

## **Abstract**

Learning exercises containing chemical calculations are necessary for complex understanding of some parts of chemical curriculum. This diploma thesis deals with creation and evaluation of worksheets containing multicomponent learning tasks closely connected to reality for pupils of elementary and high school. The theoretical part consists of the summary of present valid Czech curricular documents, mainly parts focused on chemical calculations and sustainable development. The main part of this thesis is creation of worksheets containing multicomponent learning tasks focused on different topics of chemistry which were chosen according to Framework Education Programmes. Created worksheets were verified and evaluated at high school. Based on evaluations of worksheets action research focused on problems during solving chemical calculations was conducted on elementary school.