







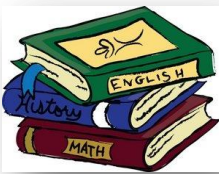




## Summary

# RockCheck Meets AR



	<b>Target age</b>	
	10-19 years	
	<b>Level of difficulty</b>	
	<input type="checkbox"/> Easy <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High	
	<b>Key words:</b>	
	Minerals, rocks, rock identification using AR, rock cycle, use of rocks as raw material	
	<b>Abstract of the activity:</b>	
	<p><i>The AR application is designed to support the already existing RockCheck App. Five of the stones can be viewed and experienced using Augmented Reality: Gneiss, Limestone, Marble, Sandstone, and Obsidian. The Markers can be printed on paper and scanned using any Android Device. A detailed installation guide is attached.</i></p>	
	<b>Learning Goals</b>	
	<ul style="list-style-type: none"> <li>• Students identify and classify different rocks using Augmented Reality</li> <li>• Students get in touch with new, digital educational formats</li> </ul>	

## Summary

	<p><b>Specific Abilities</b> - <i>At the end of the activity the student will be able to:</i></p> <ul style="list-style-type: none"> <li>• Explain difference between minerals and rocks</li> <li>• Get to know basic characteristic for recognizing rocks</li> <li>• Use their smartphones and Augmented Reality together with the RockCheck App for identification of rocks</li> <li>• Relate rocks to different raw materials</li> </ul>
	<p><b>Cross-curricula Links-</b> <i>Examples:</i></p> <ul style="list-style-type: none"> <li>• Ecology/Environment</li> <li>• Geography</li> <li>• Technology</li> <li>• Social Sciences: i.e. human conditions, ethics</li> <li>• Economics/Economy</li> </ul>
	<p><b>Prerequisites</b> - <i>Knowledge and skills necessary for carrying out the activity</i></p> <ul style="list-style-type: none"> <li>• Students should receive support installing the application on their smartphones (teachers should be familiar with the installation guide)</li> </ul>
	<p><b>Time requirement</b> <i>plus eventually other boundary conditions (i.e. Instruments)</i></p> <p><b>Usual time for RockCheck ( 3* 45 min) + additional 20 minutes to get to know the AR App</b></p> <p><b>Instruments (eventually):</b> <i>Android Devices are necessary to use the application.</i></p>
	<p><b>Learning and Teaching Support Materials - What you can find in the toolkit</b></p> <p><i>Examples:</i></p> <ol style="list-style-type: none"> <li>1. Markers (to be printed)</li> <li>2. Installation Guide</li> <li>3. AR Content file</li> <li>4. AR apk file</li> </ol>
	<p><b>Authors - see all authors of RockCheck</b></p> <p><b>AR Application:</b> <i>Daling, Lea; RWTH Aachen University (lea.daling@ima.rwth-aachen.de)</i></p>