MATH LESSON PLAN		
Name:	**Date:**	**Subject Area & Grade:**
Nikolette McAndrew	12/8/2025	2nd Grade Math Session 5 - Seed Bead Problems

PLANNING

This section must include

My Instructional and/or Management Goals for This Lesson:

- Students will solve addition and subtraction problems using a variety of strategies (number lines, drawings, equations)
- Students will describe their thinking by using math talk sentence frames that are provided for them
- Students will follow expectations and procedures within the classroom during independent and group work. Students will use a voice level 1-2, stay on task, and collaborate with each other's ideas.

Standard(s): (MDE, grade level, or CCSS)

MDE (Michigan) Mathematics Standards – Grade 2

2.OA.A.1: Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing.

Materials I Need for This Lesson:

- Bridges Slides, which are linked — https://docs.google.com/presentation/d/1n5eys8b8K65CuqEPsMRiOynERsMU2FsVFKu90dFx6F8/edit?usp=sharing
- Teacher notes https://drive.google.com/file/d/1KA143fAx5oTJmdtRyUK7nAs1P2G0rO4n/view?usp=share_link
- Whiteboard markers
- Whiteboards (or students may write on their desks). I get a few whiteboards out for my students who need/want to keep their space clean!
- Worksheet
- Math stations

LEARNING TARGETS

This section must include

Skills/Content Taught in Lesson:

- Students will be able to idnetify the tyep of equation needed to solve the story problem by using their knowlege of mathimatical vocabulary (sum, difference)
- Studnet will be able to use various stratigies to solve the story problems (drawings, equations, number lines)
- Students will be able to explian thier thinking using mathimatical sentences

Goal for Students:

Students will have the ability to solve addition and subtraction story problems within 100 and be able to explain their thinking by finding the strategy that works best for them. Students will work as a team and follow routines and procedures during math time!

Previous Assessment Reviewed Ahead of Instruction:

Unit 3 screener, checkpoint & worksheets have all served as previous assessments

- I take detialed notes when I am observing and grading students work (in calss work, worksheets, stations, checkpoints & screeners)

Student-Friendly Target(s): (**"***I can . . .*)

I can solve problem situations using addition and subtraction strategies.

Today you're going solve problems with Jessie, his triplet cousins, and their seed bead bracelets.

CLASSROOM MANAGEMENT

This section must include

Positive Behavior Strategies, Techniques & Tools:

Positive reinforcement — Give reinforcement to students like, “I love how you are doing this” “Thank you to my friends who are staying quie & have their eyes on me”
Clear instructions — Give clear instructions for each part of the lesson & have slides/ moments carved out for meaningful questions. Check for studnets understanding before they start trying to solve the problem.
Engaging tools — Use of expo markers the students LOVE to use these & write on the desk! It makes them excited for math time! They think its so cool to actually write on the desk!

Movement — If students are off task & talkitive, start a stop watch, stand at the front of the room & start moving (touch your nose, ear, head & so on.) Students know when I do this that I am timing them to see how long it takes them to notice I am waiting on them! However much time it takes for studnets to notcie & copy my movement is the amount of time I take off of our extra recess. Students do have the opportunity to earn this time back with good behavior!

Plan for students who may struggle with social interactions, focus or emotional regulation:

Flexible seating — wobble/ bouncy chairs
Check ins — Ask student with EI questions like —Are you feeling safe to learn? Are you in control of your body? Do you need a squeeze?
If students is struggling to maintain a safe body — prompt student with “Safe body in 3… 2…1..” Student is very receptive to this!
If student is shut down, leave him. Do not touch him. Give students a 5 minute timer. Student knows when the timer goes off, he must go to an adult or I have to call for support.
Break options — Calmdown corner with mind-board for five minutes or walk?
- remind studnet that sensory room is only an option twice daily & cannot be given during instruction time.
Fidgets — Our student uses a pipe cleaner

INTRODUCTION

This section must include

Generate Interest/Hook the Learners:

Since this is my last math lesson & our kiddos are ahead in the curriculum, I thought it would be a great idea to actually make the braclets that we are reading about in the story problems! I will talk to the students about how I know that learning story problems has been very challenging & if we can get through one more lesson we can have a little reward of a craft!
My plan is just to incorporate this into our math rotations & have it be a 10 minute craft with groups of 5-6 students! I have a TON of beads from when I was a kid that I am going to bring in! This also gives me a little time to just talk and make a little craft with my students before I head off!

