OUTDOOR LESSON PLAN

School	Základná škola Karloveská 61, Bratislava – Elementary School Karloveská 61
Subject	Science
Topic/Theme	Pressure, Pressure force
Timeframe	**1 x 45 minute lesson**
Level	6th to 9th Graders
Activity	The Vinegar rocket
Objectives	- To demonstrate pressure ans pressure force in an engaging way.
Material Media Resources needed	plastic bottle, cork stopper (lid), thread, scissors, paper napkin, 2 dcl vinegar 10g bicarbonate, big jar, spoon
Description/ Step-by-step procedure	1. Find a suitable place outdoors, e.g. sports field or meadow 2. Pour approx. 2 dcl of vinegar into the plastic bottle. 3. Put 1 tablespoon of baking soda in a handkerchief and tie the handkerchief with a long thread to make a package. 4. Thread the baking soda packet into the bottle so it doesn't get soaked in the vinegar and attach it to the cork. 5. Plug the bottle with a cork. 6. Turn the bottle upside down, quickly place it in a large mason jar, making sure it is pointing towards the landing area - away from people. 7. You can repeat the experiment and improve the vinegar rocket so that it flies as high as possible.

Reflection/ Assessment	Pupils were actively involved in the selection and preparation of the experiment. They studied the procedure, principle and explanation of the experiment. They provided all the necessary aids for the implementation of the experiment. To the participants of the excursion, they explained the procedure, assigned tools, demonstrated the implementation of the experiment and, at the end, explained the physical essence of why the "vinegar rocket" flew into the air.
Students´ work examples