

AAA/LR03 x3 Batteries not included
Requires 3 x 1.5V AAA/LR03 batteries

6+
16163



FIRE AND ICE VOLCANO™

ACTIVITY GUIDE
WITH INSTRUCTIONS

Eruption Experiments

Experiments can be messy. Be sure to lay down some newspaper in case of excess "lava" flow. With each experiment, note the reaction when the ingredients are mixed. Which combination of ingredients works the best? Experiment with additional eruption formulas by adding more drops of dish soap to see how the "lava" erupts and flows differently.

Experiment 1

(use liquid dish soap, baking soda, vinegar and food coloring)

1. Measure 1 teaspoon of baking soda into the central vent.

2. Measure $1\frac{1}{2}$ tablespoons of vinegar into a small cup.
3. Add 4 drops of dish soap into the vinegar.
4. Add 20 drops of red food coloring and 5 drops of yellow food coloring into the vinegar mixture.
5. Pour the vinegar mixture into the central vent and enjoy the eruption.
6. Pour about half the vinegar mixture into the central vent to begin the eruption.
7. After the initial eruption, pour the remaining vinegar mixture into the central vent to finish the eruption.

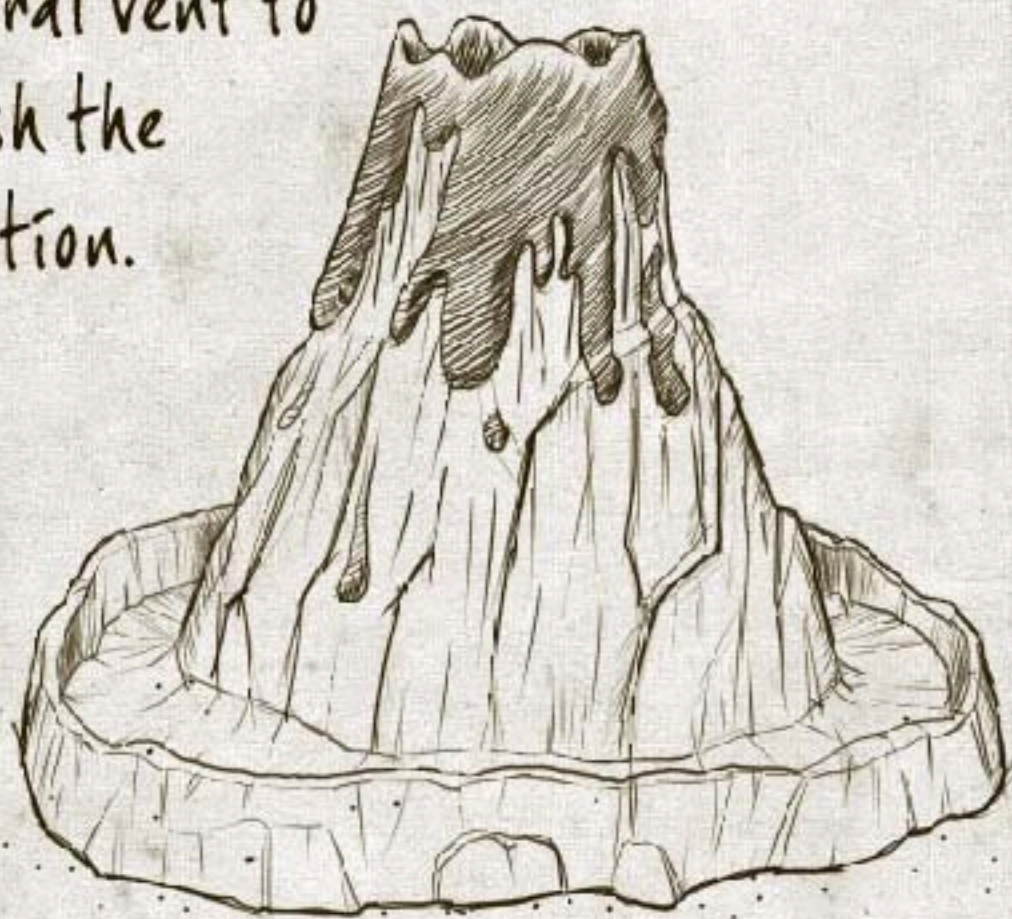
Experiment 2 - Requires ADULT SUPERVISION!

(use liquid dish soap, club soda, food coloring and antacid tablet)

1. Crush 1 antacid tablet into small pieces on a creased piece of paper.
2. Pour the crushed antacid down the crease into the central vent.
3. Measure $2\frac{1}{2}$ tablespoons of club soda into a small cup.
4. Add 6 drops of dish soap into the club soda.
5. Add 20 drops of red food coloring and 5 drops of yellow food coloring into the club soda mixture.

