

Scientific Method and the Watermelon/RubberBand Experiment

Name _____ Number ____ Pd ____

Class period: ____	Team Member Names/Numbers:
1 _____	
2 _____	
3 _____	
4 _____	
5 _____	
6 _____	

1. Identify the problem/Purpose: What do you want to know/explain? Why? How? What? What question is to be solved? This must be about something measurable.

Use observations you have made to write a question that addresses the problem or topic you want to investigate:

2. Form a Hypothesis: What do you think will happen? This is a prediction with a NUMBER result.

Use **If - then** statements: If _____ [*I do this*], then _____ [*this will happen*]

3. Experimental Variables & Controls

What is an independent variable: _____

example _____

What is a dependent variable: _____

example _____

What is a controlled variable or simply a "control": _____

GOAL: Test your hypothesis. Is it accepted (right) or rejected (wrong) ?

a: List the materials you will need: _____

b: What are your controls? _____

c. What is your independent variable? _____

d. What is your dependent? _____

e. What will you be measuring? _____

f. List your procedures: (number them)

g. What safety equipment will you need? _____

4. Results / Data Analysis (if your experimental design is chosen, you'll record the data.

Space for your own data table design:

5. Conclusion / Summary of your experiment.

After your experiment, analyze your data to see if your hypothesis was accepted or rejected. If hypothesis is rejected, give possible reasons for the difference between your hypothesis and the experimental results.

6. Sharing your results & Recommendations:

What do you want to tell others about your results, and if you were to do this experiment over, what would you do differently?
