

The color of the sky

1

Overall aims:

Cognitive

- To know the effect of aerosols in the color of the sky
- To know the causes that produce aerosols and the consequences in the air we breathe

Psychomotor

- To improve visual perception and hand control

2

Vocabulary - keywords

Science: sky; health

Sustainability: aerosols

Art: intensity of colors: dark and light blue

3

Sustainable abilities developed

Systems thinking competency

Anticipatory competency

Strategic competency

4

Pillars of sustainability included

Environmental

- To know the effects of aerosols in the color of the sky

Social

- To know the effects of some aerosols in human health

5

STEAM domains

- Science skills
- Sustainable skills
- Artistic skills



Co-funded by the
Erasmus+ Programme
of the European Union

This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

6 Teaching methodologies/activity outline

1. The children paint a page in dark blue, the teacher tells the children this represents the sky in a sunny day. In groups of four children. 10'
2. Each group put four glasses on the page, they fill the glasses with water to arrive to a height of 2 cm.
3. Tell the children they are going to put milk drops in the glasses and ask them what would they think would happen with the water.
4. Make the children look from the top of the first glass to see the page, and ask them if they see it properly. Then, the children put one drop of milk in the second glass, the teacher asks what would happen and make the children look again. The same with two drops in the third glass, three drops in the fourth glass.
5. Ask the children what would happen with the color of "the sky" if they pour 10 drops of milk.
6. The teacher explains to the children that the color of the sky is more and more light because of some little particles called aerosols.
7. The teacher explains the children that some aerosol sprays come from natural phenomena such as volcanic eruptions, and that some come from car emissions
8. This aerosols we breathe can cause illness sometimes
9. Go outside to see the color of the sky in different days and speak about it with the children

7 Expected learning outcomes

The child will be able to:

- relate the color of the sky with the composition of the atmosphere (presence of aerosols)
- recognize that the composition of the air we breathe can have consequences in our health
- recognize different intensity of colors

8 Assessment

Initial assessment: Ask children if they know why the sky has different colors. Make hypotheses

Formative assessment: Observe if the children can follow the instructions

Summative assessment: Ask the children to draw a clean sky and a sky full of aerosols

Ask questions about: Can the children explain why the sky in different moments has different intensity of colors?

Can the children relate the quality of the air can affect our health?



9	Equipment and materials to be used in learning unit (tools, ingredients etc.) <ul style="list-style-type: none"> • 1. Paper and colored pencils • 2. Glasses, water • 3. Milk, a dropper
10	Kind of setting - lab, kitchen, outdoor etc. <p>1-8 Classroom 9 Outdoor</p>
11	References - source: <p>https://www.globe.gov/documents/348830/55888557/SP02_EGaerosolsactivity_FINAL_06June2018.pdf/74ceb3da-3e8c-43bb-b571-61945e410de6</p>

