



WALT explore volcanoes as a habitat.

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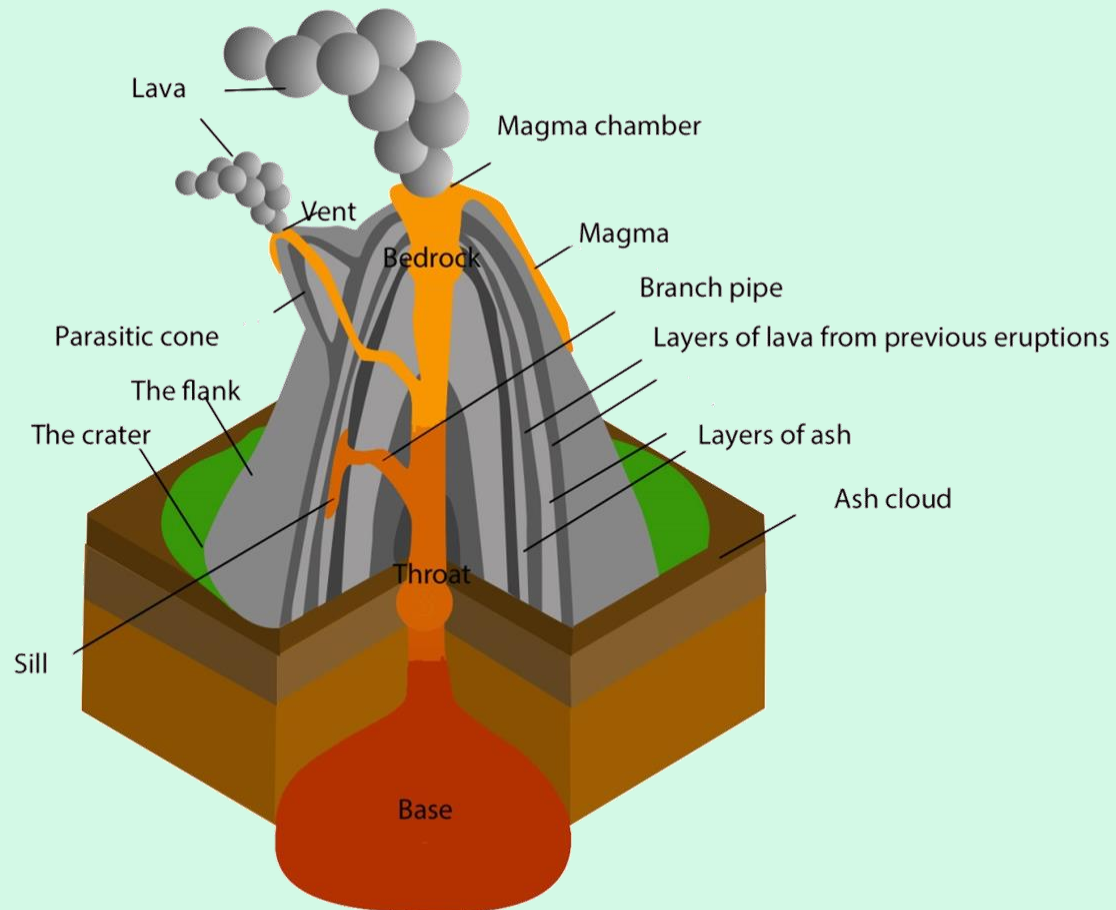
- *Understand that volcanoes produce useful minerals.*
- *Explain geothermal energy.*
- *Understand tourism*
- *Identify benefits and dangers of living near a volcano.*

Can you spot the mistakes?

