



MATHEMAGIC

- ABRACADABRA -



Educational Goals

- ❖ Exploiting the sense of an operation (division)
- ❖ Determine the pertinent information in a situation
- ❖ Develop the ability to find a constant element in a mathematical situation
- ❖ Develop logic

Key Features of the Targeted Competencies

- ❖ To decode the elements that lend themselves to a mathematical treatment
- ❖ To represent the situational problem with a mathematical model
- ❖ To elaborate a mathematical solution
- ❖ To validate the solution
- ❖ To share the information relative to the solution
- ❖ To form conjectures
- ❖ To make demonstrations or proofs

Concepts Used

- ❖ Sense of an arithmetic operation (division)
- ❖ Periodicity (distributing the cards)

Materials

- ❖ Video of the trick
- ❖ 1 deck of cards

Targeted Academic Levels
Grades 7 to 11

Mathematical Field Concerned



Suggested Teaching Formula



Time Required
Approximately 25 minutes



SUGGESTED PROCESS



Step 1: Introduction (5 minutes)

Play the video of the magic trick once (www.amazingmaths.ulaval.ca).

You will find the steps to follow to do this magic trick yourself rather than play the video in the Explanation Sheet for the trick “Abracadabra”.

Step 2: Finding the solution (15 minutes)

Place the students in teams of 2 or 3. Ask the students to recreate the trick while discussing to find the solution. Ask them to focus on the positions of the cards in the pile.

Step 3: Reveal the solution (5 minutes)

Refer to the Explanation Sheet for the trick “Abracadabra”.