

**Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from**

**Standard K.OA.3** Decompose numbers less than or equal to 10 into pairs in more than one way by using objects or drawings. Record each decomposition by a drawing or equation. For example,  $5 = 2 + 3$  and  $5 = 4 + 1$ .

**Key Elements:** By writing a single number on the left side of the equal sign and the equation on the right side of the equal sign, the students are seeing that they have the same value/amount. The equal sign shows that it is the same as (equal to) rather than just an answer to be given. It also shows that they are decomposing, or breaking down, that initial number.

Students need to understand that a given number can be broken down into multiple ways.

5

0+5

1+4

2+3

3+2

4+1

5+0

They also need to understand:  $3+2$  is not the same as  $2+3$ ,  $1+4$  is not the same as  $4+1$  ect  
Example:

Sam has 2 shells and Tim has 3 shells. In total they have 5 shells.

Sam has 3 shells and Tim has 2 shells. In total they have 5 shells.

Same amount, but different equations and different amount each person/side has.

**Example of multiple ways to decompose a number:**

**Partners or Pairs by using a break apart stick with a picture/objects/drawings**



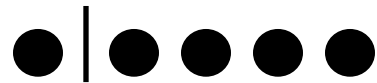
$$5 = 3 + 2$$



$$5 = 2 + 3$$



$$5 = 4 + 1$$



$$5 = 1 + 4$$



$$5 = 5 + 0$$



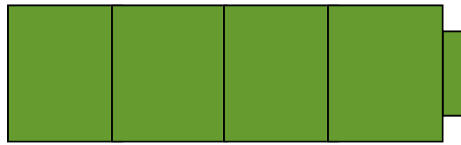
$$5 = 0 + 5$$

Additional ways to show decomposing:

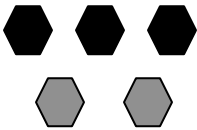
Use Cubes – take the whole and break it into two addends or partners



$$7 = 3 + 4$$



Identify addends by using a picture



$$5 = 3 + 2$$

Equation with drawing

$$6 = 3 + 3$$

Math Mountain (or side view) Balls did not line up pretty

