Simpsons Scientific Method Review Opener Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| mhtml:file://\\morpheus\groups\faculty\Science\Honors%20Biology\Lakes%20Honors%20Biology\Identify%20the%20Controls%20and%20Variables.mht!http://www.biologycorner.com/resources/smithers2.gifSmithers thinks that a special juice will increase the productivity of workers. He creates two groups of 50 workers each and assigns each group the same task (in this case, they're supposed to staple a set of papers). Group A is given the special juice to drink while they work. Group B is not given the special juice. After an hour, Smithers counts how many stacks of papers each group has made. Group A made 1,587 stacks, Group B made 2,113 stacks. | **Identify**  Control Group:  Independent Variable (IV):  Dependent Variable (DV):  Write a testable hypothesis for Smithers to use in his experiment. Make sure and use an “if . . .then” format that relates the IV and DV.  Based on his data, what should Smithers' conclusion be?    How could this experiment be improved? |
| mhtml:file://\\morpheus\groups\faculty\Science\Honors%20Biology\Lakes%20Honors%20Biology\Identify%20the%20Controls%20and%20Variables.mht!http://www.biologycorner.com/resources/homer2.gifHomer notices that his shower is covered in a strange green slime. His friend Barney tells him that coconut juice will get rid of the green slime. Homer decides to check this out by spraying half of the shower with coconut juice. He sprays the other half of the shower with water. After 3 days of "treatment" there is no change in the appearance of the green slime on either side of the shower. | **Identify**  Control Group:  Independent Variable (IV):  Dependent Variable (DV):  Three Control Variables:    How could this experiment be improved? |

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| Bart believes that mice exposed to microwaves will become extra strong (maybe mhtml:file://\\morpheus\groups\faculty\Science\Honors%20Biology\Lakes%20Honors%20Biology\Identify%20the%20Controls%20and%20Variables.mht!http://www.biologycorner.com/resources/bart2.gifhe's been reading too much Radioactive Man). He needs your help to design an experiment. He provides you with the following materials: a microwave oven, 20 mice, and a heavy block of wood that must be moved to get to a container of cheese.  Use the back of this paper to write your **hypothesis**, a brief **procedure** and a list of your **control group, IV** and **DV** and **three control variables**. How would you determine whether or not your hypothesis was confirmed? |  |