

## Teaching volcanoes in primary school

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Our poster will be about teaching volcanoes in primary school by the method Project Based Learning. We will present first a local reality: mud volcanoes in Timis County, Romania. Then we will present Step-by-Step Directions for Making a Volcano for a School Project

Few people had heard of volcanoes in Timis County. And few people know how to reach them or have already started to see them. Not promoted on the tourist map, no signs or paved roads, just stories circulating on the Internet and those who live in the area indications. Banat mud volcanoes, called by locals "Forocici" lies in a valley where nature blends perfectly with history. A few kilometers away, is famous fortification from Cornești where archaeologists working on deciphering the secrets of the largest cities in the Bronze Age. Experts in geology explains that, unlike the acquaintances mud volcanoes in Buzau, in the Banat plain mud is fluid, so that does not form cones, but "buckets" the gases escaping to the surface make water babbling like the basins tub.

When most people think about volcanoes, they think of hot lava and heat coming together in a dynamic firework of eruption. This is not what a mud volcano is. In fact, typically the water around a mud volcano is no more than 1 or 2  $^{\circ}\text{C}$  higher than the surrounding water. Mud volcanoes are caused by the build up and release of methane gas from the sediments. The reason that methane gas is released is due either to faults and fractures created by plate tectonics or to the slow release of gases in shallow areas. This interaction can push the methane hydrates through the mud which exposes them to lower pressures and causes them to turn into gas. When this occurs, there can be a quick release of methane gas which brings mud and rocks up with the methane in an explosion which mimics the lava volcano, but it is not thought to be quite as powerful. At other times, the gas just seeps out slowly from the sediments in bubbles.

Our poster will describe some activities :

1. How to Make a Volcano for Kids Using Mud
2. How to make a "Volcano Experiment" Easy and Fun
3. Background Information for a Volcano Science Project
4. The steps of a project about volcanoes: Preparing the Materials; Constructing the Volcano; Constructing the Volcano; Constructing the Volcano

The last part of our poster will be about ART AT THE MUD VOLCANOES, interdisciplinary approach of the volcanoes(pictures, crafts , writing).