## pH and outdoor education-limestone and shale Beroun

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## **Abstract**

The paper is devoted to the description of the preparation of the project for outdoor education. The central theme of the project is pH measurement in the field. The central theme is loosely linked to other topics closely related to pH in the selected area, in particular the occurrence of typical fauna and flora, industrial production and the history of the region. The project presents various methods suitable for pH determination in the field and highlights the pitfalls that can arise when measuring in real natural conditions.

The measurements are localised to the Beroun region, which is situated on shale and limestone bedrock. The limestone quarries of the Čertovy Schody (Devil's Steps) are located near Beroun. The mining and processing of limestone is historically important for this area and affects the local fauna and flora. The aim of the project is to activate pupils in chemistry lessons at secondary school, to develop critical thinking and motor skills in practical activities. The accompanying activities encourage the development of cross-curricular relationships, particularly with geology, biology and geography, and develop pupils' positive attitudes towards the area in which they live.

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Keywords

pH, outdoor education, cross-curricular relationships