

In Plus Minus, everything revolves around cooperation and calculation. Two players each take on a different role: one adds numbers, the other subtracts them. Together, they try to reach a magical target number on the game board. The grid changes constantly through the operations, and what one player does directly affects the other. This playful math game is not just about plus and minus, but especially about strategic teamwork: planning, discussing, adjusting, trying again. Thanks to its cooperative nature, students learn to anticipate each other's actions and align their own moves accordingly. With different difficulty levels, Plus Minus can be used in various contexts. The game ties in perfectly with math topics, thinking strategies, cooperation, and the development of mathematical language.



# PROMOTES THE FOLLOWING COGNITIVE SKILLS

NUMBER SENSE)

PLANNING

COLLABORATION

COMMUNICATION `

# RULES \_\_\_\_

Plus Minus is played with two students, each taking on a different role: one controls the plus sign (+), the other the minus sign (-). Together, they take turns moving across a grid filled with numbers. Their goal: adjust the number on the square they land on so that it matches the target number. For example: if you are on a 3 and the target number is 7, the plus player must add 4. But be careful: as soon as one player changes a square, that action counts towards the total, so both players must coordinate carefully. Adding or subtracting too much or too little can ruin your entire strategy.

In the starter levels, there is still some free space on the grid, making it easier to move around. But in the expert levels, the board is completely filled with numbers. The game therefore requires logical reasoning, anticipating each other's moves, and constant communication.



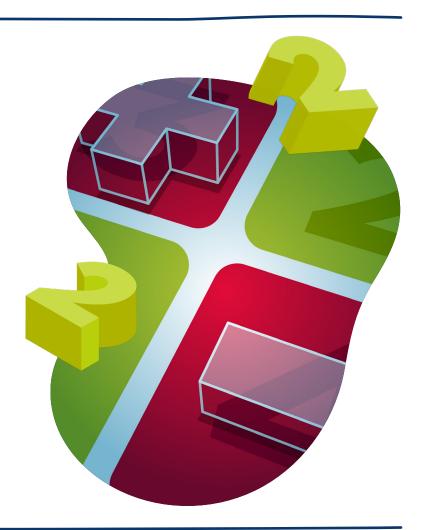
## USE IN THE CLASSROOM

You can use Plus Minus in various ways in your class; here are some examples for inspiration:

Math duo time: Have students play the game in pairs during a math circuit or learning centers. By working together to reach the correct target number, they practice addition and subtraction in a playful way. Switching between + and - strengthens their number sense, and the discussion turns math into a true teamwork exercise.

**Strategic reasoning:** Use Plus Minus as an exercise in strategic thinking. Before each move, have students pause and discuss out loud: what is our current total, what effect will your action have, and how can I anticipate that? This method emphasizes planning, verbalizing, and analyzing. Perfect as a quick activity where thinking skills are the focus.

**Target number collectors:** Challenge pairs to collect as many different target numbers as possible within a set time. For each level, they write down the random target number. At the end, have them sort their collection into odd and even numbers. This links the game to number sense, structure, and classification.



# **EDUCATIONAL GOALS** -

By playing Plus Minus, you work towards the following goals:

#### Mathematical concepts

- Number sense: exploring the relationship between numbers, addition, and subtraction towards a target value.
- Calculation strategies: estimating how much to add or subtract to reach a number exactly.
- **Structuring and reasoning:** which operation gets you closest to the goal? Which intermediate step is the smartest?



## **Executive functions & cognitive skills**

- Planning and organizing: thinking ahead about which player should make which move.
- Inhibition: resisting the impulse to make a move without coordinating with your partner first.
- Cognitive flexibility: switching strategies when an action doesn't produce the desired result.

### Social-emotional skills

- Collaboration: closely coordinating actions to achieve a common goal.
- **Communication:** explaining reasoning and listening to each other's suggestions.
- Confidence and resilience: persevering after failed attempts and encouraging one another.

By playing Plus Minus, you work towards achieving the following educational objectives:

WI ET 1.3 - WI ET 1.13 - WI ET 1.28 - LL ET 4 - LL ET 5 - SV ET 3

