Intellectual output 2

Mathematical creativity

4 Creativities Project
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INTRODUCTION

The aim of FCREATIVITIES project is to improve the teachers' abilities to generate a creative education, leading to the creation of students who are able to think, analyze and solve daily problems. With the following six activities we aim to equip the teachers with some easy to implement, fun to organize exercises to be used with **10 to 12 year old students**, focusing on enhancing their motivation, logical thinking and **mathematical creativity**. The very nature of mathematics provides a suitable platform for developing creativity. Mathematical creativity could be defined as the process that results in unusual and insightful solutions to a given problem, irrespective of its level of complexity. Mathematical creativity is observed when one generates a non-standard solution for a problem which may not be solved so easily using the conventional methods.

Title of the activity

Let's do some fun math - I have... You have... Who has...

Description

It is said that creativity sometimes separates us from machines or robots. That is true! Mathematical creativity can be tricky because it is not like traditional creativity. There is likely no formula for creativity so even in mathematics the imagination can take control. The given activity is a quick and simple way to help students see the connectivity between different mathematical operations and their potential to enjoy them.
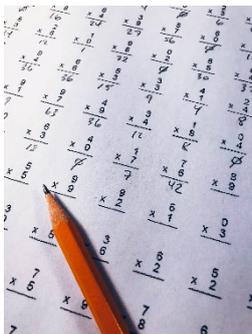
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Aims

1. Increasing interest for mathematics

2. Improving creative skills and imagination

3. Exploring mathematics in a creative and enjoyable way

Steps we must follow

1) Create a set of cards, each one containing one number (could be between 10-100) and some of them containing the sum (the sum of all the given numbers is made).
2) Each child chooses a card (without seeing the number or the sum).
3) Teacher chooses a card and begins to read in front of the class ''I have 86'' then teacher looks in class and says ''You have…'' and randomly choose a child who tells the number he has.
4) To make the game even more challenging, the teacher asks '' Who has the sum of the 2 numbers?'' and lets the child who has the correct card do the calculation and show the card.
   E.g. I have 86…. You have 73…Who has the sum of them? (159)

Materials (if needed)

- Cards with numbers

- Cards with the sum of numbers

Tips

Teachers can adapt the difficulty of the game, according to the mathematical level of the students. The teacher can go from sum to multiplication to make the activity harder. If necessary, smaller numbers will be used to be able to multiply them.