

# ENGINEERING DESIGN PROCESS

## Homemade Volcanic Eruption

### 1. Title of Experiment

### 2. Hypothesis (What will happen to my volcanic eruption as I increase the amounts of baking soda and vinegar?)

### 3. Draw a Picture of your Design (Draw a design of what your volcano will look like.)

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**4. Data Collection/Observations** (Draw a picture of your final volcanic creation.)



**5. Results** (Record the amount of baking soda and vinegar that you put in and then a description of your eruption.)



### 6. Analysis/Answer Questions

What was your best volcanic eruption? How much baking soda and vinegar were in this reaction?

Your experiment showed an acid/base reaction. If baking soda is a good base, then vinegar would be a good \_\_\_\_\_?

Since the baking soda and vinegar reacted to form new chemicals (carbonic acid and sodium acetate), would this be considered a physical or a chemical change?