IM K-5 MATH™ v.I

Math Centers

Unit 3
Adding and Subtracting Within 20

1

Shake and Spill	**Number Puzzles** $14 = 8 + \square$
Check It Off	**Find the Pair**
Compare $3+1 \quad 5$	**How Close?** $\square + \square + \square = \underline{\quad}$
Five in a Row	**Unit 3 Hands on Activities**

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Materials:

cup

Two-color counters

[Shake & Spill Stage 3 Recording Sheet](#)

[Shake & Spill, Cover Stage 4 Recording Sheet](#)

Shake & Spill Directions:

- Decide how many counters to use (up to 10).
- Partner A: Shake and spill.
- Both partners: Determine how many red counters and how many yellow counters there are and write an equation to show the total.
- Switch roles and start the next round.

Shake & Spill, Cover Directions:

- Choose how many counters to put in the cup.
- Partner A: Close your eyes.
- Partner B: Shake and spill. Cover up the yellow
- counters with the cup.
- Partner A: Open your eyes and figure out how many
- counters are under the cup.
- Partner B: Show how many.
- Both partners: Record an equation.
- Switch roles and start the next round.

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$$14 = 8 + \square$$

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
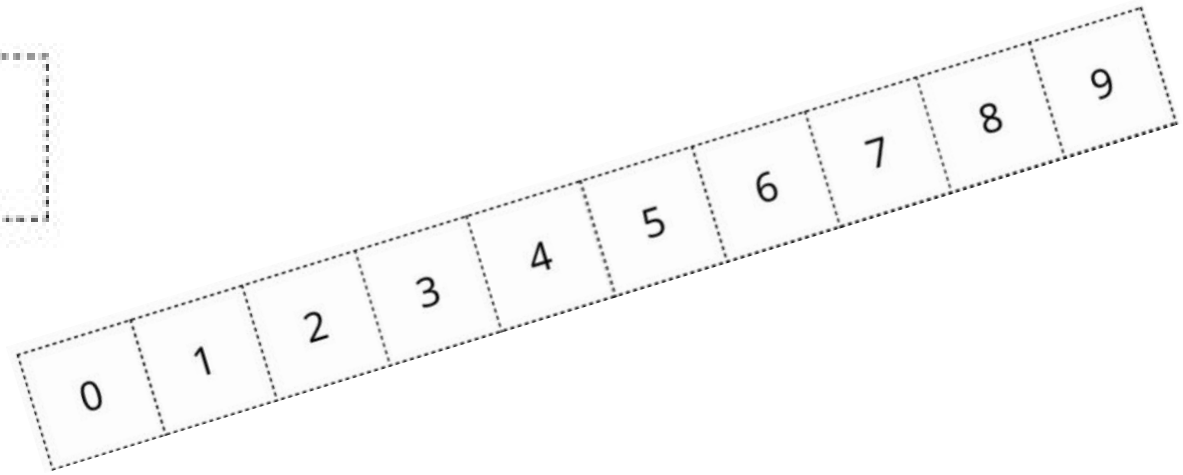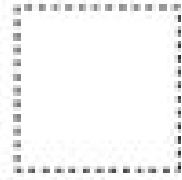
Materials:
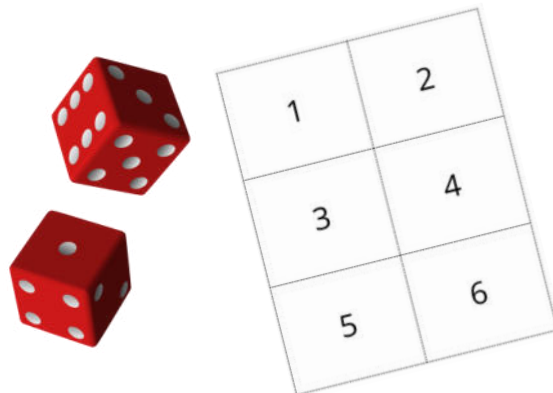
Stage 1 gameboard

Stage 2 gameboard

Number puzzles digit cards

Directions:

- Each group gets a set of digit cards and a game board.

- Place the digit cards so that every equation is true. Use each number card once.

- Complete a puzzle before moving to the next one.

- Finish as many as you can.

