PRACTICE TASK: Make 5 (Or 10) Go Fish!

Approximately one day and repeated through centers

STANDARDS FOR MATHEMATICAL CONTENT

MCCK.OA.1 Represent addition and subtraction with objects, fingers, mental images, drawings[1], sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

MCCK.OA.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

MCCK.OA.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).

MCCK.OA.4 For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.

MCCK.OA.5 Fluently add and subtract within 5

STANDARDS FOR MATHEMATICAL PRACTICE

1. Make sense of problems and persevere in solving them.
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.

BACKGROUND KNOWLEDGE

"A mental computation strategy is simply an invented strategy that is done mentally. What may be a mental strategy for one student may require written support by another…As your students become more adept, they can and should be challenged from time to time to do appropriate computations mentally. Do not expect the same skills of all students." (Page 161: Van de Walle & Loving, 2006)

ESSENTIAL QUESTIONS

- Does the order of addends change the sum? Give examples to justify your thinking.
- How do you know when your answer makes sense?

- How can I represent problem situations using objects, pictures, and numbers?
- Why is it important that I can build the number combinations for the number 5? 10?

MATERIALS

- 1 deck of playing cards for each pair of students, face cards removed (ten frame cards will also work for this game)

GROUPING

partner or small group task

TASK DESCRIPTION, DEVELOPMENT AND DISCUSSION

Part I
Engage students in a discussion about the possible number combinations to make 10. After students have explored possible combinations, introduce them to *Make 10 Go Fish.*

How to play: The object is to get two cards that total 10.

- Each player is dealt five cards. The rest of the cards are placed down in the center of the table.
- If you have any pairs of cards that total 10, put them down in front of you and replace those cards with cards from the deck.
- Take turns. On your turn, ask the other player for a card that will go with a card in your hand to make 10.
- If you get a card that makes 10, put the pair of cards down. Take another card from the deck. Your turn is over.
- If you do not get a card that makes 10, take the top card from the deck. Your turn is over. (Example: Player 1 *"Do you have a 2 in your hand?"* If player 2 has a 2 they give it to player 1. If they do not have a 2 they say "*Go Fish!")*
- If the card you take from the deck makes 10 with a card in your hand, put the pair down and take another card. Your turn is over.
- If there are no cards left in your hand but still cards in the deck, you take two cards.
- The game is over when there are no more cards.
- At the end of the game make a list of the number pairs you made.

Part II
Ask students for all the possible combinations to make 5. At first students will probably use addition as a means to make a 5. Guide the students to think of making a 5 through separating/decomposing larger numbers.

Using the same rules as *Go Fish 10*, have students play *Go Fish 5.* If a student had a 7 and they asked their partner for a 2 and received it, their number sentence could be "*I had a 7 and I decomposed the 7 into a 2&5"* OR *"7 minus 2 is equal to 5"*

FORMATIVE ASSESSMENT QUESTIONS

- What strategies are you going to use?
- What number are you using? What do you need to find out before you can ask your partner for a card?
- What if you could only use three cards to make 5 (or 10)? Which ones would you use?

- Have students share with the whole group the strategies they used to identify how many more were needed to make a number (5 or 10). Were there situations in which they added more than two numbers or that they subtracted two numbers? If so, what were they?

DIFFERENTIATION

Extension
- Encourage students who have a strong knowledge of number combinations to 5 and 10 to use number combinations with more than two numbers.

Intervention
- Allow students who are still at the direct modeling stage to use 5 or 10 frame cards, manipulatives, and/or write number sentences to show their thinking when trying to determine how many more are needed to make 5 or 10.