

Using a Conceptual Approach to Build Addition and Subtraction Fact Fluency with Understanding

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NUMBER FACT STRATEGIES

ADDITION

- Count-On 1, 2 and 0
- Use Doubles
- Make Ten

SUBTRACTION

- Think Addition

MULTIPLICATION

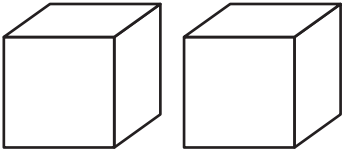
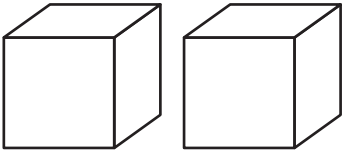
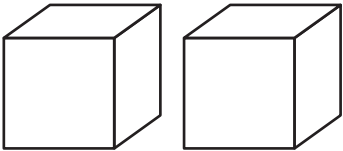
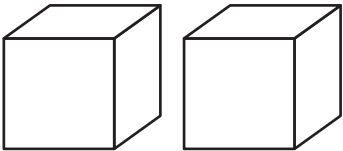
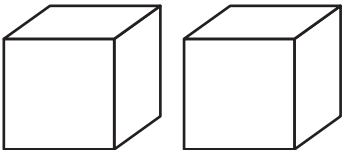
- Use Tens (5s)
- Make Generalizations (1s and 0s)
- Use Doubling (2s, 4s and 8s)
- Build Up/Down (9s and 6s)

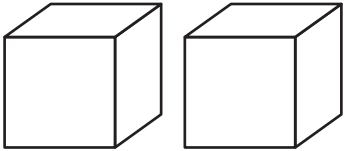
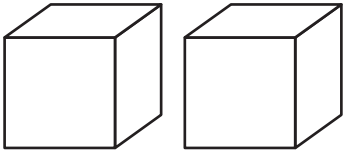
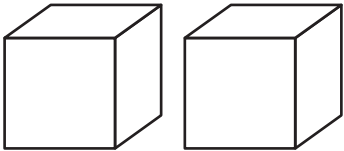
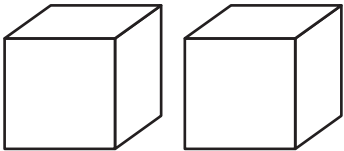
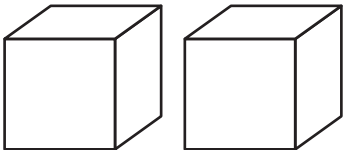
DIVISION

- Think Multiplication

REINFORCE: Count-On 1 and 2

- Roll your number cubes and count on 1 or 2.
- Find your answer below.
- Write your numbers on the number cubes. Write the number fact.

 ___ + ___ = 11
 ___ + ___ = 5
 ___ + ___ = 9
 ___ + ___ = 8
 ___ + ___ = 7

 ___ + ___ = 6
 ___ + ___ = 8
 ___ + ___ = 7
 ___ + ___ = 6
 ___ + ___ = 10

Cube A: 4, 5, 6, 7, 8, 9

Cube B: 

ADDITION CHART

+	0	1	2	3	4	5	6	7	8	9
0	0	1	2	3	4	5	6	7	8	9
1	1	2	3	4	5	6	7	8	9	10
2	2	3	4	5	6	7	8	9	10	11
3	3	4	5	6	7	8	9	10	11	12
4	4	5	6	7	8	9	10	11	12	13
5	5	6	7	8	9	10	11	12	13	14
6	6	7	8	9	10	11	12	13	14	15
7	7	8	9	10	11	12	13	14	15	16
8	8	9	10	11	12	13	14	15	16	17
9	9	10	11	12	13	14	15	16	17	18

- Count On facts
- Use Doubles facts
- Make Ten facts

REINFORCE: Double-add-1

11	19	13	15
13	9	17	19
17	11	15	9

Cube: 4, 5, 6, 7, 8, 9 (Same as previous game)

INTRODUCE: Make Ten

REINFORCE: Make Ten

- Roll your number cubes and write the fact below the example in the grid that will help you figure out the answer.
- Write the answer to both facts.

$10 + 6 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 5 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 5 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 4 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 4 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 3 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 3 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 2 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 1 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$

