

GEOMETRICIAN'S VIEWS



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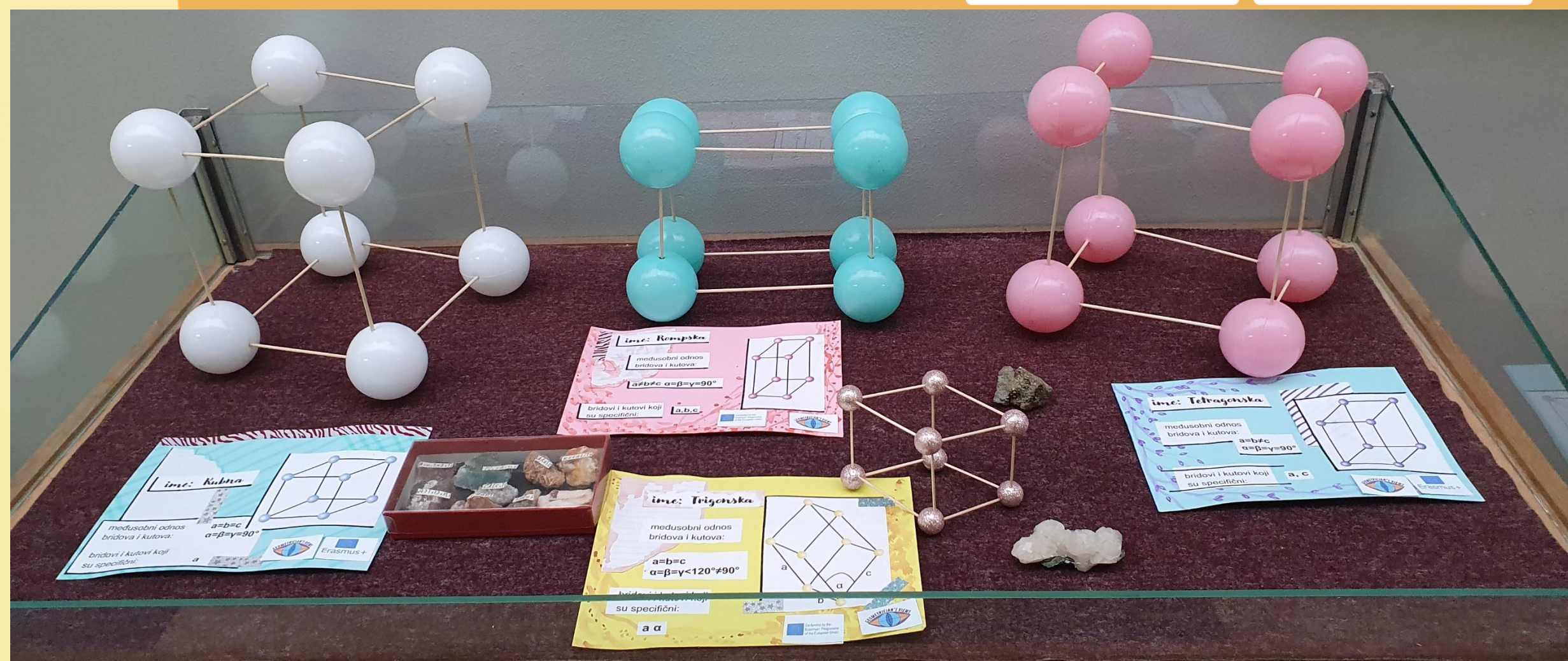
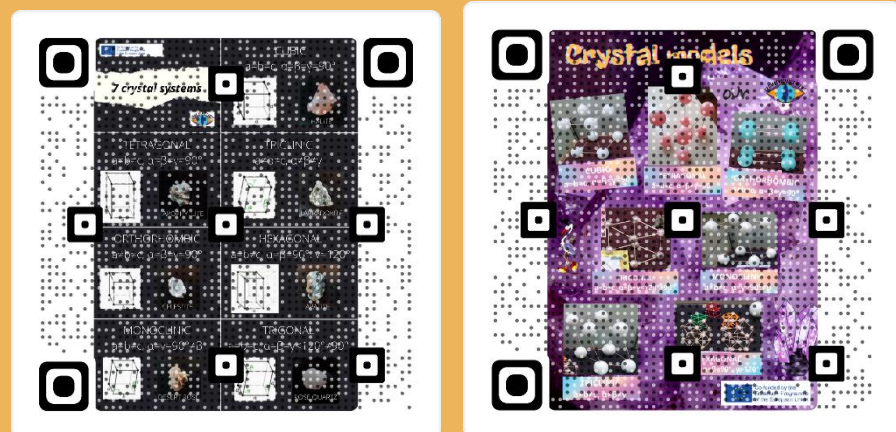
TOPIC: CRYSTAL

