Earth has several layers. The hard outer layer is the crust. The crust is the part of Earth that we live and walk on. The inside of Earth is the core. The outer part of the core is a very hot liquid metal.

Between the outer core and the crust is a layer called the mantle. The mantle is molten rock – made liquid (melted) by heat. The molten material is called magma.

There are cracks in Earth’s crust. There are places where the crust is thin. Sometimes the hot magma from the mantle bursts through the crust in these places. When the magma bursts through, it is called lava. Ash, steam, and rocks also escape through the opening. The opening is a volcano. When lava escapes from a volcano, the volcano is erupting.

A volcano gives some hints before it erupts. Steam, gas, and little spurts of lava show that the volcano is active. Some volcanoes do not erupt for many years. These volcanoes are dormant. Some volcanoes will not erupt again. These volcanoes are extinct.

Volcanoes have different shapes. They can be tall like mountains or flat like shields. They have different eruption styles and materials. They can have different locations. They can be on the ground, under the water... even on other planets!

Volcano eruptions can be dangerous. The gases that are released during an eruption can be poisonous. Eruptions may change the way the land looks. Eruptions may destroy trees, homes, and other structures.

A volcano even changes itself when it erupts. It may get bigger as the lava, cinder, and ash are added to its sides. It may have a crater at the top. It may collapse and leave a bowl-shaped hole in the ground.

Geologists are scientists who study rocks and Earth. A scientist who studies volcanoes is a volcanologist. Volcanologists study the different types of volcanoes. They use what they learn to help people predict volcano eruptions.
ANSWER THE QUESTIONS ABOUT VOLCANOES:

1. The layers of Earth, in order from outer to inner, are:
   a. crust, core, mantle
   b. crust, inner core, mantle, outer core
   c. crust, mantle, outer core, inner core
   d. crust, outer core, mantle, inner core

2. Which of the following things could be described as *molten*?
   a. pudding, before it has hardened
   b. ice cream, after it has melted
   c. magma
   d. all of the above

3. Volcanoes erupt in places...
   a. Where Earth’s crust is thin
   b. Where Earth’s crust is cracked
   c. Where they are unexpected
   d. Both a and b

4. When hot liquid comes out of a volcano, this is
   a. an eruption
   b. an explosion
   c. dormant
   d. on another planet

5. A volcano eruption is
   a. dangerous for plants and animals
   b. dangerous only for animals
   c. dangerous only for people
   d. dangerous only for plants

6. Volcano eruptions are dangerous because of
   a. the lava, which is bad for plants.
   b. heat and gas.
   c. bad smell and smoke.
   d. nothing. They are not dangerous.

7. Where can you find volcanoes?
   a. on the land
   b. in the sea
   c. on other planets
   d. all of the above
ANSWERS TO VOLCANOES

1. c
2. d
3. d
4. a
5. a
6. b
7. d