

<b>TITLE:</b> Into the Inferno
<b>SUBJECT:</b> Earth Sciences and Environment
<b>LEVEL:</b> 1st course, Bachelor
<b>AUTHOR:</b> Ismael Sánchez Jiménez
<b>OBJECTIVE:</b> To identify and explain the different ways in which volcanoes are formed, as well as its relationship with magma composition and plate tectonics
<b>Step 1</b> Brainstorming: How many types of volcanoes do you know? How are they related with magma composition and plate tectonics? Searching some images of known volcanoes around the world on the internet, and trying to classify them according to prior knowledge. Scaffolding: Tapping on prior knowledge. Classifying.
<b>Step 2</b> Remembering of keywords of previous needed knowledge, like “magma”, “magma properties: viscosity, density, silica proportion”, “plate boundaries”, etc. Anticipating: dealing with vocabulary related to the video in Step 3 Scaffolding language: Word Search on vulcanology vocabulary.
<b>Step 3</b> Watching a video. Visualization of the movie “Into the inferno”, from the German filmmaker Werner Herzog Scaffolding the process: Think - Pair - Share. Research. Worksheet 1 After watching the video, each student selects one of the volcanoes presented and starts a little research about it, according to the directions set in worksheet 1. Volcanoes are expected to be chosen of different origins, structure and activity, in order to have a broad representation of all kinds of volcanic activity in the world
<b>Step 4</b> Oral presentation. Exposition of the slide shows prepared by the students.
<b>FINAL TASK</b> Elaborating collaboratively a document summarizing all the concepts learned during this activity. Worksheet 2

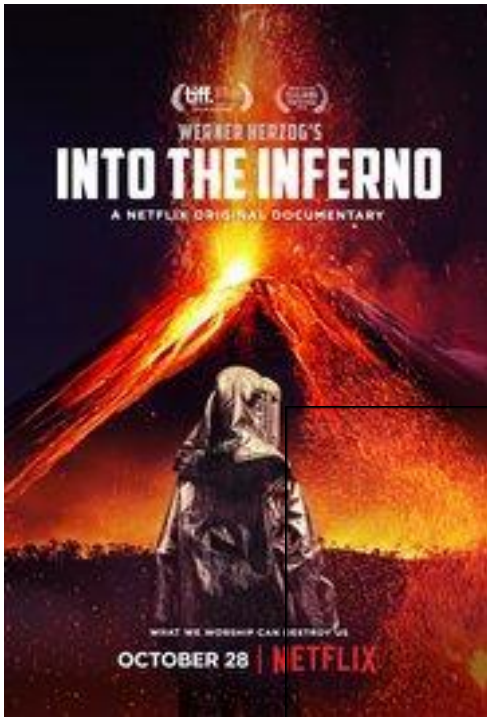
Into the Inferno Official Trailer: <https://www.youtube.com/watch?v=YoSmPkWmG4k>

Resources to do the task:

<https://webgeology.alfaweb.no>

<https://www.volcanodiscovery.com>

## INTO THE INFERNO



*"Obviously there is the scientific side to our journey," says Werner Herzog, narrating this film essay on volcanoes. "But what we are really chasing is the magical side, the demons, the new gods. This is the itinerary we have set for ourselves, no matter how strange things may eventually get."*

Original title: Into the Inferno  
Release: 2016  
Running time: 104 min.  
Country: United Kingdom, Germany, Canada  
Directed by: Werner Herzog  
Cinematography: Peter Zeitlinger

### SYNOPSIS:

An exploration of active volcanoes in Indonesia, Iceland, North Korea and Ethiopia, where Herzog follows volcanologist and co-director Clive Oppenheimer, who hopes to minimize the volcanoes' destructive impact. Herzog's quest? To gain an image of our origins and nature as a species. He finds that the volcano—mysterious, violent, and rapturously beautiful—instructs us that, "there is no single one that is not connected to a belief system."

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This documentary movie shows us different stories about people living under the constant threat of volcanic eruptions, and delights us with vibrant images of magma. During this journey, volcanologist and filmmaker visit different places where this fire mountains are of vital importance for the inhabitants of the area.

1. Do a list of the volcanoes explained in the movie, indicating their geographic characteristics.

*For example, if Teide was one of them, you might explain that Teide is a volcano with 3718 m above sea level (and 7500 above seabed) located at Canary Islands, in Spain. These are volcanic islands originated because of the presence of a hot spot under the Atlantic Ocean, situated around 200 km from the African seashore.*

2. Choose one of the volcanoes that are shown in the film and explain its influence on the local culture and /or religion of the inhabitants from the region.

3. Now is time to start some research about the volcano chosen, in order to study a little about its geologic features. This research must include and develop, at least, the following points:

- Type of volcanic structure.
- Type of volcanic activity.
- Main volcanic products expelled during eruptions.
- Plate tectonics and tectonic context in which the volcano is formed.

You can use drawings and diagrams representing its structure, origin, eruptive phases, etc.

4. With all this information, elaborate a visual presentation with MS PowerPoint, Prezi or any other slide show presentation software. Think about a 5-minute timing approximately.


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**“It is a fire that wants to burst forth, and it could not care less about what we are doing up here. This boiling mass is just monumentally indifferent to scurrying roaches, retarded reptiles and vapid humans alike.”**

**FINAL TASK**

Complete the following table according to the features of the volcanoes explained by your classmates.

*(The answers are written in blue at the table shown)*



Type of volcanic activity					
name	IVE *	% of pyroclastic rocks	Main emissions	Volcanic landform	Example
hawaiian	0-1	0-3	Lava flow	Shield volcano	
strombolian	1-2	40	Lava flow and pyroclastic rocks	Stratovolcano	
vulcanian	2-4	60	Pyroclastic rocks and lava flow	Cinder volcano	
plinian	4-8	99	Pyroclastic flow	caldera	
ultraplinian	5-8	99	Pyroclastic flow	caldera	

+ Viscosity -

\* Index of volcanic explosivity

