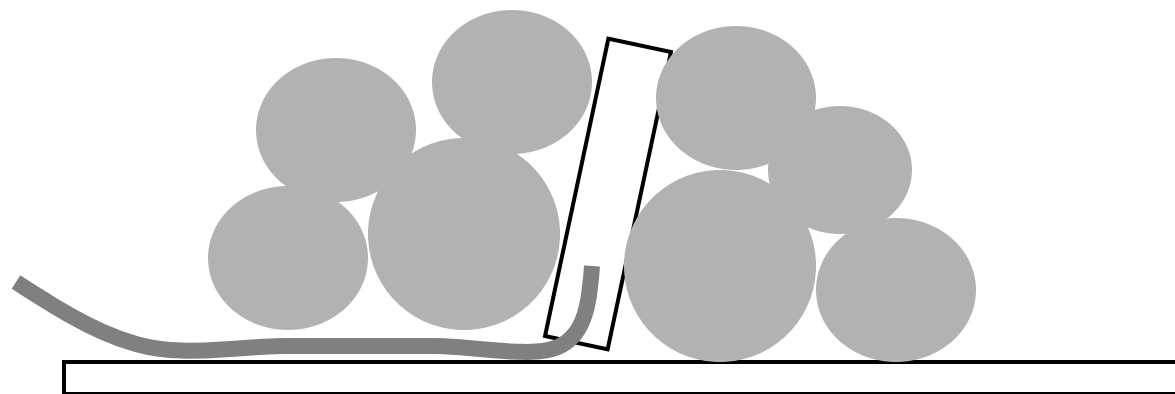


Vulcanian Eruption



Insert rubber tubing ~2 cm into the plastic tube. Secure and seal that end of the plastic tube with duct tape.

Put the plastic tube on the base, making sure the rubber tubing isn't kinked. Lead the rubber tubing away. Fix all in place with duct tape.

Pack pebbles and dirt (or screwed up plastic sheeting) around the "vent" to make it look like a volcano.

Required:

Plastic tube ~2 cm diameter,
~10 cm long, open at
both ends

~40 cm of flexible rubber tubing
with diameter of ~0.5 cm

Base – sturdy tray or piece of
wood

White flour

Duct tape

Teaspoon

Beaker

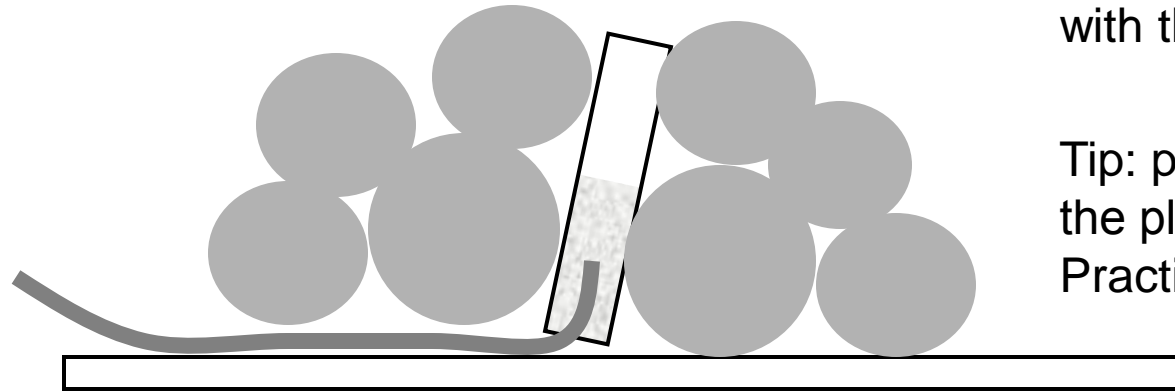
Optional:

Sugar crystals

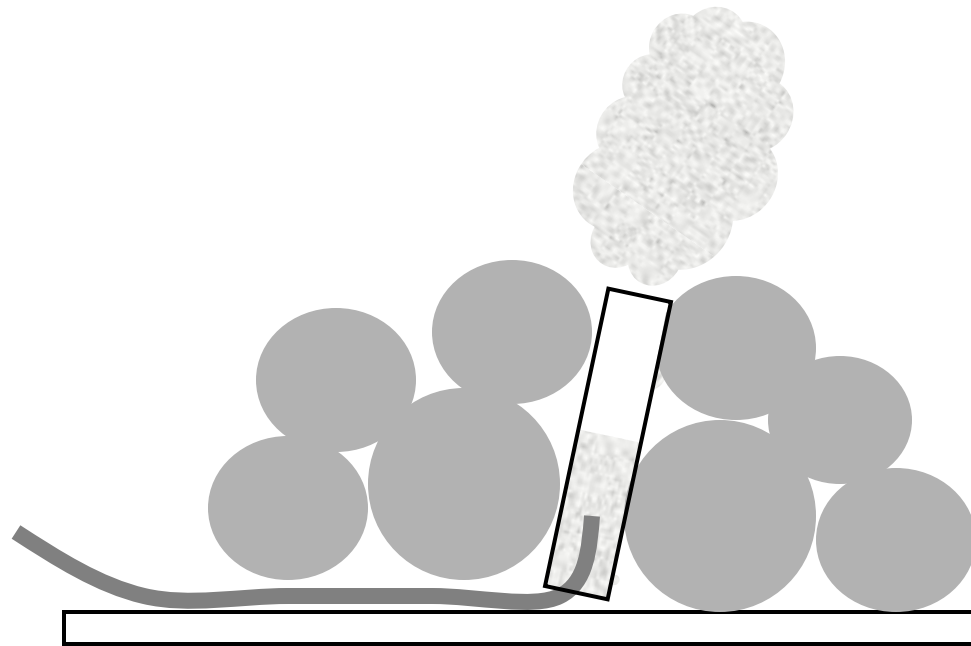
Pebbles, gravel, or dirt; or foil
or plastic sheeting

Put some flour into the beaker and mix with a few sugar crystals. Use the teaspoon to half fill the plastic tube with the flour-sugar crystal mix.

Tip: put too much or too little flour in the plastic tube and it won't work well. Practice to make sure you get a really good "plume".



Note: the sugar crystals will separate from the flour on "eruption". This represents small pieces of rock that are thrown out of the vent along with the ash in a real vulcanian eruption.



Blow sharply into the free end of the rubber tubing. This sends a plume of “ash” into the air.

Tip: the scale of the plume relative to the volcano is about right.

Tip: blow a couple more times and you can make a visible ash cloud that will drift slowly away!

Useful information

Vulcanian eruptions are named after Vulcano, Italy, which erupts this way.

Vulcanian eruptions are small explosions, but they are regular. Santiaguito in Guatemala erupts this way every couple of hours.

The plume is hot gas and ash, with some small pebbles.

Volcanoes like this are often covered with ash – as your model will be if you run the activity several times! If people breathe in ash, it can cause serious lung disease.