## CSUMB College of Education Lesson Plan Template

Lesson Title: Adding and subtracting word problems Lesson Duration: 80 minutes

| Name: Michelle Trujillo |  |
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| School: Rose Ferrero Elementary School Grade: 1st |  |
| Class Description | The first-grade class at Rose Ferrero Elementary School comprises 23 students. 13 of those students are girls, and 10 of them are boys. The primary language spoken by 18 students in the class is English. The secondary language spoken by 5 students in class is Spanish. Three of the students are Spanish-English Bilingual. There are different students from different social-economic backgrounds and ethnicities in this class. Nine of the students are Hispanic; ten are Caucasian; one is Asian, and one is African American. About 75\% of the students in my class receive free and/ or reduced lunch. |
| Background Knowledge | This class has mastered counting to 30 . They have already had previous lessons on addition, and subtraction. They know how to add and subtract numbers in problems given to them. So I am bringing both addition and subtraction together for this lesson plan. This class also has a clear understanding of addition and subtraction. But having keywords help them (i.e. add, together, increase, combined, plus, sum, both, join, altogether, total; subtract, minus, take away, less/fewer than, difference, decrease, how many are left/remain). Using addition, and subtraction in a word problem is going to be the new thing they will be learning. Students know how to use a number line to add, and subtract. |
| Standards: | CA CCSS Math - Content Standards (CA Dept of Education): |
| - Content <br> - English Language Development (ELD) | 1.0A. 1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. <br> 1.1.A.1 Exchanging information and ideas with others through oral collaborative conversations on a range of social and academic topics. |
| Central Focus/Learning Target | Overall students will be able to use addition and subtraction within 20 to accomplish solving word problems by showing their work and be able to explain how and why their solution is correct. |


| Lesson Learning Objective/Target | Students will be able to use addition and subtraction within 20 to solve word problems by finding the answer to 5 -word problems given on an exit ticket. They will need to show their work, and be able to explain how and why their solution is correct. |
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| Academic Language Objective <br> - Demands <br> - Functions <br> - Forms | Students will be able to exchange information and ideas with others around them by using key vocabulary terms, and complete sentences during their worksheet activities, think-pair-share and whole-class discussion, as directed by the teacher. <br> Key Vocabulary: add, together, increase, combined, plus, sum, both, join, altogether, total; subtract, minus, take away, less/fewer than, difference, decrease, how many are left/remain (given to them on a paper). |
| Assessment Plan, Rubric, and Feedback Procedures After Student Work Analysis | The teacher will assess students' understanding based on observations during the different points of the instruction of the lesson, and during the end of class where they will have an exit ticket for mastery of the standard. <br> Formative \#1: When students are in small group instruction, the teacher is informally assessing students of their prior knowledge of addition, and subtraction mentally noting who may need extra support going to the instruction. <br> Formative \#2: The teacher is assessing if students are using the key vocabulary terms to help them break down the word problems, and when writing the reasoning behind how and why they got the answer for their problems. <br> Formative \#3: The teacher will have students go up to the board, demonstrate that they can solve a word problem, and also explain to the class how they got their answer. <br> Final Summative: They will have an exit ticket to check for understanding <br> *The teacher will pass back the student's worksheets with feedback and pull students into groups on the next day based on their reteaching needs. While students are working on new lesson teacher will pull small groups for math.* |
| Materials | - Projector <br> - I-pads <br> - Represent and Solve Problems- Result Unknown: Lesson Slide Show: https://docs.google.com/presentation/d/1f8v2G5tPqELKTjp0wXZXCoUVC olzyc7gIQSYAVPw7TQ/view\#slide=id.ge5e05819b1 034 <br> - Word problem worksheets (3) <br> - Number line chart <br> - Students will need whiteboards/ dry-erase markers/erasers <br> - Paper with all the key vocabulary (it will have it into two separate columns an addition, and subtraction one) <br> - Review Game: https://www.mathplayground.com/tb addition/index.html |



|  | use key vocabulary words, and complete sentences as well). <br> 9. Give 1-2 minutes to discuss as a class. Most students should have been able to solve the problem. Mentally note students who did not understand. Then write down on a paper to make possible math small groups later. <br> 10. Ask a student to volunteer to come up to the board and show us how they may have used the number line to help them solve the problems. |  |
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| Formative (Informal) <br> Assessment | When students are answering with their w assessing the prior knowledge of addition, may need extra support going to the instru Write problems on the board and ask stude Present the key vocabulary words for addition handout. Use think-pair-share and whole-c | eboards, the teacher is informally nd subtraction mentally noting who ion. Asking students "Do you agree?." ts to say the problem out loud. n and subtraction on the paper s discussion. |
| Instruction and/or Practice Activity <br> (Identify necessary supports/scaffolding/ modifications) <br> 1 minute for key vocabulary paper handout <br> 10 minutes for lesson slide show <br> 10 minutes for instructions | Teacher does: <br> 1. Introduce today's goal: Today we will be able to use addition and subtraction within 20 to solve word problems by finding the answer to 5 -word problems given on an exit ticket. They will need to show their work, and be able to explain how and why their solution is correct. <br> 2. Present the key vocabulary words for addition and subtraction on the paper handout. Ask the students to go through them, and ask them if any of them have ever heard any of those words before. <br> 3. Go over Represent and Solve ProblemsResult Unknown: Lesson Slide Show: https://docs.google.com/presentation/d/1 f8v2G5tPqELKTjp0wXZXCoUVColzyc7glQSY AVPw7TQ/view\#slide=id.ge5e05819b1 0 34 <br> 4. Put up word problem instructions on the projector. | Students do: <br> 1. Students will write the day's goal in their math journals. <br> 2. Students will practice saying the key vocabulary words, and think of any questions they might have. <br> 3. Follow along with the teacher on the lesson slide show, and raise their hand if they have any questions. <br> 5. Students will follow along with the teacher for the instructions, and begin the math problem with the teacher. <br> 6 / 7. Students will raise their hands to explain their process using the key vocabulary words. |


