# Scientific Method / Science Fair Project

**Name** _____ **Due Date:** _____

**Problem –** The problem is the question that you are trying to answer.

- ❑ **2 Points** if the problem is written in the form of a testable question.
- ❑ **1 Point** if the problem is **not** written in the form of a question.
- ❑ **0 Points** if the problem is missing.

**Hypothesis –** The hypothesis is your educated guess at the answer to the problem.

- ❑ **2 Points** if the hypothesis is written as a guess or prediction to the answer of the problem.
- ❑ **1 Point** if the hypothesis is not stated as a prediction to the problem.
- ❑ **0 Points** if the hypothesis is missing.

**Materials**—All the materials necessary to perform the experiment.

- ❑ **2 Points** if all the materials are listed, including quantities/units (cm, cups, etc.)
- ❑ **1 Point** if some materials are not listed, and/or if quantities/units are not listed.
- ❑ **0 Points** if the materials are missing.

**Procedure –** The procedure is a step-by-step explanation of how to perform the experiment. To receive all 4 points the procedure must include all of the following:

a. Procedure steps must be numbered.
b. Procedure steps must be in the correct order.
c. Procedure steps must include specific and complete instructions.
d. Procedure steps must be written in complete sentences.

- ❑ **4 Points** if all four requirements have been met.
- ❑ **3 Points** if only three of the requirements have been completed.
- ❑ **2 Points** if only two of the requirements have been completed.
- ❑ **1 Point** if only one of the requirements have been completed.
- ❑ **0 Points** if the procedure is missing.

# Scientific Method / Science Fair Project

**Data –** The data is the information collected from the experiment. It should be in the form of measurements or observations. Data is usually written in some kind of data table. When a data table is not applicable, photographs or written observations can function as the data.

❑ **2 Points** if the data is well organized, such as in a data table, chart, tally marks, photographs, or detailed written observations.

❑ **1 Point** if the data is not well organized.

❑ **0 Points** if the data is missing.

**Results –** The results are the part of the experiment where you analyze the data. This is shown as a graph. (A graphic display may be used if a graph cannot.)

❑ **2 Points** if the data is correctly displayed and the correct graph type (bar, line, pie) has been used.

❑ **1 Point** if the data is not correctly displayed, and/or if the type of graph is not useful.

❑ **0 Points** if the results are missing.

**Conclusion –** The conclusion is the part of the experiment that answers the problem question. (It may or may not agree with your hypothesis.)

❑ **2 Points** if the conclusion answers the problem question.

❑ **1 Point** if the conclusion does not answer the problem question or is not related to the problem question.

❑ **0 Points** if the conclusion is missing.

## Presentation (Appearance) of Poster Board

- The tri-fold board should be neatly constructed and organized following directions.
- Information should be typed and printed out before being carefully glued to the board.
- The board may have pictures, but avoid "decorations" that do not serve a scientific purpose.
- Graphs should be computer generated.

❑ **4 Points** if all the above criteria are met.

❑ **3 Points** if most of the above criteria are met.

❑ **2 Points** if some the above criteria are met.

❑ **1 Point** if none of the above criteria are met.

Total _____ /20

17-20 points = E

13-16 points = M

9-12 points = A

5-8 points = LP