

National Geographic, Volcano!

Mafic Rock: Dark, dense, runny when molten, found in ocean crust, found in gentler volcanoes

Felsic Rock: Light in shade, not as dense, gooey when molten, found in continental crust, makes volcanoes explosive

**Asterisks indicate questions that will not be directly answered by the characters or the narrator. You must use your prior knowledge and judgment.

1. **In the opening scenes, is most of the lava mafic or felsic? Judge by the color/shade of the lava.
2. **Is Kilauea made of mafic or felsic rock
3. How deep is the source of Kilauea's magma?
4. Maurice says there are two dangers of the lava lake. What is one of those dangers?
5. Scientists' equipment is easily damaged by the conditions on a volcano. What survives better than equipment?
6. The Longai volcano, in Tanzania, has strange lava. What causes that lava to melt at a very low temperature?
7. **Maurice has a skull that he found when he explored the eruption of El Chichon volcano, in Mexico. Did that eruption appear to be caused by mafic or felsic magma?
8. Where are 90% of the world's volcanoes found?
9. How close can you get to 2000 degree lava before you get burned?

10. According to the video, which side of the Hawaiian islands is growing new land?

11. **According to your previous answer, toward which direction must the ocean crust beneath Hawaii be moving?

12. Why did the researchers' pants split early in their career?

13. **Is the Iceland lava mafic or felsic? (judge by color)

14. **Do the eruptions of Indonesian volcanoes seem to be dominated by mafic or felsic eruptions?

15. The researchers floated on a lake. What was the main ingredient of the lake?

16. According to Maurice, how long would it take for the lake to dissolve a human?

17. In one scene, a partially buried goat is rescued. Was the goat buried by a gentle or a violent volcanic eruption? Explain how you can tell.