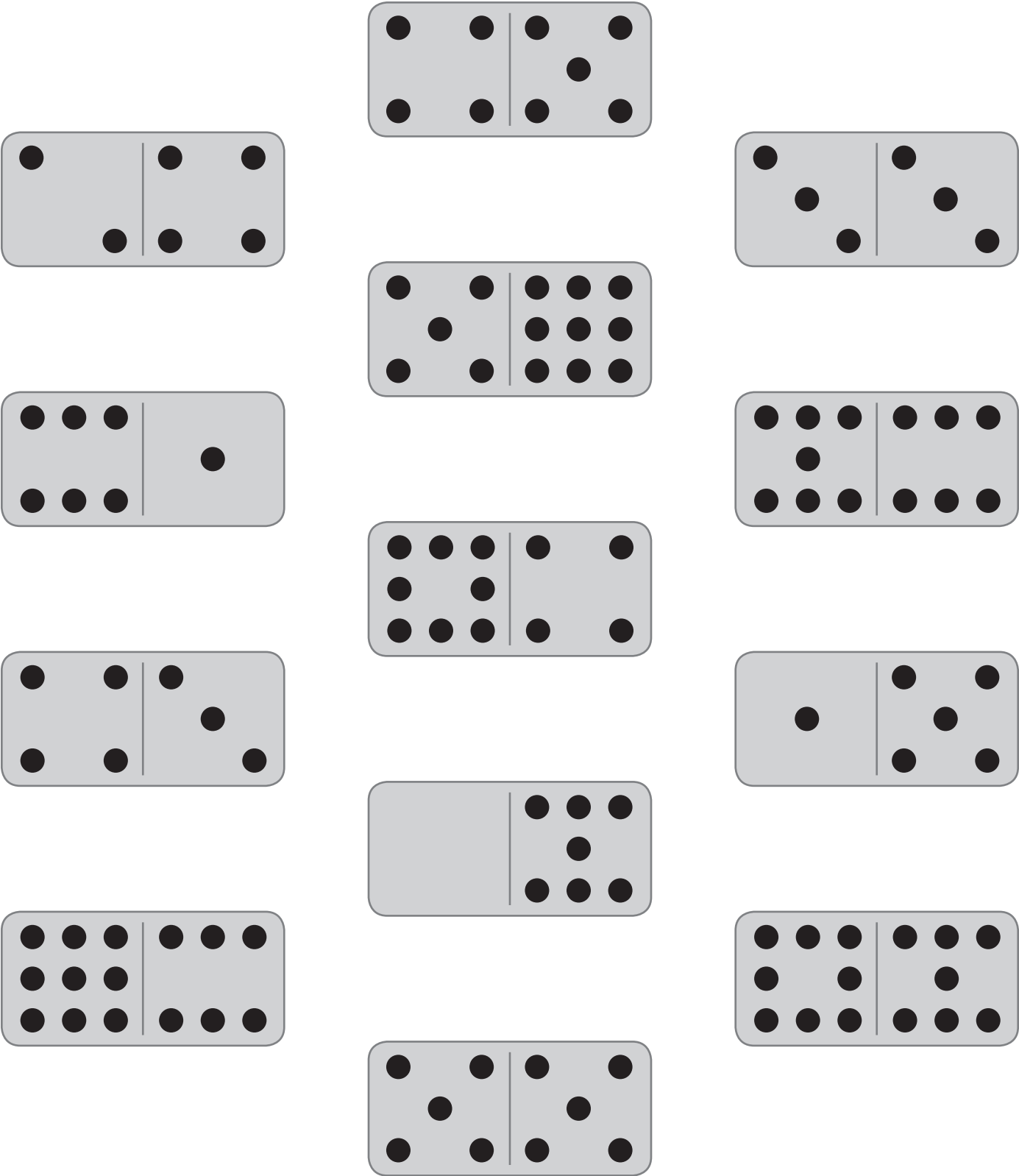
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$10 + 4 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
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$10 + 2 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 1 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$

Cube A: 8, 8, 8, 9, 9, 9

Cube B: 3, 4, 5, 5, 6, 7

DOMINO SORT

Sort these dominos according to the addition strategy you would use to calculate the total number of dots.



- Count On
- Use Doubles
- Make Ten

CONNECT ADDITION AND SUBTRACTION

Take or Tally

Player 1





Player 2

$13 - \underline{\quad\quad} = \underline{\quad\quad}$	$13 - \underline{\quad\quad} = \underline{\quad\quad}$
$12 - \underline{\quad\quad} = \underline{\quad\quad}$	$12 - \underline{\quad\quad} = \underline{\quad\quad}$
$11 - \underline{\quad\quad} = \underline{\quad\quad}$	$11 - \underline{\quad\quad} = \underline{\quad\quad}$
$10 - \underline{\quad\quad} = \underline{\quad\quad}$	$10 - \underline{\quad\quad} = \underline{\quad\quad}$
$9 - \underline{\quad\quad} = \underline{\quad\quad}$	$9 - \underline{\quad\quad} = \underline{\quad\quad}$
$8 - \underline{\quad\quad} = \underline{\quad\quad}$	$8 - \underline{\quad\quad} = \underline{\quad\quad}$
Tally	Tally

Cube A: 1, 2, 3, 1, 2, 3

Cube B: 7, 8, 9, 10, 11, 12

Cat and Mice

5		1		5		1
4	3	2	3	4	3	2
2	1	3	1	2	1	3
1	4	2	5	3	4	1
2	1	3	1	2	1	3
4	1	2	3	4	1	4
2	3	1		5	3	2
1 HOME	4 HOME	2 HOME	3 HOME	2 HOME	4 HOME	1 HOME

Materials: 2 standard dice