Connections to Previous Lessons or Skills:

- Students have been practiving addition and subration problmes iwthin 100 using drawings, equations, and number lines.
- Students have been working with Jessie & his triplet cousins for the past few days and we have been counting the bean seeds in story problems!

Review for Learners: (Who Might Lead the Review?)

Teacher facilitates - student leads with answers
“Do you.guys remeber how we counted all of the beans seeds last week?”
Talk about Jessie & his triplet cousins & the story that we read last week! “What do you remeber about the story?”
Ask students — what strategies did we use to help us solve the story problem?

Communication of “I Can” Statement/Learning Targets: (How might this be active vs. passive for students?)

I can solve problem situations using addition and subtraction strategies.
Studnets will repaet after teacher and read the i can statement out loud.

INSTRUCTIONAL SEQUENCE

Blue is scripted from the book!

THE SEED BEADS

“Last week we helped Jessie & the triplets count all of their bean seeds! Does anyone remeber how many beans Jessie & his cousins ended up with?”

“What were some ways that you solved that problem?” (equations, drawings, number lines)

Today we are going to solve another problem with Jessie, his triplet cousins, and their beans seeds! Oh & friends! It looks like they are going to make braclets out of these seed beads!

Lets read together - When I pause you read the next ‘one word’

The next day, Jessie and the triplets looked at their collection of 99 bean seeds and wondered what they could do with them.

"They look like beads," Zoe suggested, "I wonder if we could make something out of these seeds."

"Let's see if we can get them on a string," said Jessie.

"How? They don't have any holes," asked Mia.

"I have an idea," said Ana, and she ran to get the sewing kit that Abuela had given her. She used a needle and thread and pushed the needle through one of the seeds quite easily.

"Nice work, Ana!" said Mia.

"We could make friendship bracelets," suggested Zoe.

"They won't just be friendship bracelets. They'll be cousin friendship bracelets," said Jessie.

Everyone agreed and got right to work sharing the materials from Ana's sewing kit.

Zoe used 5 red and 5 orange seed beads.

Mia used 5 red and 5 green seed beads.

Ana used 5 red and 5 yellow seed beads.

Jessie used 3 orange, 3 yellow, and 4 green seed beads.

Ten seed beads on each bracelet seemed just right.

Turn to a neighbor and talked about — When we come back together be ready to share what you talked about!

If students are struggling prompt them with — How many beads are in each braclet? 10! How many braclets have they made so far? 4! If I have 4 10s how many beads have I used?

If students are still struggling count by tens together to get to 40.

How many bracelets did they make?

How many beads did they use?

Next Slide

Ana looked at the leftovers. There were still a lot of unused seed beads. "What should we do with the rest of the beads?" she asked.

Jessie asked, "What if we made a bracelet for everyone in our family?"

"That's a great idea! We can call them family bracelets," said Mia.

"Perfect! All of our family will be here tonight for dinner," said Ana excitedly.

"Do we have enough beads?" asked Ana. "Remember, we need 10 beads for each bracelet!"

"I'm not sure," Jessie said. "We started with 99 beads, and then we used 40 beads to make bracelets for ourselves. Let's work together and find out how many seed beads we have left."

How many seed beads are left?

Do we have enough information to find out whether the triplets have enough seed beads?

Why or why not? - If students have trouble… Ask them how many beans we started with - 99. Write 99 on the board. Now ask students how many beads that Jessie & the triplets have used - 40. Ask students, am I adding or taking away 40 beads? - Taking away.

Have students go to their desks & solve (SHOWING THEIR WORK!)