|  | 5. Go over instructions on how the word <br> problems will go. Read the directions to <br> the students, have them ecko read. Then <br> begin a practice problem with them. Ask <br> the students questions to push their <br> thinking, and reasoning further. This is <br> where the gradual release of responsibility <br> takes place, and where you will guide <br> them. <br> 6. Call on a student to share what the first |  |
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| 2 minutes calling on <br> step they did was. |  |  |
| ITime Allotted: 23 <br> minutes] | 7. Call on a different student for each step. |  |
| Formative (Informal) <br> Assessment | Teacher is assessing if students are using the key vocabulary words (add, together, <br> increase, combined, plus, sum, both, join, altogether, total; subtract, minus, take <br> away, less/fewer than, difference, decrease, how many are left/remain) in the <br> steps to read the word problem, and solve it. As well as when they are writing <br> down their explanation of how they got the answers, and when they are sharing |  |
| with others. |  |  |


| 1 minute for students to break up into math rotation stations <br> 2 have students set up, for their groups. <br> [Time Allotted: 30 minutes] | 5. At the back of the worksheet activities, students need to be able to write down and explain to their small group or whole class their reasoning behind the answers they got for their worksheet activities (using complete sentences). <br> 6. Walk around the room and assess if students are correctly reading the work problems and using their knowledge of the key vocabulary words. When more than $50 \%$ of the class is finished call for attention. Ask students to 1, 2, 3 self-assess their own understanding, 1 they need more help they don't get it, 2 they kind of get it but need more practice, and 3 they could teach it to a friend, this is easy. Mentally note who put up a one. <br> 7. Explain to them the math rotation stations. Students will split up into groups based on their 1,2 , and 3 self-assessments. Explain that 1's will be with the teacher first to go over the worksheet. 2's will be getting more practice on their I-pads and 3's will be playing a review game https://www.mathplayground.com/tb add ition/index.html <br> Group 1: Complete the worksheet with the teacher as a small group. <br> Group 2: Will pick one from the 3 different worksheet resources to work on. <br> Group 3: Can use the review game to practice some more or watch a youtube video that solves a problem. <br> https://www.mathplayground.com/tb add ition/index.html | 7. Based on their self-assessment students will separate into groups based on their current understanding of rounding <br> 7a. Students who rated their understanding a 1 will complete the worksheet with the teacher in a small group. <br> 7b. Students who rated their understanding a 2 will get their assigned device and go back to their desk. The digital activity will already be assigned to everyone individually in Google Classroom. Students will have prior knowledge about how to navigate into Google Classroom. <br> 7c. Students who rated their understanding a 3 will get to play a review game to practice some more or watch a youtube video that solves a problem. <br> 8. Students who would like to complete an early finisher activity will have prior knowledge of where early finisher activities are located. |
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| Closure with Outcomes Assessment | Teacher does: | Students do: <br> $1 / 2$. Students in Group 2 will return devices to their charging |



## Resources:

- https://docs.google.com/document/d/1LADJ1xsfP2tZPWN-JkbTdY6cwTXIrR4w8zQEhzhY bXs/edit?usp=sharing


## Rubric:

| Level of |  |  |  |  |
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| Performance | Excellent <br> understanding <br> demonstrated (4) | Strong <br> understanding <br> demonstrated (3) | Unclear <br> understanding <br> demonstrated (2) | Little to no <br> understanding <br> demonstrated (1) |
| My work | I showed my math <br> knowledge by <br> showing more than <br> needed to solve this <br> problem | My solution is correct <br> and makes sense | Some of my <br> thinking is correct <br> or my <br> answer/solution is <br> correct, but I can't <br> prove it | My solution does <br> not make sense. <br> My work/thinking <br> is incorrect |
| I can explain... | I explained how and <br> why my solution <br> makes sense. I used <br> key vocabulary <br> words, and symbols | I explained what I <br> knew and how I <br> solved it. I used key <br> vocabulary words, <br> and or symbols | I explained what I <br> knew and used <br> some key <br> vocabulary words, <br> and/or symbols | I did not explain <br> my thinking by <br> using key <br> vocabulary words <br> or symbols |


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Key Vocabulary

| Addition | Subtraction |
| :--- | :--- |
| $\star$ Add | $\star$ Subtract |
| $\star$ Together | $\star$ Minus |
| $\star$ Increase | $\star$ Take away |
| $\star$ Combined | $\star$ Less/fewer than |
| $\star$ Plus | $\star$ Difference |
| $\star$ Sum | $\star$ Decrease |
| $\star$ Both | $\star$ How many are left/remain |
| $\star$ Join |  |
| $\star$ Altogether |  |
| $\star$ Total |  |

