## A pattern of triangles

MYP 1-2

## Instructions

1. A child is playing with toothpicks. The sequence of his game is shown below.

2. Explore the pattern created by the child: number of toothpicks vs triangles.
3. Express your findings as a general rule.
4. Write a justification about why your general rule works for any case of the pattern. Use mathematical terminology and write a logical, concise and complete explanation.

## A game about subtraction

MYP 1-2

## Instructions

1. Solve the following subtractions.
$381-183=$
$632-236=$
$732-237=$
2. Explore the operations and answers.
3. Explain your findings using words and a general rule.
4. Justify that your general rule works for any case.
5. Write instructions to explain to your parents how to use your finding as a game. Use mathematical terminology and remember to write a logical, concise and complete explanation.
