area of a rectangle by covering it with no gaps or overlaps, counting to find the total number of square units, and describing the measurement using a number and the unit.2	

- What do the foundational standards and the math in your pre-work tell you students have learned related to this content?

  1.5E understand that the equal sign represents a relationship where expressions on each side of the equal sign represent the same value(s); **2.2C** generate a number that is greater than or less than a given whole number up to 1,200; **2.4B** add up to four two-digit numbers and subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations.

  - What's new, different and/or more complex in this grade?
  - How will we make connections between what students have already learned and what they will be learning to give them access, preserve coherence, and empower them to tackle this new work using what they already know?

- What are the headlines – related to math and instruction – you are taking away that will impact your lesson planning and execution?

Standards Deconstruction

	Know* Show*
2.6A	
2.6B	
2.7A	
2.9F	

- *Please refer to Lead4ward to complete the know/show
- Examine the Know/Show statements from grade-level standards
  - Ask yourself: If someone new was coming in to teach this, could they tell from looking at our statements specifically what students should know and be able to do by the end of this module?
  - Modify as necessary to increase specificity and clarity.
  - Ensure understanding about the purpose of deconstruction.
- Review Foundational Standards
  - What do we need to add to our Know/Do statements based on these Foundational standards?
  - Take pics of Know/Do statements so you can continue to refer to them throughout the module.

Assessment Analysis

Mid Module Assessment
Example Know/ Show

1. a. Redraw the objects below in an array. 	**2.6A** ● **Draws triangles in an array. Possible arrays include: 1 row of 12, 12 rows of 1, 2 rows of 6, 6 rows of 2, 3 rows of 4, or 4 rows of 3.** ● **Draws a strip diagram to match the addition sentence in Part (c).**

b. Circle one column. Then, circle one row.  c. Write a repeated addition number sentence to match the columns of hearts. _____	● **Circles one row and one column.** ● **What is a column and what is a row ● Entire** ● **Answers 2 + 2 + 2 + 2 + 2 = 10.**
d. Draw and label a strip diagram to match your addition sentence and array. 2. a. Circle all the expressions that describe the array.  3 + 3 + 3 + 3 3 + 5 5 + 5 + 5 5 + 5 + 5 + 5 + 5 3 + 3 + 3 + 3 + 3 10 + 3	**Draws a strip diagram to match the addition sentence in Part (c).** **2.6A** ● **Circles both 5 + 5 + 5 and 3 + 3 + 3 + 3 + 3.** ● **Draws an array showing 4 columns of 5.**

b. Count the smiley faces one row at a time. Write a repeated addition number sentence to find the total.  _____	● **Writes 5 + 5 + 5 + 5 = 20 or 4 + 4 + 4 + 4 = 20.**
c. Draw an array to match 5 + 5 + 5 + 5, where 5 is the number of objects in the column.	**Draws an array showing 4 columns of 5.**
3. a. Draw an array with 15 squares where one row is made of 5 squares.	**Draws an array showing 3 rows of 5.**

b. Write a repeated addition sentence to match the array you drew in 3(a), showing the addition of the number in each row.	**Answers 5 + 5 + 5 = 15.**
4. Sarah won a prize at school! Her teacher said that she would have two choices for the prize: Choice 1: Get $3 a day for the next 3 days. Choice 2: Get $2 a day for the next 5 days. a. Draw an array for each choice.	**Draws an array to show 3 rows of 3 and draws an array to show either 2 rows of 5 or 5 rows of 2.**
b. Which way would Sarah get more money? Explain how you know. _____ _____ _____ _____ _____	**Clearly explains that Sarah would make more money with Choice 2.**

