

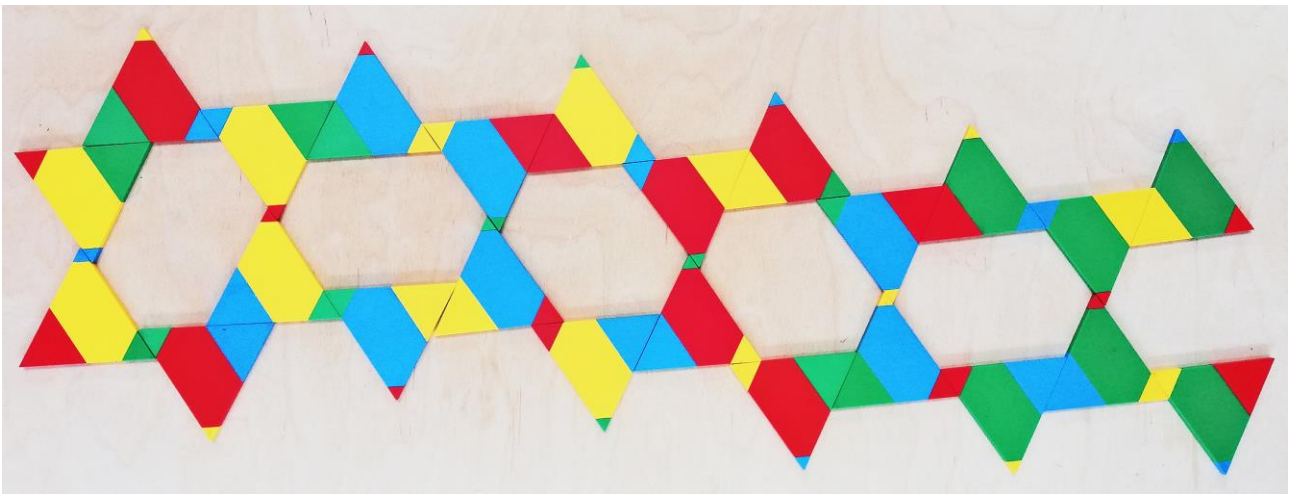
Good practices MATH_115CD_EN

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Description of the problem / exercise: **Stars and hexagons**

Using the elements of the triangle set; make a frieze pattern according to the photo:



Discover the properties of the pattern!

Questions: We can recognize that if we use all the 24 elements of the set, the end is 'open'.

How many sets do we have to use, to get a pattern, where both ends are 'closed'? What kind of symmetry groups can we recognize in this pattern?

- *Why this exercise is good:* It combines mathematics with arts, develops spatial skills, parts-whole perception, pattern making and recognizing.
- *Which level is recommended:* Secondary school students, university students of mathematics, students in mathematics talent care
- *School subject(s):* Mathematics and arts
- *Comments:* Similar tasks can help students of mathematics teacher training recognize the algebraic structures in geometric figures.