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MATHEMATICS UCI LESSON PLANNER

Part 1: Classroom Information

Grade: Kindergarten

Content Area: Mathematics

School: Cypress Village Elementary School

Mentor Teacher: Carrie Pearson

Group Size: 8-10

Lesson Length: 25-30 minutes

	<u>Identified Student Needs</u>	<u>Accommodations During Instruction to Support Student Needs</u>
Students with Special Needs (IEP and/or 504)	N/A	N/A
Students with Specific Language Needs (ELL)	There are sixteen students that are classified as ELL. Fourteen children are at the bridging level of ELD proficiency, and two students are at the emerging level of ELD proficiency. Within this lesson, there are five students classified as ELL (bridging) and one student at the emerging level of ELD proficiency.	Support students by modeling the task prior to having them engage in the learning activity. Integrate visual representations in the form of manipulatives to support conceptual understanding. Provide written sentence frames to support syntax. Repeat instructions, remodel, and clarify as necessary.
Students with Other Learning Needs (Behavior, Struggling Reader, Struggling Math)	N/A	N/A (My Mentor Teacher stated that there are currently no students who she perceives to have specific behavioral/learning needs. As the year progresses, she will have a better understanding of which students require additional support or accommodations to enhance learning).

Part 1: Planning for the Lesson

A: Standards

i. Key Content Standard:

CCSS.Math.Content.K.OA.A.3: Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).

ii. Math Practice Standard or ELA Capacity: CCSS-M Standards for Mathematical Practice, or NGSS Science and Engineering Practices, CCSS-ELA Capacity of Literate Individuals

CCSS.MATH.PRACTICE.MP5: Use appropriate tools strategically.

B. Objectives

i. Learning Objective/Goal: The students will (DO** __) to (**LEARN** __).**

Students will decompose the numeral “5” into pairs in more than one way to learn that addition involves putting together and adding to, and subtraction involves taking apart and taking from.

ii. Language Objective (transfer this from "Incorporating Academic Language"):

The students will identify different strategies to decompose the numeral “5” into pairs in multiple manners by using the sentence frame “I made 5 with ____ and ____.”

C. Assessments:

i. Informal assessment strategies you will use during class (What informal assessment strategies will you use, what specific evidence will you see and/or hear and how will you note it?)

Assessment Strategy	Evidence of Student Learning
Monitor Use of Manipulatives	Monitor students as they engage in the activity to ensure that the manipulatives are being utilized to demonstrate how the numeral “5” can be decomposed into pairs (possible pairs include: 4 reds and 1 yellow, 4 yellows and 1 red, 3 reds and 2 yellows, 3 yellows and 2 reds, 5 reds and 0 yellows, 5 yellows and 0 reds).
Individual Share-Outs Within Whole Group Setting	After the children have engaged in the activity individually, ask each child to share one strategy they used to decompose the numeral “5” into pairs. Using the sentence frame “I made 5 with ____ and ____,” the children will demonstrate understanding if they can successfully

	describe a strategy that was used to create a pair (ex: "I made 5 with <u>2 yellow counters</u> and <u>3 red counters</u> "). To deepen understanding, ask individual children to explain the particular strategy that he or she used to make "5." This will promote deep thinking and elicit responses that make mathematical reasoning visible.
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ii. Written assessment you will use to determine, **for each individual student**, to what extent they have met your learning objectives. (What specific evidence will you collect?)

Provide each child with the following worksheet that will be used to determine the extent to which the learning objective has been met. In particular, students will use red and yellow crayons (corresponding to the red and yellow counters) to represent pairs of "5" in at least three different ways.

Name: _____

Directions: Represent five into two parts.

