The MA thesis focuses on the strategies pupils use when solving mathematical problems involving systems of linear equations in other subjects, namely in physics and chemistry. Drawing on the results of the experiment, the aim of the thesis is to propose ways in which these problems can be used in math lessons.

The first part of the thesis is dedicated to those branches of physics and chemistry in which systems of linear equations are used. In the following part, the experiment itself is described. Divided into two parts, the first part of the experiment focuses on pupils at lower secondary schools, the other on pupils at upper secondary schools. The final part of the thesis is dedicated to suggesting how problems from physics and chemistry can be used in math lessons when introducing and practising systems of linear equations.