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Materials:

Number cards 0-10 or Dot cubes (6 is wild card)

Stage 1 (addition) gameboard

Stage 2 (subtraction) gameboard

	✓ Found it!	expression
0		
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Directions:

- Addition - Take turns choosing two cards, finding the **sum**, and writing an addition expression. You may have more than one expression for each sum.

- Subtraction - Take turns choosing two cards, finding the **difference**, and writing a subtraction expression. You may have more than one expression for each difference.

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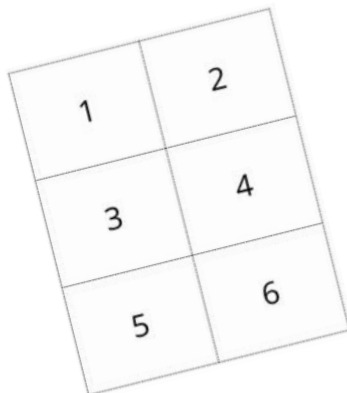
$$\underline{\qquad} + \underline{\qquad} = 10$$

$$\underline{\qquad} + \underline{\qquad} = 10$$

$$\underline{\qquad} + \underline{\qquad} = 10$$

Materials:

Number cards 0-10

Two-color counters, 10-frames

Stage 2 recording sheet

Directions:

- Each person gets 5 cards to start.
- Ask your partner for a number that can be added to one of your cards to make 10.
- If they have the card, put the pair of cards down and fill in the equation.
- If they don't have that card, pick a card from a pile.
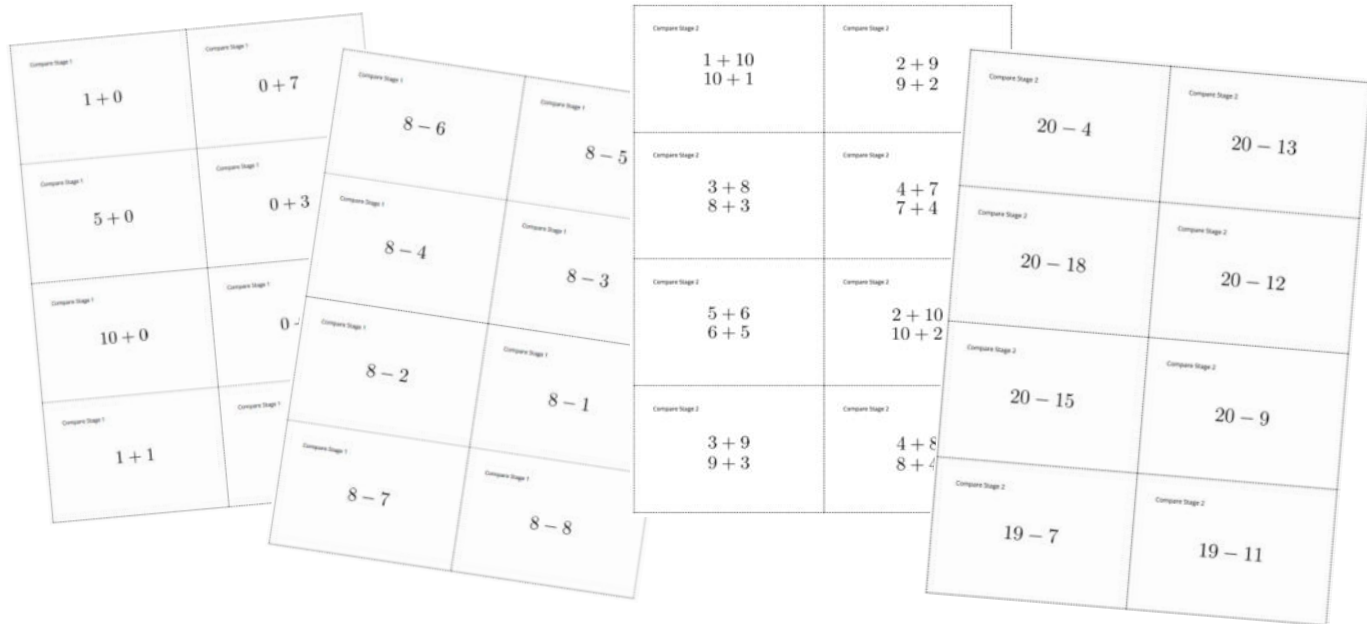- The partner with the most pairs at the end of the game wins.

