The Scientific Method - Plop Plop Fizz Fizz

Name: _____ **Period:** _____ **Date:**_____

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 (using vinegar)

Of the variables above, **circle** the one that should serve as your **CONTROL** group.

In this experiment, the independent variable is _____
What is the dependent variable, or the thing you will be measuring? _____

Step 2: Develop a claim. Finish this statement…

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

Step 3: Design and Conduct and Experiment

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? _____
Will this amount be the same in all of your tests? _____
D) What safety precautions should you take? _____

Step 4: Create a table to record your data.

Type of water	Dissolve time

Step 5: Interpret your data: (This is your evidence to support the claim)

_____

_____

_____

Step 6: Reasoning – in at least 3 sentences, answer your experimental question by justifying how the evidence supports the claim. **What factors will make an alka-seltzer tablet dissolve faster?**