99 - 40 = 59

"Great," said Ana. "We have 59 beads left!” Star this for students! This is a key detail that we need!

"But wait," said Mia. "We still need to figure out how many more bracelets we need to make.” Highlight for studnets to see!

Ask students — how could they find out how many more beads that they need?

Jessie grabbed his notebook. "Let's think. My parents and your parents will all be there," Jessie said, drawing 4 tally marks.

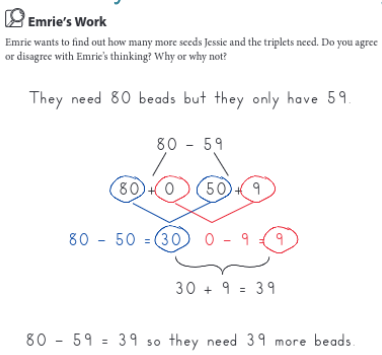
"Abuela and Abuelo are coming too," added Ana. Jessie drew 2 more tally marks.

"Don't forget about Uncle Marcos and little Mateo," added Zoe.

Jessie made 2 more tally marks.

Remind students that tally marks are another way we can keep track of our counting

Work as a group to solve together!
How many more bracelets do they need to make?
How many beads will it take to make that many bracelets?
Do they have enough seed beads? How do you know?
How many more beads do they need?



Let's take a look at Emrie's Work!
Do you agree with her? If not, why?
80 - 59 = 21

The cousins worked together to figure out whether they had enough seed beads to make bracelets for everyone. They explained their thinking, listened carefully, and responded to each other's ideas.
When they were done, they were proud of how well they communicated with each other but disappointed that they wouldn't have enough seed beads.
Just then, the triplets' dad, Uncle Leo, walked into the room.
He asked, "So, what have the cousins been doing today?"
"Can you keep a secret?" asked Jessie. Then the triplets explained their plan and how they didn't have enough seed beads to make a family bracelet for everyone.
"I think I can help," offered Uncle Leo.
"Really?!" asked Ana, Mia, Zoe, and Jessie.
Uncle Leo continued: "Jessie, your parents also brought a giant bean. We were going to have it with dinner tonight, but this seems like a great idea."
Uncle Leo got the giant bean. It was a big purple bean. When the cousins opened it up and counted, it had 21 purple seeds inside.
BEFORE GOING TO NEXT SLIDE - Ask students
If they already had 59 seeds and Uncle Leo gave them 21 What could our problem be?
59 + 21 = 80
Jessie grabbed his notebook. "Let's see. We already had 59 seed beads, and Uncle Leo just gave us 21. Fifty-nine plus 21 is..."
"It's 80!" shouted Ana, Mia, and Zoe excitedly at the same time.
"We have enough seed beads to make bracelets for everyone!"
Explain to studnets that they were just able to complete a multi- step story problem by working together! Praise them for their work!!

Homework - At the bottom of this document!
Students can get up to 2 tickets for completing homework & it is completely optional

Work place choices
- Hit the Zone
- Steps & Leaps (LAST WEEK WITH THIS GAME)
- Base Ten Triple Spin
- Star Power
- Target Twenty
- Five in a Row

Since it is my last lesson, I want to make braclets with my students. During stations, I am going to take 5-10 minutes to quickly make a braclet with a group of students that they can take home with them! It wont be anything fancy, but I thought it would be fun & on theme with this math lesson! I also want to challenge them to use the same patterns as we saw in our story problems! I know this isn't all about math, but I just want to do something fun for them!

CHECK FOR UNDERSTANDING

This section must include

Questions to Check for Understanding & Redirect Students during Instruction (list questions and how you interact with a variety of students):

- what is this asking us to find?
- How do you know if this problem will be an addition problem or a subtraction problem?
- How did you find those numbers? Show me them in the story problem!
- Can you try to show me your thinking?
- What strategy did you use?

Nonverbal Checks or Self-Assessment Strategies:

Thumbs up, sideways, or down (We use this alot & our students are VERY honest when they are not understanding which is great!)

