LESSON PLAN (7)

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| **TOPİC:** Trail of Extinct and Active Volcanoes, Earthquakes Across Europe | | | | | TİME: 45 min | |
| LEVEL: 9-10 | | | STUDENT AGE: 14-15 | | | |
| AIMS: | | | LEARNİNG OBJECTIVES: | | | |
| -to teach CLIL lesson  about volcanoes  - to learn the vocabulary  derived from the topic.  -to teach the topic via  chemical materials .  4,5 billion years ago, when the earth was getting colder time by time, the composites which have low density get solid at the surface and they created the lithosphere. Below the lithosphere, while the magma cycling and changing it’s place, it also activated the lithosphere, and because of that epirogenez and tectonic activites occured. Lava flowed from the cracked surface and they made the volcanoes with the help of gas and ashes that flown from there. The rocks that volcanoes created are different from the old ones.  Volcanic eruptions, however, can impact all of the Earth's systems, including the lithosphere itself: Volcanic eruptions create volcanic mountains. A key point is that understanding how and where volcanoes occur helps students understand the dynamic nature of the Earth's geologic processes.  “Why the lavas flowed from the volcanoes, volcanic bombs and it’s ashes’ colors are different?” We are going to make these chemical reactions at the labourtary. | | | -TO KNOW  Feature of volcanoes in the world. The effect of the earthquake volcano. Volcanic chemistry  - TO UNDERSTAND  Active volcano, Atmosphere, Crater, Cryosphere, Dome, Dormant volcano, Extinct volcano, Geosphere, Volcanic rocks Hot spot, Hydrosphere, Lateral blast, Lithospheric plates  Magma, Mantle, Shield volcano, Stratovolcano  Subduction zone, Tephra, Topographic map  Tree rings, Volcano Volcanic avalanche, Windward-  TO BE ABLE TO  Use term-specific language, Describe each process  Classify the kind of volcanoes | | | |
| Teaching aids: ppt presentation, photos of different parts of volcanoes, maps and atlases,  **Videos**  <https://www.youtube.com/watch?v=Dp0Xd1qvgGM>,  <https://www.youtube.com/watch?v=Xznc78EkT0E>,  <https://www.youtube.com/watch?v=qV-Wm4PKyxQ>  **Links:**  **http://sos.noaa.gov/Datasets/dataset.php?id=643**  <http://volcanoes.usgs.gov/>  <http://www.ucl.ac.uk/rdr/publications/irdr-special-reports/iceland>  <http://serc.carleton.edu/NAGTWorkshops/health/case_studies/volcanic_ash.html>  <http://environment.nationalgeographic.com/environment/natural-disasters/volcano-profile/>  <http://www.bbc.co.uk/search?filter=bitesize&q=volcanoes> | | | | | | |
| TIME | STAGE | PROCEDURE | | AIDS | | MODE OF INTERACTION |
| 5 min | Step 1 Warm -up | Ask student if they know what is volcano, where does volcano? Why are the volcano stones different and different color? | | Photos of different volcanoes stones | | Students give examples, they try to recognize photos |
| 2-3 min | Step 2 | Teacher explains: **Windows into the Earth**  (Volcanoes) How to experiment? | | Definition of Terms | | Students try to explain the terms |
| 20 min | Step 3 | Students make experiments with chemical substances. | | Learn the chemistry of volcanic Stones. | | Students try to experiments with Hcl, Fe, NaOH |
| 8 min | Step 4 | Summing up all processes | | Discussion | | Class work |
| 7 min | Step 5 | On line test  <http://www.123facts.com/play-quiz/Rocks-And-Stuff-530.html>  <http://triviabug.com/list-quizzes/science-and-nature/rocks-and-precious-stones/> | | test | | Students’ individual or group work |

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