

Pico, Fermi, Bagels

Why

To practice making deductions by the process of elimination and to reinforce the concept of place value

How

- The goal is to guess the leader's secret three-digit number.
- The digits in the secret number must be all different; that is, 121, 442, and 777 are not allowed.
- The leader will give clue responses to each guess as follows:
 - BAGEL** means **none** of the digits is correct
 - PICO** means **one** of the digits is correct, but it is in the wrong place
 - FERMI** means **one** of the digits is correct and in the correct place
- This sample game will illustrate how the clues are given.
(The secret number is 427.)

| Guess | Response | Comments |
|-------|-------------------|---|
| 109 | Bagels | 1, 0, and 9 are eliminated from all places |
| 123 | Fermi | Only one digit is correct and in the correct place |
| 145 | Pico | One of the digits is correct but in the wrong place |
| 265 | Pico | Same |
| 353 | Bagels | 3 and 5 are now eliminated from all the places |
| 426 | Fermi Fermi | Two numbers are correct and in the correct spot |
| 427 | Fermi Fermi Fermi | All correct!! |