

Puzzling Cartoon

- Logan's Adventure -



Educational Goals

- Develop logic
- Highlight the playful potential of mathematics
- Develop the metacognitive strategies of organization (illustrate, simulate or imitate a situation to understand it better)

Key Features of the Targeted Competency

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

Concepts Used

- Symmetry
- Duration
- Movement

Materials

- ❖ Video of the puzzle
- Sheets of paper
- Pencils
- Written copies of the puzzle (optional)

Targeted Academic Level Grades 5-6

Mathematical Field Concerned



Suggested Teaching Formula



Time RequiredApproximately 25 minutes







Suggested Process



Step 1: Introduction (2 minutes)

Present the video of the puzzle a first time (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.

Step 2: Finding the solution (13 minutes)

Place the students in pairs so they can try to find the solution. You may ask the students to illustrate the situation, so the solution becomes more accessible.

Step 3: Reveal the solution (10 minutes)

To illustrate the solution efficiently, you may ask two students to take place at both ends of a staircase of the school. The student at the bottom must go up the stairs and the one at the top must go down the stairs. Both students must start walking at the same time. There will necessarily be a *moment* when the two children will pass each other.

Refer to the Explanation Sheet for the puzzle "Logan's Adventure".