

Represent and solve problems involving addition and subtraction within 20

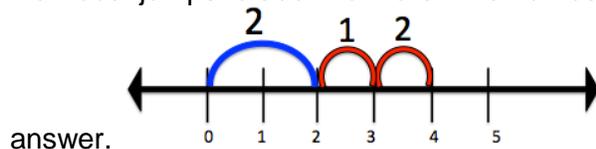
Standard 1.OA.5 Relate counting to addition and subtraction. For example, by counting on 2 to add 2.

Key Elements: Students must be able to demonstrate and use 1:1 correspondence in counting, understand the order of numbers, and understand addition as “counting on” and subtraction as “counting from”.

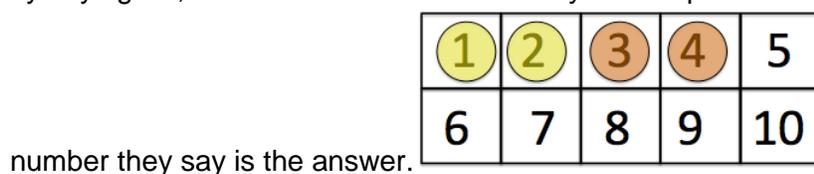
Counting on--Addition

In the problem $2 + 2$, students start at two and then count on two more to get their answer. Students can touch their hand to their head while saying “2” then use their fingers to count on two more. If this is too abstract, students can use a number line, hundreds chart, or manipulatives to solve.

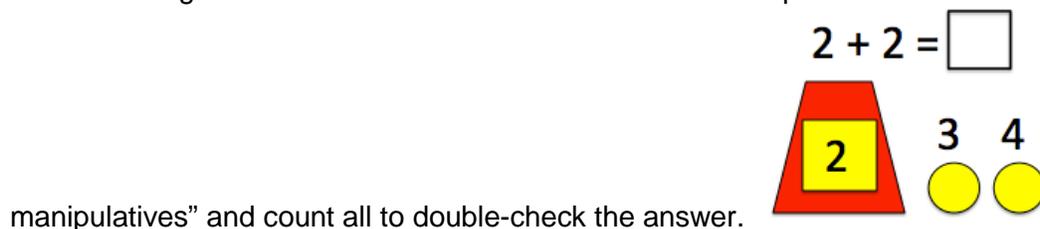
Number line: Students can do their initial jump (blue line) and say “2”. Then students will do individual jumps to add two more. The number on the number line that students end on is the



Hundreds Chart: When solving $2 + 2$ on a hundreds chart, have students cover up number 1 and 2 with counters. Then give students 2 more counters and have the students start counting by saying “2”, then continue to count as they cover up the next two numbers (3 and 4). The last



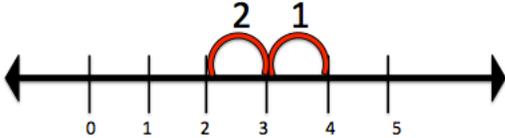
Manipulatives: In solving $2 + 2 = ?$, take a paper cup or other container to cover up two counters. Then write “2” on a sticky note and put it on the cup. On the desk, put out two more counters. Have the student touch and say the number on the sticky note, then keep counting on while touching each counter one at a time. Then take the cup off to uncover the “hidden



Counting From--Subtraction

In the problem $4 - 2$ students will start at 4 and count back two to get the answer. Students can put 4 in their head and use their fingers to count back 2. Students can use a number line, hundreds chart or manipulatives to solve.

Number line: Students can do their initial jump (blue line) and say “4”. Then students will do individual jumps backward to subtract two. The number on the number line that students end on is the answer.



Hundreds Chart: When solving $4 - 2$ on a hundreds chart, have students cover up numbers 1 through 4 with counters. Students then take two counters off. The last number they say is the

1	2	3	4	5
6	7	8	9	10

answer.

Manipulatives: In solving $4 - 2 = ?$, place 4 counters, bears, blocks, or other manipulative on the table. Take 2 of the counters away. The remaining manipulative is the answer.

