SCIENCE FAIR PROJECT: PLANNING SHEETS

Name: _____

Project Title: _____

I. TOPIC QUESTION: (What I want to find out)
Due 11/30/11

A. Select a topic question that can be answered by experimentation (not by a demonstration or model) You can go online for project ideas to: www.sciencebuddies.com
B. The topic should be written as a question to be investigated and real-world problems are recommended.
C. **MY TOPIC QUESTION IS:**

_____

_____

II. HYPOTHESIS: (What I think is going to happen) Due 11/30/11

A. The hypothesis states what you think is going to happen when you investigate the topic question (it should also describe why)
B. A good sentence structure would be:
If _____*(I do this)*_____ then ____*(this will happen)*___
because _____.
(Example) If a smaller amount of air pressure is in the basketball, then the number of successful shots will increase because the ball has less potential energy to cause it to bounce off of the rim.
C. **MY HYPOTHESIS IS:**

I think _____

_____

_____

because _____

_____

_____

III. PLANNING: <u>Due 12/15/11</u>

A. A planning table similar to the one below can be used to help create the step-by-step directions for conducting the experiment.

Planning Step	General Plan	Steps To Follow
1. What should be changed? (manipulated or independent variable)	*Example:* *1. The amount of fertilizer in each planting pot.*	*Example:* *1. Add 1, 3, 5 drops of fertilizer to three different planting pots. Label the pots.*
2. What should be kept the same? (Controlled variables)	*Example:* *2. The amount of water.* *The amount of light.* *The amount of soil.* *The same temperature.*	*Example:* *2. Measure and give equal amounts of water to each pot. Use a thermometer to measure temperature for each pot. Use equal amounts of soil and light from the light stand.*
3. How will differences be observed or measured? (responding or dependent variable)	*Example:* *3. The height of the plant. The number of seeds in each pod.*	*Example:* *3. Measure the height of each plant each day and record the data. Count the number of seeds from each plant.*

MY PLAN IS:

Planning Step	General Plan	Steps to Follow
1. What should be changed?		
2. What should be kept the same?		
3. How will differences be observed or measured?		

IV. CONDUCT YOUR EXPERIMENT AT HOME BETWEEN 12/16/11 and 1/31/12

V. LOG BOOK:

A. Writing in a spiral notebook is the most convenient way to keep a log book but any kind of booklet is acceptable

B. The log book should contain:

1. Notes on preparations you made prior to starting the experiment (did you have to make, build or collect something?)
2. Daily progress of the project (exactly what you did in each test or each day as you conducted the experiment)
3. Any drawings that might help explain your work
4. Data that was gathered from the experiment

VI. DATA AND GRAPH: (Organize your data into a table and write it in your log book. You will create a graph on your PowerPoint presentation using this data.) Due 2/10/12

Manipulated Variable (What you changed on purpose)	**Test 1**	**Test 2**	**Test 3**	**Average (if possible)**

VII. RESULT: Claim and Evidence Due 2/10/12

(Explain what happened) I claim that

(Describe your evidence or proof) I claim this because

VIII. CONCLUSION: **Due 2/10/12**

In this experiment I learned

_____

_____

_____

_____

I know this because _____

_____

_____

_____

The hypothesis was _____

_____

_____

_____

ALL POWERPOINT PROJECTS WILL
BE COPIED TO YOUR
TEACHER'S FILE ON: 2/28/12 FOR GRADING