

# Challenge



- From one end to the other -

## **Educational Goals**

- Highlight the playful potential of mathematics
- Estimate and measure an object's dimensions using unconventional units

## Key Features of the Targeted Competency

- To mobilize and apply mathematical concepts and processes appropriate to the given situation
- To apply mathematical processes appropriate to the given situation
- To justify actions or statements by referring to mathematical concepts and processes

## **Concepts Used**

- Measuring with unconventional objects
- Estimation

## **Materials**

- Mittens
- Sheets of paper
- Pencil
- Board

#### **Targeted Academic Level** Kidergarten to Grade 2

### Mathematical Field Concerned



### Suggested Teaching Formulas



**Time Required** Approximately 30 minutes







# **Suggested Process**



### **Step 1: Introduction**

The whole class together, ask the students to estimate the number of mittens they need to go around their body (perimeter). You can suggest a specific pair of mittens since the mittens can have different dimensions.

### **Step 2: Verification**

Place the students in teams of three. With a sheet of paper, build units of measurement based on the mitten's length to experiment with. Make a unit of measurement for each team. Ask one of the students to lie down on the floor, while the two others measure the number of mittens (the unit of measurement) they need to go around their friend.

#### Step 3: Review

Write the answers of each team on the board. Draw the students' attention towards the fact that the result is not always the same. The whole class together, discuss with them the reasons why the result can be different from one team to another (the child's height, the way he was lying on the ground, the measuring technique, etc.).

Make a reminder about the way to measure.

Come back over the estimations. Were their estimations realistic? What ways did they use to make their estimations?