End of Module Assessment

	2.7A **Answers even and explains thinking using pictures, numbers, or words.**
b. Explain how you know if a number is even. _____ _____ _____ _____	**b. Explains that a number is even using at least one of the following reasons:** **■ A number that occurs as we skip-count by twos.** **■ When objects are paired with none left over.** **■ A number that is twice a whole number <u>(double).</u>**
	■ A number whose last digit is 0, 2, 4, 6, or 8.
	c. Odd. Gives an explanation using one of the following or another accurate explanation. **■ Not said when skip counting by twos.** **■ There is a left- over when objects are paired.** **■ There is no dou- bles sentence.**

	■ It has a 7 in the ones place.
	2.9F **Completes the array to show 4 rows of 6.** **Completes the array to show 3 rows of 5 and gives a repeated addition sentence of 5 + 5 + 5 = 15 or 3 + 3 + 3 + 3 + 3 = 15.**
	Draws a different array using 12 squares.
	2.6A, 2.6B **a. Answers 8 and explains thinking using pictures, numbers, or words.** **b. Answers 3 and explains thinking using pictures, numbers, or words.**
	2.6A, 2.6B, 2.7A, 2.9F **a. Answers yes and gives an explanation as to why 14 is even (as stated in 1(b)).**

b. Completes the array to show 2 rows of 7.

c. Answers 7 and explains thinking using pictures, numbers, or words.

2.9F
Jean's array; explanation gives evidence of understanding that tiling must have no gaps or overlaps.

The area is 12 square units. The units are given, and the explanation explains the calculation (counting strategies, skip counting, addition <u>sentence or other appropriate strategy).</u>

- Review the skills/concepts that are necessary for students to be successful solving each problem.
  - Which of these are new in this module?
  - Which are foundational/prerequisites?
- Align each question to the standard(s) it assesses.
  - How does it add to your understanding of the standards?
  - What additions (if any) do you need to make to your standards deconstruction?
- Align each question to a topic, lesson, or set of lessons.
  - What tools and strategies should students be using to solve each problem?
  - Is there anything that looks tricky about the lesson(s)/problem?
  - What might you need to pay particular attention to in the lesson(s) to be sure students are prepared to be successful with this problem on the assessment?
- Considering your state test, are there problem types, stems, etc. that you can bring into lessons to give students at-bats? What lessons?

Pacing and Prioritization

- Topic Walk
  - Read each topic overview and consider:
    - What is the new thinking in this topic?
    - How does the new thinking of the topic build across the lessons?
    - What are the most important ideas and skills for the topic and which lessons are most important in building those?
  - Describe the arc of the module

- What is the new thinking in this module?
- How does the new thinking of the topic build across the topics?
- What are the most important ideas and skills for the module and which lessons are most important in building those?

- Calendar out your lessons*
  - How many days is this module planned for in Eureka? How many days do you have to teach it in your Scope and Sequence?
  - What lessons will you combine/deprioritize if you run into pacing issues? Why?

Monday	Tuesday Wednesday Thursday	Friday

- 5.9 Describe the geographic, political, economic, and cultural structures of Europe during the Middle Ages.
  - a. Identify and locate geographic features of Europe, including the Alps, Atlantic Ocean, North European Plain, English Channel, Ural Mountains and the Mediterranean Sea.
  - b. Describe the role of monasteries in the preservation of knowledge and the spread of the Catholic Church throughout Europe.
  - c. Explain how Charlemagne shaped and defined medieval Europe, including the creation of the Holy Roman Empire, and the establishment of Christianity as the religion of the Empire.
  - d. Describe the development of feudalism and manorialism and their role in the medieval European economy.
  - e. Describe the significance of the Magna Carta, including limiting the power of the monarch, the rule of law, and the right to trial by jury.
  - f. Explain how the Crusades affected Christian, Muslim, and Jewish populations in Europe.
  - g. Describe the economic and social effects of the spread of the Black Death (Bubonic Plague) from Central Asia to China, the Middle East, and Europe, and its effect on the global population.

- h. Describe the significance of the Hundred Years' War, including the roles of Henry V in shaping English culture and language and Joan of Arc in promoting a peaceful end to the war.