DIGITAL INCLUSION

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LESSON PLANS

"Learn to balance"	
Lesson plan to be implemented in Math class	
Aim	Learn to balance. The goal of this lesson is calming down the fear that is provoked by the term "equation" by familiarizing students with equations in which the unknown is addend.
Students age targeted	**6th Grade**
Estimated time	**45 minutes**
• **Topics covered**	a) understand the representation of the addend with the use of letters. b) acknowledge the function of equation as a balance. c) form the equation of a problem d) solve the equation by applying the operation of adding e) check the solution.
Facility/ Equipment	• Classroom • Projector • White board
Tools/ Materials	• Handout 1 • Handout 2
Development of activities	Due to the fact that equations are unknown to the students, from the beginning, the teacher announces that they are going to get involved in something new but easy to use with great success. **1st activity**, 5 minutes: Naming equations, at the same time, the teacher shows on the overhead projector ,a Math's activity from the first Grade of Primary School: ……….+5=10, 3+….=12 etc. Students laugh when they are asked to give the solution to this exercise but the teacher points out that they have to explain how they reached to the specific solution. This leads to

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	students using the reverse operation of adding, that is subtraction.
	2nd activity,5 minutes: Teacher asks students to put a letter in the blank space of the previous equations, in this way, they name the unknown number. They reach to the conclusion that the solution of this exercise does not change.
	3rd activity,10 minutes: The teacher provides students with problems from previous units of the school book and asks them to name the unknown with a letter.
	For example: "I bought a pair of shoes during sales which I paid 30 Euros because I was discounted 20 Euros from the bill. How much was initially this pair of shoes?"
	4th activity,5 minutes:
	In order for the students to comprehend the two parts of the equations as well as the importance of maintaining the balance between these parts, the teacher uses a scale to recreate the equation.
	5th activity,10 minutes: (implementing new ideas)
	The teacher shows the specific unit from phet Colorado. Students form equations, they solve them and check whether they are true or false. Afterwards, the play the games of the unit. Through the games, they form equations, they solve them and realize the use of the reverse operation to the solution.
	Homework,5 minutes:
	The teacher explains the activities students take as homework which will help them practice equations at home.

HANDOUT 1: title