

# Math game -Recognizing Numbers-



#### **Educational Goals**

- Highlight the playful potential of mathematics
- Situate natural numbers in a grid
- Work on the place value concept

### **Key Features of the Targeted Competency**

- To mobilize mathematical concepts and processes appropriate to the situation (C2)
- ❖ To apply mathematical processes appropriate to the situation (C2)

### **Concept Used**

Natural numbers

#### **Materials**

- Cards with numbers between 0 and 1 000 000 (depending on what the teacher wants to work on)
- Statements describing the numbers written on the cards
- Four small pieces of paper on which it is written: right hand, left hand, right foot, left foot
- Adhesive tape

### **Targeted Academic Levels**Kindergarten to Grade 6

#### **Targeted Competency**



### Mathematical Field Concerned



### Suggested Teaching Formula



### Time Required Approximately 20 minutes







### **Suggested Process**



#### **Preparation**

Prepare approximately 20 cards on which numbers are written. In the example below, some numbers have been repeated. Also prepare statements that will allow the students to find the numbers in the grid (see Appendix 1), print them and cut them out. Prepare 4 cards per team on which it is written: left foot, right foot, left hand, right hand (see Appendix 1). This game is ideally played as an activity, independently.

Note: The example below presents numbers between 0 and 100. To adapt it for 2<sup>nd</sup> and 3<sup>rd</sup> cycles, it is possible to place greater numbers and change the statements in Appendix 1. Plus, some numbers have been repeated in the grid, but it is not essential to do that.

#### **Step 1: Introduction**

Place the students in teams of 5. Distribute the statements and cards that were prepared. Fix the cards to the ground using adhesive tape, forming 4 columns of 5 cards. If needed, laminate the cards to reuse them.

For example, the cards' layout could look like this (this example corresponds to the statements in Appendix 1):

7	97	25	55
48	74	89	19
92	23	68	46
80	12	71	32
97	55	25	7

Step 2: The game (15 minutes)

Choose a player in the team who will be responsible to draw the numbers. We will name this player "game master". The other four players play the game. Once a game is over, the game master changes. The game master picks a student who begins. He draws a body part (right hand, left hand, right foot or left foot) and a statement. The chosen student must find the number described by the statement among the cards on the ground and place the right body part on it. The game master places the drawn pieces of paper back in the game. Then, it is the second player's turn, the third player's turn and the fourth player's turn. Once the first turn is over, the second one begins. If the body part that is named is already placed on the ground, the student must change its place. If it is a new body part, the student must place it on the number described while keeping his other body part where it is.

If a student falls or is not able to place a body part on the ground because he cannot reach, he is eliminated. The last player wins the game.

### **Variants**

- → This game can be adapted by creating cards with fractions, decimal numbers or representations of numbers with unit cubes. It is also possible to draw operations and that the student places his "body part" on the result of the requested operation.
- → For first grade, the game master can simply name a number and a body part. The player must then place his body part on the number named by the game master.
- → It is also possible to transform this game into a Bingo game. To do that, we have to create different cards with the numbers placed in different places. The teacher reads the statements and the students must find the numbers that these statements describe on their card.
- → This game can also be used during a "catch-up" period with two or three students in its original form. The teacher can also omit to name the body parts and simply ask the students to find the numbers described by the statements.

## Appendix 1

The number made by the sum of 3 units and 4 units	The number made of a ten and 2 units	The number that has one less unit than 20
The number smaller than 24 but greater than 22	The number in this grid that has 5 units, but that does not have 5 tens	The number in this grid that is greater than 30 and smaller than 40
The number that has 4 less units than 50	The number between 46 and 55	The number in this grid that has the same digit in the tens position and the units

Answer: 48

Answer: 46

position

Answer: 55

The number that is made of 6 tens and 8 units	The smallest number in the grid which digit in the tens position is 7	The number that has 4 more units than 70	
Answer: 68	Answer: 71	Answer: 74	
The number that has 2 less tens than 100	The number between 90 and 88	The only even number that has 9 tens in this grid	
Answer: 80	Answer: 89	Answer: 92	
The number in this grid that is closest to 100	The highest number in the game digit in the temposition is 5		
The number that has 2 more units than the	The number that has 0 tens	LEFT HAND RIGHT HAND	
number 23  Answer: 25	Answer: 7	LEFT FOOT	