$3 + 1$ 5

Materials:

Stage 1 addition cards
Stage 1 subtraction cards
Stage 2 addition cards
Stage 2 subtraction cards

Compare Stage 1	Compare Stage 1
$1 + 0$	$0 + 7$
$5 + 0$	$0 + 3$
$10 + 0$	$0 -$
$1 + 1$	

Compare Stage 1	Compare Stage 1
$8 - 6$	$8 - 5$
$8 - 4$	$8 - 3$
$8 - 2$	$8 - 1$
$8 - 7$	$8 - 8$

Compare Stage 2	Compare Stage 2
$1 + 10$ $10 + 1$	$2 + 9$ $9 + 2$
$3 + 8$ $8 + 3$	$4 + 7$ $7 + 4$
$5 + 6$ $6 + 5$	$2 + 10$ $10 + 2$
$3 + 9$ $9 + 3$	$4 + 8$ $8 + 4$

Compare Stage 2	Compare Stage 2
$20 - 4$	$20 - 13$
$20 - 18$	$20 - 12$
$20 - 15$	$20 - 9$
$19 - 7$	$19 - 11$

Stage 1 Directions:

- Mix the cards up and give half to each player.

- Each person flips over a card with an expression.

- The person who has the card with the greater value takes both cards.

- If the cards have the same value, flip over two new cards.

Stage 2 Directions:

- Mix the stage 2 addition and subtraction cards up and give half to each player.

- Each person flips over a card with an expression.

- The person who has the card with the greater value takes both cards.

- If the cards have the same value, flip over two new cards.

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Unit 3 ● Centers ● Compare

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$$\boxed{} + \boxed{} + \boxed{} = \underline{\hspace{3cm}}$$
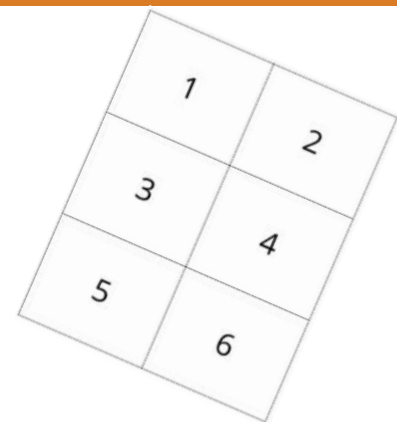
Materials:

[How Close? Stage 1 Recording Sheet](#)

[How Close? Stage 2 Recording Sheet](#)

Connecting Cubes or Counters

[Double 10-Frames](#), [Number Cards 0-10](#)

Stage 1: Add to 20 - Directions:

- Each partner:
  - Take 7 cards.
  - Choose 3 numbers.
  - Write an equation to show the sum of the 3 numbers.
  - Compare sums with your partner, whoever is closer to 20 wins a point.
- Take 3 new cards and start the next round.

Stage 2: Directions:

- Each partner:
  - Take 4 cards.
  - Choose 2 or 3 numbers to subtract from 20 in order to get as close as possible to zero.
  - Complete the equation on your recording sheet.
  - Compare equations with your partner, whoever is closer to 0 wins a point.
- Take new cards to start the next round with 4 cards.

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Materials:

Number cards 0-10

Two-color counters

Stage 1 or 2 gameboard

Stage 3 gameboard

2	4	9	8	3
5	7	6	10	9
8	3	FREE	5	4
9	2	10	3	7
6	5	8	9	4

12	14	12	8	11
15	17	16	10	19
18	13	FREE	15	14
9	17	10	13	7
19	16	11	9	18

Stage 1 Directions:

- Add 1 or 2 - Take turns choosing a number card and choose to add 1 or 2 to the number on your card, then place your counter on the **sum**.

Stage 2 Directions:

- Subtract 1 or 2 - Take turns choosing a number card and choose to subtract 1 or 2 from the number on your card, then place your counter on the **difference**.

Stage 3 Directions:

- Add 7, 8 or 9 - Take turns choosing a number card and choose to add 7, 8, or 9 to the number on your card, then place your counter on the sum.

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