

## 651-6300 (EM-20) Volcano Model

**Introduction:** Volcanoes are a consequence of living on a geologically active planet. In the most basic form, a volcano is any point on the earth's crust where magma from the upper mantle is able to force its way though to the surface. Volcanoes are usually formed at the boundaries of tectonic plates, 'hot spots' caused by deep mantle plumes, and areas where the earth's crust is being actively stretched, such as the East African Rift Valley.



Iceland is a good example of a plate boundary volcano. The Hawaiian Islands are caused by a hot spot in the crust. Kilimanjaro was born as the stretching of the African plate weakened it enough for magma to escape.

Every student has seen or heard of the famous vinegar and baking soda effect. When combined, these two substances produce a rapidly expanding fluid that quickly overflows a container. Our model utilizes the same effect, without the mess.

**Operation:** Your volcano model is shaped like a conical volcano, such as Mount Fuji. To use it, you will need to place a test tube in the 'crater' at the summit. This test tube will hold the reactants. The rim of the test tube will hold it in place.

Fill the test tube about 1/3 of the way with baking soda. Red food coloring can be added for effect. To cause an 'eruption', pour regular white vinegar into the test tube until the fluid spouts out. This 'lava' will run down the sides to be caught by the rim of the model. This eliminates the mess that often occurs with these demonstrations

When you are done, the model can be rinsed off in a sink and used again and again.

## **Warranty and Parts:**

We replace all defective or missing parts free of charge. Additional replacement parts may be ordered toll-free. We accept MasterCard, Visa, checks and School P.O.s. All products warranted to be free from defect for 90 days. Does not apply to accident, misuse or normal wear and tear. Intended for children 13 years of age and up. This item is not a toy. It may contain small parts that can be choking hazards. Adult supervision is required.