**Tiffany Strauss**

**Subject:** Mathematics

**Grade Level:**  1st

**Standards and benchmark:**

* CC.1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten, decomposing…
* CC.1.OA.3 Apply properties of operations as strategies to add and subtract.

**Learning Objectives:**

* I can understand and apply the Associative and Commutative Properties of addition to add three numbers. (I can add three numbers using strategies.)
* I can use addition strategies to add within 20.

**Accomadations:**

* Student 1 will answer only the first 5 questions per worksheet and then be permitted to read a book or play a math game at their desk.
* Student 2 will transition with Sarah as a buddy to support movement within the classroom. Student 2 will also sit close tot he teacher during rotations. If student 2 becomes agitated he can use the safe place to calm or read a book. When he has regained composure he may return to instruction.

**Planned Learning Activities:**

* **9:00-9:15: Calendar (warm-up), preview and Pre-Assessment**
	+ Students will interact and participate in calendar as a warm-up to the day’s math lesson. We are working on sums of 7, place value and money concepts within calendar.
	+ Next, preview todays learning goals. Today, we will be learning how to count three numbers. Show this video to preview todays content or find a video similar in nature. <https://www.youtube.com/watch?v=81NfQ350vw8&disable_polymer=true>
	+ Students will take a 5 question assessment of adding three numbers. (Find attached at the end of this lesson.) This pre-assessment will help to differentiate learning for each individual student. Read each question aloud and then sort students based off of current knowledge of the given concept. Sort students by the given scores...
	+ Group 1: 2 or less correct
	+ Group 2: 3 or more correct
	+ Group 3: 4 or more correct
* **9:15-10:15: Math Rotations (20 minutes per rotation) Each teacher rotation will provide a different skill set for each student as they rotate through.**
	+ **Teacher Time:**  Students will use this time to get more direct instruction of the day’s concepts and will be provided with enriching opportunities. Meet with Group 1 first. While you are teaching, the rest of the class will be participating in the anchor activities provided.
		- Group 1: The first group to meet at this time will be the group that got 2 or less correct answers on the pre-assessment. This group will be taught a 10 minute mini-lesson on adding three numbers (modeling), and then we will solve a few problems together as a group with time at the end to apply their learning independently with the practice page. Remind students that they are applying the commutative and associative properties today. We are adding so it doesn’t matter what order we add the addends in and we can move numbers around to help them make more sense to us; finding doubles or making a ten. This group may need to build the numbers with linking cubes in order to see and process the equations. Allow ALL students to use tools if needed. The practice page can be finished during achor activity time if not completed during this rotation.
		- Group 2: The group that has shown 3 or more correct answers will be taught a 5 minute mini-lesson and will then practice applying this new learning with 5 more problems involving adding three numbers. If mastery is shown the lesson will be extended with story problems involving three numbers. One common misconception we see when adding three numbers is forgetting to add the last number. If this is something you noticed during pre-assessments be sure to correct that. I like to call the last number the “leftovers.” Remind students to not forget the “left over” number! This lesson is compacted in that you are going to look at the pre-assessment and teach to the skill or strategy that is most commonly being missed. QUickly review and model the ways to build and add the numbers. Then allow students to guide you in a problem. Continue to practice and then give practice page time, to further assess whether students understand the concepts independently. If a student is still not finding success, pull back and reteach. The practice page can be finished during anchor activity time if time run out.
		- Group 3: During this time the group that showed the most understanding of the days concepts (at least 4 or more correct out of the 5 on the pre-assessment) will work with equations involving three numbers that are missing an addend. Students will need to find the missing addend to complete each equation. (Example: 2+ \_\_+4 = 9) Math talk strategies as to how an equation such as this could be solved. Allow students to add onto the conversation in finding a solution. Model a few ways that are discussed. For example, building the whole and then building the parts (bar model). Also, you could add the addends and take that number away from the whole to find the missing part. Allow students time to work in a “we do” fashion and then give them the extended adding three numbers practice page.
			* Students are encouraged to use manipulatives to build numbers if needed.
		- Before the end of the math block, gather all students attention to reflect on the days lesson.
			* What was our math goal today? Allow a few students to answer.
			* What did you learn today about adding three numbers? Allow a few students to answer or turn and talk.
			* Synthesizing the learning builds stronger connections to learning!