6. Pour about half of the club soda mixture into the central vent to begin the eruption.

7. After the initial eruption, pour the remaining club soda mixture into the central vent to finish the eruption.

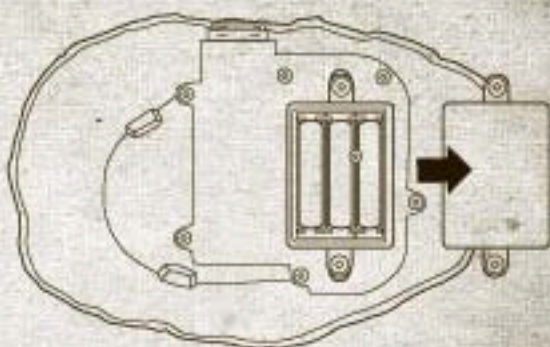


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Battery Installation

Tool required - Small Phillips head screwdriver

1. Using a Phillips head screwdriver, loosen the screw in the battery cover and remove the battery cover as shown.
2. Insert 3 "AAA" batteries (not included) as indicated in the battery compartment.
3. Replace battery cover and tighten screw.



Items needed

To begin your volcanic eruption experiments you will need to provide the following items:

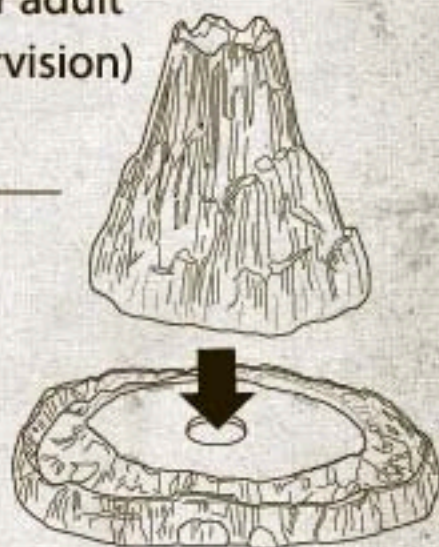
- Liquid dish soap
- Baking soda
- Vinegar
- Food coloring (red and yellow)

Optional ingredients for experiment 2:

- Club soda (a new, unopened bottle will work best)
- Antacid tablets (for use under adult supervision)

Fire (Earth) Volcano Set up

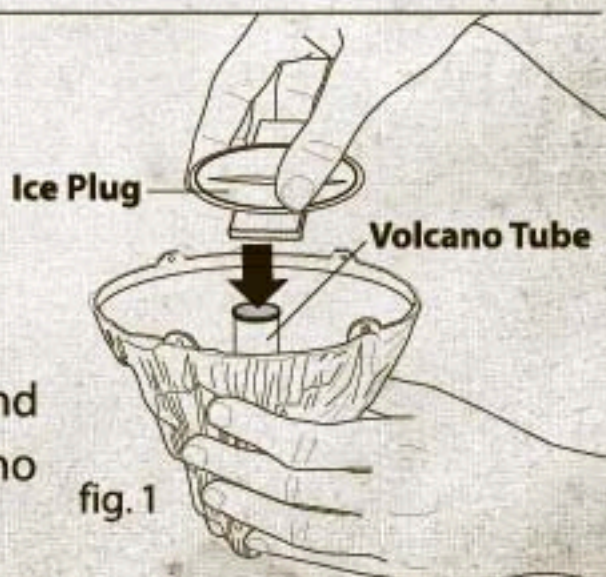
1. Place the Volcano on the Base as shown. Note that the parts fit only one way.
2. You are now ready to experiment – see eruption experiments on reverse side.



Ice Volcano Preparation

The inside of the Volcano can be used to make an ice volcano mold. To freeze your own ice volcano, follow the steps below.

1. Turn the Volcano upside down and place the Ice Plug over the Volcano Tube. See fig. 1



2. Fill with water as close to top edge as shown. See fig.2
3. Carefully place in freezer so that it is level and will not fall over and allow to freeze **overnight**.

NOTE: Before removing the Volcano from the freezer, be sure to have all the ingredients for your eruption experiments ready.



fig.2

4. After ice is completely frozen remove Volcano from freezer and remove Ice Mold Plug.
5. To remove your ice volcano from the plastic mold, let it stand for 5 minutes. Gently tap the mold to release the ice volcano. If needed, hold the Volcano as shown allowing warm water to run into and over the TOP plastic surface ONLY. This will help release the ice volcano to drop out of the mold. See fig. 3
6. Place ice volcano on the base and push the button to turn the light on. See fig.4
7. You are now ready to experiment – see eruption experiments on other side.



fig.3



fig.4

Light ON/OFF

Cleaning Fire (Earth) Volcano

DO NOT wash parts in dishwasher.

Carefully hand rinse the volcano base avoiding excess water around the ON/OFF switch and battery compartment. Towel dry.

After each experiment, rinse the volcano and run water down into the central vent of the volcano to clear away remaining eruption ingredients.

Ice Volcano

To create another eruption, quickly rinse the central vent of the volcano with COLD water to clear away remaining eruption ingredients.



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BATTERY SAFETY INFORMATION

- Non-rechargeable batteries are not to be recharged
- Rechargeable batteries are to be removed from the toy before being charged
- Rechargeable batteries are only to be charged under adult supervision
- Different types of batteries or new and used batteries are not to be mixed
- Batteries are to be inserted with the correct polarity
- Exhausted batteries are to be removed from the toy
- The supply terminals are not to be short-circuited
- Do not mix old and new batteries
- Do not mix alkaline, standard (carbon-zinc) or rechargeable (nickel-cadmium) batteries
- Do not dispose of batteries in fire. Battery may explode or leak.

KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE — DO NOT DISCARD

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