## Abstract

This paper is a view into the conception of regularity in mathematics. Possible approaches to the concept of regularity in mathematics are discussed. There is a presentation of the characteristics and relations of regular geometric figures. The conception of regularity on the part of students is explored based on the analysis of the math textbooks. This analysis of textbooks in terms of regularity is also part of the work.

The aim is to identify the types of objects which pupils are able to perceive as relationed by regularity of these objects and whether they rather use other criteria when selecting objects that do not belong to the group. Mostly the frequency and manner of expression of selection on the basis of regularity was monitored when analyzing acquired data, as well as the other most common selection criteria and the relations between the criteria used.

**Keywords:** regularity, conception of regularity, geometry, questionnaire