**Anchor activities will be done while the teacher is meeting with other groups. Students may choose at least 2 activities. Each activity gives students choice and differentiated levels for learning.**

* + **Fluency Game:** Students will work as partners to practice math fact fluency with quick recognition and number sense. Students will roll 3 dice, find the sum and check each others answers. (Fast Fact Fluency)
	+ **Zearn:** Students will use Zearn as an online platform for spiral review and skill practice. This particular site provides an individualized math journey for each student. This is a way to compact and streamline learning. Those that need more time get it, but others are able to move more quickly through materials. (Spiral Review)
	+ **Word Problems:**  Students will create their own word problems involving three numbers. Students will show their work and the solution to each question.

**Resources:**

* iPad
* Smart-board
* Linking cubes
* Go Math! Curriculum
* Practice Page (at the end of document)
* Pre-Assessment Page (at the end of document)
* Extension Page (at the end of document)

**Student performance assessment:**

* **Formative:**
	+ Formative assessment will take place during the mini-lesson. As we work on strategies I will walk around and notice any misconceptions or errors that may be occurring.
	+ As students work independently on practice pages, I will assess students and support those who need extra practice or re-teaching.
* **Summative:**
	+ Pre-assessment: At the beginning of each chapter students are assessed for prior knowledge and grouped accordingly for math rotations.
	+ Chapter Assessments: Students will be assessed for overall knowledge of the skills taught within the chapter. Those who did not meet proficiency will be retaught and practice skills needed to be successful.
	+ Zearn: Students math abilities are assessed through this platform by standard. This is another tool I can use to assess my students and their current math abilities.

**Effectiveness of your lesson:**

* The effectiveness of my lesson will be based off student engagement, student ability to use strategies taught and using properties of operation to add three numbers. Mostly formative assessment will be used to assess students understanding and knowledge throughout the lesson, summatively students will be assessed at the end of the chapter.

Pre-Assessment

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. 3 + 3 + 5 =

2. 4 + 1 + 2 =

3. OOOO + OO + OOOOO =

4. OO + OOOOO + OOOOO =

5. Sally went to the beach and found 2 shells, then she found 5 more. Before she left she found 3 shells by the water. How many shells did Sally find?

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. 3 + 3 + 5 =

2. 4 + 1 + 2 =

3. OOOO + OO + OOOOO =

4. OO + OOOOO + OOOOO =

5. Sally went to the beach and found 2 shells, then she found 5 more. Before she left she found 3 shells by the water. How many shells did Sally find?

Practice Page

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. 5 + 5 + 2 =
2. 3 + 7 + 2 =
3. 8 + 2 + 4 =
4. 4 + 5 + 6 =
5. Dave found 3 books at the library, 6 books in the classroom and 4 books at home. How many books did he find? Show your work!

Practice Page

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. 5 + 5 + 2 =
2. 3 + 7 + 2 =
3. 8 + 2 + 4 =
4. 4 + 5 + 6 =
5. Dave found 3 books at the library, 6 books in the classroom and 4 books at home. How many books did he find? Show your work!

Missing Addend

Name\_\_\_\_\_\_\_\_\_\_\_\_

Date \_\_\_\_\_\_\_\_\_\_\_\_\_

1. 3 + ? + 6 = 15 Answer:
2. 1 + 6 + ? = 14 Answer:
3. 9 + 4 + ? = 14 Answer:
4. 3 + ? + 3 = 9 Answer:
5. Create and solve your own missing addend equation.

\_\_\_\_ + \_\_\_\_ + \_\_\_\_ = \_\_\_\_\_

Missing Addend

Name\_\_\_\_\_\_\_\_\_\_\_\_

Date \_\_\_\_\_\_\_\_\_\_\_\_\_

1. 3 + ? + 6 = 15 Answer:
2. 1 + 6 + ? = 14 Answer:
3. 9 + 4 + ? = 14 Answer:
4. 3 + ? + 3 = 9 Answer:
5. Create and solve your own missing addend equation.

\_\_\_\_ + \_\_\_\_ + \_\_\_\_ = \_\_\_\_\_