



# PUZZLING CARTOON

## -THE BUILDING-



### Educational Goals

- ❖ Exploit the different senses of addition and subtraction
- ❖ Count from a given number
- ❖ Develop logic
- ❖ Highlight the playful potential of mathematics

### Key Features of the Targeted Competencies

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

### Concepts Used

- ❖ Counting
- ❖ Addition and subtraction

### Materials

- ❖ Video of the puzzle
- ❖ Sheets of paper
- ❖ Marker pens
- ❖ Written copies of the puzzle
- ❖ Tokens (optional)

**Targeted Academic Levels**  
Grades 1 to 4

**Mathematical Field Concerned**



**Suggested Teaching Formula**



**Time Required**  
Approximately 25 minutes



# SUGGESTED PROCESS



## Step 1: Introduction (5 minutes)

Present the video of the puzzle a first time ([www.amazingmaths.ulaval.ca](http://www.amazingmaths.ulaval.ca)).

A written version of the puzzle is available via the Explanation Sheet. If you believe it is necessary, you can project it or distribute copies to your students.

Present the video a second time to allow the students to thoroughly understand the information.

If needed, remind some pieces of information to the students:

- Gabrielle lives 6 floors higher than William.
- William is halfway there when he is on the 5<sup>th</sup> floor.
- Once William is on the 5<sup>th</sup> floor, there are as many floors between his apartment and Gabrielle's apartment.

## Step 2: Finding the solution (15 minutes)

Place the students in teams of 2 to 4 so they can try to find the solution.

If some students encounter difficulties, you can guide them by giving them materials, like tokens. Represent William's home with a token and Gabrielle's with another token. Place one token per floor between William's token and Gabrielle's token. Ask the students to find the 5<sup>th</sup> floor, which is halfway between the two apartments. Then, find on which floor is situated Gabrielle's apartment by counting from this reference point.

## Step 3: Reveal the solution (5 minutes)

Refer to the Explanation Sheet for the puzzle "The Building".