

TITLE: Atmosphere and pollution

GRADE: 5th (5A)

SUBJECT: Science

ERASMUS+KA219 "ENERGY FOR LIFE" STEAM LESSON PLAN
DAMAGES CAUSED BY HUMAN BEING

NAME	Atmosphere and pollution	Grade:5th(5A)	N° of lessons:4	
Summary	<i>The Earth's atmosphere is composed of a mixture of gas called air. The most important gases are nitrogen, oxygen and argo. The 1% is composed of carbon dioxide, methane, water vapor and dust. How can we analyze the components of the air? What are atmospheric pollutants? What are the main sources of atmospheric pollution?</i>			
Contents	<i>Air: essential element for living beings. The gases that make up the air. What steps can you think of to save atmosphere?</i>			
Aims	<p><i>(describe 4/5 goals what is expected to be learned by students)</i></p> <ul style="list-style-type: none"> - Lead students to discover the main features of the AIR, <i>indispensable to life on our planet Earth and to form an ecological conscience</i> - <i>reflecting on the problem of pollution</i> - <i>Know the composition and properties of air</i> - <i>Identify the causes of pollution and learn about the effects on air of our planet</i> - <i>Identify, in real contexts, problematic situations also envisaging solutions alternatives</i> 			
Resources	<p><i>(write down any resource used such us web links, youtube...)</i></p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p><i>video on youtube</i></p>			
Subject skills (to explain what has been worked or relationship with Steam areas				
Science	<i>Recognize and describe the features of the atmosphere</i>			
Technology	<i>Make a multimedia presentation</i>			
Engineering	<i>Perform and give instructions for carrying out targeted actions. The pupils plan the actions to follow (choice of materials, arrangement of objects in space, etc.)</i>			
Art	<i>Graphically represents the observed phenomenon</i>			
Maths	<i>Read and represent relationships and data with diagrams, graphics and tables.</i>			
Assessment:		SUCCEDED	ONGOING	DIDN'T SUCCEED
<i>Students have reached most of the planned goals.</i>		x		
<i>Lessons have been well planned according to the level of students and curriculum.</i>		x		



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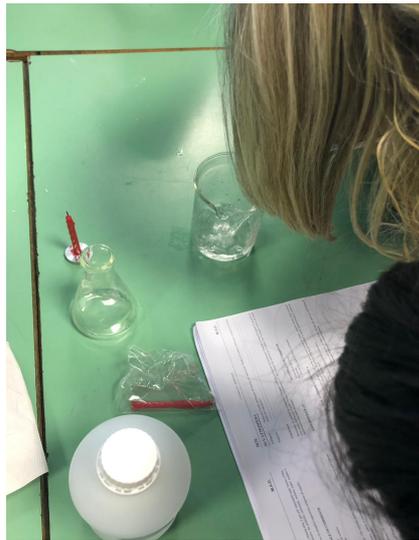
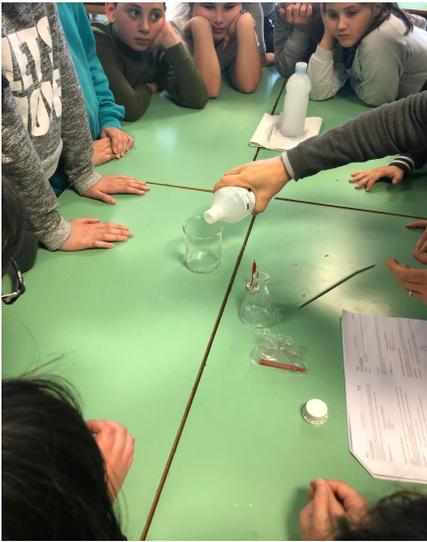
The difficulties encountered have been solved during the process	x		
Stem activities have increased students knowledge and curiosity for the topic.	x		
Outcomes of Stem lesson plans have been understood by most of the students.	x		

(In this part, It will be add photos during the process, code QR or whatever visual resource about students and teacher work)

STARTING-POINT

Scientific experiments: The air contains oxygen. The air contains carbon dioxide. The air contains water vapor







MIDWAY PROCESS

Worksheets and tests

https://drive.google.com/open?id=1xtg_wl8BzIYwkEX4l-arDQtXq7b7K8f4

FINAL RESULT

Air pollution is caused by human activity.

There are two types of air pollutants: solid and liquid particles and the compounds in the gaseous state called chemical pollutants like carbon monoxide, nitrogen oxides. Their mixture is called smog. The main sources of air pollution are: means of transport, industrial processes, forest fires, solid waste landfills.

Final questions

1. are the proportions of pollutants always the same everywhere?
2. if they can change, what are the reasons for this variation?
3. discussing in group

PUPIL MAKE A VIDEO

<https://animoto.com/play/EWIXCLp1ZIWjMK3REGVYtg>

