

I was concerned with the preconceptions of the pupils in the area of geometric optics in my diploma work. I did the research among the pupils of grammar schools and multi-annual secondary schools. The used test contained ten questions. My choice of the questions was based on the researches concerning the misconceptions in optics that have been already done. I also mention the survey of these researches in my diploma work. I compiled the summary of the textbooks that are used at grammar schools and in the lower degrees of secondary schools in the next part. These textbooks are focused on the topics contained in the questions of the test. The survey of the testing results creates main part of my diploma work. I tested before and after the teaching of optics 162 pupils from eight classes of grammar schools and multi-annual secondary schools took part in the investigation. The table with the most frequent misconceptions that were ascertained during the testing is part of this survey. I devoted to the differences in the results between the pupils from grammar schools and multi-annual secondary schools and also the differences in the results of boys and girls.