RESEARCHER VIEW

Crystal / Snowflake

Students explore crystal shapes and snowflake shapes. Descending to the micro-level, they come to interesting forms of crystal lattices within which, in a regular three-dimensional arrangement of atoms and molecules, they "search" already known mathematical shapes (cube and cuboid), but also discover some new ones (a parallelepiped whose adjacent edges are not mutually perpendicular). Students perform hands-on salt crystallization to create their own beautiful crystals. One of the examples of crystals is a snowflake whose shape has the property of six-fold symmetry. This subject is a combination of art, mathematics and chemistry.

Researcher
Željka Dijanić



ARTISTIC VIEW

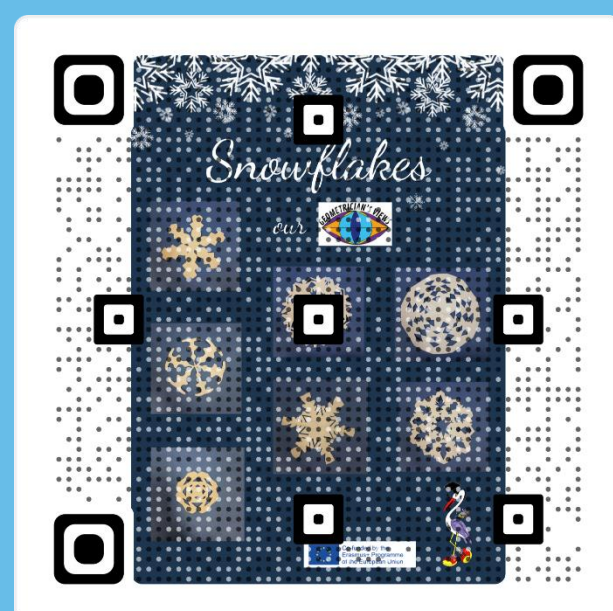
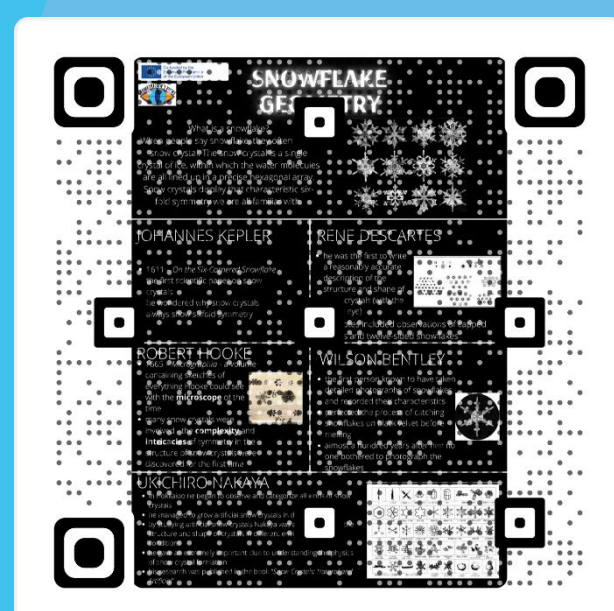
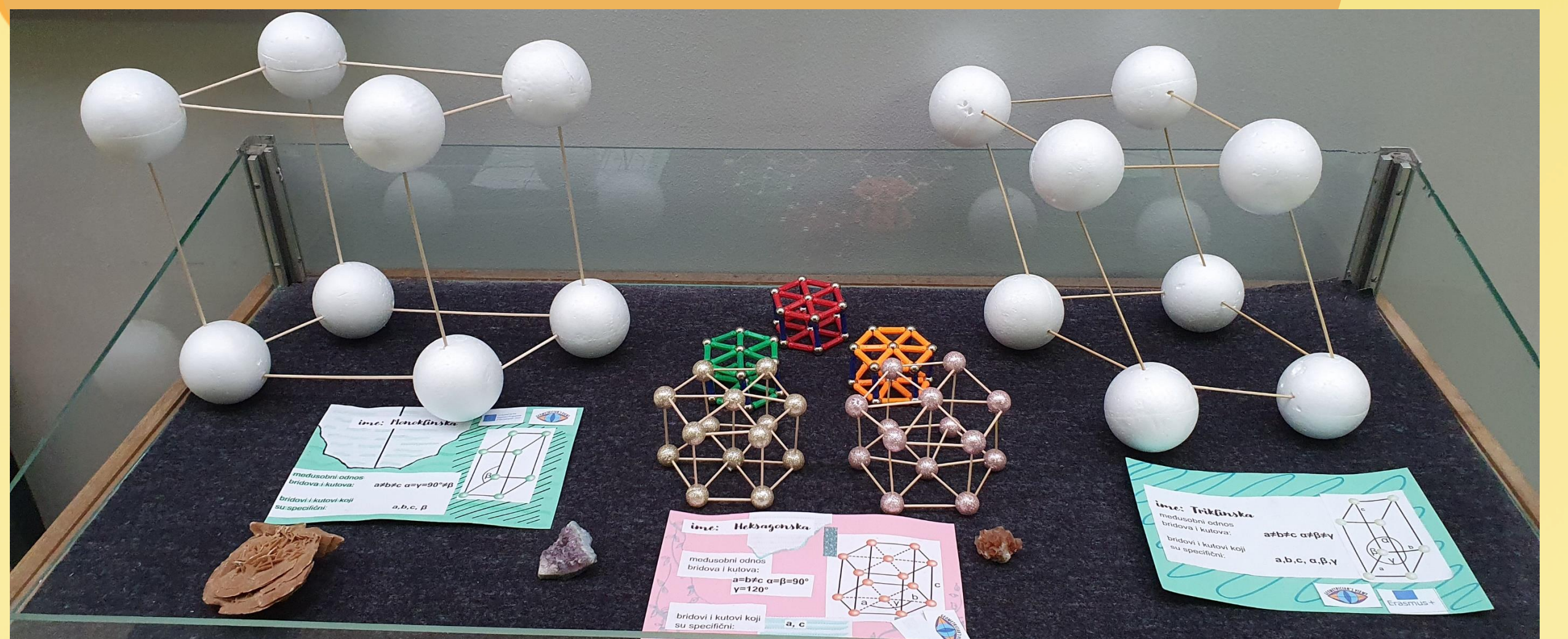
Crystal / Snowflake

