

How to Create Your Own Miniature Salt Flats

Rocks that are formed and left behind when water they are dissolved in evaporates are called evaporates. In this experiment you will learn how to create your own salt flats at home.

MATERIALS NEEDED:

- *Glass or ceramic pie dish or casserole (if you must use metal, make sure it's a disposable pan or dish; the salt will wreck metal)
- *4 cups hot water *Spoon *2 cups of salt
- *2 tablespoons baking soda
- *2 tablespoons of soil



EXPERIMENT PROCESS:

- *Slowly stir a half cup of salt, one tablespoon of baking soda, and one tablespoon of dirt into one cup of hot water until the salt dissolves completely. Let it sit for a minute, then stir it again and let it sit for another minute.
- *Pour the mixture into your pie dish and set it somewhere out in the open where it won't be disturbed. Wait for the water to evaporate completely. This may take only a day or so, or it may take several days, depending on conditions. What you've got in the bottom of your pan is like a layer of sedimentary rock that is left after the water that brought the minerals somewhere has evaporated.
- *Repeat the first two steps, but this time just use half a cup of salt, no baking soda or soil. Now you should get a layer that looks cleaner and has larger crystals.
- *Repeat steps one through three. Now you should have your own model salt flats that alternate "dirty" and "clean" strata, or layers, showing clearly how the layers are formed.

Salt flats are formed in much the same way, with water that has a lot of salt and other minerals in it evaporating and leaving the minerals behind as sediments that form layers over time as the process repeats itself.