### Teachers Collaborating:

- 1. Shawn Puttmann
- Melanie Marreel
- 3. Ruth Christensen
- 4. Bethany
- Nannenga

5. Michele Davis

#### **Essential Standard**

4. NBT.5 - Multiply a whole number of up to four digits by a one-digit whole number, and multiply two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Learning Targets

Just b/c there are 5 rows- does not mean you HAVE to have 5 learning targets

Course: 4th Grade Math

- 1. I can multiply a one-digit whole number, by a one-digit whole number.
- 2. I can demonstrate a multiplication model with a rectangular array.
- 3. I can expalin my chosen strategy.

#### **Pre-Requisite Skills**

An understanding of place value can lead to efficient strategies for computing with numbers.



## **Pre-Instruction**

What pre requisite skills need to be addressed in core instruction.

place value understading, and properties of operations to perform multi-digit arithmetic

# During Instruction: 2. How will we know if they have learned it?

% Proficient
% Close

🔴 % Far

CFA	% Proficient	% Close	% Far
Whole Grade	77	7	8



Date Started: September 23, 2019



### SMART GOAL- do not change any of these text boxes

			basic math multiplication				
The percent of	4th Graders	scoring proficient or higher in	facts	will increase from	81.5%	to	90%
			a 96 basic				
			multiplication				
			fact quiz				
			completed				
			within 10		Febuary 1,		
by the end of	third quarter	as measured by	minutes	adminstered on	2020.		

Post Instruction 3. What will we do if they do not learn it?							
Sum Assessment	% Proficient	% Close	% Far	Summative A	esesement	***	
Whole Grade	59 	9	24	26.1%	26.1%		
Totals	59	9	24				
% Proficient	64 13%			0.8%	9.8%	64.1%	
% Close % Far	9.78% 26.09%						64.1%
	***Based on our Formative Assessments and discussions, we made the decision to change the timing for the assessments from 10 minutes, to 5 minutes. We did this in order to increase the automaticity of basic multiplication facts.						
Intervention							
Small Group or Individual Intervention?							
When will it take place?							
What are looking for in student work?							
What strategies will be used to improve student learning?							

The "Near" and "Far" groups received small group practice with Extra Math, as well as direct instruction in small groups. The facts that weren't mastered by each individual were determined, and that became the focus during our Pride Time. We had three Pride Time Groups who were not proficient, and one group receiving extension activities, as they had already mastered all of the multiplication facts. We were looking for mastery of ALL multiplication facts, through nine. We decided that our "Mastery Level" would be missing 10 or fewer facts, on a FIVE minute timing. (Our pre- and post-data and summative assessment is based on a 10-minute timing.) The strategies used were Extra Math on chromebooks, basic math fact games, flashcards, and repetative practice of the touch facts for each individual student.

tough facts for each Individual student.

# Post Instruction 4. What will we do if they have already learned it?

How will you challenge students to develop higher order thinking or higher levels of DOK? Activity or Strategy used to Enrich Students

Extension Activities: Description of activity used to Extend Learning

Students who showed proficiency in math facts where given enrichment activities. These enrichment activities included higher order thinking to solve. The students needed to use their multiplication skills to correctly answer all problems. Most of the enrichment came in word form. The DOK level of activities were at 2 and 3. The students could work in teams to solve/collaborate the multi-step problems.

