



CHALLENGE

- SUM OF THE AGES -



Educational Goals

- ❖ Highlight the playful potential of mathematics
- ❖ Approximate the result of a series of additions
- ❖ Choose an appropriate type of writing depending on the context
- ❖ Collect, describe and organize data (classify or categorize) using tables
- ❖ Represent data with tables or diagrams

Key Features of the Targeted Competencies

- ❖ To decode the elements of the situational problem
- ❖ To modelize the situational problem
- ❖ To apply different strategies in order to elaborate the solution
- ❖ To validate the solution
- ❖ To define the elements of the mathematical situation
- ❖ To mobilize and apply concepts and processes appropriate to the given situation

Concepts Used

- ❖ Arithmetic operations (addition, subtraction, multiplication, division)
- ❖ Collect data and classify it
- ❖ Represent data with tables or diagrams

Materials

- ❖ Explanation Sheet
- ❖ Pencils
- ❖ Paper
- ❖ Calculator
- ❖ List of employees or school's phonebook (optional)

Targeted Academic Levels
Grades 3 to 6

Mathematical Field Concerned



Suggested Teaching Formulas



Time Required
Over 55 minutes



SUGGESTED PROCESS



Step 1: Introduction (7 minutes)

Explain the activity to the students: estimate the sum of the ages of all the people in your school. Invite the students to note the important elements necessary to solve the problem.

Step 2: Discussion (18 minutes)

The whole class together, decide what are the steps to follow to overcome the challenge, then find the tools to achieve it. Divide the task so every student has a role. Before starting the exploration, ask the class their estimation of the answer. Among others, the students can conduct a poll and collect the data by making a table or a diagram. You can encourage them to ask the ages of one class out of two, one per grade, or take an average age for each grade.

Note: You can divide the class into two or three subgroups that execute the project parallelly and compare the final results.

Step 3: Process (variable duration)

Follow the plan formulated during step 2. We suggest that you spread out this activity over several days and that you send the students into groups of two or three when the situation is favourable (for example, when coming back from recess, when they finished a task early or when they have some spare time).

Step 4: Coming back on the activity (20 minutes)

If the class was divided into teams, each one presents its steps and its result to the rest of the class.

Together, assess the result: is it realistic, is it bigger or smaller than what the students expected, what were the main difficulties encountered, is the result reliable, etc.