Math Lesson Guide Preparation Tool

Name: **Taylor Gustafson**		**Grade Level** **2nd**
Unit: 6	**Date:---**	**Lesson Title: Add Numbers with 1,2, and 3 digits**

Utah Elementary Math Learning Standard [State the strand/standard for the unit addressed by this lesson.]

Standard 2.MP.5
Use appropriate tools strategically. Consider the tools that are available when solving a mathematical problem, whether in a real-world or mathematical context. Choose tools that are relevant and useful to the problem at hand, such as drawings, diagrams, technologies, and physical objects and tools, as well as mathematical tools such as estimation or a particular strategy or algorithm.

Standard 2.NBT.1
Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; *for example, 706 equals 7 hundreds, 0 tens, and 6 ones.* Understand the following as special cases

Learning Objective *Specific to This Lesson*: *As a result of today's lesson, students will be able to . . .*

….add 1, 2, and 3 digit numbers with ease. They will also be able to take on story problems involving these types of numbers.

Overarching Essential Question(s) Specific to Lesson

How do we add numbers with 1,2, and 3 digits.

Targeted Mathematical Practices: As a result of today's lesson, students will have opportunities to. . . [Highlight the practice standard(s) to focus on in this lesson]. 1-make sense of problems and persevere 4-model with math	1-Make sense of problems and persevere 2-Reason abstractly and quantitatively 3-Construct viable arguments and critique the reasoning of others 4-Model with mathematics 5-Use appropriate tools strategically 6-Attend to precision 7-Look for and make use of structure 8-Look for and express regularity in repeated reasoning

Prerequisite Knowledge This Lesson Draws Upon:

Adding, reading large numbers, knowing ones, tens and hundreds place values.

Vocabulary Focus

Adding, multi-digit numbers, partitioning

Materials*/Resources/Technology

White boards, worksheets, thinking caps

Lesson Purpose (Introduce; Build Understanding/Make Connections; Solidify/Get Precise/Get General; Practice/Reinforce)

Practive/Reinforce

Brief Overview of Lesson	**Anticipated Time Frame**
I will sit down with the students and go over adding with them. I want them to be able to see 3 digit numbers and have little trouble adding them to other 3 digit or 2 digit numbers. I will go through multiple examples with them and then I will have them practice on their own. We will then implement there learning to real life	**20 minutes**

scenarios using story problems. I will use gradual release by going over the first one with them and then releasing it to them to try on their own. I will continue scaffolding from there.	

Formative Assessment/Evaluation Strategies: *How will students be expected to demonstrate their understanding of the learning objective? How will you make student learning visible?*

We will be using white boards and I will scaffold throughout the lesson to see if I can build off of their knowledge and keep moving on or take a break by stopping and reviewing.

Access for All: (How will you ensure that all students have access to and are able to engage appropriately in this lesson? Adaptations--for Gifted/Talented, ELL, and other Special Needs)

I will write on the board so that students that need accommodations can see. I will go over what I want them to be doing and talk clearly.

Probing Questions for Differentiation on Mathematical Tasks

Assessing Questions—to Scaffold [Create questions to scaffold students who need additional support.]	**Advancing Questions—ELABORATE/EXTEND** [Create question/tasks to move the learning forward for students who are ready to advance beyond the learning objective.]
How do we add two numbers together? Does adding number hortizontally or vertically help us when we are stuck?	Can you add these two number 456 + 323? This allows for students to add more than just 00 at the end of the numbers.

INSTRUCTIONAL PROCEDURES

This is the heart of your lesson plan!

Outline the sequence and content of the activities in a step-by-step format. Each segment should be detailed enough to communicate a strong sense of how you see the lesson unfolding. Clarify your plans to: spark curiosity; encourage student reflective thinking; prepare for transitions, scaffold student responsibility; make thinking visible; use formative assessment.

