CONSTRUCTING TASK: TAKE 1,000

STANDARDS FOR MATHEMATICAL CONTENT

MCC.3.NBT.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.

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.
6. Attend to precision.
8. Look for and express regularity in repeated reasoning.

ESSENTIAL QUESTIONS

- How can I learn to quickly calculate sums in my head?
- What strategies will help me add multiple numbers quickly and accurately?

MATERIALS

- A deck of cards containing two of each of the following numbers: 100, 200, 300, 400, 500, 600, 700, 800, 900, 500, 50, 950, 150, 850, 250, 750, 350, 650, 450, 550. (Copy 2 game cards sheets for each deck of cards)
- "Take 1,000 Game, Student Directions" Student Sheet

GROUPING

Partner/Small Group.

BACKGROUND KNOWLEDGE

Students should have had practice developing strategies to make combinations of ten and one hundred using mental math. They can apply those strategies to finding sums to one thousand.

TASK DESCRIPTION, DEVELOPMENT AND DISCUSSION

This is a card game during which students must be the first to spot combinations of one thousand. This game can be adapted to eliminate the speed aspect to the game. Students can take turns turning over a card and placing it face up next to the other cards that are face up. If there is a sum of the numbers on any pair of cards that equals 1,000 the student gets to take those cards. If there is not a sum of 1,000, then the cards are left face up and the student's turn ends. Play

continues until all of the cards have been turned over. The player with the most cards at the end of the game wins. As students play, ask them to record their pairs of 1,000 as an addition number sentence. This gives students an opportunity to focus on the pairs that make 1,000 and provides a record of the game.

Task Directions
Students follow the directions below from the "Take 1,000 Game, Student Directions" Student Sheet.
Number of Players: 2
Materials: Deck of 40 Cards
Directions:
1. Your goal in this game is to make sets of one thousand.
2. Shuffle the cards well and lay them face down in a pile on the desk.
3. Turn the top card over and set it to the side where both partners can see it. Now turn the next card over and set it to the side of the first overturned card.
4. If the first two overturned cards equal one thousand when added together, try to be the first one to say, "One Thousand!" loudly enough for your partner to hear you. If you are first to notice, you may take the cards that equal one thousand. If your partner is the first to notice, he or she gets to take the cards.
5. If the first two cards do not make a set of one thousand, keep turning cards over and setting them next to the first overturned cards. When someone spots a combination of one thousand, they call out "One Thousand!" and take the cards that total one thousand. Keep playing this way until all cards have been claimed or the overturned cards do not make a set of one thousand.
6. The player with the most cards at the end of the game is the winner.

FORMATIVE ASSESSMENT QUESTIONS

- What do you know about pairs of numbers that add to 1,000?
- What strategies are you using? How are they working for you?
- What can you do to find the answer quicker than your partner?
- Does 630 + 470 equal 1,000? How do you know?

DIFFERENTIATION

Extension
- Ask students to make cards to add to the deck of cards. Provide blank card outlines and allow students to either create their own pairs of 1,000 cards to the deck or to create their own deck of cards with which to play the game.

