

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Block: \_\_\_\_\_

## The Scientific Method - Fizzy Lab

In this lab, you will develop and test a hypothesis, analyze data and draw conclusions. You are given guidance at each step of the way. Fill out this form completely - do not skip steps!

### Step 1: Question or Observation

**Question:** What factors will make an alka-seltzer tablet dissolve faster?

Variables to test:

- Tap water
- Warm water
- Cold water
- Salt Water
- Acidic Water (Vinegar)

Of the variables above, which should serve as your **CONTROL** group? \_\_\_\_\_

In this experiment, the independent variable is the type of water (warm, salt..etc).

What is the dependent variable, or the thing you will be measuring? \_\_\_\_\_

### Step 2: Develop a hypothesis

**Finish this statement...**

Alka seltzer will dissolve fastest in \_\_\_\_\_ water, and the slowest in \_\_\_\_\_ water.



### **Step 3: Design and Conduct and Experiment**

**Answer these questions regarding your experimental design:**

A) Will you use a whole tablet or a half a tablet of alka seltzer? \_\_\_\_\_

B) How will you measure how quickly it dissolves? \_\_\_\_\_

C) How much water will you place in your beakers? \_\_\_\_\_

D) Will this amount be the same in all of your tests? \_\_\_\_\_

E) What safety precautions should you take? \_\_\_\_\_

### **Step 4: Create a data table to record your results.**

Type of Water	Dissolve Time

### **Step 5: Draw Conclusions**

**In a complete sentence, answer your experimental question by summarizing the data.**

Factors that make an alka seltzer tablet dissolve faster are

**Scientific Method Vocabulary**

Scientific method	
Hypothesis	
Control	
Independent Variable	
Dependent Variable	