



PUZZLING CARTOON

- ROCK'N'ROLL BIRTHDAY -



Educational Goals

- ❖ Develop logic
- ❖ Highlight the playful potential of mathematics
- ❖ Work on strategies for information organization (assemble, classify and use diagrams to compare pieces of information)

Key Features of the Targeted Competency

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

Concepts Used

- ❖ Representation using a diagram or a table
- ❖ Compare pieces of information
- ❖ Logic

Materials

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

Targeted Academic Level
Grades 3-4

Suggested Teaching Formula



Mathematical Field Concerned



Time required
Approximately 28 minutes



SUGGESTED PROCESS



Step 1: Introduction (3 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. You may pause on the last image (before the question mark) where all the restrictions can be seen and leave it displayed on the board.

Step 2: Finding the solution (15 minutes)

Students must try to find the solution individually first. There are many ways to solve this puzzle. Some students will draw tables, others will use logic, etc. Bring the students' attention to the fact that there are four persons and four instruments, but that each person has to respect some restrictions. After the first 10 minutes went by, place the students in pairs. They will have to observe the solutions and compare them. Each child will have to explain to his peer what he did to get to this solution.

Step 3: Reveal the solution (10 minutes)

When the solution is being revealed, ask a few students to come to the front of the class (during the previous step, you should have targeted some students who found the solution, but used different methods). Each child explains to the class the process he used to get to the solution. Then, if needed, refer to the Explanation Sheet for the puzzle "The Rock'n'Roll Birthday".