Let's get thinking!
Make and Show Five

○ ○ ○ ○ ○	○ ○ ○ ○ ○
○ ○ ○ ○ ○	○ ○ ○ ○ ○
○ ○ ○ ○ ○	○ ○ ○ ○ ○
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D. Lesson Resources/Materials (e.g., student handouts, manipulatives, PPTs, text pages, special supplies) Attach copies of any student handouts or worksheets:

"Let's Get Thinking" worksheets (10)

Red Crayons (10) and Yellow Crayons (10)

Foam Counters (50)

Pencils (10)

Part 2: Instructional Sequence - Engaging Students in the Learning Process

Introduction (5 min.): Describe how you will 1) make connections to prior knowledge, tap into their experiences and interests or use a “hook”, **AND** 2) let students know what the objective of the lesson is.

Ask the children to raise their hands if they know what it means to share. Prompt students to provide examples of what sharing can look like.

Potential responses include: “I share my toys with my friends!” “I share my snacks with my brother/sister!” etc.

After listening to 2-3 responses, explain that sharing can also involve breaking a number into two different parts or pairs.

Slide 4 beads on the top row of the “teacher rekenrek” to the left. Then explain that “4” can be shared into pairs of “2” and “2” (demonstrate this by sliding 2 beads on the top row back to the right and 2 beads on the bottom row to the left for all of the children to see).

Tell the children to try to think of another way to share “4” and to give a silent thumbs up (a thumbs up against the chest) when they have figured out a way.

Select a student to come up to the board and demonstrate show how they shared “4” for class to see.

Ask the student to explain how he or she thought of that particular strategy to use in order to share “4.”

After the student has shared his or her strategy, tell the class that they will be working on sharing numeral “5” to create as many pairs as possible.

Body of the Lesson (10 min.): Describe step-by-step what the teacher **and** the students will be doing during the lesson.

Launch:

Place five counters in a row on the table, red side up.

Ask the students how many counters they see (children should respond with “five!”)

How many of counters are red? (children should respond with “five!”)

Turn over 2 counters so the yellow side is facing upward.

Now how many of my counters are red? (children should respond with “three!”)

How many of my counters are yellow? (children should respond with “two!”)

Use the following sentence frame to put the information together: “I made 5 with 3 and 2.”

Slide a finger under all of the counters while stating “5,” point to the red counters when saying “3,” and point to the yellow counters when saying “2.”

ELL support: Repeat the statement that 5 was made with 3 and 2 while pointing to each of the colored counters accordingly.

Support students as they use the sentence frame to say, “I made 5 with 3 and 2” aloud. Point to each of the colored counters accordingly as students verbally express their thoughts.

Explore:

Provide each student five counters.

Tell the children that they will be using the counters to make and show five in at least three different ways.

Provide students with 1-2 minutes of time to utilize the manipulatives and independently come up with strategies of decomposing the five counters into different pairs.

Instruct students to represent the combinations they made with the counters by filling in the “Let’s Get Thinking” worksheet as they come up with each strategy.

Possible Misconception: Children may represent the same idea multiple times.

ELL support: Model what this looks like based on the example that was provided to the students at the beginning of the activity by selecting a red crayon and coloring in three circles on the worksheet. Then select a yellow crayon and color in two circles. Put it together by stating, “I made 5 with 3 and 2!”

Write the sentence frame “I made 5 with _____ and _____” on the whiteboard so students can reference to it as they independently come up with different methods of creating pairs.

Allow the children to independently work on the task of recording each strategy on the worksheet with red and yellow crayons.

While the children represent their ideas on the worksheet, intentionally draw a star next to one representation on each student’s paper (students will be asked to share out the starred strategy in the whole-group discussion in the **summarize/closure** section below). The strategies should be starred in a manner that allows for all of the possible combinations to be shared in the whole-group setting.

Summarize/Closure (10 min): Describe how you will **prompt the students** to summarize the lesson and restate the learning objective.

Gather the attention of the children back to the whole group.

Specifically sequence responses in the following order: 5 and 0, 0 and 5, 4 and 1, 1 and 4, 3 and 2, 2 and 3.

Have each child share the strategy that was starred aloud, using the sentence frame “I made 5 with _____ counters and _____ counters”).

As each response is shared, ask individual children to explain the particular strategy that he or she used to make “5.” This will promote deep thinking and elicit responses that make mathematical reasoning visible.

