

Name: \_\_\_\_\_

Period: ① ② ③ ④ ⑤ ⑥

# Scientific Method Homework

**Information:**

Write in your name and fill in your class period number. Read carefully and follow all of the instructions below. Date Due: \_\_\_\_\_



## Identify the Controls and Variables

Ned Flanders wants Homer Simpson to be more neighborly (friendly). He thinks that singing while he does chores in his yard will cause Homer to make friendly, positive comments. For two weeks Ned works in his yard an hour per day - same time each day. On even calendar dates he sings while he works and on odd numbered days he works but keeps quiet. Each day he keeps a record of Homer's remarks. Sure enough, on even dates Homer makes friendly remarks to Ned. On odd dates Homer curses and swears!

- Ned's Control Group: \_\_\_\_\_
- Independent (Manipulated) Variable: \_\_\_\_\_
- Controlled Variables (Constants): \_\_\_\_\_
- Dependent (Responding) Variable: \_\_\_\_\_
- What should Ned Flanders' conclusion be? \_\_\_\_\_  
\_\_\_\_\_
- How could this experiment be improved? \_\_\_\_\_

Barney Gumble is losing money in his root-beer bar. He has an idea that he'll make more money if he mixes the root-beer with water 50/50 once a customer has already had 2 root-beers. To test his hypothesis he keeps track of how much each customer drinks over the course of one week without diluting the root-beers. On the next week he serves the 50/50 root-beer after a customer has had 2 root-beers. A look at his books shows his root-beer bar now making a profit.



- What was the initial observation? \_\_\_\_\_  
\_\_\_\_\_
- Identify the..... Control Group: \_\_\_\_\_
- Independent (Manipulated) Variable: \_\_\_\_\_
- Controlled Variables (Constants): \_\_\_\_\_
- Dependent (Responding) Variable: \_\_\_\_\_
- What should Barney's conclusion be? \_\_\_\_\_