COMMUTATIVE & ASSOCIATIVE PROPERTY



Commutative Property: understanding

understanding that changing the order of the numbers does not change the result in addition and multiplication.

Associative Property:

Property: understanding that the numbers in addition and multiplication can be grouped differently and it does not change the result

COMMUTATIVE PROPERTY

Think: Commute or Changing
Location. Changing the order
of the numbers (operands)
does not change the RESULT
in addition and
multiplication.

INITIALLY

Initially, children are unsure whether reversing the numbers in an addition question will ALWAYS give the same answer (SUM). For example, the children are unsure if:

2 + 5 is the same as 5 + 2

LATER ON

Later on, the children understand that when adding numbers, the order of addition does not matter.

Eq.
$$7 + 5 = 5 + 7$$

This Key Idea is laying the foundation for MULTIPLICATION 5 x 2 will give you the same product (answer) as 2 x 5

and, ALGEBRAIC THINKING.

Eg.
$$a + b = b + a$$

ASSOCIATIVE PROPERTY

Think: Associate, or Group.

Numbers in addition and multiplication can be grouped differently and it does not change the RESULT.

INITIALLY

Initially, children are unsure whether the numbers in an addition question can be regrouped without changing the SUM. For example, the children are unsure if:

$$7 + (3 + 2)$$
 has the same answer (SUM) as $(7 + 3) + 2$

LATER ON

Later on, the children understand that when adding three or more numbers, the numbers can be regrouped without changing the sum. The order of addition does not matter.

Eg.
$$(7 + 3) + 2 = 7 + (3 + 2)$$

While beyond the primary curriculum, this Key Idea leads to ALGEBRAIC THINKING.

Eg.
$$(a + b) + c = a + (b + c)$$