Age Level: $\mathbf{1}^{\text {st }}$ Grade

Subject(s) Area: Math

## Materials Needed:

- Dot Addition Cards
- Game Boards for each pair
- Scratch paper for each pair


## Standards:

Math-1.OA. 3 Apply properties of operations as strategies to add and subtract. Examples: If $8+3$ $=11$ is known, then $3+8=11$ is also known. (Commutative property of addition.) To add $2+6$
+4 , the second two numbers can be added to make a ten, so $2+6+4=2+10=12$.
(Associative property of addition.)

## Objectives:

Identify different number sequences that add up to create a number with $85 \%$ accuracy.

## Learning Activities:

## Opening Element:

1. Receive students' attention by saying "if you hear me, put your hands on your nose"
a. Dismiss tables to the carpet area one at a time based on which table is the quietest.
b. Once all the students are in the carpet area, choose one student to be your helper to demonstrate the math activity to the rest of the class.
2. Using a big copy of the math game, explain to the students that they will be playing the game "dot addition".
a. I will deal out 4 rows of 5 cards face up and show the class.
b. I will explain to the students that the object of the game is to make a combination for each number that is on the game board.
c. Mention that they have played dot addition before but this game is just a little bit different.
i. For the variation previously the students were able to use a card more than once, for this variation the students could only a card once.
ii. If a number appears twice on the game board, students will need to find two DIFFERENT ways to create the number shown.
d. After dealing out the cards, the helper student will use the cards dealt to come up with a combination of numbers to create the first number on the board.
i. The teacher will guide the student and ask the class for any suggestions that they might have to make the number.
ii. Students will record the combinations that they made on a piece of paper that will be provided for them.
iii. I will ask the class: What different numbers can make the number 12? How do you know?
3. After the game is demonstrated, the students be called to gather materials and find a spot to play with their math partners (partners are pre-determined).
4. While the students are playing the game, I will walk around and observe the students to check for understanding and the use of strategies around the classroom.
a. Check for strategies in the students and ask these questions: How do students find combinations, how do students add, are any students counting groups? How accurate are students in their use of addition notation?

## Required Vocabulary:

number sequence- arrange in a particular order
Addition- adding numbers together
Strategies- different ways to find the answer

## Reflective Questions:

What number did you get? How can you make that number using 3 cards?
How did you get your answer?

## Guided Practice Strategies:

- I will demonstrate how to play the game in front of the class and answer any questions that they might have.
- If a student is having difficulty, I will scaffold a solution with them. Ex: You're trying to get to 12 , What if we start with $5 \& 5$. How much is that? How much more do we need to make 12 ?


## Independent Concrete Practice/Application

- Students will independently try to solve the problem prior to asking their partner.
- Students will try their own strategies to come up with the answer that they think is right.


## Differentiation:

- For struggling students, a game board with smaller numbers will be available for them to try.
- Challenge players who finish quickly to play without using any of the same combinations to get their numbers.
- Allow struggling students to use different manipulatives around the classroom if they are struggling with counting out the higher numbers.


## Instructional Methods:

- Guided group work and independent practice
- Game modeling
- Discussion of strategies


## Wrap-Up:

- When the students have finished their game they will be called back to the carpet area by groups.
- The teacher will pose the following questions: What strategies did your group use to find the numbers? How do you know that those strategies work?
- The teacher will use 2 strategies that the students mentioned and solve two more sets of numbers as a class.
- When the two sets are done, the students will be dismissed to line up for music class.


## Assessment:

## Formative:

I will use a classroom discussion to determine student understand of the concepts presented.

I will also use anecdotal notes to observe the students while they are playing the math game to look for different strategies and methods that the students are using to find out their answer.

Summative: Students will be assessed at the end of the unit using an exam.

## Reflection:

I think that my math lesson went well. The students responded very well to the game that I introduced to them and there was very little classroom management that I needed to use to keep them on task throughout the activity. One thing that I will definitely use in the future is saying "if you hear me, raise your hand" to get their attentions. The class responded very well to that and they all stopped what they were doing and paid attention to what I had to say. I had a very good closure that wrapped everything up and brought back the standard that I was focusing on. I was able to challenge the students one step further and made them think of other possibilities that they could use. There were a few parts that I would change in my lesson. One thing I would change is to use a document camera when introducing the game to the students. This way I could still demonstrate the game using the same game board that they were using but it would also be displayed bigger for them so they would be able to see the game better. Another thing I would change would be to provide the students with clearer directions. For my directions in the lesson I think that I went through them too fast and left some of the students confused. In the future, I
will break my directions up and have the students raise their hands after each direction. I will also write the directions on the board for the students to reference to. Lastly, during my lesson I dismissed the students to play the game and it was all a big jumble. I tried to give them more directions after they were dismissed but most of the students missed the directions and I had to repeat them numerous times. In the future, I will dismiss the students a few at a time so there is less chaos. Also, if I have more directions for the students, I will have them freeze and make sure they were quiet so all the students got the directions and understood them.

