

Protocol – Experimental Activity

School Year 2016/2017

"Efusive and Explosive Volcano"

Volcanoes are holes on our planet's surface connecting it to the interior layers of the Earth. During a volcanic eruption a volcano expels different materials.

Some volcanos are relatively calm, and the lava flows as if it were a river, while others are quite violent and noisy...

Can we reproduce this phenomenon in a lab?

Efusive Volcano

Material:

- Volcano model
- Gobble
- 3 tbs of sodium bicarbonate
- 1 tsp clothes detergent

- 1 tsp of red food colouring
- 1 glass with vinagre

<u>Procedure – Efusive volcano:</u>

- Mix the food colouring with the vinagre in the gobble;
- Place the sodioum bicarbonate and the detergent inside the volcano model;
- Pour the mixture (food colouring and vinegar) into the model;
- Wait for a while and watch the result..

Explosive Volcano

Material:

- Volcano model

- Sugar

- A lighter

- Potassium nitrate

- a cupcake mold

<u>Procedure – Explosive volcano:</u>

- Place ½ pack of sugar in the cupcake mold that was previoulsly attached to the volcano modelcão.
- Add a tsp of potassium nitrater Deitar uma colher de chá de nitrato de potássio.
- Set fire inside the "crater".