

## Pica Ferme Nada

This is a cooperative strategy activity that emphasizes place value. A person starts the activity by thinking of a number with an agreed upon number of digits (the number of digits is based on the age and skill level of the children playing). In fifth grade, we play with decimals to reinforce understanding of the tenths, hundredths, and thousandths places. The person writes that number on a piece of paper, which is put aside until the end of the activity.

Next, the leader, using chart paper or the chalkboard, writes a blank for each digit of the number: for a three-digit number, for example. The object of the activity is for the rest of the players to work together to figure out the number by suggesting other three-digit numbers. Each time a number is suggested, the leader responds with information about whether the numerals in the suggested number are in the “mystery” number and whether they are in the right digit place.

The information is provided in the following format: Pica (P) means the numeral is in the mystery number but is not in the correct place. Ferme (F) means the numeral and place are correct. Nada (N) means the numeral is not in the mystery number at all.

For example, if the mystery number is 386 and someone suggested 365, the leader would write down “365” – F P N.” Then the next person in the circle would suggest a number based on this information. Any child who wants to pass may do so. The activity continues in this fashion until someone is ready to name the number. When naming the number, the child must also explain the thinking that solved the mystery. To help build a cooperative spirit, the rules allow children to ask for strategic thinking help before suggesting a number. Other children may also offer strategic thinking help even if it’s not asked for. However, the guesser is not obliged to ask for or accept such help.

The more challenging way to do this activity is for the leader to write the Pica, Ferme, and Nada symbols with no direct relationship to the placement of the numerals in the suggested number. For example, if the mystery number is 386 and a student suggests 365, the leader might write “N F P.” If another student suggests 357, the leader might write “N F N.” The random placement of the symbols makes the strategic thinking more challenging and fun.

**Pica (P) = the numeral is in the mystery number but is not in the correct place**

## Pica Ferme Nada

Ferme (F) = means the numeral and place are correct

Nada (N) = means the numeral is not in the mystery number at all

### Directions:

- 1) A person starts the activity by thinking of a number (the number of digits is based on the age of the children playing. 5th graders should try it with decimals! The person writes that number on a piece of paper, which is put aside until the end of the activity.
- 2) Next, the leader writes a blank for each digit of the number.
- 3) The object of the activity is for the rest of the players to work together to figure out the number by suggesting other numbers.
- 4) Each time a number is suggested, the leader responds with information about whether the numerals in the suggested number are in the “mystery” number and whether they are in the right digit place.
- 5) For example, if the mystery number is 386 and someone suggested 365, the leader would write down “365” – F P N.” Then the next person in the circle would suggest a number based on this information.