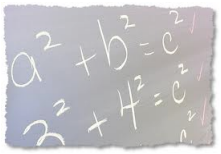
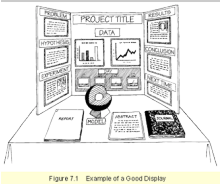
# Science Fair 2012 Assessment Rubric

| Category: | 4 | 3 | 2 | 1 |
|---|---|---|---|---|
| IDEA   | Creative, original, thought-provoking, "prove-able" scientifically. - Clearly followed the scientific method in order to perform the experiment. The problem and hypothesis are indicative of scientific thinking. | Imaginative, some creative elements- - Attempted to follow the scientific method The problem and hypothesis are somewhat indicative of scientific thinking. | Common topic. Some creativity with a fair to good design. Minimal use of scientific method. The problem and hypothesis are lacking scientific thinking. | A text book project. A common topic. Did not follow the scientific method. The problem and hypothesis have a predictable explanation |
| VARIABLES  | Independently identified and clearly defined which variables were going to be changed (independent variables) and which were going to be measured (dependent variables). Builds fair testing elements into plans for an experimental procedure, showing an awareness of variables to be considered: plan has no error or omissions. | Identified which variables were going to be changed (independent variables) and which were going to be measured (dependent variables). Some feedback was needed to clearly define the variables. Most variables were on display board. Builds fair testing elements into plans for an experimental procedure, showing an awareness of variables to be considered: few errors | With assistance (prompting), identified and clearly defined which variables were going to be changed (independent variables) and which were going to be measured (dependent variables). Variables may not have been presented on display. Several errors in plan. | Adult help needed to identify and define almost all the variables. No variables were visible on display board. |
| DISPLAY   Figure 7.1 Example of a Good Display | Each element in the display had a function and precisely served to illustrate all aspects of the experiment/ invention. All items, graphs etc. were neatly and correctly labeled. Appropriate and sophisticated vocabulary was on display board. | Each element had a function and served to illustrate some aspect of the experiment/ invention. Most items, graphs etc. were neatly and correctly labeled. Correct scientific terminology was on display board. | Each element had a function and clearly served to illustrate only a small aspect of the experiment. Most items, graphs etc. were correctly labeled. Vocabulary used was not entirely scientific in nature. Limited scientific vocab words | The display seemed incomplete or chaotic with no clear plan. Many labels were missing or incorrect. |
| CONCLUSION & RESEARCH  | Student provided a detailed conclusion clearly based on the data and related to previous research findings and the hypothesis statement (s). Implications and applications of scientific findings were clearly articulated. | Student provided a somewhat detailed conclusion clearly based on the data and related to the hypothesis statement (s). A few concrete applications of findings from experiment/ inventions presented. | Student provided a conclusion with some reference to the data and the hypothesis statement(s). Few limited to no concrete application or implications of scientific findings were shared or presented. | No conclusion was apparent OR important details were overlooked. |