

Lesson Scenario

no.4

BASED ON THE STEM
LEARNING CONCEPT AND
METHODS OF NON-FORMAL
EDUCATION

ABOUT

The STEM concept is an educational idea concerning the subjects of Science, Technology, Engineering and Mathematics. Rather than dividing them into separate curriculums, as in the traditional system, the new concept focuses on an interdisciplinary approach. This way promotes finding connections and is more in touch with modern labour market.

The STEM approach is based on activating pupils in the classroom and providing a "hands-on" experience which enables young people to learn based on their own findings. This project based style creates also a chance to develop soft skills and practice cooperation, group work and problem solving abilities. Combining the STEM idea with non-formal learning methods promotes self-awareness about personal development, builds confidence and, above all, fosters motivation through curiosity.

CANDLE EXTINGUISHER

Pupils will try to extinguish a candle using carbon dioxide created as a product of a chemical reaction.

For whom?	5th / 6th Grade
How much time do you need?	45 minutes
What will you learn?	Basic concept of a chemical reaction Properties of gas The idea of starting and stopping a chemical reaction
What soft skills will you develop?	Working in pairs Reading and carrying out instructions Precision and focus on details
What do you need?	1/2 a glass of vinegar per pair 1/2 a table spoon of baking soda per pair Tall drinking glass Candle and matches

INSTRUCTIONS

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01.

Divide the class into pairs

02.

Light the candle

03.

Pour the vinegar into the tall glass

04.

Add baking soda

05.

After the reaction stops tilt the tall glass to pour the gas onto the flame of the candle

06.

Observe the flame being extinguished by the carbon dioxide

07.

Discuss the properties of both reactions

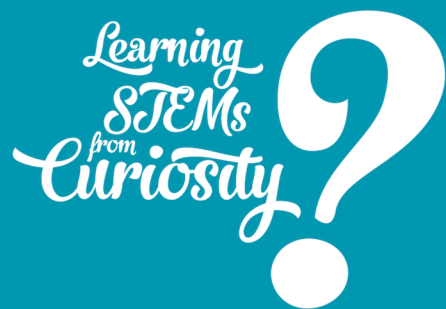
This lesson scenario was prepared by the participants of an Erasmus+ Youth Exchange Project titled Learning STEMs from Curiosity.

Participating Organizations:

Stowarzyszenie Przyjaciół Szkoły Podstawowej nr 1 w Barczewie

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For more information and resources please visit the project website by scanning the QR code below.



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