For the theme of Crystals, the students chose a snowflake as the most interesting form as a near phenomenon, so they interpreted their experience of a snowflake in a flat display through the medium of collage and paper cut techniques, where they skilfully returned to their childhood, where apparently everyone played in this way. By overlapping and reading the samples, "windows", and by subsequently cutting and dissolving the paper, they obtained a faithful representation of the flatness of the flake. The collage consists of different imaginary forms of snowflakes, and as in nature we always get different shapes by combining different snowflakes, they could not make a mistake in their interpretation here.

In another example: in the photograph of the form of the crystal, which they made through an experiment using salt and thread, on a dark background, they nicely highlighted the growth of the crystal and the free form, again a micro-micro connection of the world from nature.

In the representation of the molecule, the students played using colored styrofoam balls and "connections" where they connected the balls with sticks and thus brought us closer to the crystal molecule in a simple way.

Artist
Ivana Komel



COMMON VIEW



Though we are not aware of that, we meet crystals daily:

- when we pour sugar into our coffee or add salt to our meal
- when we drink cold water or juice with bricks of ice or eat ice cream
- when it is snowing outside or it is just freezing ...

But all of us know that crystals have some kind of a structure and that there are no two exactly the same snowflakes, but each of them has a six-pointed structure.

Also, each and every one of us look at those crystal structures with delight and admiration.

Crystals are living beings in the beginnings of creation.

(Nikola Tesla 1900)