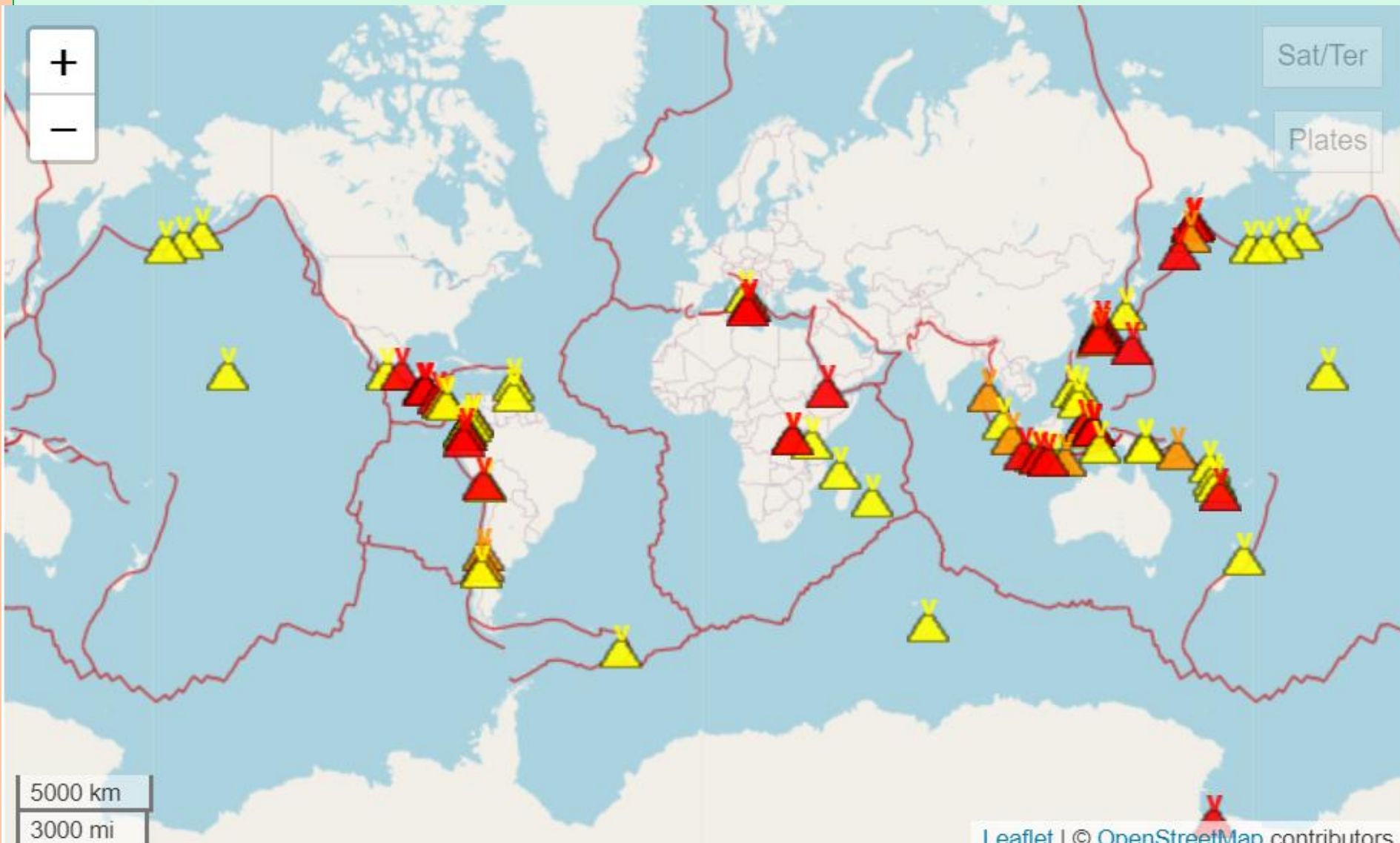
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There are 500 active volcanoes (volcanoes that still erupt) in the world. On average, 25 erupt each year. This can an eruption of lava, ash and noxious (poisonous) gas. (See map)



However, 6 million people still live near them.

What reasons can you think for living near or on a volcano?

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Mount Vesuvius, Italy.

Most volcanoes are safe between eruptions for large amounts of time. The people who live there often think that the eruptions are predictable.

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Diamond Cone, Hawaii.

Fertile soil

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The soil, after thousands of years, is some of the richest on earth for minerals - Mount Etna is a good example, as is the city of Naples - lots of grapes, lemon trees, herbs, flowers and tomatoes grow there, making it easy to find good quality food.



Mount Etna, Italy.



Mount Vesuvius, Naples

Sulphur Mining in Ijen Volcano, Java

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Sulphur miner. Kawah Ijen, Java © Flickr, Matt Paish



Sulphur mining © Flickr; Johannes Zielcke

Sulphur is mined from Volcanoes (this is a dangerous process where people dig out things out of rock).

They use a pick to chip the dried sulphur off the volcano's surface, then take it away.

Sulphur is used in cosmetics, explosives, and agricultural products.

Mining for Diamonds and precious metals.

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Magma has many metals and minerals in it, which are mined - tin, lead, copper, gold, silver and diamonds can be found in volcanic rocks.

Therefore, some people work mining around volcanoes to gain and sell these.

Diamond inside volcanic rock



© Flickr, James St. John's

Diamond mine



Geothermal energy in Iceland

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Geothermal energy is a type of energy generated by the heat that naturally occurs underground near volcanoes. We can see this rising to the surface in hot springs, and geysers.

The underground heat can be used to make electricity. 85% of Iceland's heating and hot water is generated by this.



Hellisheidi Geothermal Plant, Hengill, Iceland ©
Flickr; Chris Beckett



Tourism

Volcanoes attract a lot of Tourists. Hawaii gets 8 million a year, and from that, \$14 billion. Yellowstone park in America is another example!

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© Flickr; Yellowstone National Park

Old Faithful Inn, visitors watching an eruption of Old Faithful Geyser

Don't forget about the disadvantages, though!

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Lava, ash and poisonous gasses are a real danger if they erupt!



Lava flow on Hawaii island © Adam, Flickr



Pyroclastic flows at Mayon Volcano © C.G. Newhall, Wikicommons

Your Activity:

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Today, please write a postcard as if you have been on holiday to a Volcano!

What did you find out?

Did you feel safe or not? Why?

What were the advantages?



Extra: Draw a volcano for the front

Try to sell the Volcano holiday experience as a Travel Agent! Remember to warn your customer about the disadvantages, though.