

The scenario

Subject	Mechanics of Liquid / Surface Tension
Length	1:47
Main objectives	Analyse the properties of liquids and the liquid surface layer
Detailed objectives	
Structure and description of experiments:	
1. Introduction	Description: The motivation for the experiment will be the investigation of phenomena from nature - the movement of insects on the water surface.
2. Main subject	Description: Investigation of the surface layer of a liquid and the possibility of floating bodies with a greater density than the water on the surface of the liquid.
Part 1	
(0:40), Experiment 1 (0:54), Experiment 2 (1:20),	<p>Tools: Water, glass, paper clips</p> <p>Description: Fill the glass with water up to the top. We take the paper clip with a fork and try to place it on the surface of the liquid. Even if the clip is made of a material that is more dense than water, the clip will stay on the surface of the water.</p> <p>Then we start immersing the paper clips one by one in the liquid and observe that the water does not flow out of the glass. The first drop of water will flow out of the glass only when there are enough staples in the glass.</p> <p>Questions: Why can even bodies with a greater density than the density of water remain on the surface of the liquid? Where is it used in nature?</p> <p>Conclusions: Thanks to the surface tension of the liquid, even some bodies whose density is greater than the density of water can float on the surface of the water.</p>
3. Summary, evaluation and notes	<p>The children carry out simple experiments on their own, in which, for example, they find out how many paper clips fit in a glass full of water or that they can place a paper clip on the surface of the water without it sinking to the bottom.</p> <p>Level: primary school (6th grade, ISCED 2 / 8th grade)</p>