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Good practices
ARTS_301CD_EN

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Description of the problem / exercise: **Poly-Universe and Suprematism**

A century ago, the Russian constructivist painter Kasimir Malevich formed the creation of the black square on a white background, and other suprematism basic elements, which are: CIRCLE–SQUARE–CROSS (Figure 1). The opposite pair of a square is the cross because if we put the picture fields together, the cross divides the square into four parts, that is, it tries to break it down.

Figure 1

Malevich had the greatest intellectual influence on the work of Saxon, the inventor of the Poly-Universe, and he liked to use these elements in his painting. Of course, he inserted them into his polydimensional imaging system, as shown below, and wrote about it (Figure 2).

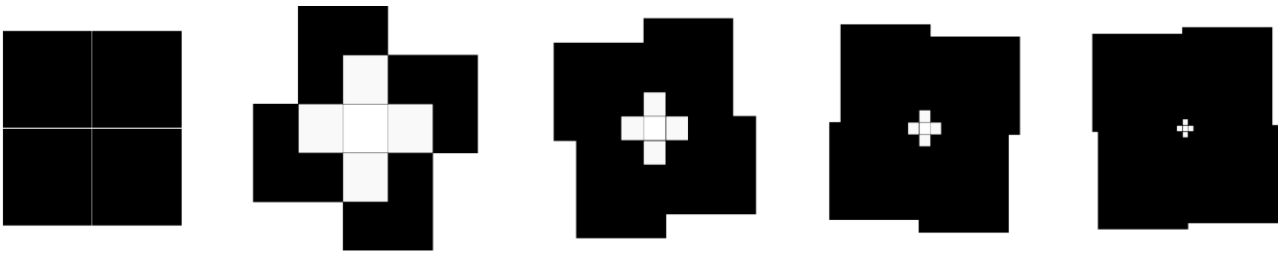

Figure 2:

*'I did my next experiment during the '**supreMADIsm'** (www.mobilemadimuseum.hu) festival organized in 2006 in Moscow. I embedded the white cross, one of Malevich's basic suprematism elements into the other basic suprematism element, the black square, the former trying to deconstruct the latter. The confrontation of these two forms can be found in my earlier works of art, but in the present case transcending the geometric shaping did not take place in terms of some 'Russian spiritualism', but rather pragmatically. Before that we had been able to understand the scientific nature of my works in their fractal character described by the 'dimension shifting'. Now, the main field of interest of mine included dividing the plane surfaces with the help of geometric figures and rearranging Malevich's cross in a poly-dimensional way. During this work I created horizontal and diagonal constructions, poly-dimensional cross-icons, but in this case, as a result of the closed system of the form, there arose finite, only about a dozen of variations for each. Strict*

monochrome, or more unambiguously, the black and white contrasts produce a powerful psychological effect besides the variations of visual logical structures.' (Figure 3)

We now show a work with a horizontal and a diagonal arrangement:

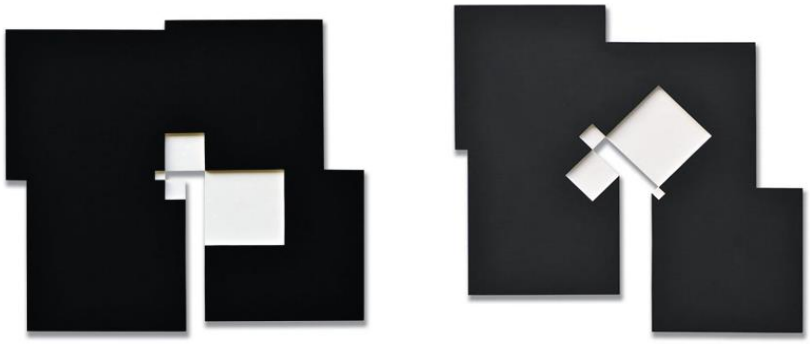

Figure 3

Working in small groups, cut out the basic forms from black and white paper and put together the works above. Then cut out as many basic elements as possible and find all the possible layouts and organize a comparative exhibition of them. How many such works can be made?

