

The subject of this diploma thesis is Tangram solving. The target of this thesis is to ascertain on which level is a pre-school child able to solve such tasks; does the child make a visible progress and under what circumstances if the tasks are repeated. This thesis further discusses the problem-solving phenomena of difficulty. The author follows up the theoretical part in which she defines the concept of Tangrams in the context of puzzles.

The experiment is run over three age categories. The author registers the solving process using spreadsheets and solution outputs. On the basis of a quality analysis of selected phenomena she defines those, which affect the level of difficulty of chosen task. This thesis contains tables and two hundred and twenty six attached pages and of photodocumentation. In the end, the author brings in typical child manifestations in the process of problem solving including mistakes and difficulties.

Key words: pre-school child, progress, phenomena of difficulty , level of difficulty, Tangram, puzzle, composition - unit and its parts