



HOLOMAKERS PROJECT

**Motivating secondary school students towards STEM careers through
hologram making and innovative virtual image processing practices
with direct links to current research and laboratory practices**

Erasmus+ KA2 2017-1-PL01-KA201-038420

Worksheet for Activity 3

The oxymoronic sentences

Team:



Forming oxymoronic sentences

Search for information online, discuss with your classmates and write down your answers/findings below.

“Oxymoron”: What does it mean?

What is an oxymoronic sentence? Can you give 1-2 examples of an oxymoronic sentence? Write them below.



Holography & oxymoronic sentences

Recall your hologram making experience. Can you come up with an oxymoronic sentence that reflects the idea of holography?

Apply the iterative algorithm in Octave on the chosen sentence to digitally transform it into a diffraction pattern.

Can you now reconstruct the initial image? What will you do?

[Optional] Apply the reconstruction algorithm to decompose the patterns that your classmates have made (available online). Are their sentences indeed oxymoronic?

Can you make a diagram that represents briefly the stages that you went through.

Area for sketches

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Creators

Rene Alimisi, Chrysanthi Papasarantou (EDUMOTIVA)

Contributors

Artur Sobczyk (WUT)

Declaration

This report has been prepared in the context of the HOLOMAKERS project. Where other published and unpublished source materials have been used, these have been acknowledged.

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