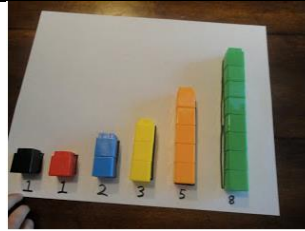


STEAM Recipe

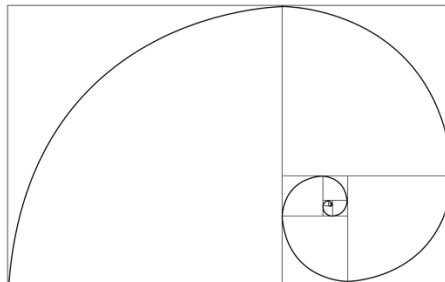
Theme	Fibonacci numbers in a poem
Target Age Group	16+ The Fibonacci numbers are given by the course mathematics (statistics) in secondary school. The students are 16 years old. You can also do some tasks for younger children. It's just the name of the theory that is linked to subject matter of 16 years old students.
Duration of Activity	Minimum 50 minutes
Resources/Materials Needed (exact details required)	<ul style="list-style-type: none"> • Legoblocks • Fibonacci spiral • Pictures of Fibonacci numbers in nature • Example of a poem with the Fibonacci numbers.
STEAM Components	Arts and Maths

WHY	Goals/Objectives/Targets/Aims	<ol style="list-style-type: none"> 1. The students learn the first numbers of the Fibonacci numbers. 2. The students can make a poem. 3. The students find the Fibonacci numbers in nature.
HOW	Method/Activities (i.e step by step instructions for teacher)	<p>Context</p> <p>Fibonacci was an Italian mathematician. He introduced Europe to the sequence of Fibonacci numbers.</p> <p>Fibonacci sequence: 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, ...</p> <p>The fact is that every number after the first two is the sum of the two preceding ones.</p> <p>First step:</p> <p>The children discover the Fibonacci numbers. They get towers of Legoblocks. What is the link between the towers?</p>



Second step:

The children (in groups) have to find the Fibonacci numbers in the **Fibonacci spiral**. This step can also replace the first step. You can also link this to photography.



Third step:

The children are going to **look** for the Fibonacci numbers in **nature**. The teacher gives a few pictures of flowers where they can find the Fibonacci numbers. They have to find them in groups.



Fourth step:

The last step is to make an **artwork** of the Fibonacci numbers. There are a lot of possibilities they can do.

- 1 word
- 1 word
- 2 words
- 3 words



STRATEGIC PARTNERSHIP

AGENTS OF CHANGE IN EDUCATION

		<p>5 words 8 words ...</p> <p style="text-align: center;"> I wrote a poem on a page but then each line grew by the word sum of the previous two until I started to worry at all these words coming with such frequency because, as you can see, it can be easy to run out of space when a poem gets all Fibonacci sequence. </p> <p>Extra links for other artworks with the Fibonacci numbers: https://www.whatdowedoallday.com/fibonacci-art-project/ http://learnersinbloom.blogspot.be/2012/10/fibonacci-sequence-for-preschoolers.html </p>
DID IT WORK	Reflection/Evaluation (where applicable)	<p>You can ask things about the Fibonacci numbers.</p> <p>The teacher can evaluate the poems.</p>