Lesson Segments		**What will the teacher do?** [How will the teacher engage students, get them ready to launch, monitor student participation, orchestrate discussion & reflective thinking?]	**What will the students do?** [How will students be actively engaged in each part of the lesson?]
BEFORE **Spark curiosity . . . Get ready . . . Get set . . .**	**Beginning of Class** How does the warm-up/starter activity connect to students' prior knowledge, or how is it based on analysis of homework? Approximately __2___ minutes.	**I will want to get their math minds going by asking an engaging question to start us off. I would put a set of various numbers on the board with magnets and have them write in their math journal the biggest number they can make out of the four given numbers. And then the smallest number they can make. Then I would have various students come to the board to do it in front of the class. Because my lesson includes adding and subtracting I might ask the**	**Get excited about math. Actively participate in engaged question.**

		students to reflect on how adding and subtracting relate to eachother. I could have the share with partners or write in their journals. This is a question that the students will already know and get to build confidence about math before we begin new material.	
	1. ENGAGE: How will you engage students and spark their curiosity toward the learning objective? Approximately ___2__ minutes.	**To begin the lesson I will have the kids start with adding multi-digit numbers together using base ten blocks. They will each have their own white boards and markers. Once they are finished I will be able to scaffold to see who is with me and who needs more support.** **I will give support prior to them adding the blocks by telling them that they can break the numbers up into hundreds, tens, and ones. Or they are welcome to add them up in their heads. If they do choose to add it up in their heads I will want them to be able to explain to me or a partner about what they did.**	**Think about prior knowledge on adding. What is it? Why do we use it? Where do we use it? How do we use it?**
	2. LAUNCH: How will you introduce students to the task so that they are invited to work like a mathematician? How will you check that students are ready to work on the task individually or in small groups? How will you distribute materials, transition into individual or small-group work, keep students engaged in the lesson . . . signal students back to whole group? Approximately ___5__ minutes.	**At this point I want the students to be able to add multi-digit numbers side by side. For example, 300+124 and 30+124. I want the students to be able to identify the difference and to be able to correctly stack the numbers on top of eachother while adding (I find that it is common for students to make the mistake of mis-stacking**	**Follow along with teachers instruction with her white board. Use prior knowledge to know where the ones/tens/hundreds place are.**

		while adding). I will review what hundreds, tens, and ones place values are. **Point to each digit, say its place value and have children repeat. For example, 2 in 235 has a place value of 200. Ask what digit is in the ones and tens place?** **I will have students practice on their white boards by writing the number 324 on the board. I will say "Now I want you to write the number that is in the tens place for me."** **This is an area that I will predict their might be some varied answers. Some students might put 2 and some might put 20. They are both right and I will explain that.** **Then as a class we will begin adding such multi-digit numbers. The first problem I will put on the board will be 400+245. I will tell them that they have 30 seconds to think about it and when they are finished to put their heads down. When I see that most people are ready I will ask one person to come up to solve it using the stacking method. Thumbs up or down if they got what the person sharing got. Scaffold.**	

DURING **Let go & let student do!**	**3. Investigate/Instruct/or EXPLORE** How will the task develop student sense making and reasoning? How will the task require student communication and development of practice standards? Approximately __15___ minutes.	**After doing a couple big problems I will then launch into the problems that I have given them on their worksheets. The problems start off easier and end with the harder ones. I will tell them to do the first on from each section (there are three). I will remind them that they have to be able to justify their answers and to be ready to share.** **Once finished I will have them share what they have with a partner and I will increase difficulty from scaffolding to see how they are coming along.** **I will be having them write what they think the answers are on their boards and then showing me.** **I will have them continue with a harder problem. I will have two people share. To engage the whole class I will say "hold up your hold if you did it so and so's way, and I will say the same thing for the other person." This will help the class relate to eachother and get everyone involved in the sharing process as well.**	**Participate when asked.** **Learn and engage with peers.**

AFTER **Orchestrate sharing & highlight take-away.**	**4. SUMMARIZE/EXPLAIN/Share, Debrief:** How will student questions and reflections be elicited in the summary of the lesson? How will students' understanding of the learning objective be determined? What questions and math talk strategies will support communication, and reflective thinking, and reinforce learning objectives? Approximately _10____ minutes.	**Towards the end of the lesson, we will begin story problems and relating this addition to real life scenarios. I will go over the first one with them and then to see where they are in their learning. I will then read the second story problem to them and have the solve on their own. I will see what they came up with and then have them share with a partner what their strategies were. After they share with a partner, I will have them share with the whole group about what their partner did to solve it. This is make sure that they are listening to their partners about the various ways that you can solve story problems.**	**Think about real life scenarios through story problems. Actively engage and participate. Think outside the box.**
	5. Recap and Close: How will you close the lesson so that students are clear about the "take away" from the lesson? Leave Residue! Approximately __2___ minutes.	**I will close the lesson by giving them a take away problem. With doing this I will see who has fully grasped it and who will need more help in the future.** **For example, exit ticket 300 + 450.** **Or I could give them a story problem similar to one that we had already solved.**	**Use what has been previously taught to make best answer.**