

# **STEAM Recipe**

Theme	Music throughout the years
Target Age Group	
	10-11 years old
Duration of Activity	420 min ton
Passaures / Matarials Nooded / exact details	120 minutes
Resources/Materials Needed (exact details required)	Clothes that may be dirty
requiredy	1 <sup>st</sup> hour:
	A computer corner
	- Computers
	- Instruction paper
	- Student bundle
	A song corner
	- The students instrument
	An instrument corner
	<ul><li>Plastic Bottles</li><li>Toilet rolls</li></ul>
	- Balloons
	- Egg cartons
	- Paper / duct tape
	- Butter package
	- Rice grains
	- Plastic cups
	- Sand - Maize
	- Hot glue?
	- Rope
	- Driftwood
	- Cardboard
	<ul> <li>Other materials that can be recycled</li> </ul>
	2 <sup>nd</sup> hour:
	A soundwave corner
	- Djembe
	A decorating corner
	- Glitter



# AGENTS OF CHANGE IN EDUCATION

	<ul> <li>Confetti</li> <li>Colored paper</li> <li>Crêpe paper</li> <li>Feathers if possible</li> </ul>
	A pollution corner
	<ul><li>Student bundle</li><li>Pen</li><li>calculator</li></ul>
STEAM Components	<ul> <li>Science = how sound waves work;</li> <li>Technology = what is the best way to make an instrument;</li> <li>Engineering = how to construct an instrument;</li> <li>Arts = decorating / designing their instrument;</li> <li>Mathematics = calculating the amount of waste there is in the ocean.</li> </ul>

14/11/	Cools/Objectives/Towarts/Aires	Mosto is proved them just conhece. It has a let we see
WHY	Goals/Objectives/Targets/Aims	Waste is more than just garbage. It has a lot more
		possibilities. We try to teach students to see that.
		<ul> <li>A student acknowledges that the ocean is polluted</li> </ul>
		<ul> <li>A student calculates how much waste there is in the ocean</li> </ul>
		<ul> <li>A student makes an instrument from scratch using only recycled materials</li> </ul>
		- A student explains how sound waves work
		- A student makes an instrument which makes sound
		- A student decorates their instrument in their own
		way
		- A student improvises a song with their own
		homemade instrument
HOW	Method/Activities (i.e step by step	We are going to work in corners:
	instructions for teacher)	1st hour:
	·	- A computer corner
		- A instrument corner
		- A soundwave corner
		2nd hour:
		- A decorating corner
		- A pollution corner
		- A song corner



## AGENTS OF CHANGE IN EDUCATION

Every corner is lasting for 15 min. We then have 10 min left as a buffer for switching and explaining things if needed. All corners have an instruction paper which tells the students what to do.

1st hour

#### 1.Computer corner

**Explanation:** 

The students have to research on a computer what pollution is doing to our environment.

They have to research how many tons of garbage there are in the ocean.

They also have to research at what rate the pollution is being decreased.

#### 2.Instrument corner

Explanation:

The students have to make their own instrument from scratch. There will be a table with the available materials where the students can make their own instrument. They can use any kind of bonding material they wish to use, but they have to be responsible with the amounts they use. There is one main criterium: the instrument has to make a sound.

### 3. Soundwave corner

Explanation:

This corner is made up in 2 parts:

- 1. The first part is teaching the students that sound waves are just waves of air moving. We are going to demonstrate this by using a djembe. The students have to put their hands behind the djembe and feel the movement of the air.
- 2. The second part of this corner is that the students stand in a line and the teacher pushes the first student in that line and the students will then find that sound waves their loudness is affected by the distance it needs to travel.

2nd hour

#### 4. Decorating corner

Explanation:

The students can decorate their instrument in any way they like. There is a table where the materials will be provided.



# AGENTS OF CHANGE IN EDUCATION

		They have to wear clothes that may become dirty. The tables will be protected from any crayons or other decorating materials.  5.Pollution corner Explanation:
		The students have to calculate how much pollution there is in the ocean from the previous corner (computer corner) and how much pollution there will be in the next 5 years.
		6.Song corner Explanation: The purpose of this corner is that they make a piece of music with the instruments they made. This proves that their instrument is useful and proves that you can make other things with recycled materials.
DID IT WORK	Reflection/Evaluation (where applicable)	<ul> <li>For every corner there could be an evaluation: <ul> <li>Computer corner - There is only one right answer to how pollution there is.</li> <li>Instrument corner - If the instrument makes a noise it passes.</li> <li>Soundwave corner - If they can decipher that sound is just moving particles they pass.</li> </ul> </li> </ul>
		<ul> <li>2nd hour:</li> <li>Decorating corner - No specific right answer</li> <li>Pollution corner - If they find the answer to the question they pass</li> <li>Song corner - If they can make a rhythmic song they pass.</li> </ul>