Intervention
- If two struggling students are going to play this game together, it may help to model the game during small group instruction first. While modeling the game, use the think-aloud strategy to model ways students can think about pairs to one thousand.
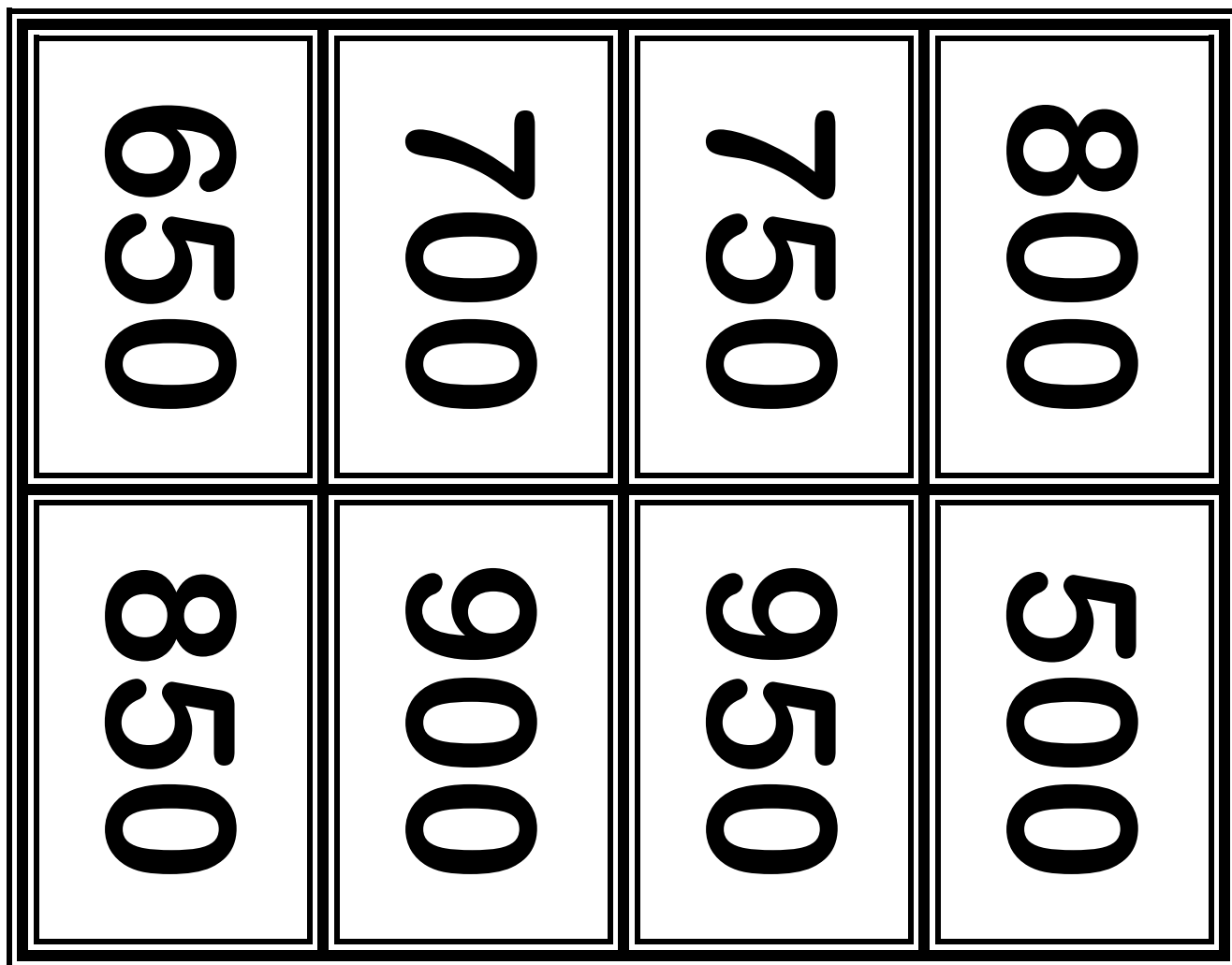
- Play a "Pairs to 100" game. Cards and directions can be found in Unit 6, Grade 2 frameworks. Or play a "Pairs to 20" game using two of each of the following cards: 1, 19, 2, 18, 3, 17, 4, 16, 5, 15, 6, 14, 7, 13, 8, 12, 9, 11, 10, 10.

TECHNOLOGY

- http://letsplaymath.wordpress.com/tag/mental-math/ Offers ideas for other games and links to additional math sites.

50	100	150	200
250	300	350	400
450	500	550	600

650	700	750	800
850	900	950	500

Name _____ Date _____

Take 1,000 Game
Student Directions

Number of Players: 2

Materials: Deck of 40 Cards

Directions:

1. Shuffle the cards well and lay them face down in a pile on the desk.

2. Turn the top card over and set it to the side where both partners can see it. Now turn the next card over and set it to the side of the first overturned card.

3. Your goal in this game is to make sets of one thousand.

4. If the first two overturned cards equal one thousand when added together, try to be the first one to say, "One Thousand!" loudly enough for your partner to hear you. If you are first to notice, you may take the cards that equal one thousand. If your partner is the first to notice, he or she gets to take the cards.

5. If the first two cards do not make a set of one thousand, keep turning cards over and setting them next to the first overturned cards. When someone spots a combination of one thousand, they call out "One Thousand!" and take the cards that total one thousand. Keep playing this way until all cards have been claimed or the overturned cards do not make a set of one thousand.

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