ELL Support: Allow students to use their fingers or counters to support them as they share their ideas aloud.

Ask each individual sharer to demonstrate his or her strategy with the counters for everyone in the group to see.

Connect each sequence by explaining to students that regardless of the order in which numbers are put together, both strategies create the numeral “5” (ex: 5 and 0 is the same as 0 and 5).

Once all of the possible sequences have been shared aloud, repeat the shared sequence in the same order.

Part 3: Incorporating Academic Language

(to be completed after you have planned the content part of your lesson plan)

1. Describe the rich learning task(s) related to the content learning objective.

This task incorporates a rich task involving colored counter manipulatives as students independently think of ways to decompose the numeral “5.” As children work with the manipulatives, the richness of the task becomes clear, as multiple approaches to solving the same problem are drawn on, and students of different skill levels are provided with opportunities to learn from the activity. In addition, the task is rich because it involves the communication of mathematical reasoning with the support of a sentence frame.

The task also implicitly teaches the skill of addition and subtraction, as students apply subtraction as they create different pair groups, and apply addition when they bring the paired numbers together to create “5.”

2. **Language Function:** How will students be communicating in relation to the content in the learning task(s)? Identify the specific **function** (purpose or genre) you want to systematically address in your lesson plan that will scaffold students to stronger disciplinary discourse. The language function will always be a verb. Some examples are: describe, identify, explain, justify, analyze, construct, compare, or argue.

Identify

3. **Language Demands:** Looking at the specific function (purpose or genre) your students will be using, what are the language demands that you will systematically address in this lesson?

Vocabulary:

Key to this lesson:

Pair

Together

Syntax [1]: (Sentence structure)

"I made 5 with _____ and _____."

Discourse [2]: (Communication/Verbal questions)

Students will express their mathematical thinking through drawings of their strategies and through the communication of their ideas with the support of sentence frames.

4. **Language Objective:** What is/are the **language objective(s)** for your lesson?

The students will identify different strategies to decompose the numeral "5" into pairs in multiple manners by using the sentence frame "I made 5 with _____ and _____."

5. What does your language objective sound like/look like for different levels of language learners? Ask yourself, "What would the students say/write when using the language function." Remember to consider the language demands while creating sample language that the students might use.

Emerging	Expanding	Bridging
-The educator can state each number in the student's pair aloud, and the child should be able to point to the counters accordingly. For example, if an emerging student created a pair of 4 and 1, the teacher should say, "I made 5" as the student underlines the 5 counters on the table with his or her finger. Then, the teacher should say, "with 4" as the student points to the four counters. The educator should then say "and 1," and the child should point to the one counter. The teacher should then repeat the sentence by combining each of the components together.	- The teacher should point to each pair or counters, and the student would have to individually provide the corresponding number aloud. The teacher will draw a line on the table with his or her finger beneath the five counters, and the emerging student will say, "I made 5." table with his or her finger. Then, the teacher will point to the four counters and the child should say "with 4." The educator should then point to the singular counter and the child should say "and 1." The student should then be able to repeat the sentence by combining each of the components together.	- "I made 5 with _____ and _____."

6. Language Support: What **instructional strategies** will you use during your lesson to teach the specific language skill and provide support and opportunities for guided and independent practice?

Instruction	Guided Practice	Independent Practice
<ul style="list-style-type: none"> When modeling how to make 5, introduce the sentence frame "I made 5 with _____ and _____" verbally so students have the opportunity to understand what their language should sound like as they organize their thoughts. 	<ul style="list-style-type: none"> During the launch of the lesson, students will be supported as they draw a line on the table from left to right with their fingers, and say, "I made five" aloud together. They will then be supported as they point to the red counters and say, "with three." Finally, they will be supported as they point to the yellow counters and say "and 2." 	<ul style="list-style-type: none"> Write the sentence frame "I made 5 with _____ and _____" on the whiteboard so students can reference to it as they independently come up with different methods of creating pairs. As students work independently on the problems, they will use manipulatives, which will provide a concrete support as they reason through different strategies.