

Water I use in Daily Life

A grade 8 – 9 chemistry module on water hardness

Abstract

What kind of water – *hard water* or *soft water* – we use in daily life? One the one hand – the taste of *hard water* is better; it is good for tissues of bones and teeth. On the other hand – it causes scale, which damages household equipment, and form sediment on the walls of tubes, which reduces efficacy of pipes. Is it possible to determine at home whether the water is hard? How we can remove scale? Is it necessary to soften *hard water*? These are problems faced by every family.

Sections included		
1.	Student worksheet	Describes the scenario in more detail and the tasks the students should carry out
2.	Teaching guide	Suggests a teaching approach

Overall Competences: inquiry skills, experimental skills, communicative skills (reading, ability to retrieve the essential from the text, ability to present, discuss), social skills (cooperation skills)

Grade Level: grade 8 – 9

Anticipated time: 2 lessons of 40 minutes

Curriculum content: Technique of separation of mixture – evaporation. Difference between compositions of diverse kind of waters. Soft and hard water. Transient, and transitory water hardness. Properties of hard water. The disadvantages of using hard water. Scale. Techniques to soften hard water. Water-softeners.

Kind of activity: brainstorming, inquiry method, experiment, conversation (interview), work with the text, discussion



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Supporting and coordinating actions on innovative methods in science education: teacher training on inquiry based teaching methods on a large scale in Europe

