Social, Emotional, and Academic Development (SEAD) Lesson Plan for Mathematics

GRADE LEVEL/COURSE AND MATH STANDARD(S)

Grade 2

2.NBT.B.9 Explain why addition and subtraction strategies work, using place value and the properties of operations.

2.NBT.B.7 Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.

INTRODUCTION

The tasks are teacher created and utilize the lesson planning template from <u>Stride 3: A Pathway</u> to Equitable Math Instruction: Creating Conditions to Thrive (pages 13-14).

The lesson is intended to:

- Connect to the social, emotional, and academic (SEAD) theme of belonging in
 mathematics in order to promote equitable instruction, specifically a safe community
 where mathematical discourse supports active listening, promotes diverse perspectives
 and insights, and allows students to consider others' reasoning to advance their own
 mathematical understanding.
- Create opportunities for sharing power within the classroom.
- Deepen student understanding of a place value strategy (using a visual representation to make sense of adding tens with tens, and ones with ones) for adding numbers.
- Strengthen student disposition by providing multiple opportunities for students to build confidence and clarity.
- Leverage students' linguistic assets within this lesson to support their engagement with the content (for example, mixed-ability grouping, role-playing with Team Work Rubric, discussion protocols).

SEAD THEME		
		Identity
		Discourse
		Agency
	X	Belonging

SMP(S) TO SUPPORT THE SEAD THEME

SMP 1: Make sense of problems and persevere in solving them.

SMP 2: Reason abstractly and quantitatively.

X SMP 3: Construct viable arguments and critique the reasoning of others.

SMP 4: Model with mathematics.

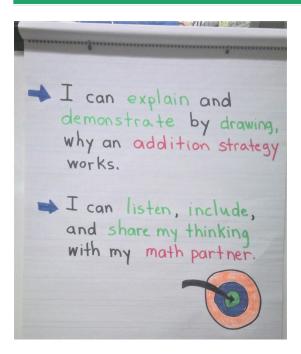
SMP 5: Use appropriate tools strategically.

X SMP 6: Attend to precision.

SMP 7: Look for and make use of structure.

SMP 8: Look for and express regularity in repeated reasoning.

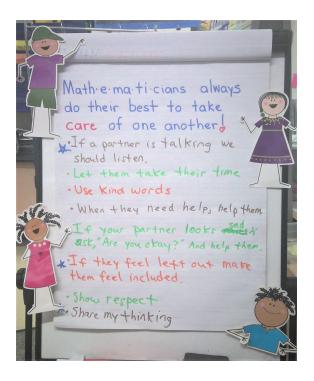
LESSON OBJECTIVE/GOAL



STEPS

Pre-Lesson Preparation: Teacher creates and/or gathers materials:

- Copies of student tasks (<u>Tasks 1-3 Examples</u>)
- Charts and markers for Launch
- Student-designed Math Partners Rubric example
- Team Talk cards



Launch (Day 1): Explicit instruction is a crucial step to set expectations and provide skills training for this and future group activities. Structure your circle or classroom environment to meet the needs of your students.

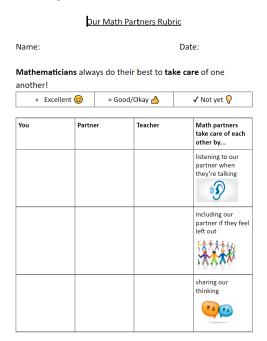
- Discuss the fact that each student has gifts to share, and the greatest gift is kindness.
 Explain that the class is going to be in charge of creating an inclusive community for math partners/groups where everyone feels welcomed and valued. Chart student ideas.
 Lead students to group similar ideas into student moves. (See example in above picture.)
- Explain that they will take the lead in creating their own Math Partner Rubric. In my class, the students decided to vote on three student moves from the chart for their rubric. They also chose the symbols! (Math Partners Rubric)
- Once you have finalized the student moves, role-play and/or rehearse.
- Promote ways to celebrate a student taking a risk when sharing their thinking, as well as how to respectfully disagree with a peer and share their reasoning.

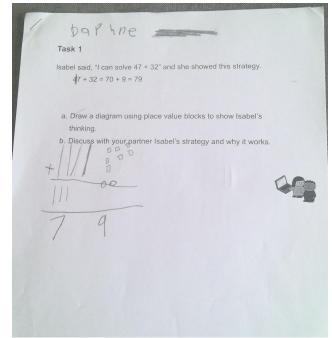
Math Activity (Day 2):

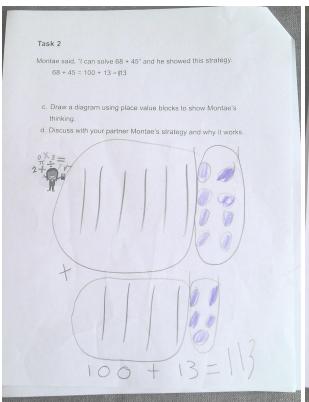
- Number Talk: Follow or include a number talk routine:
 - \circ Solve 69+45 =
 - After charting all of the student answers/strategies, discuss how different strategies can be used to solve the same problem. (Number Talks Example)
- Introduce the <u>tasks</u> that they will work on with a partner.
 - Step one: Read the task with their partner.
 - Step two: Discuss what is required to complete the task. Use the <u>Team Talk</u>
 <u>Example</u> prompts if needed to guide the discussion.
 - Step three: Complete the tasks.
- Review the Math Partners Rubric that they will complete after group work.

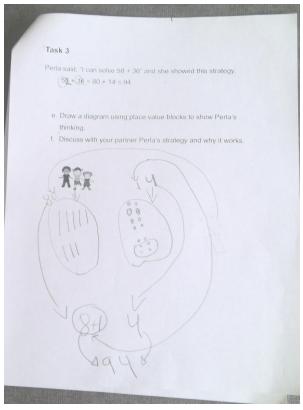
- When students complete their tasks, pass out the Math Partners Rubric. Explain the
 importance of thinking about each action that they are checking. These rubrics will be
 used to celebrate what is being done well and to help each other grow in areas that need
 to be improved.
- Important Notes:
 - Lean into group discussions and take notes on student interactions.
 - It is important to group students for success. I usually "fold the room" and intentionally group to maximize student strengths.
 - After reviewing the Math Partners Rubrics, have a follow-up class meeting for students to discuss their experiences. I asked the following questions:
 - 1. What worked well with your partner? How did it make you feel? Did it help you feel like an important member of the group?
 - 2. What were some areas that could have been improved? How did it make you feel? What could you have done to make it more successful?

Summary: Assess Student Work on Tasks & Exit Ticket (Math Partners Rubric)









SUMMARY/REFLECTION OF LESSON

Looking at the student Math Partners Rubric, I noticed the following on the twenty responses: four students marked all areas with (+), and sixteen students had a variety of ratings. During follow-up meetings, a critical component of the lesson, I asked students about their ratings. Some students supported the answers with examples from the activity, while other students expressed that they really didn't understand a certain part of the rubric. The questions outlined in the "Important Notes" section above allowed the students to reflect upon their role as a mathematician and if their partner felt valued and included. The open dialogue in the meeting led to a couple of students restoring their partnership by committing to work on areas that were checked "not yet.', and they also gave suggestions to help students who were still working on adding tens and tens. Peer to peer support was evident throughout the meeting. The poster created by the class is visible in our classroom, and we refer to it before partner or team work. I will use the rubric again and have the students choose the criteria as they did with this rubric.