Formative Assessment of Learning Target(s):

- seeing students work on desk with privacy folders! This helps me with my students who either are too scared to ask for help or don't think that they need help.
- Listening to partner discussions during turn & talk
- Taking notes of my students who consistently need support and those who are ready for an extra challenge
- I also use students homework to help me grasp where they are at with math! Even though it is optional, they love to get tickets so I usally have all of my students turning homework in!

CLOSURE

This section must include

Review of learning target(s) and "I can" statements (How might you make this active vs. passive?)

"I can solve problem situations using addition and subtraction strategies."

If time allows — Invite a few students to share out how they used drawings, equations, number lines, or mental math to solve the Jessie and cousins problems.

Ask studnets how they are feeling with story problems— thumbs up/sideways/down

Big Take-Aways to Highlight:

- there is not one way to solve a problem! We can find the strategies that work best for us and use them to help us solve problems in math!
- We have to show our thinking in math! - drawings, number lines, or equations.
- Using our knowleged of vocabulary to use the correct type of operation (addition or subtraction)

Connections to Future Learning or "**Where We're Going Next":**

- The skills in this lesson directly prepare students for their unit 3 math test this Friday! Their test will include similar addition and subtraction story problems & require knowlege of mathimatical vocabulary !
- Students will continue to practice showing strategies and explaining their thinking to build confidence and mastery for the upcoming assessment.

DIFFERENTIATION

May occur through the content, the process, the product, or the learning environment

This section must include

Accommodations/Resources to Support Struggling Students:

Visual supports — I try to show all the ways the problem can be solved to students! (Number line, drawing, equation)
Modeling — teacher will always model what student should do!
Reading out loud — Some of my students who struggle with decoding, benefit from me reading the story problems or worksheets out loud to them!

Language Accommodations/Resources for Emergent Bilingual Leaners:

- Visual supports
- one on one teaching
- at home work and practice
- Test & words are read to student out loud

Enrichment or Challenge:

- Leaders - Students who are needing a challenge can demonsrate how they found their answer on the board & help their classmates understand better! We learn best from our peers!
- Multiple strategy challenge — ask students to solve the problem using two different strategies!

Technology to Enhance this Lesson:

- Interactive Story Problem Slides — Use Slides or a similar platform to display each of Jessie and his cousins' bead problems clearly. (I try to make the slides as engaging as I can!)
- Digital manipulatives (number line, base ten blocks, etc.)
- Audio Support for Accessibility — Students who need reading support can use text-to-speech tools or audio versions of the story problems.

ASSESSMENT

This section must include

Evidence of Learning: (How do I know students understand or can do now?)

- Students can explian their thinkng verbally or by using a strategy
- Student work shows clear thinking & understanding (drawings, equations, number lines)
- Students use mathimatical vocabulary (add, subtract, difference, sum, equation)

Formative Assessment to Inform Future Instruction:

- review students homework to see their thinking & use of strategy
- See which strategies are being used accurately & which ones need some extra review & rienforcemnet!

TAKE NOTES - as you do ask yourself

- Do students utilize a strategy to solve the problem?
- Which students are struggling to grasp/ find a strategy that works for them?

More Addition & Subtraction Practice

1 Solve each addition or subtraction combination.

10 − 10	20 + 20	35 − 10
40 + _____ = 45	60 − 8 = _____	_____ + 3 = 43
_____ = 70 − 6	_____ − 2 = 90	100 = _____ + 30

2 Circle the problem below that you think is most challenging or most interesting. Then solve it and show your thinking.

58 + 3 26 + 26 35 + 45

3 Circle the problem below that you think is most challenging or most interesting. Then solve it and show your thinking.

21 − 6 33 − 15 50 − 26

NAME _____ | DATE _____

More Addition & Subtraction Practice page 2 of 2

4 Charlie is 65 inches tall. Kyle is 57 inches tall. How much taller is Charlie than Kyle? Show your thinking.

Charlie is ____ inches taller than Kyle.

5 **CHALLENGE** Find 4 numbers that have a total of 90. Show your thinking.

_____ + _____ + _____ + _____ = 90