We show all the solutions that should have been made (Figure 4):

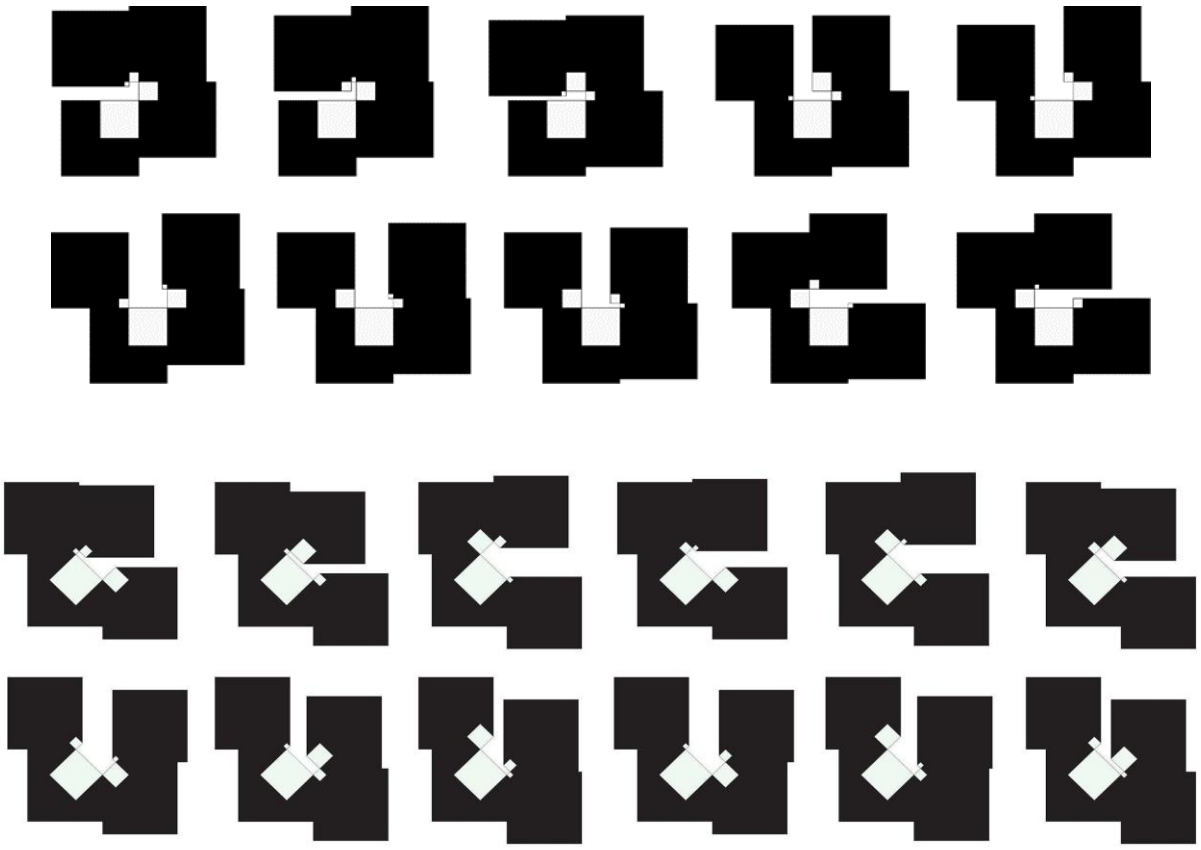

Figure 4

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- Why this exercise is good: It is a unique way to introduce art through geometry and combinatorics, developing both visual memory and algorithmic thinking.
- Level of teacher training: secondary school, teacher training
- School subject(s): Art history, creative arts, combinatorics, constructive play
- Comments: The exercise can be done in teams, individually, at school or as homework at home. It is worth comparing with other solutions and discussing those experiences, what they may have missed or what method they have devised to solve the problem...