



Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

**Problems:** Select one of the following problems and design an experiment to test the problem. **Be sure to look back at the bold paragraphs for help.**

- A. Susie can't freeze her sample of Pacific Ocean water.
- B. Ants keep attacking the humming bird feeder in the backyard.

My problem choice: \_\_\_\_\_

Describe what is causing the problem \_\_\_\_\_

\_\_\_\_\_

Hypothesis for my problem \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Experimental variable \_\_\_\_\_

Control variables \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Now you need to 'set-up' the experiment. Be sure to label ALL of the necessary variables for each group.**

<b>Group A Control Group</b>	<b>Group B Experimental Group</b>	<b>Group C Experimental Group</b>

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

**PROBLEM EXAMPLE**

Be sure to look back at the bold paragraphs for help.

**When John washes his grapes using the cheap paper towels, they always rip.**

\*Describe what is causing the problem

**The paper towels are starting to fall apart when they are wet.**

\*Hypothesis for my problem

**I think the expensive paper towels will hold grapes better than the cheap paper towels when the paper towel is wet.**

\*Experimental variable

**Type of paper towel**

\*Control variables

**mass of grapes, volume of water poured on paper towel, time the grapes sit on the wet paper towel,**

**Now you need to 'set-up' the experiment. Be sure to label ALL of the necessary variables for each group.**

<b>Group A Control Group</b>	<b>Group B Experimental Group</b>	<b>Group C Experimental Group</b>
C.V.= I will use 10 g of grapes, 50 ml of water and allow the grapes to sit on the paper towel for 10 seconds.	C.V.= I will use 10 g of grapes, 50 ml of water and allow the grapes to sit on the paper towel for 10 seconds.	C.V.= I will use 10 g of grapes, 50 ml of water and allow the grapes to sit on the paper towel for 10 seconds.
<b>C.V. cheap paper towel</b>	<b>E.V. expensive paper towel</b>	<b>E.V. regular priced paper towel</b>