

Key Vocabulary:

Fluency - in math, it is the ability to solve age-appropriate problems correctly and quickly, without counting one-to-one

Addition - to combine or put together two or more quantities

Subtraction - to take one quantity away from another, or to find the difference between two quantities

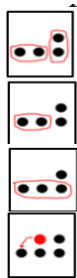
Decompose - to separate into smaller parts

Key Ideas:

(K.OA.5) This standard calls for students to demonstrate fluency in addition and subtraction with all numbers 5 or less. Students who are fluent display accuracy (correct answer), efficiency (a reasonable amount of steps in about 3-5 seconds without resorting to counting), and flexibility (using strategies such as the commutative property) (Kling & Bay-Williams, 2020).

Fluency to 5 is solidified along with the work of decomposing quantities (NC.K.OA.3) and looking at multiple ways to quickly count and decompose a set into two groups (NC.K.OA.6). Before students can add and subtract quantities to 5, they must recognize that a number is made up of smaller numbers.

- **Example Task:** The teacher displays a dot card and asks students to find “how many” without counting each individual dot. Students explain how they found the quantity.



“I saw 2 and 2. I know that makes 4.”

“I saw 2. Then, I counted 3, 4.”

“I saw 3. One more makes 4.”

“It looked like 4 on a die/dice, but one dot fell down.”

Sample Problems:

What is the total with 3 and combined with 2?

What is the answer when 4 is taken away from 5?

Leo has 5 apples in a basket. Some are red and some are green. What are the possible combination of apples he could have?