

SUBJECT AREAS:

Natural science

ACTIVITY DESCRIPTION:

An experiment to be carried out in the classroom to better explain how volcanic eruptions works.

OBJECTIVES:

- To learn students more about Volcano and its eruption

MATERIALS:

For the Lava
Bottles
Funnel
Washing up liquid (1 tbsp)
Red food coloring
Vinegar (½ cup)
Baking soda (½ cup)
Tray

GRADE/LEVEL:

Upper Elementary School (12-14)

DURATION:

Preparation time: 60 min.

Activity time: 60 min.

PLACE:

Classroom

AUTOR:

Centro per lo Sviluppo Creativo
"Danilo Dolci" - Italy

Volcano

INTRODUCTION:

There are more than 1500 active volcanoes on Earth. Around 50–70 volcanoes erupt every year. There are 82 volcanoes in Europe and 32 of these are in Iceland, one of the UK's closest 'volcanic neighbors'. Most of the volcanoes on Earth are not well-monitored or even monitored at all. Some volcanoes erupt almost continuously (e.g. Etna and Stromboli) but some don't erupt for tens, hundreds or even thousands of years. During this interactive lesson students will see how volcanic eruption looks like.

BACKGROUND:

Teacher can use preparation time to create from cardboard, paper, glue and colors the form of volcano, or this activity can be done in the classroom. As this activity can be very interesting for students it can be done in a small groups where students can mix the solution and provoke the volcanic eruption.

Procedure:

Outline: For this lesson it's necessary to prepare the classroom for small chemical reaction even if it doesn't happen that the 'lava' comes out of the tray.

Instruction:

As teacher you can do experiment in front of the classroom or you can give the instructions to students and monitor the whole process. If you decide to give an opportunity to your students you should split them in small groups in that case each group can do the experiment.

First of all pour the washing up liquid in a bottle and add the red food coloring.

After which make sure the bottle is closed well and shake the solution well.

Once the solution is well mixed pour the vinegar inside.

In other bottle, which is placed inside of "volcano" pour the baking soda. After this you are ready for the eruption, the solution of vinegar, color and washing up liquid should be poured in the bottle with baking soda and the chemical reaction pretending to be lava will begin.

FUN FACTS:

- *There are more than 1500 active volcanoes on Earth. Around 50–70 volcanoes erupt every year. There are 82 volcanoes in Europe and 32 of these are in Iceland*
- *The word “volcano” comes from the Roman name “Vulcan”*
- *Approximately 350 million people live within “danger range” of an active volcano.*
- *Lava from a volcano can reach 1,250°C.*
- *The world’s largest active volcano is Mauna Loa in Hawaii.*

ASSESSMENT:

Teacher can give a task to students to observe and briefly write down what happened. A short essay on how volcanic eruption works.

EVALUATION:

After students did the experiment and they have seen how volcanos eruption looks like students can use the book or internet at home and write an essay about volcanos?