The thesis discusses the concept of formal reasoning and determination of its level. The content of the thesis was processing of data from the Czech republic, which was collected via Lawson's test of formal reasoning. Psychometric analysis of the questions and the test as a whole was made using the Classical Test Theory and Item Response Theory. Also detailed distractor analysis, including commentary offering a possible reason respondent might have chosen said distractor, was made. Next was determination of the level of formal reasoning of our respondents, who were Czech elementary level students. Lastly, comparison of our results with the results of Czech and foreign studies was made.