

Title: Classroom optics-related activities

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Abstract: The main aim of this bachelor thesis was to create several worksheets with various optics experiments for teaching optics, that would be especially usable at primary schools. These worksheets were created for pupils as well as teachers, and involve group work. The work contains of 12 worksheets on six topics: straightforward propagation of light, image formation in a plane mirror, colors of objects, color folding, refraction of light and light scattering. All worksheets have been checked by experienced teachers and most of them have also been tested in real lessons. Therefore the teachers' versions of worksheets could be supplemented with methodological and technical notes in order to help future users prepare and use them. Part of the thesis is also an overview of selected materials that contain optics experiments and a chapter devoted to two ways mobile phones can be used in optics.

Keywords: optics experiments, worksheets, pupils' group work