## **MMA SCIENCE FAIR REQUIREMENTS**

## **19 FEBRUARY 2014**

- Topic Selection (For help go to science buddies.com and complete the Topic Selection Wizard under student - project help – topic selection wizard)
- 2. Question (The specific question they will investigate in the science fair project)
- 3. **Research Plan and Bibliography** (This is a roadmap of the research that need to be answered. The Bibliography is a list of the sources that will be used to answer the research questions. 6<sup>th</sup> & 7<sup>th</sup> graders must have at least 3 offline sources including one encyclopedia)
- 4. Research Paper (The purpose of the research paper is to provide information to help understand why the experiment turns out the way it does. It should include: the history of similar experiments or inventions; definitions of all important words and concepts that describe the experiment; answers to all the background research plan questions; mathematical formulas, if needed.
  Some teachers may elect to make this optional for 4<sup>th</sup> and 5<sup>th</sup> grade students)
- Variables and Hypothesis (An explanation of which factors will be changed while conducting the experiment and a hypothesis)
- 6. **Materials and Procedures** (A detailed list of the materials that will be used to conduct the experiment and detailed steps that will be followed.)
- 7. **Conducting the Experiment** (Students should run a minimum of 3 trials of their experiment and record results in lab book)
- 8. **Data Analysis and Graphs** (This is the analysis of the experimental data.

  A summary of the findings of the experiment).
- 9. **Conclusions** (An explanation of the results of the experiment).
- Final Report (A report that collects all the above written assignments in one place plus a short abstract of the project).
- 11. **Display Board** (The final project board that will be displayed at the fair).
- 12. Science Fair (Students will bring their project to the school)