Date:_____ Name:_____

HR:_____ Partner:_____

Science Fair Step 1 – Establish Testable Question

Topic:

Possible Question: (circle independent variable & underline dependent variable)

Hypothesis:

Why do you expect that to happen?

How will you control the independent variable?

How will you measure the dependent variable?

List 3 (or more) things you will background-research about your topic

1)

2)

3)

Approved:_____Date:_____

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HR:_____ Partner:_____

Science Fair Step 2 – Background Research

What experiments have already been done? What other variables have been tried? What other hypotheses have been tested? **Attach bibliography and photocopies of cited material.**

How does your research contribute to existing knowledge? How is it relevant to the world?

What information supports your hypothesis? What information suggests a different hypothesis?

Why did you choose this question?

Date:_____ Name:_____

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Science Fair Step 3 – Establish Procedure

What is your control?

What other variables will you need to keep the same? How will you keep these variables the same? How will you measure these variables?

Materials: What equipment and materials will you use? Attach materials and equipment list.

Set up: How will you set up your experiment to perform the test? Attach a sketch of your set up.

Data Table: What data will you collect? What will your data table look like? Create a data table on a separate sheet of paper and attach it to this sheet. Provide space for recording the "other" variables.

Procedure: How will you perform your experiment? Write a step by step procedure on a separate sheet of paper and attach it to this sheet. Include set up and measurements of control and "other" variables.

Approved:_____Date:_____

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Science Fair Step 4 – Collect Data

Does your equipment require calibration? Have your tested it against standards? How?

What are some sources of error? How do you know your data is reliable?

Use your data sheet to collect data. Attach the data sheet.

Record observations every time you collect data. Attach your observations.

What other things effected your data as you were collecting it? How did these things effect your data?

How did you have to change your original procedure to get the results you reported?

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Science Fair Step 5 – Data Analysis and Conclusions

Put your data into words. Report your observations as part of your data story. DO NOT SUMMERIZE.

Summarize your data.

What calculations did you do? Why?

What does your data mean?

Was your hypothesis right? Use your data to prove your hypotheseis right or wrong.

If your hypothesis was wrong, why? If it was right, why?

Approved:_____Date:_____

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Science Fair Step 6 – Abstract

Restate your question and hypothesis. Use Step One to help you with this.

Discuss background as outlined in Step Two.

Summerize procedures and set up from Step Three.

Tell story of data collection from Step Four.

State conclusions and important highlights from your analysis in Step Five.

Organize and rewrite as an abstract of your project. Put this abstract on your poster board.

Cut your abstract back to 250 words and print it out on the official abstract form.

Approved:_____Date:_____

Date:_____ Name:_____

HR:_____ Partner:_____

Science Fair Step 7 – The Poster!

Poster is white tri-fold presentation board, and meets the space requirements outline in the Rules.

All elements are typed in black readable font, in presentable format, on white paper.

Each element is mounted on trimmed colored paper and arranged neatly on the board.

The title is catchy and visible across the room.

Any decoration must communicate important information about your topic or project.

Poster is not too busy or too empty, but balanced and professional.

Name, homeroom and project number are recorded on the back in black marker.

Poster scores “Meets Expectations” on Portfolio Scoring Rubric. Attach Rubric with actual score.

Approved:_____Date:_____