



# Puzzling cartoon

- Bread Slice -



## Educational Goals

- ❖ Develop logic
- ❖ Highlight the playful potential of mathematics
- ❖ Decompose a solid figure into right prisms

## Key Features of the Targeted Competency

- ❖ 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

## Concept Used

- ❖ Decomposing a solid figure (Geometry)

## Materials

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

**Targeted Academic Level**  
Grades 7-11

**Mathematical Field Concerned**



**Suggested Teaching Formula**



**Time Required**  
Approximately 25 minutes



## Suggested Process



### **Step 1: Introduction** (3 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.

### **Step 2: Finding the solution** (17 minutes)

Place the students in pairs so they can try to find the solution. Encourage the students to write down all the elements of information given by the affirmations.

To guide their thought process, draw their attention on what happens during the cut of a knife. You can help them by pointing out to them that they are allowed to move the pieces of bread to succeed. If the shape of the loaf is a problem to them, they can consider it like a rectangular prism.

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

Refer to the Explanation Sheet for the puzzle “Bread Slice”.