Department of Education
Dennis M. Walcott, Chancellor

ELEMENTARY SCIENCE EXPO

STEM matters NYC

2013 STEM Matters NYC Elementary Science Expo Participation Rules and Guidelines

DOE schools are invited to participate in the First Annual STEM Matters NYC Elementary Science Expo. Science investigation projects from elementary schools across New York City that exemplify student interest, curiosity and a desire to explore the mysteries of the world will be on display. Projects that are eligible for entry in the STEM Matters NYC Elementary Science Expo must meet the following requirements:

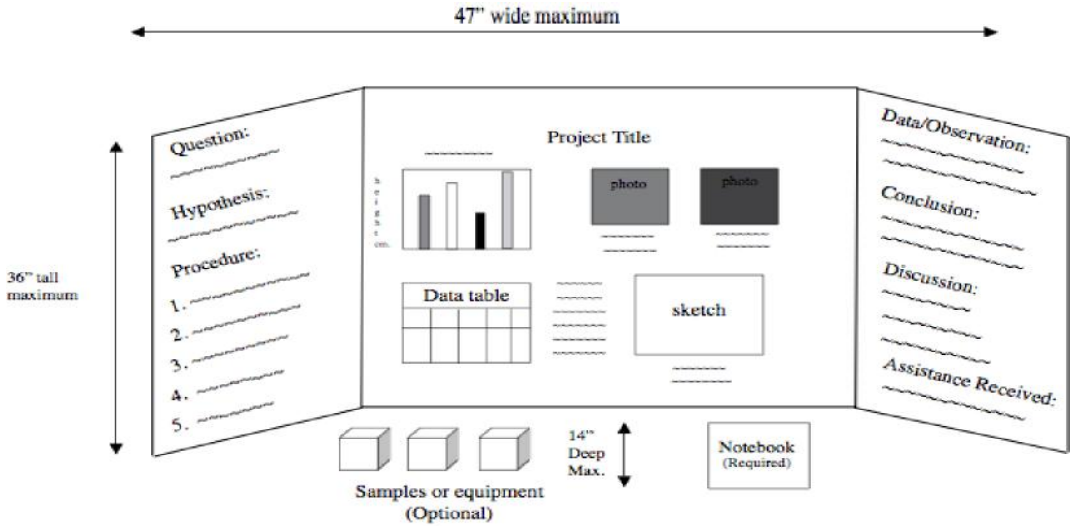
1. Projects are submitted by a DOE school.

2. Projects can be i**ndividual student**, **team** or **whole class projects** for all grades K-6.

3. Student projects should be one of the following types for all grades K-6:
   - An experiment which is an investigation
   - An innovation or invention of something students build such as a model or device
   - A study which involves extensive research of a topic that is already well known; a study may also include a demonstration.

4. The Display Board: Each exhibit must contain all of the required components or steps of the scientific methodology listed below. The display should include a notebook for **grades 3-6**.
   - Exhibits should pay close attention to overall appearance:
     - Each part of the project must be clearly labeled.
     - Grammar and spelling must be correct.
     - Writing should be easily read.
     - Science content must be accurate.

The diagram below is an example of what a display might look like.



- ***Project Title:*** The title should attract attention to the project. It should be thought provoking and creative. The title must appear on the project board and on the cover of the notebook.

- ***Statement of the Problem (Purpose/Question):*** The statement of the problem is a brief description of the problem the student(s) is trying to solve or the study being researched. What question(s) is the student trying to answer in this experiment?

- ***Hypothesis:*** The hypothesis tells the audience what the student(s) think will happen. A hypothesis should be in the following form: "If [the independent variable]..., then [the dependent variable].

- ***Materials:*** A list of everything used in the experiment including the amounts (how much) used. Please use metric units!

- ***Procedure:*** The procedure should detail step-by-step instructions stating how the project was done. The procedure should be written clearly enough that anyone can repeat it. This component explains how the student(s) did the experiment and must include at least three trials. Students in grades 3-6, also need to identify the variables in their procedure.

- ***Data/Results/Observations:*** What did the student(s) find out? As the experiment is performed, the student(s) should record all of their measurements (in metric units) as well as any observations and descriptions. Measurements should be presented in a data table. Whenever possible, students should construct a graph, chart, or both to make the data easier to understand.

- ***Conclusion:*** Based on the data, what did the student(s) find out? What did the experiment show? Does the data show the hypothesis was correct? Or does the data indicate the hypothesis was wrong? What is the answer to the question/problem?

- ***A Bibliography***

5. **Safety Guidelines**
   Teachers and schools must adhere to all safety rules and regulations as provided in the DOE Science Safety Manual. In particular, the following items are not permitted:
   - No organisms: living, dead or preserved (plants or animals)
   - No fungi or bacteria
   - No projects which involve the injury or death of vertebrate animals will be accepted
   - No fresh or preserved human or vertebrate animal tissue may be displayed

6. All schools must meet the 2013 STEM Matters NYC Elementary Science Expo **Deadline Dates.**