

# Pre-Exploration

Decide whether the statements are true or false. If you think a statement is false, explain why.

1 All volcanoes are extremely dangerous and deadly.

False. Some volcanoes are not dangerous or deadly. It depends on the type of volcano, the type and contents of the eruption, and the location of the volcano (nearby towns and population size).

2 Volcanoes form only at fault lines.

False. volcanoes do form at fault lines, but they also form over magma hot spots.

3 Some volcanoes are more dangerous than others.

True.

4 All volcanoes look the same and erupt in the same way.

False. There are three different types of volcanoes: stratovolcanoes, cinder cone volcanoes, and shield volcanoes. Eruptions of volcanoes depend on the volcano type, the material being erupted, the gas content, plus many other factors.

5

There are three different types of rocks.

True.

6

Sedimentary rock always becomes metamorphic rock, which always becomes igneous rock, which always becomes sedimentary rock.

False. Each rock type can change to either of the other two types. How rocks change depends on their location and whether they are being heated, under pressure, etc.

7

You can always tell if a mountain is a volcano by looking at it.

False. Some mountains may look like volcanoes, but they are actually just mountains. Some volcanoes do not even look like volcanoes.

8

Gases can make a volcano more explosive.

True.

9

Lava with low viscosity is more dangerous than lava with high viscosity.

False. more viscous lava can cause more damage than less viscous lava. more viscous lava is stickier and picks up more material as it flows.

10

There is no way to know when volcanoes will erupt.

False. It is not possible to predict with absolute certainty, but monitoring volcanic activity (e.g., gases) can help volcanologists forecast eruptions.