

Hi everyone!

Read the information below and take a good look at the pictures too.

(Lava is fascinating stuff, isn't it?)

Write 3 to 5 questions (you choose) about the text. Remember to use accurate spelling and punctuation. I will choose the best questions to make a class quiz then send it to you. Remember to think of different types of questions too! Good luck!

If you are not able to access OneNote, ask your grown up to email your questions to me.

## Lava

As soon as lava leaves the vent, it begins to cool and turn into rock. When lava cools, its surface can be smooth or it can break up into rough boulders.

No matter how sticky or runny the lava is while it is molten, eventually it will cool and become solid rock (picture ①).

▼ ① In this picture lava is pouring into the sea and being cooled by the water. Notice the treacly nature of the lava. The surface skin has become solid and turned black. The red molten lava still oozes out from below.





▲ ② Lava tends to be very sticky or very runny. On the left is sticky lava, called aa lava. It is so sticky that it moves very slowly. That gives the surface time to cool. Once cooled, the surface becomes brittle and is broken up as it is carried along by the flowing lava below. Aa lava makes a rough, bouldery type of surface. The picture on the right is runny, or pahoehoe, lava. It only forms a thin skin and is smooth.

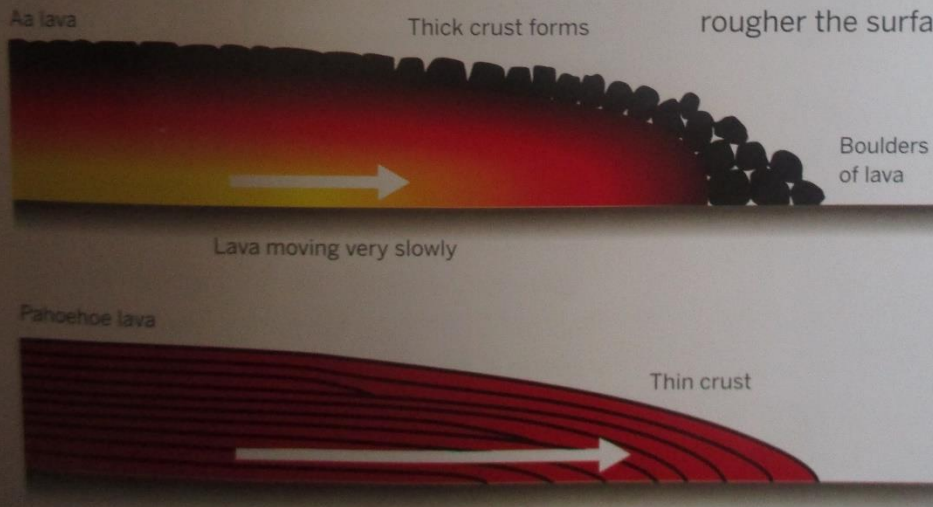
As the lava changes from red to black, it develops a skin (picture ②). Look carefully at the surface of the 'skin' on the lava flow and compare it with the solid rock shown in the picture.

Lava exposed to the air for a long time turns brown (it contains a lot of iron and so has 'rusted'). But otherwise the surface shapes are very similar.

### Names for lava

The Hawaiian islanders in the Pacific Ocean have the world's biggest volcano (Mauna Loa), and the names of volcanic rock are taken from the Hawaiian language (pictures ② and ③). Lava with a smooth surface is called **PAHOEHOE LAVA** (pronounced pahowie-howie). Lava with a rough, broken surface is **AA LAVA** (pronounced aaah, aaah).

In general, the stickier the lava, the rougher the surface it produces.



◀ ③ This diagram shows a side view through the lava. The sticky lava is thick and develops a crust that breaks up as the lava below moves; the more runny lava moves forwards in thin sheets and cools all at the same time.